



Florida Department of
TRANSPORTATION

NOISE STUDY REPORT (NSR)

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

ATLANTIC AVENUE (SR 806)

**FROM FLORIDA'S TURNPIKE (M.P. 1.748)
TO JOG ROAD (M.P. 3.560)**

FINANCIAL PROJECT ID: 440575-3-22-02
EFFICIENT TRANSPORTATION DECISION MAKING (ETDM) NUMBER: 14423
PALM BEACH COUNTY, FLORIDA

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

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

Prepared for:
FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

May 2023

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Prepared by:
Bernard Kinney Associates, Inc.

May 2023

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EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) District 4 has conducted this Project Development and Environment (PD&E) Study to determine the engineering and environmental effects of the proposed four to six-lane widening of Atlantic Avenue (SR 806) from Florida's Turnpike (M.P. 1.748) to Jog Road (M.P. 3.560), in Palm Beach County. This PD&E Study documents the need for capacity and multimodal improvements, and presents the procedures utilized to develop and evaluate a preferred alternative. The PD&E Study satisfies the requirements of FDOT and follows the process for a Type II Categorical Exclusion (CE). The PD&E Study process was developed in compliance with the National Environmental Policy Act (NEPA), and other applicable federal and state regulations.

This study utilized the Traffic Noise Model (TNM) version 2.5 which is the most current model available for the prediction of highway traffic noise levels. Traffic noise impacts were evaluated for potential noise sensitive sites developed prior to the project's Date of Public Knowledge (DPK). Based upon the DPK, Activity Category B, C, D, and E land uses were evaluated for potential noise impacts. The noise study was developed based upon the current regulatory criteria contained in Part 2, Chapter 18 Noise (July 1, 2020) of the PD&E Manual and the Traffic Noise Modeling and Analysis Practitioners Handbook dated January 1, 2016.

The noise sensitive areas evaluated are representative of one hundred and fifty-seven (157) noise sensitive receptor locations. The computer modeled noise receptor locations are as follows: named and un-named residential areas, recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the outside seating areas associated with restaurants.

The traffic noise levels predicted at the one hundred and fifty-seven (157) noise sensitive receptor locations under evaluation approached or exceeded the FDOT NAC at three (3) residential areas for all alternatives (1A, 1B, and 2A) therefore; potential noise abatement measures were evaluated. A fourth alternative (Alternative 2B) was not specifically evaluated as it was a combination of Alternative 2A and Alternative 1B which were evaluated for potential impacts. Additionally, Alternatives 1C and 2C were not specifically evaluated as they are similar to a combination of Alternatives 2A and 1B. Alternatives 3 and 3A were not evaluated as they were similar to Alternative 1B. The remaining noise sensitive areas did not approach or exceed the appropriate NAC for the Activity Categories evaluated; therefore, potential noise abatement measures were not evaluated.

Activity Category B and C locations require potential noise abatement measures for computer predicted sound levels which approach or exceed 66 dB(A). Activity Category E locations require potential noise abatement measures for computer predicted sound levels which approach or exceed 71 dB(A).

Ground mounted noise barriers were evaluated at NSA 9 and NSA 10. NSA 9 was evaluated for potential noise barrier placement at two (2) locations, BW-2 and BW-3. There were six (6) impacted receptor locations associated with NSA 9 which is located on the north side of SR-806 / Atlantic Avenue and east of Jog Road. BW-2 represents four (4) impacted receptor locations (R136N-R139N). BW-3 represents two (2) impacted receptor locations (R149N-R150N). NSA 10 was evaluated for potential noise barrier placement at one (1) location, BW-1. There were eleven (11) impacted receptor locations associated with NSA 10 which is located on the north side of SR-806 / Atlantic Avenue and west of Jog Road. BW-1

represents eleven (11) impacted receptor locations (R64-R67N, R72N-R77N, and R80N). The impacted receptor locations represent single family homes directly adjacent to the study corridor.

The residential locations identified will experience sound levels which exceed the applicable NAC; therefore, potential noise abatement measures were evaluated for all three (3) alternatives. (Alternative 1A, 1B, and 2A)

For each alternative, ground mounted noise barriers were evaluated for heights ranging from 8 Ft. to 18 Ft. in height at 2 Ft. intervals. For all alternatives, (BW-1), a noise barrier 1,780 Ft. to 1,824 Ft. in length was evaluated. This noise barrier met the Department's Feasibility Factor (Noise Reduction Factor) and the Reasonableness Factor (Noise Reduction Design Goal). The barrier also met the Cost Reasonableness Factor. For all alternatives, (BW-2), a noise barrier 900 Ft. in length was evaluated. This noise barrier met the Department's Feasibility Factor (Noise Reduction Factor) and the Reasonableness Factor (Noise Reduction Design Goal). The barrier also met the Cost Reasonableness Factor. However, the noise barrier height was limited to 14 Ft. due to the Cost Reasonableness Factor. For all alternatives, (BW-3), a noise barrier 200 Ft. in length was evaluated. This noise barrier was not feasible (Noise Reduction Factor) or reasonable (Noise Reduction Design Goal) given that the minimum acoustical reduction of 5 dB(A) could not be achieved. The computer predicted insertion loss ranged from 0.7 to 4.4 dB(A).

The cost of noise barrier placement (BW-1) for Alternative 1A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 1A ranged from \$ 19,033 to \$ 28,969. The cost of noise barrier placement (BW-2) for Alternative 1A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1A ranged from \$ 27,000 to \$ 54,000. The cost of noise barrier placement (BW-1) for Alternative 1B ranged from \$ 427,200 to \$ 961,200. The cost per benefited receptor for Alternative 1B ranged from \$ 17,800 to \$ 28,271. The cost of noise barrier placement (BW-2) for Alternative 1B ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1B ranged from \$ 27,000 to \$ 54,000. The cost of noise barrier placement (BW-1) for Alternative 2A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 2A ranged from \$ 19,033 to \$ 28,969. The cost of noise barrier placement (BW-2) for Alternative 2A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 2A ranged from \$ 27,000 to \$ 54,000.

The feasibility factor associated with a barriers noise reduction is the Noise Reduction Factor. FDOT's Noise Reduction Factor requires that two (2) or more impacted receptors achieve a 5 dB(A) reduction or greater in order to be considered feasible. The reasonableness factor associated with a barriers noise reduction is the Noise Reduction Design Goal. FDOT's Noise Reduction Design Goal requires that one (1) or more benefitted receptors achieve a 7 dB(A) reduction or greater in order to be considered reasonable. The Department's Cost Reasonableness Factor limits a noise barriers cost to \$ 42,000 per benefited receptor. Additional cost associated with utility impacts / relocation and other potential cost associated with right-of-way and construction have not been evaluated as part of the cost reasonableness factor.

The proposed roadway improvements are expected to have a minimal impact, with few exceptions, on the adjacent noise sensitive receptor locations. The predicted noise level increase for Alternative 1A is approximately 1.4 to 8.6 dB(A). The predicted noise level increase for Alternative 1B is approximately 1.2 to 7.6 dB(A). The predicted noise level increase for Alternative 2A is approximately 1.2 to 8.4 dB(A). A noise level increase of this magnitude is generally perceivable.

1.0 INTRODUCTION

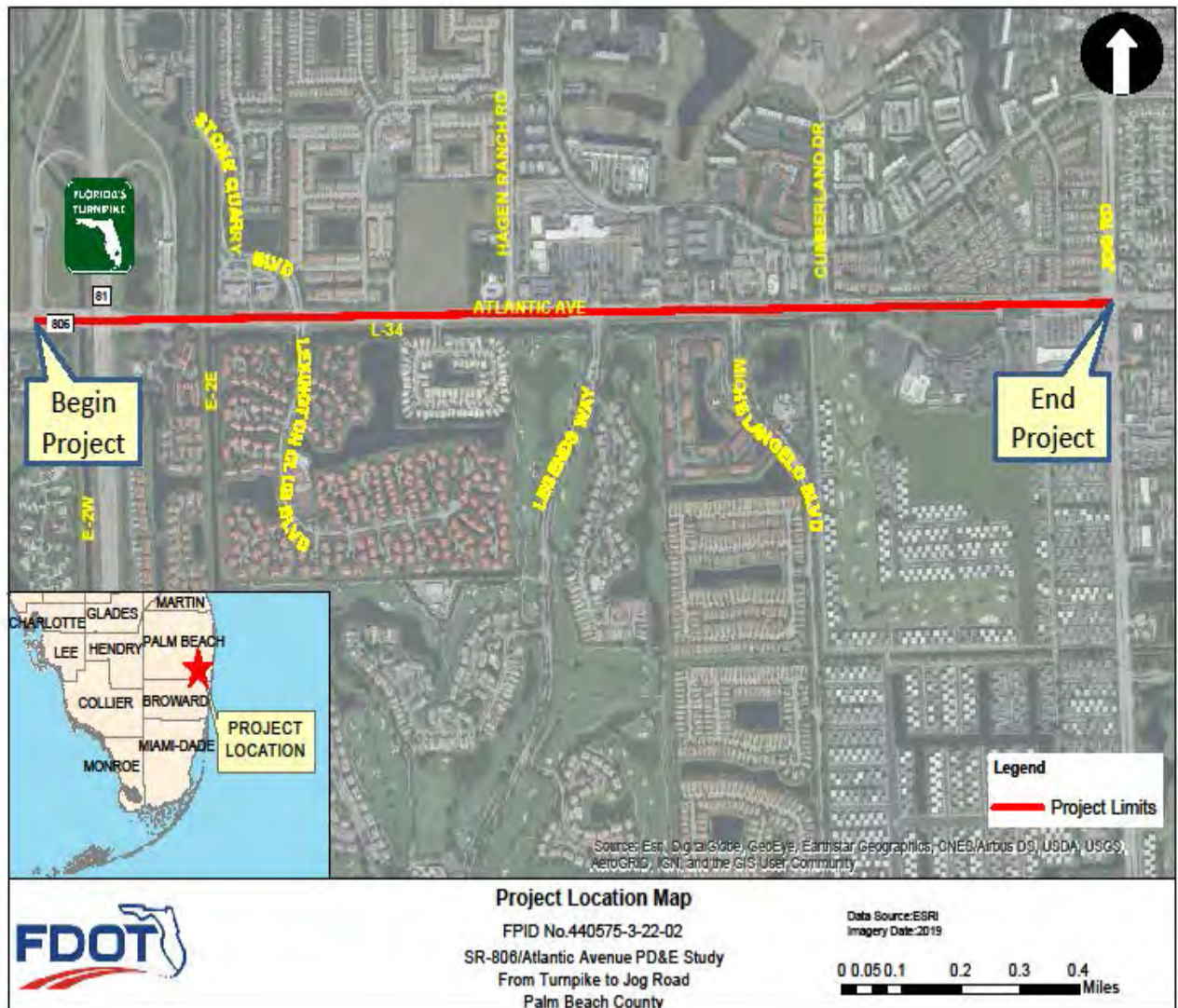
The Florida Department of Transportation (FDOT) District 4 has conducted this Project Development and Environment (PD&E) Study to determine the engineering and environmental effects of the proposed four to six-lane widening of Atlantic Avenue (SR 806) from Florida's Turnpike (M.P. 1.748) to Jog Road (M.P. 3.560), in Palm Beach County. A project location map is shown in **Figure 1**. This PD&E Study documents the need for capacity and multimodal improvements, and presents the procedures utilized to develop and evaluate a preferred alternative. Information relating to the engineering and environmental characteristics essential for development of alternatives and analytical decisions was collected. The alternatives were analyzed using a variety of parameters utilizing a matrix format. This process was utilized to identify natural, physical, and socio-economic impacts, while providing the necessary future transportation improvements. The study includes solicited input from the public and local agencies. The PD&E Study satisfies the requirements of FDOT and follows the process for a Type II Categorical Exclusion (CE). The PD&E Study process was developed in compliance with the National Environmental Policy Act (NEPA), and other applicable federal and state regulations.

Traffic noise impacts were evaluated for potential noise sensitive locations identified in this study. Based upon the existing land uses, Activity Category B, C, D, and E noise sensitive locations were evaluated. Thirteen (13) Noise Sensitive Areas (NSA) were identified adjacent to the study corridor. The noise sensitive areas evaluated are representative of one hundred and fifty-seven (157) noise sensitive receptor locations. The computer modeled noise receptor locations are as follows: the named and un-named residential areas, recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the outside seating areas associated with restaurants. The noise study was developed based upon the current regulatory criteria contained in Part 2, Chapter 18 Noise (July 1, 2020), of the Project Development & Environment Manual, and the Traffic Noise Modeling and Analysis Practitioners Handbook dated January 1, 2016. Additionally, the current regulatory criteria contained in the New Final Rule (23 CFR Part 772) dated July 13, 2010 is in compliance with the Department's Noise Policy. A summary of the noise study may be found in the Type II Categorical Exclusion (CE) for the project available under separate cover.

2.0 PROJECT DESCRIPTION

The project involves widening a 1.8-mile segment of Atlantic Avenue from Turnpike to Jog Road in unincorporated Palm Beach County. The proposed project would widen the existing four-lane roadway to a six-lane roadway with upgraded bicycle and pedestrian bicycle facilities. Additionally, stormwater management facilities were evaluated within the study area.

Figure 1: Project Location Map



Purpose and Need

The primary purpose of the project is to improve the local and regional transportation network while also providing enhanced multimodal interrelationships along Atlantic Avenue from Turnpike to Jog Road.

The project is located within the jurisdiction of the Palm Beach TPA. The proposed widening is included in the Palm Beach TPA's *2045 Long Range Transportation Plan (LRTP)*, in the *2020-2040 Desires Plan* and within the *Transportation Improvement Program (TIP) Fiscal Years (FY) 2022-2026* (adopted date: June 16, 2020). This project is also listed as number 16-1 in the List of Priority Projects by the Palm Beach TPA. Funding for right-of-way is planned to be available in Year 2024-2025. Within the TIP, the total cost is listed for widening of Atlantic Avenue from west of Lyons Road to Jog Road.

The 2018 Annual Average Daily Traffic (AADT) within the project limits ranges from 38,900 to 46,700 vehicles per day (VPD). Based on the anticipated growth within the corridor, the future traffic volumes were projected from 57,100 to 70,400 VPD by 2045. The corridor with the existing capacity within the project limits is anticipated to operate at Level of Service (LOS) 'F' by design year 2045. Widening Atlantic Avenue will promote enhanced traffic flow and will help improve the LOS.

Atlantic Avenue intersects two major north-south roadways, Turnpike on the west and Jog Road on the east. The Turnpike is a part of the state's Strategic Intermodal System (SIS). The SIS includes Florida's important transportation facilities that support the state's economy and mobility. Currently, Atlantic Avenue is an inadequate link between these multilane roadways. Expanding Atlantic Avenue to six lanes will better serve the regional transportation network and the local collector roadways.

Atlantic Avenue contains a sidewalk adjacent to the westbound lanes throughout the entire length of the study area. There is a sidewalk adjacent to the eastbound lanes from the Turnpike to Michelangelo Boulevard. However, there is an existing sidewalk gap from Michelangelo Blvd. to west of Jog Road on the south side of Atlantic Avenue. There are four ft. wide designated bicycle facilities along Atlantic Avenue. The Palm Beach TPA *Master Comprehensive Bicycle Transportation Plan (MCBTP)* (March 2011) includes bicycle facilities improvement recommendations throughout Palm Beach County. The MCBTP designates Atlantic Avenue from the Turnpike to I-95 as a "Priority Corridor." The TPA Bike Suitability Map (February 2016) states that this section of Atlantic Avenue is ranked as "fair": high speed road (>35 mph) with some space for bicyclists to travel.

3.0 PROJECT ALTERNATIVES

The following section provides information on the typical section and two mainline alignment alternatives.

Alternative 1 – Best Fit Alignment

The typical section proposed from Turnpike to Jog Road incorporates the FDOT's criteria for a six-lane divided urban facility. It is comprised of three, 11-foot travel lanes in each direction with a 22-foot median. In each direction, seven-foot bicycle lanes are proposed adjacent to Type F curb and gutter with an eight-foot wide sidewalk on the north side and a ten-foot wide sidewalk on the south side. This typical section requires a minimum of 130 feet in order to accommodate mainline improvements. Therefore, right-of-way for the mainline is required under this alternative at various locations within the study limits. In order to minimize right-of-way take on the south side of Atlantic Avenue from the L-34 Canal, a best fit alignment was considered which utilizes some right-of-way on the north side as well as the south side of Atlantic

Avenue. Right-of-way acquisition on the north side of Atlantic Avenue will require up to 23-feet west of Cumberland Drive. However, the design takes into consideration business and residential properties. As such, business or residential relocations are not anticipated as part of the mainline improvements. The L-34 Canal on the south side will require realignment and a portion will also require dual 54-inch culverts. **Appendix A** depicts Alternative 1: Best Fit Alignment typical sections.

Alternative 2 – South Alignment

This alternative typical section is the same as in Alternative 1. However, it holds the north right-of-way line along Atlantic Avenue east of Stone Quarry Road, shifting the alignment to the south. This increases the amount of right-of-way take on the south side of Atlantic Avenue from the L-34 Canal. **Appendix A** depicts Alternative 2: South Alignment typical sections.

Alternative 3: Best Fit – Alignment

This alternative typical section is similar to Alternative 1 with the exception of having a ten-foot wide sidewalk on the north side as opposed to an eight-foot wide sidewalk as it was developed in response to the Palm Beach TPA's signed resolution. It maintains a similar alignment as Alternative 1. Another key difference is that it includes widening of the sidewalks on both sides from the Turnpike southbound ramp intersection to east of the Turnpike Bridge which also includes widening both E-2W bridges. **Appendix A** depicts Alternative 3: Best Fit Alignment preliminary typical sections.

Alternative 3(a): Best Fit Alignment

Ten-foot wide sidewalks (six-foot minimum in constrained areas) on both sides and seven-foot wide buffered bicycle lanes on both sides. The bicycle lane is reduced to five-feet wide going westbound between Hagen Ranch Road and Legends Way (a length of approximately 630-feet) due to right-of-way constraints. Bulkhead walls are proposed along the right turns at Legends Way and Michelangelo Boulevard. Appendix A depicts Alternative 3(a): Best Fit Alignment typical sections.

Atlantic Avenue at Jog Road Intersection Alternatives

At the intersection of Atlantic Avenue and Jog Road, two intersection alternatives have been considered which can be combined with either of the previously mentioned mainline alignments (Alternative 1 and Alternative 2). These two intersection alternatives are described below.

Alternative A: Partial Displaced Left Turns (PDLT)

This alternative consists of displaced left turns eastbound and westbound on Atlantic Avenue. Dual left turns would be controlled by a new proposed signal setback approximately 300-feet from the existing signals, eastbound and westbound at each side of the intersection. The dual left turns would then cross over the Atlantic Avenue mainline into another storage for dual left turns that would also be controlled by a new signal in each direction (eastbound and westbound). As such, the additional left turn storage lanes and associated intersection improvements for the PDLT requires additional right-of-way at all four quadrants of the intersection.

Access changes associated with the proposed intersection improvements include the following:

- Closure of the westbound to southbound left turn median opening into Kings Point Shopping Center just west of Jog Road.

- Closure of the westbound to southbound left turn into Seville Terrace. This left turn needs to be eliminated to provide the necessary eastbound dual left turn storage for the PDLT concept. As such, Seville Terrace will operate as right in, right out, and left out. A U-turn at Cumberland Drive is proposed since the left turn movement at Seville Terrace is proposed to be closed.
- Closure of the westbound to southbound median left turn into the Atlantic Square shopping center. This left turn needs to be eliminated in order to provide the necessary westbound dual left turn storage for PDLT concept. The westbound left turn movement to access the shopping center will need to be made at the intersection of El Claire Ranch Road in the 'Build' condition.

Alternative B: Triple Lefts

This alternative consists of introducing triple lefts on all approaches at the intersection of Atlantic Avenue and Jog Road. Although this alternative does not achieve acceptable overall intersection LOS in the design year 2045, it does involve less right-of-way acquisition and access impacts than the PDLT alternative. This alternative also does not introduce any new signals and the intersection would operate using the same phases as the existing condition. Right-of-way impacts for this alternative are generally in the southwest, southeast, and northwest quadrants and is needed to accommodate the additional left turn lane at each approach.

Access changes associated with the proposed intersection improvements include the following:

- Closure of the westbound to southbound left turn median opening into Kings Point Shopping Center just west of Jog Road. An additional left turn lane is proposed to be added westbound to southbound at Seville Terrace to accommodate vehicles which need to make a U-turn to access the Kings Point Shopping Center. A U-turn at Cumberland Drive is also proposed.

Alternative C: Dual Lefts

This alternative consists of maintaining the existing dual lefts on all approaches at the intersection of Atlantic Avenue and Jog Road. Although this alternative does not achieve acceptable overall intersection LOS in the design year 2045 and has the highest delay compared to the PDLT and Triple Left alternatives, it does involve the least amount of right-of-way. This alternative also does not introduce any new signals and the intersection would operate using the same phases as the existing condition. Right-of-way impacts for this alternative are generally in the northeast quadrant of Atlantic Avenue and Jog Road where an additional through lane will need to be constructed. A narrow sliver of right-of-way will also be required in the northwest and southwest corners.

Access changes associated with the proposed intersection improvements include the following

- Closure of the westbound to southbound left turn median opening into Kings Point Shopping Center just west of Jog Road. An additional left turn lane is proposed to be added westbound to southbound at Seville Terrace to accommodate vehicles which need to make a U-turn to access the Kings Point Shopping Center. A U-turn at Cumberland Drive is also proposed.

Construction Segments

The Atlantic Avenue improvements from Turnpike to Jog Road are proposed to be constructed as two segments under FPID 440575-4 (Turnpike to Cumberland Drive) and FPID 440575-5 (Cumberland Drive

to Jog Road). The Atlantic Avenue widening should be coordinated with the proposed widening improvements to the west of Turnpike on Atlantic Avenue.

4.0 LAND USES

4.1 Existing Land Uses

The existing land uses adjacent to the project corridor are representative of named and un-named residential areas, recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the outside seating areas associated with restaurants. There is also a tract of vacant land which is currently being developed for residential / commercial use (building permit was established). The residential areas are located on the north and south side of SR-806 / Atlantic Avenue and the east and west side of Jog Road. Terra Nova is under development now. Several privacy walls are located on SR-806 / Atlantic Avenue and Jog Road.

4.2 Future Land Uses

Future land use adjacent to the study area is expected to remain consistent with the existing land use characteristics. The study corridor is fully developed which would limit any future development. Should any noise sensitive development occur, the contents of this report should be considered before approving any potential noise sensitive land uses directly adjacent to the SR-806 / Atlantic Avenue corridor. One (1) residential development is under construction in the vicinity of 7500-7600 W. Atlantic Avenue. The residential area is not expected to be impacted by traffic noise. The area is a multi-family development.

FDOT is not responsible for future noise abatement measures for parcels or locations with building permits approved after the project's Date of Public Knowledge (DPK). Active / Granted building permits for potential noise sensitive areas within the study corridor limits were requested on April 12, 2021. A response from Palm Beach County was received on April 15, 2021. A second request / follow-up was made on September 15, 2021. A response from Palm Beach County was received on October 1, 2021. There were no additional noise sensitive sites identified based on the building permit information received by Palm Beach County. There were no additional noise sensitive areas identified.

5.0 METHODOLOGY

The noise study was developed based upon the current regulatory criteria contained in Part 2, Chapter 18 Noise (July 1, 2020) of the PD&E Manual and the Traffic Noise Modeling and Analysis Practitioners Handbook dated January 1, 2016.

Additionally, the current regulatory criteria contained in the New Final Rule (23 CFR Part 772) dated July 13, 2010 is reflected in the Departments Noise Policy. The technical criteria are provided in the Federal Regulations Title 23, Part 772 (23 CFR Part 772) entitled "Procedures for Abatement of Highway Traffic Noise and Construction Noise"¹. Chapter 335.17 of the Florida Statute requires the use of 23 CFR Part 772 in the noise impact assessment process regardless of funding, and the FDOT PD&E Manual, Part 2, Chapter 18 Noise (July 1, 2020)². Additionally, technical guidance is provided in the Traffic Noise Modeling and Analysis Practitioners Handbook, January 1, 2016³.

Computer predicted noise levels were produced using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) version 2.5. The project alternatives evaluated in the noise study consist of the Existing Year 2018 Condition and the Design Year 2045 No-Build and Build Alternative Condition (Alternative 1A, 1B, and 2A). The traffic noise levels were predicted for each of these conditions. No other alternatives were evaluated. A fourth alternative (Alternative 2B) was not specifically evaluated as it was a combination of Alternative 2A and Alternative 1B which were evaluated for potential impacts. Additionally, Alternatives 1C and 2C were not specifically evaluated as they are similar to a combination of Alternatives 2A and 1B.

No consideration was given to potential noise sensitive land uses established after the DPK. Both the interior (where applicable) and exterior areas of potential noise sensitive locations were evaluated for potential noise impacts.

FDOT is not responsible for future noise abatement measures for parcels or locations with building permits approved after the DPK. The DPK is the approval date of the Type II Categorical Exclusion (CE).

The Noise Abatement Criteria (NAC) activity categories for the noise sensitive areas evaluated include Activity Category B, C, D, and E locations. The Activity Category B locations represent the named and unnamed residential areas, the Activity Category C locations represent recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the Activity Category E locations represent outside restaurant seating areas. No other activity categories were identified as of the date of this report.

5.1 Noise Metrics

The noise level descriptor used by FDOT will be level equivalent (LEQ). LEQ is the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period, with LEQ (h) being the hourly value of LEQ.

Title 23 CFR Part 772 specifies that either the LEQ(h) or L10(h) metric, but not both, may be used on a project. Consistent with this requirement, the FDOT elects to use the LEQ(h) metric.

The noise levels developed for this analysis are expressed in decibels (dB) using an “A”- scale [dB(A)] weighting. This scale most closely approximates the response characteristics of the human ear.

5.2 Traffic Data

Predicted traffic noise levels are primarily dependent on traffic volumes, vehicle mix, and vehicle speeds. The project traffic data developed for this study was prepared as part of the PD&E Study and the Traffic Data Forms for Noise Studies. The project traffic data was developed for SR-806 / Atlantic Avenue corridor for the following conditions: Existing Year 2018 Condition and the Design Year 2045 No-Build and Build Alternative Condition (Alternative 1A, 1B, and 2A). Traffic volumes representative of Level of Service (LOS) C or demand (whichever is less) was used as input data for the noise study and is consistent with the Traffic Noise Modeling and Analysis Practitioners Handbook dated January 1, 2016. This represents the highest traffic volume traveling at the highest average speed for this project. Such conditions typically generate the highest noise levels at a given site during a normal day. A review of the traffic data for this

study determined that the project traffic data (demand) would be used for input into TNM version 2.5. The project traffic data developed for this study is presented in **Appendix B**.

5.3 Noise Abatement Criteria

Noise sensitive sites are defined in the PD&E Manual as any property (owner occupied, rented or leased) where frequent exterior human use occurs and where a lowered noise level would be of benefit. Consistent with the guidance provided in the PD&E Manual, unless the area of exterior frequent use is identified elsewhere, residential receptor sites were placed at the edge of the dwelling unit closest to the major traffic noise source as dictated by professional judgment. Examples of common outdoor and indoor activities and their associated noise levels are presented in **Figure 2**.

The FHWA has established specific noise levels for both exterior and interior locations where frequent human activity could occur. These noise levels vary by activity category and are presented in **Table 1**.

Figure 2: Typical Noise Levels

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL dB(A)	COMMON INDOOR ACTIVITIES
Jet Fly-over at 1000 ft	---110---	Rock Band
Gas Lawn Mower at 3 ft	---100---	
Diesel Truck at 50 ft, at 50 mph	---90---	Food Blender at 1 m (3 ft)
Noise Urban Area (Daytime)	---80---	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower at 100 ft	---70---	Vacuum Cleaner at 10 ft
Commercial Area		Normal Speech at 3 ft
Heavy Traffic at 300 ft	---60---	Large Business Office
Quiet Urban Daytime	---50---	Dishwasher Next Room
Quiet Urban Nighttime	---40---	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
	---30---	Bedroom at Night, Concert Hall (Background)
Quiet Rural Nighttime		
	---20---	
	---10---	
Lowest Threshold of Human Hearing	---0---	Lowest Threshold of Human Hearing
Source: California Dept. of Transportation Technical Noise Supplement, Oct. 1998, Page 18.		

Table 1
NOISE ABATEMENT CRITERIA (NAC)
[Hourly A-Weighted Sound Level-decibels (dB(A))]

Activity Category	Activity Leq(h) ¹		Evaluation Location	Description of Activity Category
	FHWA	FDOT		
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.

Note: FDOT defines that a substantial noise increase occurs when the existing noise level is predicted to be exceeded by 15 decibels or more as a result of the transportation improvement project. When this occurs, the requirement for abatement consideration will be followed.

The FDOT has also established an approach criterion based upon these activity categories. The FDOT approach criteria are one (1) decibel below the FHWA criteria.

Potential noise abatement measures must be considered for all activity categories (except Activity Category F and G) which either meet or exceed the FDOT NAC for a specific category or experience a substantial noise increase as a direct result of a transportation improvement project.

The FDOT defines a substantial increase as 15 dB(A) or more over the existing conditions. A substantial increase in traffic-related noise usually occurs for new alignment transportation projects. This study has identified that Activity Category B, C, D, and E locations were present as of the date of this report.

5.4 NOISE ABATEMENT MEASURES

The traffic noise levels predicted at one hundred and fifty-seven (157) noise sensitive receptor locations under evaluation approached or exceeded the FDOT NAC at three (3) residential areas (Noise Sensitive Areas 9 and 10); therefore, potential noise abatement measures were evaluated. Noise Sensitive Area 9 is representative of six (6) noise sensitive receptor locations on the north side of SR-806 / Atlantic Avenue within an un-named residential community. Noise Sensitive Area 10 is representative of eleven (11) noise sensitive receptor locations within the Villages of Oriole residential community also on the north side of SR-806 / Atlantic Avenue. The impacted receptor locations are identified as R64N, R65N-67N, R72N-R77N, R80N, R136N-R139N, and R149N-R150N. A summary of the potential noise abatement measures considered by the Department are presented below.

5.4.1 Traffic Management

Traffic management techniques are considered an acceptable noise abatement measure by the FHWA; however, such measures may be difficult to implement. A review of the project traffic data does not support this technique as a viable choice.

5.4.2 Alignment Modifications

Alignment modifications are considered an effective noise abatement measure by the FHWA. Given the right-of-way limitations associated with the study corridor, this technique is not a viable choice.

5.4.3 Buffer Zones

Buffer zones are considered an effective noise abatement measure by the FHWA. Given the right-of-way limitations associated with the study corridor, this technique is not a viable choice. The noise contours developed for the noise study will assist local planning agencies in minimizing future traffic noise impacts adjacent to the study corridor by restricting future development in areas where future traffic noise impacts have been identified.

5.4.4 Noise Barrier Placement

Potential noise barrier placement is the most effective noise abatement measure utilized by the Department. The Department has established feasibility and reasonableness factors which are used to determine the viability of potential noise barrier placement. Potential noise abatement measures were evaluated at three (3) locations adjacent to SR-806 / Atlantic Avenue where noise impacts were identified.

Ground mounted noise barriers were evaluated at NSA 9 and NSA 10. NSA 9 was evaluated for potential noise barrier placement at two (2) locations, BW-2 and BW-3. There were six (6) impacted receptor locations associated with NSA 9 which is located on the north side of SR-806 / Atlantic Avenue and east of Jog Road. BW-2 represents four (4) impacted receptor locations (R136N-R139N). BW-3 represents two (2) impacted receptor locations (R149N-R150N). NSA 10 was evaluated for potential noise barrier placement at one (1) location, BW-1. There were eleven (11) impacted receptor locations associated with NSA 10 which is located on the north side of SR-806 / Atlantic Avenue and west of Jog Road. BW-1 represents eleven (11) impacted receptor locations (R64-R67N, R72N-R77N, and R80N). The impacted receptor locations represent single family homes directly adjacent to the study corridor. The residential locations identified will experience sound levels which exceed the applicable NAC; therefore, potential noise abatement measures were evaluated for all three (3) alternatives. (Alternative 1A, 1B, and 2A) A fourth alternative (Alternative 2B) was not specifically evaluated as it was a combination of Alternative 2A and Alternative 1B which were evaluated for potential impacts. Additionally, Alternatives 1C and 2C were not specifically evaluated as they are similar to a combination of Alternatives 2A and 1B.

For each alternative, ground mounted noise barriers were evaluated for heights ranging from 8 Ft. to 18 Ft. in height at 2 Ft. intervals. For all alternatives, (BW-1), a noise barrier 1,780 Ft. to 1,824 Ft. in length was evaluated. This noise barrier met the Department's Feasibility Factor (Noise Reduction Factor) and the Reasonableness Factor (Noise Reduction Design Goal). The barrier also met the Cost Reasonableness Factor. For all alternatives, (BW-2), a noise barrier 900 Ft. in length was evaluated. This noise barrier met the Department's Feasibility Factor (Noise Reduction Factor) and the Reasonableness Factor (Noise Reduction Design Goal). The barrier also met the Cost Reasonableness Factor. However, the noise barrier height was limited to 14 Ft. due to the Cost Reasonableness Factor. For all alternatives, (BW-3), a noise barrier 200 Ft. in length was evaluated. This noise barrier was not feasible (Noise Reduction Factor) or reasonable (Noise Reduction Design Goal) given that the minimum acoustical reduction of 5 dB(A) could not be achieved.

The cost of noise barrier placement (BW-1) for Alternative 1A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 1A ranged from \$ 19,033 to \$ 28,969. The cost of noise barrier placement (BW-2) for Alternative 1A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1A ranged from \$ 27,000 to \$ 54,000. The cost of noise barrier placement (BW-1) for Alternative 1B ranged from \$ 427,200 to \$ 961,200. The cost per benefited receptor for Alternative 1B ranged from \$ 17,800 to \$ 28,271. The cost of noise barrier placement (BW-2) for Alternative 1B ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1B ranged from \$ 27,000 to \$ 54,000. The cost of noise barrier placement (BW-1) for Alternative 2A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 2A ranged from \$ 19,033 to \$ 28,969. The cost of noise barrier placement (BW-2) for Alternative 2A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 2A ranged from \$ 27,000 to \$ 54,000.

The feasibility factor associated with a barriers noise reduction is the Noise Reduction Factor. FDOT's Noise Reduction Factor requires that two (2) or more impacted receptors achieve a 5 dB(A) reduction or greater in order to be considered feasible. The reasonableness factor associated with a barriers noise reduction is the Noise Reduction Design Goal. FDOT's Noise Reduction Design Goal requires that one (1) or more benefitted receptors achieve a 7 dB(A) reduction or greater in order to be considered reasonable. The Department's Cost Reasonableness Factor limits a noise barriers cost to \$ 42,000 per benefitted

receptor. Additional cost associated with utility impacts / relocation and other potential cost associated with right-of-way and construction have not been evaluated as part of the cost reasonableness factor.

The remaining noise sensitive areas adjacent to SR-806 / Atlantic Avenue did not approach or exceed the appropriate NAC for the Activity Categories evaluated; therefore, potential noise abatement measures were not considered.

6.0 TRAFFIC NOISE ANALYSIS

The noise study identified fourteen (14) Noise Sensitive Areas (NSA) which were evaluated for potential noise impacts for the following conditions: Existing Year 2018 Condition and the Design Year 2045 No-Build and Build Alternative Condition (Alternative 1A, 1B, and 2A).

The noise sensitive areas evaluated are representative of one hundred and fifty-seven (157) noise sensitive receptor locations. The computer modeled noise receptor locations are as follows: the named and un-named residential areas, recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the outside seating areas associated with restaurants. The noise receptor location and description summary are presented in **Table 2-1, 2-2, and 2-3**.

The potential noise sensitive locations identified in this report are representative of Activity Category B, C, D, and E as shown in **Table 1**. There are no other noise sensitive areas located within the project corridor as of the date of this report and was verified through an active building permit request. There are no other noise sources located adjacent to the study corridor which could interfere with the existing ambient highway traffic noise levels.

First and second floor receptors were assumed to be placed 5 feet and 15 feet above ground, respectively. Consistent with these guidelines, residential receptors were placed at the edge of the dwelling unit closest to the major traffic noise source at a height of 5 feet and 15 feet.

6.1 Model Validation

Field measurements were documented to evaluate the current noise conditions and to determine if TNM version 2.5 could accurately predict the noise levels for the study corridor under evaluation. Measurements of the ambient noise levels for the project corridor were documented using procedures defined in the FHWA report Measurement of Highway-Related Noise (FHWA-PD-96-046)⁴.

Noise level measurements, meteorological conditions, and traffic data were recorded at four (4) representative locations adjacent to the SR-806 / Atlantic Avenue corridor. The study corridor limits extend along SR-806 /Atlantic Avenue from Florida's Turnpike to East of El Clair Ranch Road. The field measurement locations are identified as ML1 through ML4 and are described below. The locations are also presented in the Noise Analysis Maps presented in **Appendix C**.

- **ML1** – Monitoring Location 1 (ML1/R6S) is located within the Lexington Club Residential Community at 7930 B Lexington Club Boulevard (single family residence). The measurement location is situated approximately 235-304 feet from the edge of pavement.

Table 2-1 Noise Receptor Location and Description Summary Alternative 1A													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 1A						Existing Alignment	Build Alternative 1A	
R1S	129+52.53	Tennis Court	66	284.53	276.27	8.26	R37S	172+99.48	MF Residential	66	685.91	670.58	15.33
R2S	130+26.90	Swimming Pool	66	288.47	275.92	12.55	R38S	177+56.69	MF Residential	66	156.15	142.92	13.23
R3S	130+40.31	MF Residential	66	535.25	522.42	12.83	R39S	180+69.41	MF Residential	66	225.32	212.09	13.23
R4S	135+17.18	Assisted Living Fac.	66	138.93	126.65	12.28	R40S	182+11.99	MF Residential	66	217.99	205.05	12.94
R5S	135+54.30	Assisted Living Fac.	66	440.5	428.51	11.99	R41S	177+60.93	MF Residential	66	347.91	334.68	13.23
R6S	139+11.54	SF Residential	66	155.12	148.51	6.61	R42S	179+25.87	MF Residential	66	413.75	400.51	13.24
R7S	141+48.07	SF Residential	66	158.93	159.02	0.09	R43S	181+78.63	Tennis Court	66	430.51	417.4	13.11
R8S	143+09.84	SF Residential	66	257.52	264.77	7.25	R44S	187+57.51	Golf Course	66	133.75	120.48	13.27
R9S	138+27.13	SF Residential	66	229.42	220.77	8.65	R45S	185+20.15	Golf Course	66	237.09	223.5	13.59
R10S	140+88.01	SF Residential	66	251.15	248.61	2.54	R46S	190+03.96	Golf Course	66	265.24	251.11	14.13
R11S	143+87.42	SF Residential	66	401.98	413.18	11.20	R47S	188+15.29	Swimming Pool	66	636.54	623.21	13.33
R12S	141+01.88	SF Residential	66	415.76	413.62	2.14	R48S	189+46.75	Tennis Court	66	610.56	597.27	13.29
R13S	147+47.65	SF Residential	66	219.73	238.05	18.32	R49S	191+12.34	Golf Course	66	157.31	143.85	13.46
R14S	149+50.69	SF Residential	66	191.11	209.23	18.12	R50S	192+93.42	Golf Course	66	150.42	137.58	12.84
R15S	147+13.61	SF Residential	66	304.91	322.95	18.04	R51S	195+03.72	Golf Course	66	187.88	174.56	13.32
R16S	149+74.87	SF Residential	66	293.96	311.88	17.92	R52S	191+97.23	Golf Course	66	300.47	287.85	12.62
R17S	154+21.18	SF Residential	66	142.13	148.64	6.51	R53S	194+16.65	Golf Course	66	406.78	393.68	13.10
R18S	156+36.59	SF Residential	66	142.41	140.54	1.87	R54S	195+43.16	Golf Course	66	317.75	304.48	13.27
R19S	158+16.12	Swimming Pool	66	119.64	108.57	11.07	R55S	191+91.64	MF Residential	66	686.91	674.27	12.64
R20S	160+41.61	SF Residential	66	120.37	100.2	20.17	R56S	200+23.67	Recreational Bldg.	51	357.37	344.25	13.12
R21S	161+48.72	SF Residential	66	144.85	122.16	22.69	R57S	203+41.08	Recreational Bldg.	51	396.30	383.16	13.14
R22S	162+96.37	SF Residential	66	139.24	115.99	23.25	R58S	206+55.12	Recreational Bldg.	51	341.51	328.04	13.47
R23S	153+77.04	SF Residential	66	195.85	203.61	7.76	R59S	198+94.66	Swimming Pool	66	491.37	478.21	13.16
R24S	153+89.15	SF Residential	66	285.87	292.83	6.96	R60S	209+05.90	Tennis Court	66	571.00	569.81	1.19
R25S	156+47.72	SF Residential	66	301.33	298.66	2.67	R61S	209+58.23	Medical Office	51	90.62	89.70	0.92
R26S	159+75.08	SF Residential	66	298.33	280.46	17.87	R62S	211+24.57	Medical Office	51	132.29	131.27	1.02
R27S	163+06.76	SF Residential	66	216.82	193.45	23.37	R63S	211+57.80	Medical Office	51	323.13	322.11	1.02
R28S	163+49.07	SF Residential	66	268.25	244.42	23.83	R64N	216+25.75	SF Residential	66	97.73	84.02	13.71
R29S	164+13.77	Golf Course	66	159.85	135.63	24.22	R65N	214+76.78	SF Residential	66	106.51	92.64	13.87
R30S	167+69.21	Golf Course	66	152.29	123.04	29.25	R66N	213+30.85	SF Residential	66	97.55	82.91	14.64
R31S	170+56.75	Golf Course	66	156.94	135.49	21.45	R67N	216+24.40	SF Residential	66	165.70	151.99	13.71
R32S	164+22.09	Golf Course	66	279.24	254.9	24.34	R68N	214+77.67	SF Residential	66	167.65	153.77	13.88
R33S	168+63.28	Golf Course	66	260.6	233.32	27.28	R69N	213+40.91	SF Residential	66	168.21	153.62	14.59
R34S	172+81.31	Golf Course	66	173.83	157.86	15.97	R70N	216+27.89	SF Residential	66	268.72	255.01	13.71
R35S	176+37.84	Golf Course	66	185.02	171.79	13.23	R71N	213+32.29	SF Residential	66	271.42	256.79	14.63
R36S	172+15.22	Golf Course	66	276.19	258.78	17.41	R72N	212+42.14	SF Residential	66	58.22	42.96	15.26

Table 2-1 Noise Receptor Location and Description Summary Alternative 1A													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 1A						Existing Alignment	Build Alternative 1A	
R73N	210+02.92	SF Residential	66	60.86	45.75	15.11	R91BN	178+29.66	MF Residential	66	396.91	389.30	7.61
R74N	207+39.41	MF Residential	66	54.48	40.25	14.23	R108N	216+27.41	SF Residential	66	338.65	324.94	13.71
R75N	205+07.93	MF Residential	66	58.03	46.77	11.26	R109N	215+23.29	SF Residential	66	341.74	327.91	13.83
R76N	212+42.20	SF Residential	66	116.12	101.10	15.02	R110N	216+26.74	SF Residential	66	454.47	440.76	13.71
R77N	210+05.59	SF Residential	66	116.06	100.95	15.11	R111N	215+24.80	SF Residential	66	453.55	439.73	13.82
R78N	207+07.95	SF Residential	66	188.16	174.28	13.88	R112N	216+30.45	SF Residential	66	630.12	616.42	13.70
R79N	205+11.43	MF Residential	66	133.50	122.19	11.31	R113N	215+27.79	SF Residential	66	631.01	617.20	13.81
R80N	201+84.61	MF Residential	66	80.77	73.16	7.61	R114N	216+30.08	SF Residential	66	689.68	675.98	13.70
R81N	198+38.13	MF Residential	66	101.01	93.16	7.85	R115N	215+26.49	SF Residential	66	691.06	677.24	13.82
R82N	195+19.74	MF Residential	66	114.94	106.78	8.16	R116N	216+32.11	SF Residential	66	863.79	850.09	13.70
R83N	192+97.88	MF Residential	66	134.79	126.80	7.99	R117N	215+30.38	SF Residential	66	864.21	850.39	13.82
R84N	201+70.33	MF Residential	66	175.85	168.24	7.61	R118N	216+30.87	SF Residential	66	976.13	962.43	13.70
R85N	198+78.59	SF Residential	66	279.80	271.98	7.82	R119N	215+31.72	SF Residential	66	979.15	965.34	13.81
R86N	195+14.94	MF Residential	66	221.69	213.52	8.17	R120N	216+49.72	SF Residential	66	1062.93	1049.26	13.67
R87N	192+92.05	MF Residential	66	224.81	216.77	8.04	R121N	216+51.04	SF Residential	66	1200.79	1187.12	13.67
R88N	187+03.63	Comm. Center	51	63.48	56.11	7.37	R122N	216+52.82	SF Residential	66	1337.23	1323.57	13.66
R89N	184+46.32	Church	51	188.85	181.30	7.55	R123N	218+36.09	SF Residential	66	1286.74	1273.37	13.37
R90N	181+37.92	Funeral Home	51	118.83	110.95	7.88	R124N	218+34.23	SF Residential	66	1162.56	1149.19	13.37
R91N	178+29.66	Swimming Pool	66	321.37	313.88	7.49	R125N	218+37.59	SF Residential	66	1019.14	1005.77	13.37
R92N	172+40.56	Restaurant	71	93.95	89.66	4.29	R126N	218+32.82	SF Residential	66	830.52	817.15	13.37
R93N	166+40.32	Medical Office	51	171.23	174.52	3.29	R127N	218+38.98	SF Residential	66	695.38	682.01	13.37
R94N	166+85.09	Restaurant	71	289.98	293.24	3.26	R128N	218+32.51	SF Residential	66	558.02	544.60	13.42
R95N	151+67.69	MF Residential	66	126.43	88.24	38.19	R129N	218+24.40	SF Residential	66	378.59	365.23	13.36
R96N	149+25.25	MF Residential	66	139.39	99.52	39.87	R130N	219+33.50	SF Residential	66	310.31	296.86	13.45
R97N	147+10.04	MF Residential	66	149.83	111.81	38.02	R131N	220+03.25	SF Residential	66	1303.70	1290.53	13.17
R98N	152+09.41	MF Residential	66	360.22	322.61	37.61	R132N	219+98.86	SF Residential	66	982.46	968.97	13.49
R99N	149+32.84	MF Residential	66	398.76	358.86	39.90	R133N	219+80.74	SF Residential	66	593.21	579.74	13.47
R100N	146+60.01	MF Residential	66	395.86	358.75	37.11	R134N	220+13.21	SF Residential	66	309.79	296.29	13.50
R101N	142+37.59	Restaurant	71	176.25	154.72	21.53	R135N	219+98.00	SF Residential	66	144.36	130.85	13.51
R102N	141+66.46	Medical Office	51	164.55	146.86	17.69	R136N	220+57.16	SF Residential	66	71.96	58.41	13.55
R103N	141+24.71	Restaurant	71	157.28	141.85	15.43	R137N	223+26.71	SF Residential	66	70.48	55.56	14.92
R104N	141+01.53	Restaurant	71	156.17	141.11	15.06	R138N	225+74.15	SF Residential	66	56.56	40.29	16.27
R105N	140+15.03	Restaurant	71	164.65	152.53	12.12	R139N	226+77.73	SF Residential	66	76.50	59.86	16.64
R106N	138+49.94	Restaurant	71	170.87	161.53	9.34	R140N	227+15.66	SF Residential	66	151.25	134.91	16.34
R107N	138+21.76	Restaurant	71	170.63	161.30	9.33	R141N	227+21.77	SF Residential	66	237.15	220.57	16.58
R91AN	178+29.66	MF Residential	66	396.91	389.30	7.61	R142N	230+13.63	Club House	66	307.42	293.11	14.31

Table 2-1 Noise Receptor Location and Description Summary Alternative 1A													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 1A						Existing Alignment	Build Alternative 1A	
R143N	230+62.47	Swimming Pool	66	414.59	400.74	13.85	R151N	235+95.39	SF Residential	66	216.25	205.37	10.88
R144N	223+24.63	SF Residential	66	204.90	190.01	14.89	R152S	216+27.67	MF Residential	66	934.38	937.30	2.92
R145N	223+41.79	SF Residential	66	307.74	292.71	15.03	R153S	216+66.88	MF Residential	66	853.14	856.17	3.03
R146N	232+99.76	SF Residential	66	282.27	269.74	12.53	R154S	216+23.75	MF Residential	66	805.37	808.28	2.91
R147N	232+97.02	SF Residential	66	202.33	189.80	12.53	R155S	215+49.88	MF Residential	66	930.52	933.54	3.02
R148N	233+31.04	SF Residential	66	125.82	113.47	12.35	R156S	215+88.12	MF Residential	66	854.29	857.09	2.80
R149N	235+01.49	SF Residential	66	68.82	57.43	11.39	R157S	231+02.12	Medical Office	51	119.74	121.26	1.52
R150N	235+85.35	SF Residential	66	65.59	54.67	10.92							

Table 2-2 Noise Receptor Location and Description Summary Alternative 1B													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 1B						Existing Alignment	Build Alternative 1B	
R1S	129+52.53	Tennis Court	66	284.53	276.27	8.26	R37S	172+99.48	MF Residential	66	685.91	670.58	15.33
R2S	130+26.90	Swimming Pool	66	288.47	275.92	12.55	R38S	177+56.69	MF Residential	66	156.15	142.92	13.23
R3S	130+40.31	MF Residential	66	535.25	522.42	12.83	R39S	180+69.41	MF Residential	66	225.32	212.09	13.23
R4S	135+17.18	Assisted Living Fac.	66	138.93	126.65	12.28	R40S	182+11.99	MF Residential	66	217.99	205.05	12.94
R5S	135+54.30	Assisted Living Fac.	66	440.5	428.51	11.99	R41S	177+60.93	MF Residential	66	347.91	334.68	13.23
R6S	139+11.54	SF Residential	66	155.12	148.51	6.61	R42S	179+25.87	MF Residential	66	413.75	400.51	13.24
R7S	141+48.07	SF Residential	66	158.93	159.02	0.09	R43S	181+78.63	Tennis Court	66	430.51	417.4	13.11
R8S	143+09.84	SF Residential	66	257.52	264.77	7.25	R44S	187+57.51	Golf Course	66	133.75	120.48	13.27
R9S	138+27.13	SF Residential	66	229.42	220.77	8.65	R45S	185+20.15	Golf Course	66	237.09	223.5	13.59
R10S	140+88.01	SF Residential	66	251.15	248.61	2.54	R46S	190+03.96	Golf Course	66	265.24	251.11	14.13
R11S	143+87.42	SF Residential	66	401.98	413.18	11.20	R47S	188+15.29	Swimming Pool	66	636.54	623.21	13.33
R12S	141+01.88	SF Residential	66	415.76	413.62	2.14	R48S	189+46.75	Tennis Court	66	610.56	597.27	13.29
R13S	147+47.65	SF Residential	66	219.73	238.05	18.32	R49S	191+12.34	Golf Course	66	157.31	143.85	13.46
R14S	149+50.69	SF Residential	66	191.11	209.23	18.12	R50S	192+93.42	Golf Course	66	150.42	137.58	12.84
R15S	147+13.61	SF Residential	66	304.91	322.95	18.04	R51S	195+03.72	Golf Course	66	187.88	174.56	13.32
R16S	149+74.87	SF Residential	66	293.96	311.88	17.92	R52S	191+97.23	Golf Course	66	300.47	287.85	12.62
R17S	154+21.18	SF Residential	66	142.13	148.64	6.51	R53S	194+16.65	Golf Course	66	406.78	393.68	13.10
R18S	156+36.59	SF Residential	66	142.41	140.54	1.87	R54S	195+43.16	Golf Course	66	317.75	304.48	13.27
R19S	158+16.12	Swimming Pool	66	119.64	108.57	11.07	R55S	191+91.64	MF Residential	66	686.91	674.27	12.64
R20S	160+41.61	SF Residential	66	120.37	100.2	20.17	R56S	200+23.67	Recreational Bldg.	51	357.37	339.81	17.56
R21S	161+48.72	SF Residential	66	144.85	122.16	22.69	R57S	203+41.08	Recreational Bldg.	51	396.30	374.56	21.74
R22S	162+96.37	SF Residential	66	139.24	115.99	23.25	R58S	206+55.12	Recreational Bldg.	51	341.51	315.33	26.18
R23S	153+77.04	SF Residential	66	195.85	203.61	7.76	R59S	198+94.66	Swimming Pool	66	491.37	478.21	13.16
R24S	153+89.15	SF Residential	66	285.87	292.83	6.96	R60S	209+05.90	Tennis Court	66	571.00	553.80	17.20
R25S	156+47.72	SF Residential	66	301.33	298.66	2.67	R61S	209+58.23	Medical Office	51	90.62	73.03	17.59
R26S	159+75.08	SF Residential	66	298.33	280.46	17.87	R62S	211+24.57	Medical Office	51	132.29	113.27	19.02
R27S	163+06.76	SF Residential	66	216.82	193.45	23.37	R63S	211+57.80	Medical Office	51	323.13	304.11	19.02
R28S	163+49.07	SF Residential	66	268.25	244.42	23.83	R64N	216+25.75	SF Residential	66	97.73	91.02	6.71
R29S	164+13.77	Golf Course	66	159.85	135.63	24.22	R65N	214+76.78	SF Residential	66	106.51	99.64	6.87
R30S	167+69.21	Golf Course	66	152.29	123.04	29.25	R66N	213+30.85	SF Residential	66	97.55	89.91	7.64
R31S	170+56.75	Golf Course	66	156.94	135.49	21.45	R67N	216+24.40	SF Residential	66	165.70	158.99	6.71
R32S	164+22.09	Golf Course	66	279.24	254.9	24.34	R68N	214+77.67	SF Residential	66	167.65	160.77	6.88
R33S	168+63.28	Golf Course	66	260.6	233.32	27.28	R69N	213+40.91	SF Residential	66	168.21	160.62	7.59
R34S	172+81.31	Golf Course	66	173.83	157.86	15.97	R70N	216+27.89	SF Residential	66	268.72	262.01	6.71
R35S	176+37.84	Golf Course	66	185.02	171.79	13.23	R71N	213+32.29	SF Residential	66	271.42	263.79	7.63
R36S	172+15.22	Golf Course	66	276.19	258.78	17.41	R72N	212+42.14	SF Residential	66	58.22	42.96	15.26

Table 2-2 Noise Receptor Location and Description Summary Alternative 1B													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 1B						Existing Alignment	Build Alternative 1B	
R73N	210+02.92	SF Residential	66	60.86	52.75	8.11	R91BN	178+29.66	MF Residential	66	396.91	389.30	7.61
R74N	207+39.41	MF Residential	66	54.48	46.88	7.60	R108N	216+27.41	SF Residential	66	338.65	331.94	6.71
R75N	205+07.93	MF Residential	66	58.03	50.37	7.66	R109N	215+23.29	SF Residential	66	341.74	334.91	6.83
R76N	212+42.20	SF Residential	66	116.12	108.10	8.02	R110N	216+26.74	SF Residential	66	454.47	447.76	6.71
R77N	210+05.59	SF Residential	66	116.06	107.95	8.11	R111N	215+24.80	SF Residential	66	453.55	446.73	6.82
R78N	207+07.95	SF Residential	66	188.16	180.51	7.65	R112N	216+30.45	SF Residential	66	630.12	623.42	6.70
R79N	205+11.43	MF Residential	66	133.50	125.84	7.66	R113N	215+27.79	SF Residential	66	631.01	624.20	6.81
R80N	201+84.61	MF Residential	66	80.77	73.16	7.61	R114N	216+30.08	SF Residential	66	689.68	682.98	6.70
R81N	198+38.13	MF Residential	66	101.01	93.16	7.85	R115N	215+26.49	SF Residential	66	691.06	684.24	6.82
R82N	195+19.74	MF Residential	66	114.94	106.78	8.16	R116N	216+32.11	SF Residential	66	863.79	857.09	6.70
R83N	192+97.88	MF Residential	66	134.79	126.80	7.99	R117N	215+30.38	SF Residential	66	864.21	857.39	6.82
R84N	201+70.33	MF Residential	66	175.85	168.24	7.61	R118N	216+30.87	SF Residential	66	976.13	969.43	6.70
R85N	198+78.59	SF Residential	66	279.80	271.98	7.82	R119N	215+31.72	SF Residential	66	979.15	972.34	6.81
R86N	195+14.94	MF Residential	66	221.69	213.52	8.17	R120N	216+49.72	SF Residential	66	1062.93	1056.26	6.67
R87N	192+92.05	MF Residential	66	224.81	216.77	8.04	R121N	216+51.04	SF Residential	66	1200.79	1194.12	6.67
R88N	187+03.63	Comm. Center	51	63.48	56.11	7.37	R122N	216+52.82	SF Residential	66	1337.23	1330.57	6.66
R89N	184+46.32	Church	51	188.85	181.30	7.55	R123N	218+36.09	SF Residential	66	1286.74	1280.37	6.37
R90N	181+37.92	Funeral Home	51	118.83	110.95	7.88	R124N	218+34.23	SF Residential	66	1162.56	1156.19	6.37
R91N	178+29.66	Swimming Pool	66	321.37	313.88	7.49	R125N	218+37.59	SF Residential	66	1019.14	1012.77	6.37
R92N	172+40.56	Restaurant	71	93.95	89.66	4.29	R126N	218+32.82	SF Residential	66	830.52	824.15	6.37
R93N	166+40.32	Medical Office	51	171.23	174.52	3.29	R127N	218+38.98	SF Residential	66	695.38	689.01	6.37
R94N	166+85.09	Restaurant	71	289.98	293.24	3.26	R128N	218+32.51	SF Residential	66	558.02	551.60	6.42
R95N	151+67.69	MF Residential	66	126.43	88.24	38.19	R129N	218+24.40	SF Residential	66	378.59	372.23	6.36
R96N	149+25.25	MF Residential	66	139.39	99.52	39.87	R130N	219+33.50	SF Residential	66	310.31	303.86	6.45
R97N	147+10.04	MF Residential	66	149.83	111.81	38.02	R131N	220+03.25	SF Residential	66	1303.70	1297.53	6.17
R98N	152+09.41	MF Residential	66	360.22	322.61	37.61	R132N	219+98.86	SF Residential	66	982.46	975.97	6.49
R99N	149+32.84	MF Residential	66	398.76	358.86	39.90	R133N	219+80.74	SF Residential	66	593.21	586.74	6.47
R100N	146+60.01	MF Residential	66	395.86	358.75	37.11	R134N	220+13.21	SF Residential	66	309.79	303.29	6.50
R101N	142+37.59	Restaurant	71	176.25	154.72	21.53	R135N	219+98.00	SF Residential	66	144.36	137.85	6.51
R102N	141+66.46	Medical Office	51	164.55	146.86	17.69	R136N	220+57.16	SF Residential	66	71.96	65.41	6.55
R103N	141+24.71	Restaurant	71	157.28	141.85	15.43	R137N	223+26.71	SF Residential	66	70.48	62.56	7.92
R104N	141+01.53	Restaurant	71	156.17	141.11	15.06	R138N	225+74.15	SF Residential	66	56.56	47.29	9.27
R105N	140+15.03	Restaurant	71	164.65	152.53	12.12	R139N	226+77.73	SF Residential	66	76.50	67.13	9.37
R106N	138+49.94	Restaurant	71	170.87	161.53	9.34	R140N	227+15.66	SF Residential	66	151.25	141.91	9.34
R107N	138+21.76	Restaurant	71	170.63	161.30	9.33	R141N	227+21.77	SF Residential	66	237.15	227.62	9.53
R91AN	178+29.66	MF Residential	66	396.91	389.30	7.61	R142N	230+13.63	Club House	66	307.42	296.87	10.55

Table 2-2 Noise Receptor Location and Description Summary Alternative 1B													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 1B						Existing Alignment	Build Alternative 1B	
R143N	230+62.47	Swimming Pool	66	414.59	403.95	10.64	R151N	235+95.39	SF Residential	66	216.25	205.37	10.88
R144N	223+24.63	SF Residential	66	204.90	197.01	7.89	R152S	216+27.67	MF Residential	66	934.38	919.30	15.08
R145N	223+41.79	SF Residential	66	307.74	299.71	8.03	R153S	216+66.88	MF Residential	66	853.14	838.17	14.97
R146N	232+99.76	SF Residential	66	282.27	269.74	12.53	R154S	216+23.75	MF Residential	66	805.37	790.28	15.09
R147N	232+97.02	SF Residential	66	202.33	189.80	12.53	R155S	215+49.88	MF Residential	66	930.52	915.54	14.98
R148N	233+31.04	SF Residential	66	125.82	113.47	12.35	R156S	215+88.12	MF Residential	66	854.29	839.09	15.20
R149N	235+01.49	SF Residential	66	68.82	57.43	11.39	R157S	231+02.12	Medical Office	51	119.74	121.26	1.52
R150N	235+85.35	SF Residential	66	65.59	54.67	10.92							

Table 2-3 Noise Receptor Location and Description Summary Alternative 2A													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 2A						Existing Alignment	Build Alternative 2A	
R1S	129+52.53	Tennis Court	66	284.53	276.27	8.26	R37S	172+99.48	MF Residential	66	685.91	661.70	24.21
R2S	130+26.90	Swimming Pool	66	288.47	275.92	12.55	R38S	177+56.69	MF Residential	66	156.15	131.92	24.23
R3S	130+40.31	MF Residential	66	535.25	522.42	12.83	R39S	180+69.41	MF Residential	66	225.32	201.09	24.23
R4S	135+17.18	Assisted Living Fac.	66	138.93	126.65	12.28	R40S	182+11.99	MF Residential	66	217.99	194.05	23.94
R5S	135+54.30	Assisted Living Fac.	66	440.5	428.51	11.99	R41S	177+60.93	MF Residential	66	347.91	323.68	24.23
R6S	139+11.54	SF Residential	66	155.12	147.92	7.20	R42S	179+25.87	MF Residential	66	413.75	389.51	24.24
R7S	141+48.07	SF Residential	66	158.93	153.43	5.50	R43S	181+78.63	Tennis Court	66	430.51	406.40	24.11
R8S	143+09.84	SF Residential	66	257.52	254.20	3.32	R44S	187+57.51	Golf Course	66	133.75	109.48	24.27
R9S	138+27.13	SF Residential	66	229.42	220.68	8.74	R45S	185+20.15	Golf Course	66	237.09	212.50	24.59
R10S	140+88.01	SF Residential	66	251.15	244.82	6.33	R46S	190+03.96	Golf Course	66	265.24	240.11	25.13
R11S	143+87.42	SF Residential	66	401.98	400.73	1.25	R47S	188+15.29	Swimming Pool	66	636.54	612.21	24.33
R12S	141+01.88	SF Residential	66	415.76	409.60	6.16	R48S	189+46.75	Tennis Court	66	610.56	586.27	24.29
R13S	147+47.65	SF Residential	66	219.73	220.71	0.98	R49S	191+12.34	Golf Course	66	157.31	132.85	24.46
R14S	149+50.69	SF Residential	66	191.11	191.91	0.80	R50S	192+93.42	Golf Course	66	150.42	126.58	23.84
R15S	147+13.61	SF Residential	66	304.91	294.78	10.13	R51S	195+03.72	Golf Course	66	187.88	162.80	25.08
R16S	149+74.87	SF Residential	66	293.96	294.78	0.82	R52S	191+97.23	Golf Course	66	300.47	276.85	23.62
R17S	154+21.18	SF Residential	66	142.13	142.31	0.18	R53S	194+16.65	Golf Course	66	406.78	382.68	24.10
R18S	156+36.59	SF Residential	66	142.41	138.91	3.50	R54S	195+43.16	Golf Course	66	317.75	293.28	24.47
R19S	158+16.12	Swimming Pool	66	119.64	108.45	11.19	R55S	191+91.64	MF Residential	66	686.91	663.27	23.64
R20S	160+41.61	SF Residential	66	120.37	100.20	20.17	R56S	200+23.67	Recreational Bldg.	51	357.37	340.04	17.33
R21S	161+48.72	SF Residential	66	144.85	122.16	22.69	R57S	203+41.08	Recreational Bldg.	51	396.30	381.53	14.77
R22S	162+96.37	SF Residential	66	139.24	115.99	23.25	R58S	206+55.12	Recreational Bldg.	51	341.51	326.41	15.10
R23S	153+77.04	SF Residential	66	195.85	196.07	0.22	R59S	198+94.66	Swimming Pool	66	491.37	472.10	19.27
R24S	153+89.15	SF Residential	66	285.87	285.71	0.16	R60S	209+05.90	Tennis Court	66	571.00	568.18	2.82
R25S	156+47.72	SF Residential	66	301.33	297.33	4.00	R61S	209+58.23	Medical Office	51	90.62	88.07	2.55
R26S	159+75.08	SF Residential	66	298.33	280.46	17.87	R62S	211+24.57	Medical Office	51	132.29	129.64	2.65
R27S	163+06.76	SF Residential	66	216.82	193.45	23.37	R63S	211+57.80	Medical Office	51	323.13	320.48	2.65
R28S	163+49.07	SF Residential	66	268.25	244.42	23.83	R64N	216+25.75	SF Residential	66	97.73	85.64	12.09
R29S	164+13.77	Golf Course	66	159.85	135.37	24.48	R65N	214+76.78	SF Residential	66	106.51	94.27	12.24
R30S	167+69.21	Golf Course	66	152.29	123.91	28.38	R66N	213+30.85	SF Residential	66	97.55	84.54	13.01
R31S	170+56.75	Golf Course	66	156.94	132.44	24.50	R67N	216+24.40	SF Residential	66	165.70	153.61	12.09
R32S	164+22.09	Golf Course	66	279.24	254.74	24.50	R68N	214+77.67	SF Residential	66	167.65	155.40	12.25
R33S	168+63.28	Golf Course	66	260.6	233.41	27.19	R69N	213+40.91	SF Residential	66	168.21	155.25	12.96
R34S	172+81.31	Golf Course	66	173.83	149.27	24.56	R70N	216+27.89	SF Residential	66	268.72	256.64	12.08
R35S	176+37.84	Golf Course	66	185.02	160.79	24.23	R71N	213+32.29	SF Residential	66	271.42	258.42	13.00
R36S	172+15.22	Golf Course	66	276.19	251.57	24.62	R72N	212+42.14	SF Residential	66	58.22	44.58	13.64

Table 2-3 Noise Receptor Location and Description Summary Alternative 2A													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 2A						Existing Alignment	Build Alternative 2A	
R73N	210+02.92	SF Residential	66	60.86	47.38	13.48	R91BN	178+29.66	MF Residential	66	396.91	400.30	3.39
R74N	207+39.41	MF Residential	66	54.48	41.51	12.97	R108N	216+27.41	SF Residential	66	338.65	326.57	12.08
R75N	205+07.93	MF Residential	66	58.03	47.48	10.55	R109N	215+23.29	SF Residential	66	341.74	329.54	12.20
R76N	212+42.20	SF Residential	66	116.12	102.72	13.40	R110N	216+26.74	SF Residential	66	454.47	442.39	12.08
R77N	210+05.59	SF Residential	66	116.06	102.58	13.48	R111N	215+24.80	SF Residential	66	453.55	441.35	12.20
R78N	207+07.95	SF Residential	66	188.16	175.14	13.02	R112N	216+30.45	SF Residential	66	630.12	618.04	12.08
R79N	205+11.43	MF Residential	66	133.50	122.89	10.61	R113N	215+27.79	SF Residential	66	631.01	618.82	12.19
R80N	201+84.61	MF Residential	66	80.77	74.97	5.80	R114N	216+30.08	SF Residential	66	689.68	677.61	12.07
R81N	198+38.13	MF Residential	66	101.01	100.00	1.01	R115N	215+26.49	SF Residential	66	691.06	678.87	12.19
R82N	195+19.74	MF Residential	66	114.94	118.25	3.31	R116N	216+32.11	SF Residential	66	863.79	851.72	12.07
R83N	192+97.88	MF Residential	66	134.79	137.80	3.01	R117N	215+30.38	SF Residential	66	864.21	852.02	12.19
R84N	201+70.33	MF Residential	66	175.85	170.24	5.61	R118N	216+30.87	SF Residential	66	976.13	964.06	12.07
R85N	198+78.59	SF Residential	66	279.80	278.21	1.59	R119N	215+31.72	SF Residential	66	979.15	966.97	12.18
R86N	195+14.94	MF Residential	66	221.69	225.05	3.36	R120N	216+49.72	SF Residential	66	1062.93	1050.89	12.04
R87N	192+92.05	MF Residential	66	224.81	227.77	2.96	R121N	216+51.04	SF Residential	66	1200.79	1188.75	12.04
R88N	187+03.63	Comm. Center	51	63.48	67.11	3.63	R122N	216+52.82	SF Residential	66	1337.23	1325.20	12.03
R89N	184+46.32	Church	51	188.85	192.30	3.45	R123N	218+36.09	SF Residential	66	1286.74	1275.00	11.74
R90N	181+37.92	Funeral Home	51	118.83	121.95	3.12	R124N	218+34.23	SF Residential	66	1162.56	1150.81	11.75
R91N	178+29.66	Swimming Pool	66	321.37	324.88	3.51	R125N	218+37.59	SF Residential	66	1019.14	1007.39	11.75
R92N	172+40.56	Restaurant	71	93.95	97.47	3.52	R126N	218+32.82	SF Residential	66	830.52	818.78	11.74
R93N	166+40.32	Medical Office	51	171.23	174.52	3.29	R127N	218+38.98	SF Residential	66	695.38	683.63	11.75
R94N	166+85.09	Restaurant	71	289.98	293.24	3.26	R128N	218+32.51	SF Residential	66	558.02	546.23	11.79
R95N	151+67.69	MF Residential	66	126.43	105.27	21.16	R129N	218+24.40	SF Residential	66	378.59	366.85	11.74
R96N	149+25.25	MF Residential	66	139.39	117.78	21.61	R130N	219+33.50	SF Residential	66	310.31	298.49	11.82
R97N	147+10.04	MF Residential	66	149.83	127.65	22.18	R131N	220+03.25	SF Residential	66	1303.70	1292.16	11.54
R98N	152+09.41	MF Residential	66	360.22	339.05	21.17	R132N	219+98.86	SF Residential	66	982.46	970.60	11.86
R99N	149+32.84	MF Residential	66	398.76	377.16	21.60	R133N	219+80.74	SF Residential	66	593.21	581.37	11.84
R100N	146+60.01	MF Residential	66	395.86	373.62	22.24	R134N	220+13.21	SF Residential	66	309.79	297.92	11.87
R101N	142+37.59	Restaurant	71	176.25	158.83	17.42	R135N	219+98.00	SF Residential	66	144.36	132.48	11.88
R102N	141+66.46	Medical Office	51	164.55	148.18	16.37	R136N	220+57.16	SF Residential	66	71.96	60.04	11.92
R103N	141+24.71	Restaurant	71	157.28	141.70	15.58	R137N	223+26.71	SF Residential	66	70.48	57.19	13.29
R104N	141+01.53	Restaurant	71	156.17	140.77	15.40	R138N	225+74.15	SF Residential	66	56.56	41.92	14.64
R105N	140+15.03	Restaurant	71	164.65	150.56	14.09	R139N	226+77.73	SF Residential	66	76.50	61.76	14.74
R106N	138+49.94	Restaurant	71	170.87	159.10	11.77	R140N	227+15.66	SF Residential	66	151.25	136.55	14.70
R107N	138+21.76	Restaurant	71	170.63	159.17	11.46	R141N	227+21.77	SF Residential	66	237.15	222.19	14.96
R91AN	178+29.66	MF Residential	66	396.91	400.30	3.39	R142N	230+13.63	Club House	66	307.42	293.98	13.44

Table 2-3 Noise Receptor Location and Description Summary Alternative 2A													
Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)	Noise Receptor Number	Noise Receptor Station Number SR 806 / Atlantic Avenue	Noise Receptor Description	FDOT NAC	Distance from Nearest Center Travel Lane (Ft.)	Distance from Nearest Center Travel Lane (Ft.)	Distance Variance (Ft.)
				Existing Alignment	Build Alternative 2A						Existing Alignment	Build Alternative 2A	
R143N	230+62.47	Swimming Pool	66	414.59	401.48	13.11	R151N	235+95.39	SF Residential	66	216.25	204.72	11.53
R144N	223+24.63	SF Residential	66	204.90	191.63	13.27	R152S	216+27.67	MF Residential	66	934.38	935.67	1.29
R145N	223+41.79	SF Residential	66	307.74	290.59	17.15	R153S	216+66.88	MF Residential	66	853.14	854.55	1.41
R146N	232+99.76	SF Residential	66	282.27	269.86	12.41	R154S	216+23.75	MF Residential	66	805.37	806.66	1.29
R147N	232+97.02	SF Residential	66	202.33	189.92	12.41	R155S	215+49.88	MF Residential	66	930.52	931.91	1.39
R148N	233+31.04	SF Residential	66	125.82	113.51	12.31	R156S	215+88.12	MF Residential	66	854.29	855.47	1.18
R149N	235+01.49	SF Residential	66	68.82	57.02	11.80	R157S	231+02.12	Medical Office	51	119.74	121.12	1.38
R150N	235+85.35	SF Residential	66	65.59	54.04	11.55							

- **ML2** – Monitoring Location 2 (ML2/R43S) is located within the Murano of Delray Beach Condominium Homes at 15005 Michelangelo Boulevard (clubhouse / tennis court). The measurement location is situated approximately 510-580 feet from the edge of pavement.
- **ML3** – Monitoring Location 3 (ML3/R85N) is located within the Moonlit Drive Community at 6831 Moonlit Drive/Way (single family residence). The measurement location is situated approximately 262-330 feet from the edge of pavement.
- **ML4** – Monitoring Location 4 (ML4/R141N R142N) is located within an un-named residential area east of Jog Road (single family residence). The measurement location is situated approximately 237-327 feet from the edge of pavement.

6.1.1 Methodology

A series of three (3) continuous 10-minute measurement periods were acquired at the designated field measurement locations (ML1 through ML4). Noise levels were measured using the Larson Davis 831 Type I Real Time Sound Level Analyzer (SN 4153) for the purposes of field verification of the existing measured noise levels. The Larson Davis 831 instrumentation adheres to the following Acoustical Specifications IEC 61672-2013 (Class 1), IEC 60651-2001 (Type 1), IEC 60804-2000 (Type 1), IEC 61260-2001 (Class 1), IEC 61252-2002, ANSI S1.4-2014 Class 1, ANSI S1.11-2004, 1/1 & 1/3 Octave Band Class 1, and ANSI S1.25-1991 (R2007).

The Larson Davis Model CAL 200 Calibrator (SN 8533) with two selectable calibration levels of 94.00 dB and 114.00 dB at 1 KHz was utilized in the measurement analysis and was the manufacturer's specified calibrator. The Larson Davis Model CAL 200 Calibrator (SN 8533) adheres to the following Acoustical Specifications IEC 6LR61, NEDA 1604A, IEC 60942-2003 CLASS 1, and ANSI S1.40-2006.

The entire acoustical system was calibrated before and after each series of (10) minute measurement periods and received an annual factory calibration by the manufacturer's representative. The sound level analyzer was calibrated at 114.00 dB at 1 KHz and was verified to be within the calibration tolerance. The acoustical and meteorological instrumentation is presented in **Table 3**.

The sound level meter was properly mounted on an instrument tripod approximately five (5) feet above the ground surface at each designated noise measurement location. The manufacturer's specified wind screen was properly mounted on the sound level meter microphone during the field measurement period. Prior to each measurement period, the sound level meter's battery level was verified to be within the manufacturer's recommended tolerance. Vehicle counts were acquired by video recording. Vehicle speeds were measured with a Stalker Basic Radar Gun (SN KE5356) and a Decatur Scout Radar Gun (SN SHD-04728) which was calibrated before and after each measurement period.

6.1.2 Meteorological Conditions

During each field noise measurement period, meteorological components, such as cloud cover, ambient temperature, wind speed, wind direction, and humidity, were documented. The corresponding meteorological condition associated with each measurement period was recorded with a Kestrel hand held Pocket Weather Tracker. The Kestrel Model 4500NV (SN 678342) was utilized to record all field meteorological conditions associated with this study.

Table 3
Acoustical and Meteorological Instrumentation

Instrument Type & Model No.	Manufacturer	Serial No.	Annual Calibration	Calibration Laboratory
Larson Davis Model 831 Type I SLM	Larson Davis	04153	07/12/2021	Larson Davis
Larson Davis PRM 831 Preamplifier	Larson Davis	012499	07/12/2021	Larson Davis
Larson Davis 377B02 Microphone	Larson Davis	113988	07/12/2021	Larson Davis
Larson Davis Model 831 Type I SLM	Larson Davis	03557	07/12/2021	Larson Davis
Larson Davis PRM 831 Preamplifier	Larson Davis	016882	07/12/2021	Larson Davis
Larson Davis 377B02 Microphone	Larson Davis	305224	07/12/2021	Larson Davis
Larson Davis Cal 200 Calibrator	Larson Davis	8533	06/25/2021	Larson Davis
Kestrel 4500 NV Pocket Weather Tracker	Kestrel	678342	N/A	N/A
GPS HOLUX MN M-215+	HOLUX	SN 215+ L70700105	N/A	N/A
GPS HOLUX MN GR-213	HOLUX	SN 213U-91802451	N/A	N/A
Stalker Basic Radar Gun	Stalker	SN KE5356	N/A	N/A
Decatur Scout Radar Gun	Decatur	SHD-04728	N/A	N/A

6.1.3 Field Measurement Data

Field noise measurements, meteorological conditions, and vehicle speeds were documented at four (4) representative locations (ML1 through ML4) adjacent to the SR-806 / Atlantic Avenue corridor. ML1 represented the residential area of the Lexington Club. ML2 represented the recreational area of the Murano of Delray Beach Condominium Homes. ML3 represented the residential area of Moonlit Way. ML4 represented the un-named residential area east of Jog Road.

The noise measurement data sheets are presented in **Appendix D**. The field measured noise levels and corresponding vehicle classification information are depicted in the TNM 2.5 model validation results presented in **Table 4**. The noise levels are reported to the 1/10th of a decibel using the LEQ(h) noise descriptor.

6.1.4 Model Validation Results

In accordance with Part 2, Chapter 18 Noise (July 1, 2020), of the PD&E Manual, the acceptable range of error between the field noise level measurements and the predicted noise levels is +/- 3 dB(A). If this acceptable range of error can be achieved, TNM version 2.5 inputs can be relied upon for the purposes of predicting the noise levels for the project conditions. The difference between the field measured noise levels and the predicted noise levels for all but one (1) measurement trial was within +/- 3 dB(A). Therefore, the model inputs were determined to be valid for further use with this study. The TNM 2.5 model validation results are presented in **Table 4**. The measurement periods associated with ML1 through ML4 were within the acceptable range of error for validation purposes, with one exception at ML2 where a waste removal truck with alarms interfered with the majority of the measurement period.

Table 4 TNM 2.5 Model Validation Results

Monitoring Site Identification Number	Monitoring Site Location	Begin Time	End Time	Travel Lanes	Distance From Nearest Edge of Travel Lane (Feet)	Cars		Medium Trucks		Heavy Trucks		Buses		Motorcycles		Field Measured Noise Level dB(A)	TNM / Computer Predicted Noise Level dB(A)	Difference (Measured-Predicted) dB(A)	Model Validation (+/-) 3 dB(A) Yes / No
						Vehicles Per Hour	Speed (MPH)	Vehicles Per Hour	Speed (MPH)	Vehicles Per Hour	Speed (MPH)	Vehicles Per Hour	Speed (MPH)	Vehicles Per Hour	Speed (MPH)				
Field Validation Site: SR-806 / Atlantic Avenue from Florida Turnpike to Jog Road – July 27, 2021																			
ML1 (R6S)	7930 B Lexington Club Boulevard	09:57:15	10:07:15	Atlantic Ave. EB	235	936	44	36	46	06	46	--	--	--	--	55.8	55.4	-0.4	YES
				Atlantic Ave. WB	304	822	36	06	34	12	26	--	--	--	--				
		10:07:15	10:17:15	Atlantic Ave. EB	235	1,140	47	78	47	24	47	--	--	--	--	55.8	58.3	2.5	YES
				Atlantic Ave. WB	304	810	40	30	38	24	35	--	--	--	--				
		10:17:15	10:27:15	Atlantic Ave. EB	235	1,038	44	24	39	18	39	--	--	--	--	54.9	56.0	1.1	YES
				Atlantic Ave. WB	304	600	38	06	38	12	35	--	--	--	--				
Average 1.3																			
ML2 (R43S)	15005 Michelangelo Boulevard	10:54:22	11:04:22	Atlantic Ave. EB	510	990	44	54	46	30	46	--	--	--	--	53.1	52.5	-0.6	YES
				Atlantic Ave. WB	580	984	36	18	34	12	26	--	--	--	--				
		11:04:22	11:14:22	Atlantic Ave. EB	510	1,020	44	30	44	06	44	--	--	--	--	56.2	50.1	-6.1	NO Influenced by Waste Removal Truck w/ Alarms
				Atlantic Ave. WB	580	942	44	30	41	--	--	--	--	--	--				
		11:14:22	11:24:22	Atlantic Ave. EB	510	900	42	48	42	24	42	--	--	--	--	51.7	51.6	-0.1	YES
				Atlantic Ave. WB	580	894	49	30	37	--	--	--	--	--	--				
Average 2.2																			
ML3 (R85N)	6831 Moonlit Drive / Way	11:42:09	11:52:09	Atlantic Ave. EB	330	918	39	42	39	18	39	--	--	--	--	53.5	54.0	0.5	YES
				Atlantic Ave. WB	262	654	37	06	38	12	30	--	--	12	34				
		11:52:09	12:02:09	Atlantic Ave. EB	330	1,110	40	24	40	24	40	--	--	--	--	55.4	54.9	-0.5	YES
				Atlantic Ave. WB	262	1,014	34	12	34	12	36	--	--	--	--				
		12:02:09	12:12:09	Atlantic Ave. EB	330	942	36	36	40	36	40	--	--	06	34	55.2	55.3	0.1	YES
				Atlantic Ave. WB	262	648	41	06	41	18	23	--	--	--	--				

6.2 PREDICTED NOISE LEVELS AND ABATEMENT ANALYSIS

The predicted noise levels and applicable abatement analysis measures were developed based upon the modeling criteria described in Part 2, Chapter 18 Noise (July 1, 2020), of the PD&E Manual and the Traffic Noise Modeling and Analysis Practitioners Handbook dated January 1, 2016. Specific input data for TNM version 2.5 is required to generate computer predicted noise levels associated with the project area under evaluation. One hundred and fifty-seven (157) noise sensitive receptor locations representative of named and un-named residential areas, recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the outside seating areas associated with restaurants was evaluated. The noise sensitive locations are depicted in the Noise Analysis Maps presented in **Appendix C**.

6.2.1 Data Sources

The data input sources that TNM version 2.5 relied upon for the purposes of predicting noise levels for this study are as follows: roadway and receptor data (state plane coordinates), project traffic data (i.e., vehicle volumes, vehicle mix, and vehicle speeds), distance(s) from the center of each roadway to the receptor, the widths of the roadway and lanes, the height of the receptor, barrier and buffer information including embankments, areas of water (e.g., ponds), paved surfaces, building rows or other structures, the type of propagation paths (hard vs. soft), variations in terrain between the receptors and the roadway, and any changes in grade. Each of these factors can influence the predicted noise levels. The coordinate geometry for this study was developed with the State Plane Coordinate System. Elevation data was provided in the project survey file (TIN File) and LIDAR data provided by Palm Beach County. Two (2) privacy walls were evaluated on SR-806 / Atlantic Avenue and Jog Road and were included in the acoustical model development. The privacy wall heights ranged from 5.5 to 6 Feet in height.

6.2.2 Predicted Noise Levels

The TNM 2.5 predicted noise levels for the project area are presented in **Table 5-1, 5-2, and 5-3**. The noise study evaluated the following conditions: Existing Year 2018 Condition and the Design Year 2045 No-Build and Build Alternative Condition (Alternative 1A, 1B, and 2A). The predicted noise levels were evaluated at Fourteen (14) Noise Sensitive Areas which represent one hundred and fifty-seven (157) noise sensitive receptor locations.

6.2.3 Noise Sensitive Area 1-2

Noise Sensitive Area 1-2 represents the assisted living area of Sonata and the residential areas of the Waterways and the Lexington Club on the south side of SR-806 / Atlantic Avenue. This area is representative of single and multi-family residences and recreational areas and represents 16 noise sensitive receptor locations which will experience the following computer predicted sound levels: R1S-R16S:

- Existing Year (2018) Condition: 51.2 dB(A) to 61.2 dB(A).
- No-Build Alternative Year (2045) Condition: 53.0 dB(A) to 62.8 dB(A).
- Build Alternative 1A Year (2045) Condition: 53.6 dB(A) to 64.4 dB(A).
- Build Alternative 1B Year (2045) Condition: 53.6 dB(A) to 64.4 dB(A).
- Build Alternative 2A Year (2045) Condition: 53.6 dB(A) to 64.4 dB(A).

6.2.4 Noise Sensitive Area 3

Noise Sensitive Area 3 represents residential areas of Eagle Point on the south side of SR-806 / Atlantic Avenue. This area is representative of single-family residences and represents 12 noise sensitive receptor locations which will experience the following computer predicted sound levels: R17S-R28S:

- Existing Year (2018) Condition: 54.9 dB(A) to 61.8 dB(A).
- No-Build Alternative Year (2045) Condition: 56.4 dB(A) to 63.3 dB(A).
- Build Alternative 1A Year (2045) Condition: 56.8 dB(A) to 65.8 dB(A).
- Build Alternative 1B Year (2045) Condition: 56.8 dB(A) to 65.8 dB(A).
- Build Alternative 2A Year (2045) Condition: 56.9 dB(A) to 65.8 dB(A).

6.2.5 Noise Sensitive Area 4

Noise Sensitive Area 4 represents the residential and recreational areas of Glen Eagles Country Club on the south side of SR-806 / Atlantic Avenue. This area is representative of single-family residences and recreational areas and represents 9 noise sensitive receptor locations which will experience the following computer predicted sound levels: R29S-R37S:

- Existing Year (2018) Condition: 50.2 dB(A) to 61.0 dB(A).
- No-Build Alternative Year (2045) Condition: 51.8 dB(A) to 62.5 dB(A).
- Build Alternative 1A Year (2045) Condition: 52.5 dB(A) to 64.5 dB(A).
- Build Alternative 1B Year (2045) Condition: 52.5 dB(A) to 64.5 dB(A).
- Build Alternative 2A Year (2045) Condition: 52.6 dB(A) to 64.7 dB(A).

6.2.6 Noise Sensitive Area 5-6

Noise Sensitive Area 5-6 represents the residential and recreational areas of Murano of Delray Beach and Vizcaya on the south side of SR-806 / Atlantic Avenue. This area is representative of single-family residences and recreational areas and represents 11 noise sensitive receptor locations which will experience the following computer predicted sound levels: R38S-R48S:

- Existing Year (2018) Condition: 52.2 dB(A) to 60.4 dB(A).
- No-Build Alternative Year (2045) Condition: 53.7 dB(A) to 61.9 dB(A).
- Build Alternative 1A Year (2045) Condition: 54.4 dB(A) to 63.8 dB(A).
- Build Alternative 1B Year (2045) Condition: 54.4 dB(A) to 63.8 dB(A).
- Build Alternative 2A Year (2045) Condition: 54.6 dB(A) to 64.6 dB(A).

6.2.7 Noise Sensitive Area 7

Noise Sensitive Area 7 represents the residential and recreational areas of Kings Point on the south side of SR-806 / Atlantic Avenue. This area is representative of single-family residences and recreational areas and represents 17 noise sensitive receptor locations which will experience the following computer predicted sound levels: R49S-R60S, R152S-R156S: **Interior / Jog Road**

- Existing Year (2018) Condition: 30.2 dB(A) to 69.6 dB(A).
- No-Build Alternative Year (2045) Condition: 31.8 dB(A) to 71.1 dB(A).

- Build Alternative 1A Year (2045) Condition: 32.4 dB(A) to 71.1 dB(A).
- Build Alternative 1B Year (2045) Condition: 32.3 dB(A) to 71.0 dB(A).
- Build Alternative 2A Year (2045) Condition: 32.5 dB(A) to 71.1 dB(A).

6.2.8 Noise Sensitive Area 8

Noise Sensitive Area 8 represents medical offices on the south side of SR-806 / Atlantic Avenue. This area is representative medical facilities and represents 4 noise sensitive receptor locations which will experience the following computer predicted sound levels: R61S-R63S, R157S: **Interior**

- Existing Year (2018) Condition: 30.2 dB(A) to 38.2 dB(A).
- No-Build Alternative Year (2045) Condition: 31.8 dB(A) to 39.7 dB(A).
- Build Alternative 1A Year (2045) Condition: 32.4 dB(A) to 39.9 dB(A).
- Build Alternative 1B Year (2045) Condition: 32.3 dB(A) to 39.9 dB(A).
- Build Alternative 2A Year (2045) Condition: 32.5 dB(A) to 39.9 dB(A).

6.2.9 Noise Sensitive Area 9 (Noise Barrier BW-2, BW-3)

Noise Sensitive Area 9 represents the un-named residential and recreational areas on the north side of SR-806 / Atlantic Avenue. This area is representative of single-family residences and recreational areas and represents 29 noise sensitive receptor locations which will experience the following computer predicted sound levels: **R123N-R151N:**

- Existing Year (2018) Condition: 53.1 dB(A) to 67.2 dB(A).
- No-Build Alternative Year (2045) Condition: 54.7 dB(A) to 69.2 dB(A).
- Build Alternative 1A Year (2045) Condition: 54.8 dB(A) to 71.3 dB(A).
- Build Alternative 1B Year (2045) Condition: 54.8 dB(A) to 70.4 dB(A).
- Build Alternative 2A Year (2045) Condition: 54.8 dB(A) to 71.3 dB(A).

6.2.10 Noise Sensitive Area 10 (Noise Barrier BW-1)

Noise Sensitive Area 10 represents the residential areas of the Villages of Oriole on the north side of SR-806 / Atlantic Avenue. This area is representative of single-family residences and represents 39 noise sensitive receptor locations which will experience the following computer predicted sound levels: **R64N-R87N, R108N-R122N:**

- Existing Year (2018) Condition: 54.5 dB(A) to 66.3 dB(A).
- No-Build Alternative Year (2045) Condition: 56.1 dB(A) to 67.9 dB(A).
- Build Alternative 1A Year (2045) Condition: 56.5 dB(A) to 72.9 dB(A).
- Build Alternative 1B Year (2045) Condition: 56.3 dB(A) to 72.0 dB(A).
- Build Alternative 2A Year (2045) Condition: 56.5 dB(A) to 72.8 dB(A).

6.2.11 Noise Sensitive Area 11

Noise Sensitive Area 11 represents a community center, a place of worship, a funeral home, a medical office, restaurants, and a residential complex (The International Club) on the north side of SR-806 / Atlantic Avenue. This area represents 7 noise sensitive receptor locations which will experience the following computer predicted sound levels: **R88N-R94N: Interior**

- Existing Year (2018) Condition: 32.6 dB(A) to 64.7 dB(A).
- No-Build Alternative Year (2045) Condition: 34.1 dB(A) to 66.2 dB(A).
- Build Alternative 1A Year (2045) Condition: 35.4 dB(A) to 67.2 dB(A).
- Build Alternative 1B Year (2045) Condition: 35.4 dB(A) to 67.2 dB(A).
- Build Alternative 2A Year (2045) Condition: 34.8 dB(A) to 66.6 dB(A).

6.2.12 Noise Sensitive Area 12

Noise Sensitive Area 12 represents the residential area of the Villaggio Reserve on the north side of SR-806 / Atlantic Avenue. This area is representative of single and multi-family residences and represents 6 noise sensitive receptor locations which will experience the following computer predicted sound levels:

R95N-R100N:

- Existing Year (2018) Condition: 51.5 dB(A) to 57.6 dB(A).
- No-Build Alternative Year (2045) Condition: 53.1 dB(A) to 59.1 dB(A).
- Build Alternative 1A Year (2045) Condition: 53.5 dB(A) to 60.4 dB(A).
- Build Alternative 1B Year (2045) Condition: 53.5 dB(A) to 60.4 dB(A).
- Build Alternative 2A Year (2045) Condition: 53.4 dB(A) to 59.9 dB(A).

6.2.13 Noise Sensitive Area 13

Noise Sensitive Area 13 represents restaurants and a medical office on the north side of SR-806 / Atlantic Avenue. This area represents 7 noise sensitive receptor locations which will experience the following computer predicted sound levels: **R101N-R107N: Interior**

- Existing Year (2018) Condition: 34.4 dB(A) to 59.7 dB(A).
- No-Build Alternative Year (2045) Condition: 36.0 dB(A) to 61.3 dB(A).
- Build Alternative 1A Year (2045) Condition: 37.9 dB(A) to 63.2 dB(A).
- Build Alternative 1B Year (2045) Condition: 37.9 dB(A) to 63.2 dB(A).
- Build Alternative 2A Year (2045) Condition: 37.7 dB(A) to 63.1 dB(A).

Table 5-1 TNM 2.5 Predicted Noise Levels dB(A) Build Alternative 1A																			
Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R1S	0	C	66	55.3	57.0	57.4	2.1	N	N	R31S	0	C	66	61.0	62.5	64.5	3.5	N	N
R2S	0	C	66	55.4	57.1	57.6	2.2	N	N	R32S	0	C	66	56.5	58.1	59.0	2.5	N	N
R3S	3	B	66	51.2	53.0	53.6	2.4	N	N	R33S	0	C	66	56.8	58.3	59.4	2.6	N	N
R4S	4	B	66	61.2	62.8	64.4	3.2	N	N	R34S	0	C	66	59.5	61.0	62.6	3.1	N	N
R5S	4	B	66	53.1	54.8	55.6	2.5	N	N	R35S	0	C	66	58.1	59.6	61.1	3.0	N	N
R6S	1	B	66	59.5	61.1	62.4	2.9	N	N	R36S	0	C	66	56.7	58.2	58.9	2.2	N	N
R7S	1	B	66	59.5	61.1	62.0	2.5	N	N	R37S	4	B	66	50.2	51.8	52.5	2.3	N	N
R8S	1	B	66	57.0	58.5	58.8	1.8	N	N	R38S	4	B	66	59.2	60.7	62.6	3.4	N	N
R9S	1	B	66	57.0	58.6	59.5	2.5	N	N	R39S	4	B	66	56.3	57.8	58.9	2.6	N	N
R10S	1	B	66	56.5	58.1	58.7	2.2	N	N	R40S	4	B	66	56.5	58.0	59.2	2.7	N	N
R11S	1	B	66	54.2	55.7	56.0	1.8	N	N	R41S	4	B	66	53.9	55.4	56.2	2.3	N	N
R12S	1	B	66	53.2	54.8	55.4	2.2	N	N	R42S	4	B	66	52.5	54.0	55.1	2.6	N	N
R13S	1	B	66	57.8	59.3	59.4	1.6	N	N	R43S	0	C	66	52.2	53.8	54.9	2.7	N	N
R14S	1	B	66	58.4	59.9	59.9	1.5	N	N	R44S	0	C	66	60.4	61.9	63.8	3.4	N	N
R15S	1	B	66	55.9	57.4	57.6	1.7	N	N	R45S	0	C	66	56.2	57.7	58.7	2.5	N	N
R16S	1	B	66	55.8	57.4	57.4	1.6	N	N	R46S	0	C	66	56.7	58.3	59.0	2.3	N	N
R17S	1	B	66	60.1	61.6	62.2	2.1	N	N	R47S	0	C	66	52.4	54.0	54.6	2.2	N	N
R18S	1	B	66	60.0	61.6	62.7	2.7	N	N	R48S	0	C	66	52.2	53.7	54.4	2.2	N	N
R19S	0	C	66	61.5	63.1	64.8	3.3	N	N	R49S	0	C	66	60.6	62.2	63.8	3.2	N	N
R20S	1	B	66	61.7	63.3	65.6	3.9	N	N	R50S	0	C	66	60.9	62.4	63.9	3.0	N	N
R21S	1	B	66	60.7	62.2	64.5	3.8	N	N	R51S	0	C	66	58.5	60.1	61.3	2.8	N	N
R22S	1	B	66	61.8	63.3	65.8	4.0	N	N	R52S	0	C	66	56.1	57.6	58.2	2.1	N	N
R23S	1	B	66	57.7	59.2	59.9	2.2	N	N	R53S	0	C	66	53.9	55.4	56.4	2.5	N	N
R24S	1	B	66	55.5	57.1	57.3	1.8	N	N	R54S	0	C	66	55.2	56.8	57.4	2.2	N	N
R25S	1	B	66	54.9	56.4	56.8	1.9	N	N	R55S	2	B	66	50.1	51.7	52.4	2.3	N	N
R26S	1	B	66	55.2	56.8	57.4	2.2	N	N	R56S	0	D ¹	51	30.2	31.8	32.4	2.2	N	N
R27S	1	B	66	58.2	59.8	61.3	3.1	N	N	R57S	0	D ¹	51	31.1	32.7	33.2	2.1	N	N
R28S	1	B	66	56.8	58.3	59.4	2.6	N	N	R58S	0	D ¹	51	31.4	33.0	33.4	2.0	N	N
R29S	0	C	66	60.7	62.2	64.3	3.6	N	N	R59S	0	C	66	52.3	53.9	54.9	2.6	N	N
R30S	0	C	66	60.2	61.8	64.3	4.1	N	N	R60S	0	C	66	52.8	54.4	54.8	2.0	N	N

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
 25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels

Table 5-1
TNM 2.5 Predicted Noise Levels
dB(A)
Build Alternative 1A

Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R61S	0	D ¹	51	39.7	41.3	41.9	2.2	N	N	R91N	0	C	66	52.1	53.7	54.1	2.0	N	N
R62S	0	D ¹	51	37.5	39.1	39.4	1.9	N	N	R92N	0	E	71	64.7	66.2	67.2	2.5	N	N
R63S	0	D ¹	51	32.1	33.7	33.5	1.4	N	N	R93N	0	D ¹	51	34.5	36.0	36.7	2.2	N	N
R64N	1	B	66	66.3	67.9	71.9	5.6	N¹	N¹	R94N	0	E	71	49.5	51.0	51.4	1.9	N	N
R65N	1	B	66	62.4	63.9	67.4	5.0	Y¹	Y¹	R95N	4	B	66	57.6	59.1	60.4	2.8	N	N
R66N	1	B	66	61.4	62.9	67.6	6.2	Y¹	Y¹	R96N	8	B	66	57.5	59.0	60.1	2.6	N	N
R67N	1	B	66	63.3	64.8	69.3	6.0	Y¹	Y¹	R97N	6	B	66	57.5	59.1	60.3	2.8	N	N
R68N	1	B	66	60.1	61.6	64.4	4.3	N	N	R98N	6	B	66	51.5	53.1	53.5	2.0	N	N
R69N	1	B	66	59.0	60.6	63.5	4.5	N	N	R99N	8	B	66	51.7	53.3	53.7	2.0	N	N
R70N	1	B	66	61.6	63.2	64.5	2.9	N	N	R100N	8	B	66	52.4	54.0	54.5	2.1	N	N
R71N	1	B	66	56.5	58.1	60.0	3.5	N	N	R101N	0	E	71	59.1	60.7	62.5	3.4	N	N
R72N	1	B	66	63.1	64.7	71.7	8.6	Y¹	Y¹	R102N	0	D ¹	51	34.4	36.0	37.9	3.5	N	N
R73N	1	B	66	62.3	63.8	70.7	8.4	Y¹	Y¹	R103N	0	E	71	59.7	61.3	63.2	3.5	N	N
R74N	2	B	66	66.1	67.7	72.9	6.8	Y¹	Y¹	R104N	0	E	71	59.7	61.3	63.2	3.5	N	N
R75N	2	B	66	64.4	66.0	70.3	5.9	Y¹	Y¹	R105N	0	E	71	59.3	60.9	62.6	3.3	N	N
R76N	1	B	66	60.2	61.7	66.4	6.2	Y¹	Y¹	R106N	0	E	71	59.1	60.7	62.4	3.3	N	N
R77N	1	B	66	59.8	61.4	66.0	6.2	Y¹	Y¹	R107N	0	E	71	59.1	60.7	62.4	3.3	N	N
R78N	1	B	66	58.6	60.2	62.4	3.8	N	N	R91AN	1	B	66	51.7	53.2	53.7	2.0	N	N
R79N	2	B	66	60.2	61.8	64.5	4.3	N	N	R91BN	0	B	66	55.7	57.2	58.8	3.1	N	N
R80N	2	B	66	62.5	64.1	67.8	5.3	Y¹	Y¹	R108N	1	B	66	61.2	62.9	63.3	2.1	N	N
R81N	2	B	66	61.0	62.6	65.7	4.7	N	N	R109N	1	B	66	57.8	59.3	60.8	3.0	N	N
R82N	2	B	66	60.3	61.9	65.0	4.7	N	N	R110N	1	B	66	60.5	62.1	62.4	1.9	N	N
R83N	2	B	66	60.4	61.9	64.6	4.2	N	N	R111N	1	B	66	57.1	58.7	59.7	2.6	N	N
R84N	2	B	66	58.0	59.6	61.6	3.6	N	N	R112N	1	B	66	59.2	60.8	61.0	1.8	N	N
R85N	1	B	66	54.7	56.3	57.7	3.0	N	N	R113N	1	B	66	55.5	57.1	57.8	2.3	N	N
R86N	2	B	66	56.5	58.1	59.6	3.1	N	N	R114N	1	B	66	59.1	60.7	60.8	1.7	N	N
R87N	2	B	66	57.4	59.0	60.2	2.8	N	N	R115N	1	B	66	55.2	56.8	57.4	2.2	N	N
R88N	0	D ¹	51	41.8	43.4	44.3	2.5	N	N	R116N	1	B	66	59.3	60.9	60.9	1.6	N	N
R89N	0	D ¹	51	32.6	34.1	35.4	2.8	N	N	R117N	1	B	66	54.8	56.4	56.8	2.0	N	N
R90N	0	D ¹	51	36.1	37.6	39.3	3.2	N	N	R118N	1	B	66	59.2	60.8	60.9	1.7	N	N

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels
N¹ Noise Receptor R64N is located in the proposed ROW (Right-of-way take)
Y¹ Proposed Noise Barrier BW-1

Table 5-1 TNM 2.5 Predicted Noise Levels dB(A) Build Alternative 1A																			
Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R119N	1	B	66	54.5	56.1	56.5	2.0	N	N	R139N	1	B	66	65.4	67.0	68.9	3.5	Y ²	Y ²
R120N	1	B	66	61.1	62.7	62.7	1.6	N	N	R140N	1	B	66	60.1	61.6	63.3	3.2	N	N
R121N	1	B	66	60.1	61.8	61.8	1.7	N	N	R141N	1	B	66	56.9	58.4	59.3	2.4	N	N
R122N	1	B	66	58.3	60.0	60.0	1.7	N	N	R142N	0	C	66	55.5	57.0	57.6	2.1	N	N
R123N	1	B	66	62.9	64.4	64.4	1.5	N	N	R143N	0	C	66	53.6	55.1	55.6	2.0	N	N
R124N	1	B	66	63.8	65.4	65.4	1.6	N	N	R144N	1	B	66	58.2	59.7	60.7	2.5	N	N
R125N	1	B	66	63.5	65.1	65.1	1.6	N	N	R145N	1	B	66	55.8	57.4	57.9	2.1	N	N
R126N	1	B	66	63.8	65.4	65.4	1.6	N	N	R146N	1	B	66	56.4	58.0	58.4	2.0	N	N
R127N	1	B	66	63.3	64.9	64.9	1.6	N	N	R147N	1	B	66	59.1	60.6	61.3	2.2	N	N
R128N	1	B	66	64.3	65.8	65.9	1.6	N	N	R148N	1	B	66	63.3	64.9	65.4	2.1	N	N
R129N	1	B	66	65.3	66.9	66.9	1.6	N ²	N ²	R149N	1	B	66	67.0	68.5	68.6	1.6	N ³	N ³
R130N	1	B	66	59.9	61.5	61.7	1.8	N	N	R150N	1	B	66	67.2	68.8	68.8	1.6	N ³	N ³
R131N	1	B	66	53.1	54.7	54.8	1.7	N	N	R151N	1	B	66	57.5	59.1	59.2	1.7	N	N
R132N	1	B	66	54.8	56.4	56.5	1.7	N	N	R152S	4	B	66	65.1	66.6	66.6	1.5	N ²	N ²
R133N	1	B	66	56.5	58.1	58.3	1.8	N	N	R153S	4	B	66	69.6	71.1	71.1	1.5	N ²	N ²
R134N	1	B	66	58.2	59.7	60.1	1.9	N	N	R154S	4	B	66	65.2	66.7	66.7	1.5	N ²	N ²
R135N	1	B	66	62.0	63.6	64.8	2.8	N	N	R155S	4	B	66	60.1	61.6	61.6	1.5	N	N
R136N	1	B	66	65.8	67.4	68.8	3.0	Y ²	Y ²	R156S	4	B	66	62.7	64.2	64.2	1.5	N	N
R137N	1	B	66	65.6	67.2	68.8	3.2	Y ²	Y ²	R157S	0	D ¹	51	38.2	39.7	39.9	1.7	N	N
R138N	1	B	66	67.6	69.2	71.3	3.7	Y ²	Y ²										

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels
N² Noise Receptor located on Jog Road (No capacity improvements)
Y² Proposed Noise Barrier BW-2 (Excludes heights of 16' and 18' which exceeds Reasonableness Factor / Cost)
N³ Proposed Noise Barrier BW-3 d did not meet the Noise Reduction Factor (Feasibility Factor)

Table 5-2 TNM 2.5 Predicted Noise Levels dB(A) Build Alternative 1B																			
Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R1S	0	C	66	55.3	57.0	57.4	2.1	N	N	R31S	0	C	66	61.0	62.5	64.5	3.5	N	N
R2S	0	C	66	55.4	57.1	57.6	2.2	N	N	R32S	0	C	66	56.5	58.1	59.0	2.5	N	N
R3S	3	B	66	51.2	53.0	53.6	2.4	N	N	R33S	0	C	66	56.8	58.3	59.4	2.6	N	N
R4S	4	B	66	61.2	62.8	64.4	3.2	N	N	R34S	0	C	66	59.5	61.0	62.6	3.1	N	N
R5S	4	B	66	53.1	54.8	55.6	2.5	N	N	R35S	0	C	66	58.1	59.6	61.1	3.0	N	N
R6S	1	B	66	59.5	61.1	62.4	2.9	N	N	R36S	0	C	66	56.7	58.2	58.9	2.2	N	N
R7S	1	B	66	59.5	61.1	62.0	2.5	N	N	R37S	4	B	66	50.2	51.8	52.5	2.3	N	N
R8S	1	B	66	57.0	58.5	58.8	1.8	N	N	R38S	4	B	66	59.2	60.7	62.6	3.4	N	N
R9S	1	B	66	57.0	58.6	59.5	2.5	N	N	R39S	4	B	66	56.3	57.8	58.9	2.6	N	N
R10S	1	B	66	56.5	58.1	58.7	2.2	N	N	R40S	4	B	66	56.5	58.0	59.2	2.7	N	N
R11S	1	B	66	54.2	55.7	56.0	1.8	N	N	R41S	4	B	66	53.9	55.4	56.2	2.3	N	N
R12S	1	B	66	53.2	54.8	55.4	2.2	N	N	R42S	4	B	66	52.5	54.0	55.1	2.6	N	N
R13S	1	B	66	57.8	59.3	59.4	1.6	N	N	R43S	0	C	66	52.2	53.8	54.9	2.7	N	N
R14S	1	B	66	58.4	59.9	59.9	1.5	N	N	R44S	0	C	66	60.4	61.9	63.8	3.4	N	N
R15S	1	B	66	55.9	57.4	57.6	1.7	N	N	R45S	0	C	66	56.2	57.7	58.7	2.5	N	N
R16S	1	B	66	55.8	57.4	57.4	1.6	N	N	R46S	0	C	66	56.7	58.3	59.0	2.3	N	N
R17S	1	B	66	60.1	61.6	62.2	2.1	N	N	R47S	0	C	66	52.4	54.0	54.6	2.2	N	N
R18S	1	B	66	60.0	61.6	62.7	2.7	N	N	R48S	0	C	66	52.2	53.7	54.4	2.2	N	N
R19S	0	C	66	61.5	63.1	64.8	3.3	N	N	R49S	0	C	66	60.6	62.2	63.8	3.2	N	N
R20S	1	B	66	61.7	63.3	65.6	3.9	N	N	R50S	0	C	66	60.9	62.4	63.9	3.0	N	N
R21S	1	B	66	60.7	62.2	64.5	3.8	N	N	R51S	0	C	66	58.5	60.1	61.3	2.8	N	N
R22S	1	B	66	61.8	63.3	65.8	4.0	N	N	R52S	0	C	66	56.1	57.6	58.2	2.1	N	N
R23S	1	B	66	57.7	59.2	59.9	2.2	N	N	R53S	0	C	66	53.9	55.4	56.4	2.5	N	N
R24S	1	B	66	55.5	57.1	57.3	1.8	N	N	R54S	0	C	66	55.2	56.8	57.4	2.2	N	N
R25S	1	B	66	54.9	56.4	56.8	1.9	N	N	R55S	2	B	66	50.1	51.7	52.4	2.3	N	N
R26S	1	B	66	55.2	56.8	57.4	2.2	N	N	R56S	0	D ¹	51	30.2	31.8	32.3	2.1	N	N
R27S	1	B	66	58.2	59.8	61.3	3.1	N	N	R57S	0	D ¹	51	31.1	32.7	33.1	2.0	N	N
R28S	1	B	66	56.8	58.3	59.4	2.6	N	N	R58S	0	D ¹	51	31.4	33.0	33.4	2.0	N	N
R29S	0	C	66	60.7	62.2	64.3	3.6	N	N	R59S	0	C	66	52.3	53.9	54.8	2.5	N	N
R30S	0	C	66	60.2	61.8	64.3	4.1	N	N	R60S	0	C	66	52.8	54.4	54.8	2.0	N	N

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
 25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels

Table 5-2
TNM 2.5 Predicted Noise Levels
dB(A)
Build Alternative 1B

Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R61S	0	D ¹	51	39.7	41.3	43.0	3.3	N	N	R91N	0	C	66	52.1	53.7	54.1	2.0	N	N
R62S	0	D ¹	51	37.5	39.1	40.5	3.0	N	N	R92N	0	E	71	64.7	66.2	67.2	2.5	N	N
R63S	0	D ¹	51	32.1	33.7	33.5	1.4	N	N	R93N	0	D ¹	51	34.5	36.0	36.7	2.2	N	N
R64N	1	B	66	66.3	67.9	71.6	5.3	Y¹	Y¹	R94N	0	E	71	49.5	51.0	51.4	1.9	N	N
R65N	1	B	66	62.4	63.9	66.9	4.5	Y¹	Y¹	R95N	4	B	66	57.6	59.1	60.4	2.8	N	N
R66N	1	B	66	61.4	62.9	66.9	5.5	Y¹	Y¹	R96N	8	B	66	57.5	59.0	60.1	2.6	N	N
R67N	1	B	66	63.3	64.8	69.1	5.8	Y¹	Y¹	R97N	6	B	66	57.5	59.1	60.3	2.8	N	N
R68N	1	B	66	60.1	61.6	64.0	3.9	N	N	R98N	6	B	66	51.5	53.1	53.5	2.0	N	N
R69N	1	B	66	59.0	60.6	63.0	4.0	N	N	R99N	8	B	66	51.7	53.3	53.7	2.0	N	N
R70N	1	B	66	61.6	63.2	64.3	2.7	N	N	R100N	8	B	66	52.4	54.0	54.5	2.1	N	N
R71N	1	B	66	56.5	58.1	59.9	3.4	N	N	R101N	0	E	71	59.1	60.7	62.5	3.4	N	N
R72N	1	B	66	63.1	64.7	70.7	7.6	Y¹	Y¹	R102N	0	D ¹	51	34.4	36.0	37.9	3.5	N	N
R73N	1	B	66	62.3	63.8	69.7	7.4	Y¹	Y¹	R103N	0	E	71	59.7	61.3	63.2	3.5	N	N
R74N	2	B	66	66.1	67.7	72.0	5.9	Y¹	Y¹	R104N	0	E	71	59.7	61.3	63.2	3.5	N	N
R75N	2	B	66	64.4	66.0	69.7	5.3	Y¹	Y¹	R105N	0	E	71	59.3	60.9	62.6	3.3	N	N
R76N	1	B	66	60.2	61.7	65.8	5.6	N	N	R106N	0	E	71	59.1	60.7	62.4	3.3	N	N
R77N	1	B	66	59.8	61.4	65.4	5.6	N	N	R107N	0	E	71	59.1	60.7	62.4	3.3	N	N
R78N	1	B	66	58.6	60.2	62.1	3.5	N	N	R91AN	1	B	66	51.7	53.2	53.7	2.0	N	N
R79N	2	B	66	60.2	61.8	64.1	3.9	N	N	R91BN	0	B	66	55.7	57.2	58.8	3.1	N	N
R80N	2	B	66	62.5	64.1	67.6	5.1	Y¹	Y¹	R108N	1	B	66	61.2	62.9	63.2	2.0	N	N
R81N	2	B	66	61.0	62.6	65.7	4.7	N	N	R109N	1	B	66	57.8	59.3	60.6	2.8	N	N
R82N	2	B	66	60.3	61.9	65.0	4.7	N	N	R110N	1	B	66	60.5	62.1	62.2	1.7	N	N
R83N	2	B	66	60.4	61.9	64.6	4.2	N	N	R111N	1	B	66	57.1	58.7	59.4	2.3	N	N
R84N	2	B	66	58.0	59.6	61.5	3.5	N	N	R112N	1	B	66	59.2	60.8	60.8	1.6	N	N
R85N	1	B	66	54.7	56.3	57.6	2.9	N	N	R113N	1	B	66	55.5	57.1	57.7	2.2	N	N
R86N	2	B	66	56.5	58.1	59.6	3.1	N	N	R114N	1	B	66	59.1	60.7	60.7	1.6	N	N
R87N	2	B	66	57.4	59.0	60.2	2.8	N	N	R115N	1	B	66	55.2	56.8	57.2	2.0	N	N
R88N	0	D ¹	51	41.8	43.4	44.3	2.5	N	N	R116N	1	B	66	59.3	60.9	60.8	1.5	N	N
R89N	0	D ¹	51	32.6	34.1	35.4	2.8	N	N	R117N	1	B	66	54.8	56.4	56.6	1.8	N	N
R90N	0	D ¹	51	36.1	37.6	39.3	3.2	N	N	R118N	1	B	66	59.2	60.8	60.8	1.6	N	N

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels
Y¹ Proposed Noise Barrier BW-1

Table 5-2
TNM 2.5 Predicted Noise Levels
dB(A)
Build Alternative 1B

Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R119N	1	B	66	54.5	56.1	56.3	1.8	N	N	R139N	1	B	66	65.4	67.0	68.1	2.7	Y ²	Y ²
R120N	1	B	66	61.1	62.7	62.7	1.6	N	N	R140N	1	B	66	60.1	61.6	62.9	2.8	N	N
R121N	1	B	66	60.1	61.8	61.8	1.7	N	N	R141N	1	B	66	56.9	58.4	59.1	2.2	N	N
R122N	1	B	66	58.3	60.0	60.0	1.7	N	N	R142N	0	C	66	55.5	57.0	57.6	2.1	N	N
R123N	1	B	66	62.9	64.4	64.4	1.5	N	N	R143N	0	C	66	53.6	55.1	55.6	2.0	N	N
R124N	1	B	66	63.8	65.4	65.5	1.7	N	N	R144N	1	B	66	58.2	59.7	60.3	2.1	N	N
R125N	1	B	66	63.5	65.1	65.5	2.0	N	N	R145N	1	B	66	55.8	57.4	57.6	1.8	N	N
R126N	1	B	66	63.8	65.4	66.4	2.6	N ²	N ²	R146N	1	B	66	56.4	58.0	58.3	1.9	N	N
R127N	1	B	66	63.3	64.9	65.9	2.6	N	N	R147N	1	B	66	59.1	60.6	61.2	2.1	N	N
R128N	1	B	66	64.3	65.8	67.1	2.8	N ²	N ²	R148N	1	B	66	63.3	64.9	65.4	2.1	N	N
R129N	1	B	66	65.3	66.9	68.2	2.9	N ²	N ²	R149N	1	B	66	67.0	68.5	68.6	1.6	N ³	N ³
R130N	1	B	66	59.9	61.5	61.8	1.9	N	N	R150N	1	B	66	67.2	68.8	68.8	1.6	N ³	N ³
R131N	1	B	66	53.1	54.7	54.8	1.7	N	N	R151N	1	B	66	57.5	59.1	59.2	1.7	N	N
R132N	1	B	66	54.8	56.4	56.5	1.7	N	N	R152S	4	B	66	65.1	66.6	66.4	1.3	N ²	N ²
R133N	1	B	66	56.5	58.1	58.4	1.9	N	N	R153S	4	B	66	69.6	71.1	71.0	1.4	N ²	N ²
R134N	1	B	66	58.2	59.7	59.9	1.7	N	N	R154S	4	B	66	65.2	66.7	66.5	1.3	N ²	N ²
R135N	1	B	66	62.0	63.6	64.4	2.4	N	N	R155S	4	B	66	60.1	61.6	61.3	1.2	N	N
R136N	1	B	66	65.8	67.4	68.0	2.2	Y ²	Y ²	R156S	4	B	66	62.7	64.2	64.0	1.3	N	N
R137N	1	B	66	65.6	67.2	67.9	2.3	Y ²	Y ²	R157S	0	D ¹	51	38.2	39.7	39.9	1.7	N	N
R138N	1	B	66	67.6	69.2	70.4	2.8	Y ²	Y ²										

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels
N² Noise Receptor located on Jog Road (No capacity improvements)
Y² Proposed Noise Barrier BW-2 (Excludes heights of 16’ and 18’ which exceeds Reasonableness Factor / Cost)
N³ Proposed Noise Barrier BW-3 d did not meet the Noise Reduction Factor (Feasibility Factor)

Table 5-3 TNM 2.5 Predicted Noise Levels dB(A) Build Alternative 2A																			
Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R1S	0	C	66	55.3	57.0	57.4	2.1	N	N	R31S	0	C	66	61.0	62.5	64.7	3.7	N	N
R2S	0	C	66	55.4	57.1	57.5	2.1	N	N	R32S	0	C	66	56.5	58.1	59.0	2.5	N	N
R3S	3	B	66	51.2	53.0	53.6	2.4	N	N	R33S	0	C	66	56.8	58.3	59.4	2.6	N	N
R4S	4	B	66	61.2	62.8	64.4	3.2	N	N	R34S	0	C	66	59.5	61.0	63.0	3.5	N	N
R5S	4	B	66	53.1	54.8	55.6	2.5	N	N	R35S	0	C	66	58.1	59.6	61.7	3.6	N	N
R6S	1	B	66	59.5	61.1	62.3	2.8	N	N	R36S	0	C	66	56.7	58.2	59.1	2.4	N	N
R7S	1	B	66	59.5	61.1	62.2	2.7	N	N	R37S	4	B	66	50.2	51.8	52.6	2.4	N	N
R8S	1	B	66	57.0	58.5	58.9	1.9	N	N	R38S	4	B	66	59.2	60.7	63.3	4.1	N	N
R9S	1	B	66	57.0	58.6	59.3	2.3	N	N	R39S	4	B	66	56.3	57.8	59.3	3.0	N	N
R10S	1	B	66	56.5	58.1	58.6	2.1	N	N	R40S	4	B	66	56.5	58.0	59.6	3.1	N	N
R11S	1	B	66	54.2	55.7	56.3	2.1	N	N	R41S	4	B	66	53.9	55.4	56.3	2.4	N	N
R12S	1	B	66	53.2	54.8	55.5	2.3	N	N	R42S	4	B	66	52.5	54.0	55.1	2.6	N	N
R13S	1	B	66	57.8	59.3	59.8	2.0	N	N	R43S	0	C	66	52.2	53.8	54.9	2.7	N	N
R14S	1	B	66	58.4	59.9	60.5	2.1	N	N	R44S	0	C	66	60.4	61.9	64.6	4.2	N	N
R15S	1	B	66	55.9	57.4	57.7	1.8	N	N	R45S	0	C	66	56.2	57.7	59.1	2.9	N	N
R16S	1	B	66	55.8	57.4	57.6	1.8	N	N	R46S	0	C	66	56.7	58.3	59.4	2.7	N	N
R17S	1	B	66	60.1	61.6	62.6	2.5	N	N	R47S	0	C	66	52.4	54.0	54.8	2.4	N	N
R18S	1	B	66	60.0	61.6	62.8	2.8	N	N	R48S	0	C	66	52.2	53.7	54.6	2.4	N	N
R19S	0	C	66	61.5	63.1	64.8	3.3	N	N	R49S	0	C	66	60.6	62.2	65.0	4.4	N	N
R20S	1	B	66	61.7	63.3	65.6	3.9	N	N	R50S	0	C	66	60.9	62.4	65.1	4.2	N	N
R21S	1	B	66	60.7	62.2	64.5	3.8	N	N	R51S	0	C	66	58.5	60.1	62.4	3.9	N	N
R22S	1	B	66	61.8	63.3	65.8	4.0	N	N	R52S	0	C	66	56.1	57.6	58.7	2.6	N	N
R23S	1	B	66	57.7	59.2	59.9	2.2	N	N	R53S	0	C	66	53.9	55.4	56.6	2.7	N	N
R24S	1	B	66	55.5	57.1	57.4	1.9	N	N	R54S	0	C	66	55.2	56.8	57.7	2.5	N	N
R25S	1	B	66	54.9	56.4	56.9	2.0	N	N	R55S	2	B	66	50.1	51.7	52.7	2.6	N	N
R26S	1	B	66	55.2	56.8	57.4	2.2	N	N	R56S	0	D ¹	51	30.2	31.8	32.5	2.3	N	N
R27S	1	B	66	58.2	59.8	61.3	3.1	N	N	R57S	0	D ¹	51	31.1	32.7	33.4	2.3	N	N
R28S	1	B	66	56.8	58.3	59.3	2.5	N	N	R58S	0	D ¹	51	31.4	33.0	33.5	2.1	N	N
R29S	0	C	66	60.7	62.2	64.3	3.6	N	N	R59S	0	C	66	52.3	53.9	55.0	2.7	N	N
R30S	0	C	66	60.2	61.8	64.3	4.1	N	N	R60S	0	C	66	52.8	54.4	54.9	2.1	N	N

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
 25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels

Table 5-3
TNM 2.5 Predicted Noise Levels
dB(A)
Build Alternative 2A

Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R61S	0	D ¹	51	39.7	41.3	42.0	2.3	N	N	R91N	0	C	66	52.1	53.7	54.0	1.9	N	N
R62S	0	D ¹	51	37.5	39.1	39.5	2.0	N	N	R92N	0	E	71	64.7	66.2	66.6	1.9	N	N
R63S	0	D ¹	51	32.1	33.7	33.6	1.5	N	N	R93N	0	D ¹	51	34.5	36.0	36.7	2.2	N	N
R64N	1	B	66	66.3	67.9	71.9	5.6	N¹	N¹	R94N	0	E	71	49.5	51.0	51.3	1.8	N	N
R65N	1	B	66	62.4	63.9	67.3	4.9	Y¹	Y¹	R95N	4	B	66	57.6	59.1	59.9	2.3	N	N
R66N	1	B	66	61.4	62.9	67.5	6.1	Y¹	Y¹	R96N	8	B	66	57.5	59.0	59.7	2.2	N	N
R67N	1	B	66	63.3	64.8	69.3	6.0	Y¹	Y¹	R97N	6	B	66	57.5	59.1	59.9	2.4	N	N
R68N	1	B	66	60.1	61.6	64.3	4.2	N	N	R98N	6	B	66	51.5	53.1	53.4	1.9	N	N
R69N	1	B	66	59.0	60.6	63.4	4.4	N	N	R99N	8	B	66	51.7	53.3	53.6	1.9	N	N
R70N	1	B	66	61.6	63.2	64.5	2.9	N	N	R100N	8	B	66	52.4	54.0	54.3	1.9	N	N
R71N	1	B	66	56.5	58.1	60.0	3.5	N	N	R101N	0	E	71	59.1	60.7	62.2	3.1	N	N
R72N	1	B	66	63.1	64.7	71.5	8.4	Y¹	Y¹	R102N	0	D ¹	51	34.4	36.0	37.7	3.3	N	N
R73N	1	B	66	62.3	63.8	70.5	8.2	Y¹	Y¹	R103N	0	E	71	59.7	61.3	63.0	3.3	N	N
R74N	2	B	66	66.1	67.7	72.8	6.7	Y¹	Y¹	R104N	0	E	71	59.7	61.3	63.1	3.4	N	N
R75N	2	B	66	64.4	66.0	70.3	5.9	Y¹	Y¹	R105N	0	E	71	59.3	60.9	62.5	3.2	N	N
R76N	1	B	66	60.2	61.7	66.3	6.1	Y¹	Y¹	R106N	0	E	71	59.1	60.7	62.1	3.0	N	N
R77N	1	B	66	59.8	61.4	65.9	6.1	N	N	R107N	0	E	71	59.1	60.7	62.1	3.0	N	N
R78N	1	B	66	58.6	60.2	62.4	3.8	N	N	R91AN	1	B	66	51.7	53.2	53.5	1.8	N	N
R79N	2	B	66	60.2	61.8	64.4	4.2	N	N	R91BN	0	B	66	55.7	57.2	58.5	2.8	N	N
R80N	2	B	66	62.5	64.1	67.6	5.1	Y¹	Y¹	R108N	1	B	66	61.2	62.9	63.3	2.1	N	N
R81N	2	B	66	61.0	62.6	65.1	4.1	N	N	R109N	1	B	66	57.8	59.3	60.8	3.0	N	N
R82N	2	B	66	60.3	61.9	64.0	3.7	N	N	R110N	1	B	66	60.5	62.1	62.4	1.9	N	N
R83N	2	B	66	60.4	61.9	63.6	3.2	N	N	R111N	1	B	66	57.1	58.7	59.7	2.6	N	N
R84N	2	B	66	58.0	59.6	61.4	3.4	N	N	R112N	1	B	66	59.2	60.8	61.0	1.8	N	N
R85N	1	B	66	54.7	56.3	57.5	2.8	N	N	R113N	1	B	66	55.5	57.1	57.9	2.4	N	N
R86N	2	B	66	56.5	58.1	59.2	2.7	N	N	R114N	1	B	66	59.1	60.7	60.8	1.7	N	N
R87N	2	B	66	57.4	59.0	59.7	2.3	N	N	R115N	1	B	66	55.2	56.8	57.4	2.2	N	N
R88N	0	D ¹	51	41.8	43.4	43.0	1.2	N	N	R116N	1	B	66	59.3	60.9	60.9	1.6	N	N
R89N	0	D ¹	51	32.6	34.1	34.8	2.2	N	N	R117N	1	B	66	54.8	56.4	56.8	2.0	N	N
R90N	0	D ¹	51	36.1	37.6	38.5	2.4	N	N	R118N	1	B	66	59.2	60.8	60.9	1.7	N	N

D1 Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels
N¹ Noise Receptor R64N is located in the proposed ROW (Right-of-way take)
Y¹ Proposed Noise Barrier BW-1

Table 5-3
TNM 2.5 Predicted Noise Levels
dB(A)
Build Alternative 2A

Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement	Noise Receptor Number	Number of Noise Sensitive Sites Represented Dwelling Units	Activity Category	FDOT NAC	(2018) Existing Year dB(A)	(2045) No-Build Alternative dB(A)	(2045) Build Year Alternative dB(A)	Difference Between Build and Existing dB(A)	Approach or Exceed FDOT NAC	Consider Abatement
R119N	1	B	66	54.5	56.1	56.5	2.0	N	N	R139N	1	B	66	65.4	67.0	68.9	3.5	Y ²	Y ²
R120N	1	B	66	61.1	62.7	62.7	1.6	N	N	R140N	1	B	66	60.1	61.6	63.3	3.2	N	N
R121N	1	B	66	60.1	61.8	61.8	1.7	N	N	R141N	1	B	66	56.9	58.4	59.3	2.4	N	N
R122N	1	B	66	58.3	60.0	60.0	1.7	N	N	R142N	0	C	66	55.5	57.0	57.6	2.1	N	N
R123N	1	B	66	62.9	64.4	64.4	1.5	N	N	R143N	0	C	66	53.6	55.1	55.6	2.0	N	N
R124N	1	B	66	63.8	65.4	65.4	1.6	N	N	R144N	1	B	66	58.2	59.7	60.7	2.5	N	N
R125N	1	B	66	63.5	65.1	65.1	1.6	N	N	R145N	1	B	66	55.8	57.4	57.9	2.1	N	N
R126N	1	B	66	63.8	65.4	65.4	1.6	N	N	R146N	1	B	66	56.4	58.0	58.4	2.0	N	N
R127N	1	B	66	63.3	64.9	64.9	1.6	N	N	R147N	1	B	66	59.1	60.6	61.3	2.2	N	N
R128N	1	B	66	64.3	65.8	65.9	1.6	N	N	R148N	1	B	66	63.3	64.9	65.4	2.1	N	N
R129N	1	B	66	65.3	66.9	66.9	1.6	N ²	N ²	R149N	1	B	66	67.0	68.5	68.6	1.6	N ³	N ³
R130N	1	B	66	59.9	61.5	61.7	1.8	N	N	R150N	1	B	66	67.2	68.8	68.8	1.6	N ³	N ³
R131N	1	B	66	53.1	54.7	54.8	1.7	N	N	R151N	1	B	66	57.5	59.1	59.2	1.7	N	N
R132N	1	B	66	54.8	56.4	56.5	1.7	N	N	R152S	4	B	66	65.1	66.6	66.6	1.5	N ²	N ²
R133N	1	B	66	56.5	58.1	58.3	1.8	N	N	R153S	4	B	66	69.6	71.1	71.1	1.5	N ²	N ²
R134N	1	B	66	58.2	59.7	60.1	1.9	N	N	R154S	4	B	66	65.2	66.7	66.7	1.5	N ²	N ²
R135N	1	B	66	62.0	63.6	64.8	2.8	N	N	R155S	4	B	66	60.1	61.6	61.6	1.5	N	N
R136N	1	B	66	65.8	67.4	68.8	3.0	Y ²	Y ²	R156S	4	B	66	62.7	64.2	64.2	1.5	N	N
R137N	1	B	66	65.6	67.2	68.8	3.2	Y ²	Y ²	R157S	0	D ¹	51	38.2	39.7	39.9	1.7	N	N
R138N	1	B	66	67.6	69.2	71.3	3.7	Y ²	Y ²										

D¹ Interior sound level after a 25 dB(A) reduction for masonry building construction and single glazed windows
25 dB(A) sound level reduction factor applied to the modeling results to predict interior traffic noise levels
N² Noise Receptor located on Jog Road (No capacity improvements)
Y² Proposed Noise Barrier BW-2 (Excludes heights of 16’ and 18’ which exceeds Reasonableness Factor / Cost)
N³ Proposed Noise Barrier BW-3 d did not meet the Noise Reduction Factor (Feasibility Factor)

6.3 NOISE IMPACT ANALYSIS

The traffic noise levels predicted at the one hundred and fifty-seven (157) noise sensitive receptor locations under evaluation approached or exceeded the FDOT NAC at three (3) residential areas for all alternatives (1A, 1B, and 2A) therefore; potential noise abatement measures were evaluated. A fourth alternative (Alternative 2B) was not specifically evaluated as it was a combination of Alternative 2A and Alternative 1B which were evaluated for potential impacts. Additionally, Alternatives 1C and 2C were not specifically evaluated as they are similar to a combination of Alternatives 2A and 1B.

Noise Sensitive Area 9 (Residential Locations) SR-806 / Atlantic Avenue East of Jog Road

Ground mounted noise barriers were evaluated at NSA 9. This residential area was evaluated for potential noise barrier placement at two (2) locations, BW-2 and BW-3. There were six (6) impacted receptor locations associated with NSA 9. BW-2 represents four (4) impacted receptor locations (R136N-R139N). BW-3 represents two (2) impacted receptor locations (R149N-R150N). The residential locations identified will experience sound levels which exceed the applicable NAC for all three (3) alternatives. (Alternative 1A, 1B, and 2A)

For all alternatives, (BW-2) which is 900 Ft. in length, with heights ranging from 8-18 Ft., met the Department's Feasibility Factor (Noise Reduction Factor) and the Reasonableness Factor (Noise Reduction Design Goal). The barrier also met the Cost Reasonableness Factor with all costs not exceeding \$42,000 per benefited receptor. However, the noise barrier height was limited to 14 Ft. due to the Cost Reasonableness Factor. For all alternatives, (BW-3) which is 200 Ft. in length, with heights ranging from 8 -18 Ft., was not feasible (Noise Reduction Factor) or reasonable (Noise Reduction Design Goal) given that the minimum acoustical reduction of 5 dB(A) could not be achieved. The computer predicted insertion loss ranged from 0.7 to 4.4 dB(A).

Noise Sensitive Area 10 (Residential Locations) SR-806 / Atlantic Avenue West of Jog Road

A single ground mounted noise barrier was evaluated at NSA 10. This residential area was evaluated for potential noise barrier placement at one (1) location, BW-1. There were eleven (11) impacted receptor locations (R64-R67N, R72N-R77N, and R80N). The residential locations identified will experience sound levels which exceed the applicable NAC for all three (3) alternatives. (Alternative 1A, 1B, and 2A)

For all alternatives, (BW-1) which is 1,780 Ft. to 1,824 Ft. in length, with heights ranging from 8-18 Ft., met the Department's Feasibility Factor (Noise Reduction Factor) and the Reasonableness Factor (Noise Reduction Design Goal). The barrier also met the Cost Reasonableness Factor with all costs not exceeding \$42,000 per benefited receptor.

The cost of noise barrier placement (BW-1) for Alternative 1A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 1A ranged from \$ 19,033 to \$ 28,969. The cost of noise barrier placement (BW-2) for Alternative 1A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1A ranged from \$ 27,000 to \$ 54,000. The cost of noise barrier placement (BW-1) for Alternative 1B ranged from \$ 427,200 to \$ 961,200. The cost per benefited receptor for Alternative 1B ranged from \$ 17,800 to \$ 28,271. The cost of noise barrier placement (BW-2) for Alternative 1B ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1B ranged from \$ 27,000 to \$

54,000. The cost of noise barrier placement (BW-1) for Alternative 2A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 2A ranged from \$ 19,033 to \$ 28,969. The cost of noise barrier placement (BW-2) for Alternative 2A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 2A ranged from \$ 27,000 to \$ 54,000.

The noise barrier analysis results are presented in **Table 6-1, 6-2, and 6-3**. The noise barrier insertion loss results are presented in **Table 6-1, 6-2, and 6-3**.

The feasibility factor associated with a barriers noise reduction is the Noise Reduction Factor. FDOT's Noise Reduction Factor requires that two (2) or more impacted receptors achieve a 5 dB(A) reduction or greater in order to be considered feasible. The reasonableness factor associated with a barriers noise reduction is the Noise Reduction Design Goal. FDOT's Noise Reduction Design Goal requires that one (1) or more benefited receptors achieve a 7 dB(A) reduction or greater in order to be considered reasonable.

The Department's Cost Reasonableness Factor limits a noise barriers cost to \$ 42,000 per benefitted receptor. Additional cost associated with utility impacts / relocation and other potential cost associated with right-of-way and construction have not been evaluated as part of the cost reasonableness factor.

The remaining noise sensitive areas adjacent to SR-806 / Atlantic Avenue did not approach or exceed the appropriate NAC for the Activity Categories evaluated; therefore, potential noise abatement measures were not considered.

Table 6-1
Noise Barrier Analysis Results
ALTERNATIVE 1A
BW 1

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefited Receptors ²			Average Reduction for Benefited Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefited Receptor ⁴
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)	Impacted	Not Impacted	Total			
8	1,824	10	4	2	4	10	0	23 ⁶	7.1	\$ 437,760	\$ 19,033
10	1,824	10	0	3	7	10	3 ⁵	26 ⁶	8.7	\$ 547,200	\$ 21,046
12	1,824	10	0	0	10	10	11 ⁵	34 ⁶	9.9	\$ 656,640	\$ 19,312
14	1,824	10	0	0	10	10	11 ⁵	34 ⁶	10.9	\$ 766,080	\$ 22,531
16	1,824	10	0	0	10	10	11 ⁵	34 ⁶	11.7	\$ 875,520	\$ 25,750
18	1,824	10	0	0	10	10	11 ⁵	34 ⁶	12.4	\$ 984,960	\$ 28,969

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ R68N, R69N, R78N, R79N, R84N 5.5-9.2 dB(A) noise reduction. The 5 not impacted benefitted receptors represent 11 residential units.

⁶ The 10 impacted receptors represent 23 residential units. (See following table)

Table 6-1
Noise Barrier Insertion Loss Results
ALTERNATIVE 1A
BW 1

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW1 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R65 ^{1,2}	2	67.4	61.7	60.1	59.0	57.9	57.2	56.6	5.7	7.3	8.4	9.5	10.2	10.8
R66 ^{1,2}	2	67.6	60.7	58.8	57.6	56.5	55.7	55.0	6.9	8.8	10.0	11.1	11.9	12.6
R67 ^{1,2}	1	69.4	63.6	62.7	62.1	61.6	61.2	60.9	5.8	6.7	7.3	7.8	8.2	8.5
R72 ^{1,2}	2	71.8	61.6	59.5	58.3	56.9	56.0	55.2	10.2	12.3	13.5	14.9	15.8	16.6
R73 ^{1,2}	2	70.8	62.3	60.5	59.3	58.2	57.3	56.4	8.5	10.3	11.5	12.6	13.5	14.4
R74 ^{1,2}	4	73.0	64.5	62.5	60.8	59.3	58.3	57.3	8.5	10.5	12.2	13.7	14.7	15.7
R75 ^{1,2}	4	70.4	62.1	60.4	59.2	58.1	57.2	56.3	8.3	10.0	11.2	12.3	13.2	14.1
R76 ^{1,2}	1	66.4	60.9	59.6	58.4	57.5	56.8	56.1	5.5	6.8	8.0	8.9	9.6	10.3
R77 ^{1,2}	1	66.0	60.8	59.6	58.2	57.3	56.6	55.9	5.2	6.4	7.8	8.7	9.4	10.1
R80 ^{1,2}	4	67.8	61.0	59.4	58.4	57.6	57.0	56.5	6.8	8.4	9.4	10.2	10.8	11.3

¹ Meets Noise Reduction Factor (Feasibility Factor).

² Meets Noise Reduction Design Goal (Reasonableness Factor).

Table 6-1
Noise Barrier Analysis Results
ALTERNATIVE 1A
BW 2

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefitted Receptors ²			Average Reduction for Benefitted Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefitted Receptor ⁴
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)	Impacted	Not Impacted	Total			
8	900	4	1	1	2	4	0	8 ⁶	7.3	\$ 216,000	\$ 27,000
10	900	4	0	1	3	4	0	8 ⁶	8.9	\$ 270,000	\$ 33,750
12	900	4	0	0	4	4	1 ⁵	9 ⁶	9.9	\$ 324,000	\$ 36,000
14	900	4	0	0	4	4	1 ⁵	9 ⁶	10.8	\$ 378,000	\$ 42,000
16	900	4	0	0	4	4	1 ⁵	9 ⁶	11.4	\$ 432,000	\$ 48,000
18	900	4	0	0	4	4	1 ⁵	9 ⁶	12.0	\$ 486,000	\$ 54,000

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ R140N 5.7-6.8 dB(A) noise reduction. The 1 not impacted benefitted receptor represents 1 residential unit.

⁶ The 4 impacted receptors represent 8 residential units. (See following table)

Table 6-1
Noise Barrier Insertion Loss Results
ALTERNATIVE 1A
BW 2

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW2 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R136 ^{1,2}	2	68.9	63.1	62.3	61.8	61.4	61.2	60.9	5.8	6.6	7.1	7.5	7.7	8.0
R137 ^{1,2}	2	68.8	61.6	59.7	58.6	57.7	56.9	56.2	7.2	9.1	10.2	11.1	11.9	12.6
R138 ^{1,2}	3	71.4	62.0	60.0	58.6	57.3	56.5	55.6	9.4	11.4	12.8	14.1	14.9	15.8
R139 ^{1,2}	1	68.9	62.1	60.3	59.2	58.4	57.7	57.1	6.8	8.6	9.7	10.5	11.2	11.8

¹ Meets Noise Reduction Factor (Feasibility Factor).

² Meets Noise Reduction Design Goal (Reasonableness Factor).

Table 6-1
Noise Barrier Analysis Results
ALTERNATIVE 1A
BW 3

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefited Receptors ²			Average Reduction for Benefited Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefited Receptor ⁴
			dB(A)			Impacted	Not Impacted	Total			
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)						
8	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
10	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
12	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
14	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
16	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
18	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ 7 dB(A) reduction not achieved at any receptor.

Table 6-1
Noise Barrier Insertion Loss Results
ALTERNATIVE 1A
BW 3

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW3 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R149	2	68.6	65.3	64.9	64.5	64.4	64.3	64.2	3.3	3.7	4.1	4.2	4.3	4.4
R150	1	68.8	68.2	68.2	68.1	68.1	68.1	68.1	0.6	0.6	0.7	0.7	0.7	0.7

Table 6-2
Noise Barrier Analysis Results
ALTERNATIVE 1B
BW 1

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefited Receptors ²			Average Reduction for Benefited Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefited Receptor ⁴
			dB(A)			Impacted	Not Impacted	Total			
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)						
8	1,780	9	0	2	4	9	2 ⁵	24 ⁶	6.0	\$ 427,200	\$ 17,800
10	1,780	9	0	1	6	9	5 ⁵	27 ⁶	7.1	\$ 534,000	\$ 19,778
12	1,780	9	0	1	6	9	12 ⁵	34 ⁶	7.9	\$ 640,800	\$ 18,847
14	1,780	9	0	0	7	9	12 ⁵	34 ⁶	8.6	\$ 747,600	\$ 21,988
16	1,780	9	0	0	7	9	12 ⁵	34 ⁶	9.2	\$ 854,400	\$ 25,129
18	1,780	9	0	0	7	9	12 ⁵	34 ⁶	9.7	\$ 961,200	\$ 28,271

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ R69N, R76, R77, R78N, R79N, R84N 5.5-10.1 dB(A) noise reduction. The 6 not impacted benefitted receptors represent 12 residential units.

⁶ The 9 impacted receptors represent 22 residential units. (See following table)

Table 6-2
Noise Barrier Insertion Loss Results
ALTERNATIVE 1B
BW 1

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW1 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R64	1	71.7	70.1	69.9	69.9	69.8	69.7	69.7	1.6	1.8	1.8	1.9	2.0	2.0
R65 ^{1,2}	2	66.9	62.0	60.9	60.0	59.4	58.9	58.5	4.9	6.0	6.9	7.5	8.0	8.4
R66 ^{1,2}	2	67.0	60.8	59.3	58.5	57.7	57.1	56.5	6.2	7.7	8.5	9.3	9.9	10.5
R67	1	69.1	68.6	68.5	68.4	68.4	68.4	68.4	0.5	0.6	0.7	0.7	0.7	0.7
R72 ^{1,2}	2	70.7	61.3	60.1	59.1	58.2	57.3	56.7	9.4	10.6	11.6	12.5	13.4	14.0
R73 ^{1,2}	2	69.6	60.7	59.5	58.5	57.7	56.9	56.2	8.9	10.1	11.1	11.9	12.7	13.4
R74 ^{1,2}	4	72.0	63.5	62.0	60.8	59.6	58.5	57.4	8.5	10.0	11.2	12.4	13.5	14.6
R75 ^{1,2}	4	69.7	61.8	60.2	59.0	58.0	57.1	56.4	7.9	9.5	10.7	11.7	12.6	13.3
R80 ^{1,2}	4	67.6	60.9	59.3	58.3	57.5	56.9	56.4	6.7	8.3	9.3	10.1	10.7	11.2

¹ Meets Noise Reduction Factor (Feasibility Factor).

² Meets Noise Reduction Design Goal (Reasonableness Factor).

Table 6-2
Noise Barrier Analysis Results
ALTERNATIVE 1B
BW 2

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefited Receptors ²			Average Reduction for Benefited Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefited Receptor ⁴
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)	Impacted	Not Impacted	Total			
8	900	4	1	2	1	4	0	8 ⁶	6.6	\$ 216,000	\$ 27,000
10	900	4	0	1	3	4	0	8 ⁶	8.2	\$ 270,000	\$ 33,750
12	900	4	0	1	3	4	1 ⁵	9 ⁶	9.2	\$ 324,000	\$ 36,000
14	900	4	0	0	4	4	1 ⁵	9 ⁶	10.0	\$ 378,000	\$ 42,000
16	900	4	0	0	4	4	1 ⁵	9 ⁶	10.6	\$ 432,000	\$ 48,000
18	900	4	0	0	4	4	1 ⁵	9 ⁶	11.2	\$ 486,000	\$ 54,000

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ R140N 5.3-6.4 dB(A) noise reduction. The 1 not impacted benefitted receptor represents 1 residential unit.

⁶ The 4 impacted receptors represent 8 residential units. (See following table)

Table 6-2
Noise Barrier Insertion Loss Results
ALTERNATIVE 1B
BW 2

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW2 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R136 ^{1,2}	2	68.1	62.9	61.9	61.5	61.1	60.8	60.6	5.2	6.2	6.6	7.0	7.3	7.5
R137 ^{1,2}	2	67.9	61.2	59.4	58.3	57.5	56.7	56.1	6.7	8.5	9.6	10.4	11.2	11.8
R138 ^{1,2}	3	70.4	62.4	60.2	59.0	57.8	56.9	56.0	8.0	10.2	11.4	12.6	13.5	14.4
R139 ^{1,2}	1	68.2	61.7	60.1	59.0	58.2	57.6	57.1	6.5	8.1	9.2	10.0	10.6	11.1

¹ Meets Noise Reduction Factor (Feasibility Factor).

² Meets Noise Reduction Design Goal (Reasonableness Factor).

Table 6-2
Noise Barrier Analysis Results
ALTERNATIVE 1B
BW 3

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefited Receptors ²			Average Reduction for Benefited Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefited Receptor ⁴
			dB(A)			Impacted	Not Impacted	Total			
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)						
8	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
10	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
12	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
14	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
16	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
18	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ 7 dB(A) reduction not achieved at any receptor.

Table 6-2
Noise Barrier Insertion Loss Results
ALTERNATIVE 1B
BW 3

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW3 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R149	2	68.6	65.3	64.9	64.5	64.4	64.3	64.2	3.3	3.7	4.1	4.2	4.3	4.4
R150	1	68.8	68.2	68.2	68.1	68.1	68.1	68.1	0.6	0.6	0.7	0.7	0.7	0.7

Table 6-3
Noise Barrier Analysis Results
ALTERNATIVE 2A
BW 1

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefited Receptors ²			Average Reduction for Benefited Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefited Receptor ⁴
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)	Impacted	Not Impacted	Total			
8	1,824	9	3	2	4	9	1 ⁵	23 ⁶	7.3	\$ 437,760	\$ 19,033
10	1,824	9	0	1	8	9	4 ⁵	26 ⁶	8.9	\$ 547,200	\$ 21,046
12	1,824	9	0	0	9	9	12 ⁵	34 ⁶	10.0	\$ 656,640	\$ 19,312
14	1,824	9	0	0	9	9	12 ⁵	34 ⁶	11.0	\$ 766,080	\$ 22,531
16	1,824	9	0	0	9	9	12 ⁵	34 ⁶	11.8	\$ 875,520	\$ 25,750
18	1,824	9	0	0	9	9	12 ⁵	34 ⁶	12.6	\$ 984,960	\$ 28,969

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ R68N, R69N, R77, R78N, R79N, R84N 5.4-10.1 dB(A) noise reduction. The 6 not impacted benefitted receptors represent 12 residential units.

⁶ The 9 impacted receptors represent 22 residential units. (See following table)

Table 6-3
Noise Barrier Insertion Loss Results
ALTERNATIVE 2A
BW 1

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW1 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R65 ^{1,2}	2	67.4	61.8	60.3	59.1	58.0	57.2	56.6	5.6	7.1	8.3	9.4	10.2	10.8
R66 ^{1,2}	2	67.5	60.8	59.1	57.7	56.9	55.9	55.1	6.7	8.4	9.8	10.6	11.6	12.4
R67 ^{1,2}	1	69.4	63.6	62.7	62.1	61.6	61.2	60.9	5.8	6.7	7.3	7.8	8.2	8.5
R72 ^{1,2}	2	71.6	61.6	59.5	58.3	57.1	56.0	55.2	10.0	12.1	13.3	14.5	15.6	16.4
R73 ^{1,2}	2	70.6	61.9	60.3	59.1	58.1	57.3	56.4	8.7	10.3	11.5	12.5	13.3	14.2
R74 ^{1,2}	4	72.8	64.4	62.5	61.0	59.4	58.3	57.4	8.4	10.3	11.8	13.4	14.5	15.4
R75 ^{1,2}	4	70.3	62.1	60.4	59.2	58.1	57.3	56.3	8.2	9.9	11.1	12.2	13.0	14.0
R76 ^{1,2}	1	66.4	60.8	59.4	58.3	57.5	56.7	56.1	5.6	7.0	8.1	8.9	9.7	10.3
R80 ^{1,2}	4	67.6	60.8	59.2	58.2	57.4	56.7	56.2	6.8	8.4	9.4	10.2	10.9	11.4

¹ Meets Noise Reduction Factor (Feasibility Factor).

² Meets Noise Reduction Design Goal (Reasonableness Factor).

Table 6-3
Noise Barrier Analysis Results
ALTERNATIVE 2A
BW 2

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefitted Receptors ²			Average Reduction for Benefitted Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefitted Receptor ⁴
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)	Impacted	Not Impacted	Total			
8	900	4	1	1	2	4	0	8 ⁶	7.1	\$ 216,000	\$ 27,000
10	900	4	0	1	3	4	0	8 ⁶	8.8	\$ 270,000	\$ 33,750
12	900	4	0	1	3	4	1 ⁵	9 ⁶	9.8	\$ 324,000	\$ 36,000
14	900	4	0	0	4	4	1 ⁵	9 ⁶	10.6	\$ 378,000	\$ 42,000
16	900	4	0	0	4	4	1 ⁵	9 ⁶	11.3	\$ 432,000	\$ 48,000
18	900	4	0	0	4	4	1 ⁵	9 ⁶	11.8	\$ 486,000	\$ 54,000

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ R140N 5.6-6.7 dB(A) noise reduction. The 1 not impacted benefitted receptor represents 1 residential unit.

⁶ The 4 impacted receptors represent 8 residential units. (See following table)

Table 6-3
Noise Barrier Insertion Loss Results
ALTERNATIVE 2A
BW 2

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW2 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R136 ^{1,2}	2	68.9	63.3	62.5	62.1	61.7	61.5	61.3	5.6	6.4	6.8	7.2	7.4	7.6
R137 ^{1,2}	2	68.8	61.7	59.7	58.7	57.8	57.0	56.3	7.1	9.1	10.1	11.0	11.8	12.5
R138 ^{1,2}	3	71.4	62.3	60.2	58.8	57.4	56.5	55.8	9.1	11.2	12.6	14.0	14.9	15.6
R139 ^{1,2}	1	68.9	62.1	60.4	59.2	58.4	57.7	57.2	6.8	8.5	9.7	10.5	11.2	11.7

¹ Meets Noise Reduction Factor (Feasibility Factor).

² Meets Noise Reduction Design Goal (Reasonableness Factor).

Table 6-3
Noise Barrier Analysis Results
ALTERNATIVE 2A
BW 3

Noise Barrier Height (Feet)	Noise Barrier Length (Feet)	Number of Impacted Receptors	Noise Reduction at Impacted Receptors ¹			Number of Benefited Receptors ²			Average Reduction for Benefited Receptors dB(A) ¹	Total Estimated Cost ³	Cost per Benefited Receptor ⁴
			dB(A)			Impacted	Not Impacted	Total			
			5-5.9 dB(A)	6-6.9 dB(A)	> 7.0 dB(A)						
8	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
10	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
12	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
14	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
16	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵
18	200	2	0	0	0	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵	NA ⁵

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

² Receptors with a predicted reduction of 5 dB(A) or more are considered benefitted.

³ Based on a unit cost of \$ 30 per square foot.

⁴ FDOT cost reasonable criterion is \$ 42,000 per benefitted receptor.

⁵ 7 dB(A) reduction not achieved at any receptor.

Table 6-3
Noise Barrier Insertion Loss Results
ALTERNATIVE 2A
BW 3

Noise Receptor #	# Units	Build Alt. Design Year 2045 Noise Level dB(A)	Noise Barrier BW3 Predicted Insertion Loss by Wall Height											
			BW HT 8 FT.	BW HT 10 FT.	BW HT 12 FT.	BW HT 14 FT.	BW HT 16 FT.	BW HT 18 FT.	Insertion Loss dB(A) 8 FT.	Insertion Loss dB(A) 10 FT.	Insertion Loss dB(A) 12 FT.	Insertion Loss dB(A) 14 FT.	Insertion Loss dB(A) 16 FT.	Insertion Loss dB(A) 18 FT.
R149	2	68.6	65.3	64.9	64.5	64.4	64.3	64.2	3.3	3.7	4.1	4.2	4.3	4.4
R150	1	68.8	68.2	68.2	68.1	68.1	68.1	68.1	0.6	0.6	0.7	0.7	0.7	0.7

7.0 CONCLUSIONS

The Florida Department of Transportation (FDOT) District 4 has conducted this Project Development and Environment (PD&E) Study to determine the engineering and environmental effects of the proposed four to six-lane widening of Atlantic Avenue (SR 806) from Florida's Turnpike (M.P. 1.748) to Jog Road (M.P. 3.560), in Palm Beach County. This PD&E Study documents the need for capacity and multimodal improvements, and presents the procedures utilized to develop and evaluate a preferred alternative. The PD&E Study satisfies the requirements of FDOT and follows the process for a Type II Categorical Exclusion (CE). The PD&E Study process was developed in compliance with the National Environmental Policy Act (NEPA), and other applicable federal and state regulations.

The noise sensitive areas evaluated are representative of one hundred and fifty-seven (157) noise sensitive receptor locations. The computer modeled noise receptor locations are as follows: named and un-named residential areas, recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the outside seating areas associated with restaurants.

The traffic noise levels predicted at the one hundred and fifty-seven (157) noise sensitive receptor locations under evaluation approached or exceeded the FDOT NAC at three (3) residential areas for all alternatives (1A, 1B, and 2A) therefore; potential noise abatement measures were evaluated. A fourth alternative (Alternative 2B) was not specifically evaluated as it was a combination of Alternative 2A and Alternative 1B which were evaluated for potential impacts. Additionally, Alternatives 1C and 2C were not specifically evaluated as they are similar to a combination of Alternatives 2A and 1B. Alternatives 3 and 3A were not evaluated as they were similar to Alternative 1B. The remaining noise sensitive areas did not approach or exceed the appropriate NAC for the Activity Categories evaluated; therefore, potential noise abatement measures were not considered.

Ground mounted noise barriers were evaluated at NSA 9. This residential area was evaluated for potential noise barrier placement at two (2) locations, BW-2 and BW-3. There were six (6) impacted receptor locations associated with NSA 9. BW-2 represents four (4) impacted receptor locations (R136N-R139N). BW-3 represents two (2) impacted receptor locations (R149N-R150N). The residential locations identified will experience sound levels which exceed the applicable NAC for all three (3) alternatives. (Alternative 1A, 1B, and 2A)

A single ground mounted noise barrier was evaluated at NSA 10. This residential area was evaluated for potential noise barrier placement at one (1) location, BW-1. There were eleven (11) impacted receptor locations (R64-R67N, R72N-R77N, and R80N). The residential locations identified will experience sound levels which exceed the applicable NAC for all three (3) alternatives. (Alternative 1A, 1B, and 2A)

The cost of noise barrier placement (BW-1) for Alternative 1A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 1A ranged from \$ 19,033 to \$ 28,969. The cost of noise barrier placement (BW-2) for Alternative 1A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1A ranged from \$ 27,000 to \$ 54,000. The cost of noise barrier placement (BW-1) for Alternative 1B ranged from \$ 427,200 to \$ 961,200. The cost per benefited receptor for Alternative 1B ranged from \$ 17,800 to \$ 28,271. The cost of noise barrier placement (BW-2) for Alternative 1B ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 1B ranged from \$ 27,000 to \$

54,000. The cost of noise barrier placement (BW-1) for Alternative 2A ranged from \$ 437,760 to \$ 984,960. The cost per benefited receptor for Alternative 2A ranged from \$ 19,033 to \$ 28,969.

The cost of noise barrier placement (BW-2) for Alternative 2A ranged from \$ 216,000 to \$ 486,000. The cost per benefited receptor for Alternative 2A ranged from \$ 27,000 to \$ 54,000.

For all alternatives, (BW-3) which is 200 Ft. in length, with heights ranging from 8-18 Ft., was not feasible (Noise Reduction Factor) or reasonable (Noise Reduction Design Goal) given that the minimum acoustical reduction of 5 dB(A) could not be achieved. The computer predicted insertion loss ranged from 0.7 to 4.4 dB(A).

There are no other noise sensitive areas located within the project corridor as of the date of this report and was verified through two (2) active building permit requests. There are no other noise sources located adjacent to the study corridor which could interfere with the existing ambient highway traffic noise levels with the exception of Jog Road.

The proposed roadway improvements are expected to have a minimal impact, with few exceptions, on the adjacent noise sensitive receptor locations. The predicted noise level increase for Alternative 1A is approximately 1.4 to 8.6 dB(A). The predicted noise level increase for Alternative 1B is approximately 1.2 to 7.6 dB(A). The predicted noise level increase for Alternative 2A is approximately 1.2 to 8.4 dB(A). A noise level increase of this magnitude is generally perceivable.

Statement of Likelihood

The Florida Department of Transportation is committed to the construction of feasible and reasonable noise abatement measures at the noise-impacted locations identified in Table 6 (Noise Barrier Analysis) and Appendix C (Noise Analysis Maps) contingent upon the following conditions:

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

8.0 CONSTRUCTION NOISE AND VIBRATION

The study corridor is situated in a medium density populated area, with the majority of the noise sensitive locations being comprised of named and un-named residential areas, recreational areas (clubhouses, recreational buildings, tennis courts, swimming pools and golf courses), medical facilities, educational centers, places of worship, a funeral home, and the outside seating areas associated with restaurants. The SR-806 / Atlantic Avenue corridor limits extend from Florida's Turnpike to East of Jog Road.

Generally, there does not appear to be any locations which may require special noise and vibration control consideration during the construction process. Special consideration as it relates to ground borne vibration impacts should be evaluated again, prior to the construction improvements. There are existing privacy walls adjacent to proposed FDOT noise barriers which may require removal.

The noise sensitive locations are depicted in the Noise Analysis Maps presented in **Appendix C**. Noise and vibration impacts may occur due to movement and operation of heavy equipment and construction activities.

Noise control measures will include those contained in FDOT Standard Specifications for Road and Bridge Construction⁵. Special consideration may be required to minimize noise and vibration impacts resulting from the expected bridge construction process.

These considerations could include any of the following: limitations on the construction activities, temporary noise abatement structures around noisy equipment, and methods to measure and reduce ground borne vibration impacts.

A list of typical construction noise and vibration sensitive sites can be found on page 18-47 of Chapter 18 (Topic No. 650-000-001, July 1, 2020). A summary of potential noise and vibration sensitive sites has been provided in **Appendix E**.

An assessment of these sites should take place prior to construction to mitigate potential impacts. Section 335.02, Florida Statutes, in 2003, exempts FDOT from compliance with local ordinances. However, FDOT policy is to follow the requirement of local ordinances to the extent that it is reasonable. If unanticipated noise and / or vibration issues arise during the construction process, the Project Engineer, in concert with the District Noise Specialist and the Contractor, may investigate additional methods of controlling these impacts on a case-by- case basis.

9.0 COMMUNITY COORDINATION

A copy of the Noise Study Report should be submitted to the appropriate local planning / zoning officials for their use in land use control. To assist local planning officials, the distances to the 66 dB(A) noise contours were estimated by evaluating the results of the computer modeled receptor location(s) identified in this analysis. The 66 dB(A) noise contour delineates the distance from the closest edge of the travel lane that an approach of the NAC for Activity Category B and Category C is expected to occur for the 2045 design year traffic condition. The 71 dB(A) noise contour delineates the distance from the closest edge of the travel lane that an approach of the NAC for Activity Category E is expected to occur for the 2045 design year traffic condition.

This study has identified that Activity Category B, C, D, and E locations were present under the existing study corridor conditions. For the Build Alternative (Alternative 1A, 1B, and 2A), the estimated distance from the closest edge of the travel lane to the 66 dB(A) noise contour for Build Alternative 1A and 2A is approximately 84-110 Ft. on the south side of SR-806 and 88-108 Ft. on the north side of SR-806. The estimated distance from the closest edge of the travel lane to the 66 dB(A) noise contour for Build Alternative 1B is approximately 108-110 Ft. on the south side of SR-806 and 88-110 Ft. on the north side of SR-806. The estimated distance from the closest edge of the travel lane to the 71 dB(A) noise contour

for Alternative 1A and 2A is approximately 35-40 Ft. on the north side of SR-806. The estimated distance from the closest edge of the travel lane to the 71 dB(A) noise contour for Alternative 1B is approximately 42-44 Ft. on the north side of SR-806.

The set-back distances referenced above account only for the traffic noise associated with SR-806 / Atlantic Avenue corridor and do not take into consideration the noise levels associated with other noise sources. The noise contours are depicted on the Noise Analysis Maps presented in **Appendix C**. The noise contour table is presented in **Appendix F**.

Further, the distances to the 66 dB(A) and 71 dB(A) noise contours do not consider the effects of shielding from adjacent buildings, significant changes in roadway elevation, unusual topographic features, abnormal atmospheric conditions, or local traffic volumes from adjacent roadways.

Each of these factors could either increase or decrease the estimated distance to the 66 dB(A) and 71 dB(A) noise contours. Therefore, the setback distances shown in **Appendix F** are approximate values and should be considered as general guidance information.

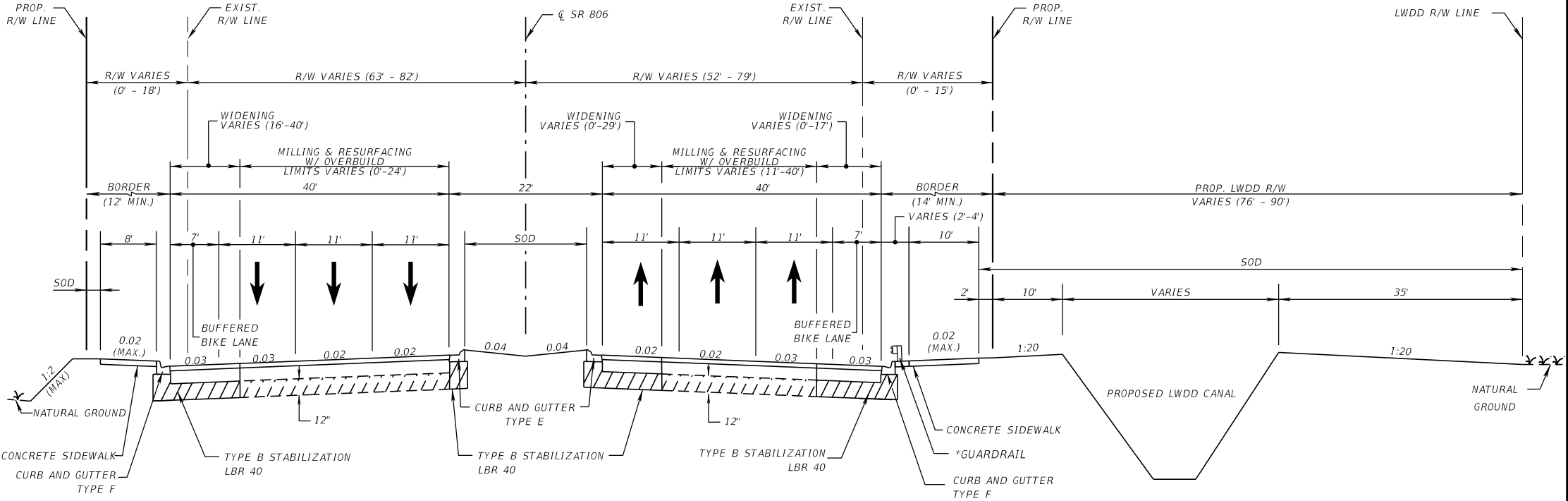
10.0 REFERENCES

1. Procedures for Abatement of Highway Traffic Noise and Construction Noise; FHWA; April 2001.
2. FDOT PD&E Manual, Part 2, Chapter 18 (Noise Policy); FDOT; Tallahassee, Florida; July 1, 2020.
3. The Traffic Noise Modeling and Analysis Practitioners Handbook; FDOT; Tallahassee, Florida; January 1, 2016.
4. Measurement of Highway-Related Noise (FHWA-PD-96-046); FHWA; May 1996.
5. Standard Specifications for Road and Bridge Construction; FDOT; Tallahassee, Florida; 2013.

APPENDIX A

TYPICAL SECTIONS

PROJECT CONTROLS		TYPICAL SECTION No. 1	
CONTEXT CLASSIFICATION			



ATLANTIC AVE
ALTERNATIVE 1: BEST FIT ALIGNMENT
PROPOSED ROADWAY TYPICAL
FROM EAST OF LWDD E-2 CANAL TO EAGLE POINT DRIVE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

()	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
()	C2 : RURAL	()	C4 : URBAN GENERAL
()	C2T : RURAL TOWN	()	C5 : URBAN CENTER
()	C3R : SUBURBAN RES.	()	C6 : URBAN CORE
()	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

☐ INTERSTATE	☐ MAJOR COLLECTOR
☐ FREEWAY/EXPWY.	☐ MINOR COLLECTOR
☒ PRINCIPAL ARTERIAL	☐ LOCAL
☐ MINOR ARTERIAL	

HIGHWAY SYSTEM

() NATIONAL HIGHWAY SYSTEM
() STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
() OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

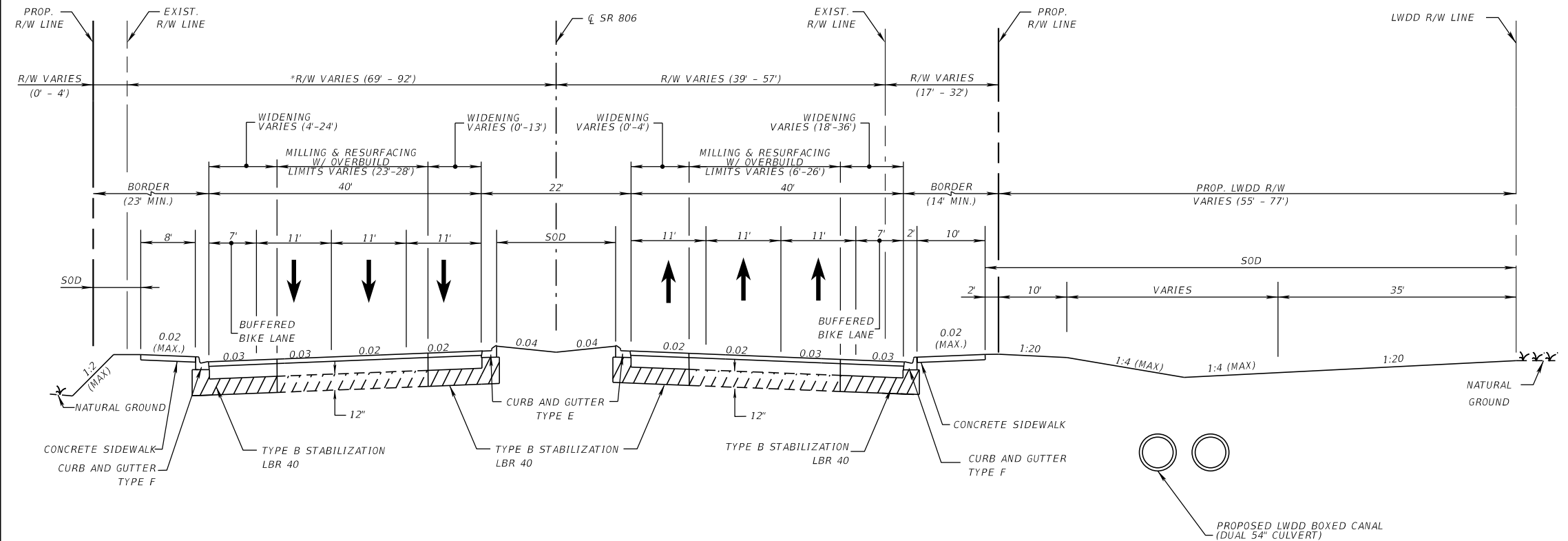
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

() NEW CONSTRUCTION / RECONSTRUCTION
() RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 2



ATLANTIC AVE

ALTERNATIVE 1: BEST FIT ALIGNMENT
(WITH DOUBLE 54" PIPES)
PROPOSED ROADWAY TYPICAL
FROM EAGLE POINT DRIVE TO LEGENDS WAY

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 44,200
ESTIMATED OPENING YEAR = 2025 AADT = 30,500
ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
DESIGN HOUR T = 2.95 %
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED =

NOT TO SCALE

* ROW LIMITS INCLUDE THE DEDICATED ROW AT THE TERRA NOVA DEVELOPMENT.

<i>FINANCIAL PROJECT ID</i>	<i>SHEET NO.</i>
440575-3-22-02	2

PROJECT CONTROLS

<u>CONTEXT CLASSIFICATION</u>	
() C1 : NATURAL	(X) C3C : SUBURBAN COMM.
() C2 : RURAL	() C4 : URBAN GENERAL
() C2T : RURAL TOWN	() C5 : URBAN CENTER
() C3R : SUBURBAN RES.	() C6 : URBAN CORE
() N/A : L.A. FACILITY	

- FUNCTIONAL CLASSIFICATION**

() INTERSTATE () FREEWAY/EXPWY. (X) PRINCIPAL ARTERIAL () MINOR ARTERIAL	() MAJOR COLLECTOR () MINOR COLLECTOR () LOCAL
---	--

() INTERSTATE	() MAJOR COLLECTOR
() FREEWAY/EXPWY.	() MINOR COLLECTOR
(X) PRINCIPAL ARTERIAL	() LOCAL
() MINOR ARTERIAL	

- ### HIGHWAY SYSTEM
- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

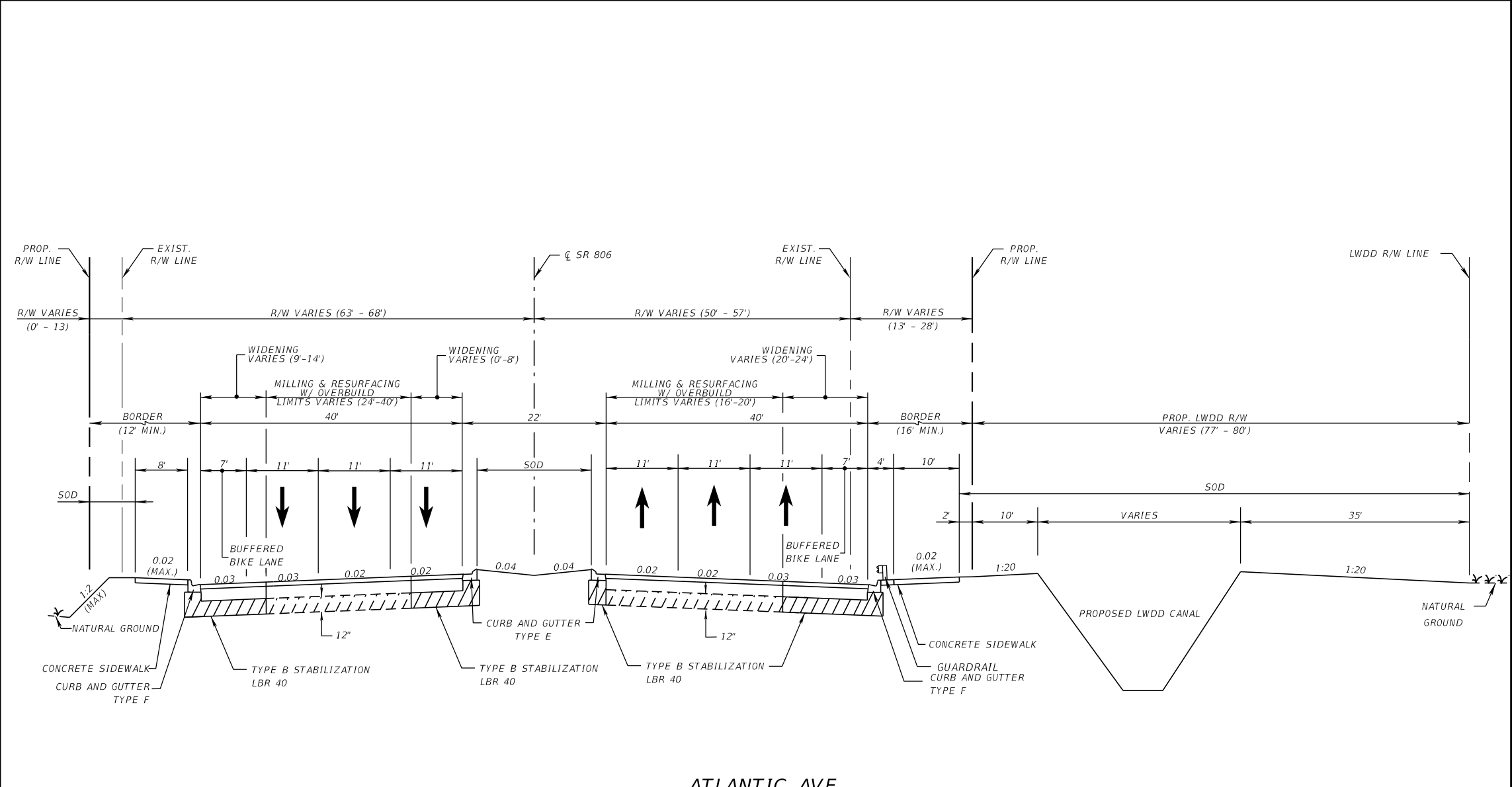
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

- | <u>CRITERIA</u> | |
|-----------------|-----------------------------------|
| () | NEW CONSTRUCTION / RECONSTRUCTION |
| () | RESURFACING (LA FACILITIES) |
| (X) | RRR (ARTERIALS & COLLECTORS) |

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

TYPICAL SECTION No. 3



ATLANTIC AVE
ALTERNATIVE 1: BEST FIT ALIGNMENT
PROPOSED ROADWAY TYPICAL
FROM LEGENDS WAY TO 370 FEET WEST OF MICHELANGELO BLVD

ATLANTIC AVE
ALTERNATIVE 1: BEST FIT ALIGNMENT
PROPOSED ROADWAY TYPICAL
FROM LEGENDS WAY TO 370 FEET WEST OF MICHELANGELO BLVD

ATLANTIC AVE
ALTERNATIVE 1: BEST FIT ALIGNMENT
PROPOSED ROADWAY TYPICAL
FROM LEGENDS WAY TO 370 FEET WEST OF MICHELANGELO BLVD

ATLANTIC AVE
ALTERNATIVE 1: BEST FIT ALIGNMENT
PROPOSED ROADWAY TYPICAL
FROM LEGENDS WAY TO 370 FEET WEST OF MICHELANGELO BLVD

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 42,500

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	3

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 42,500

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	3

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 42,500

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	3

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 42,500

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	3

PROJECT CONTROLS		TYPICAL SECTION No. 4	
CONTEXT CLASSIFICATION			
FUNCTIONAL CLASSIFICATION			
HIGHWAY SYSTEM			
ACCESS CLASSIFICATION		ATLANTIC AVE	
CRITERIA		ALTERNATIVE 1: BEST FIT ALIGNMENT (WITH DOUBLE 54" PIPES) PROPOSED ROADWAY TYPICAL	
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:		FROM 370 FEET WEST OF MICHELANGELO BLVD TO 75 FEET EAST OF MICHELANGELO BLVD	
		TRAFFIC DATA	
		CURRENT YEAR = 2018 AADT = 42,500 ESTIMATED OPENING YEAR = 2025 AADT = 30,500 ESTIMATED DESIGN YEAR = 2045 AADT = 38,500 K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR) DESIGN HOUR T = 2.95 % DESIGN SPEED = 45 MPH POSTED SPEED = 45 MPH TARGET SPEED =	
		NOT TO SCALE	
		FINANCIAL PROJECT ID SHEET NO.	
		440575-3-22-02 4	

PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL

()

C2T : RURAL TOWN

()

C5 : URBAN CENTER

()

C3R : SUBURBAN RES.

()

C6 : URBAN CORE

()

N/A : L.A. FACILITY

TYPICAL SECTION No. 5

ATLANTIC AVE

ALTERNATIVE 1: BEST FIT ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM 75 FEET EAST OF MICHELANGELO BLVD TO WEST OF CUMBERLAND DR

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 39,900

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	5

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

FUNCTIONAL CLASSIFICATION

HIGHWAY SYSTEM

ACCESS CLASSIFICATION

CRITERIA

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

C1 : NATURAL

C2 : RURAL

C2T : RURAL TOWN

C3R : SUBURBAN RES.

N/A : L.A. FACILITY

(X) C3C : SUBURBAN COMM.

C4 : URBAN GENERAL

C5 : URBAN CENTER

C6 : URBAN CORE

INTERSTATE

FREEWAY/EXPWY.

PRINCIPAL ARTERIAL

MINOR ARTERIAL

MAJOR COLLECTOR

MINOR COLLECTOR

LOCAL

NATIONAL HIGHWAY SYSTEM

STRATEGIC INTERMODAL SYSTEM

STATE HIGHWAY SYSTEM

OFF-STATE HIGHWAY SYSTEM

1 - FREEWAY

2 - RESTRICTIVE w/Service Roads

3 - RESTRICTIVE w/660 ft. Connection Spacing

4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing

5 - RESTRICTIVE w/440 ft. Connection Spacing

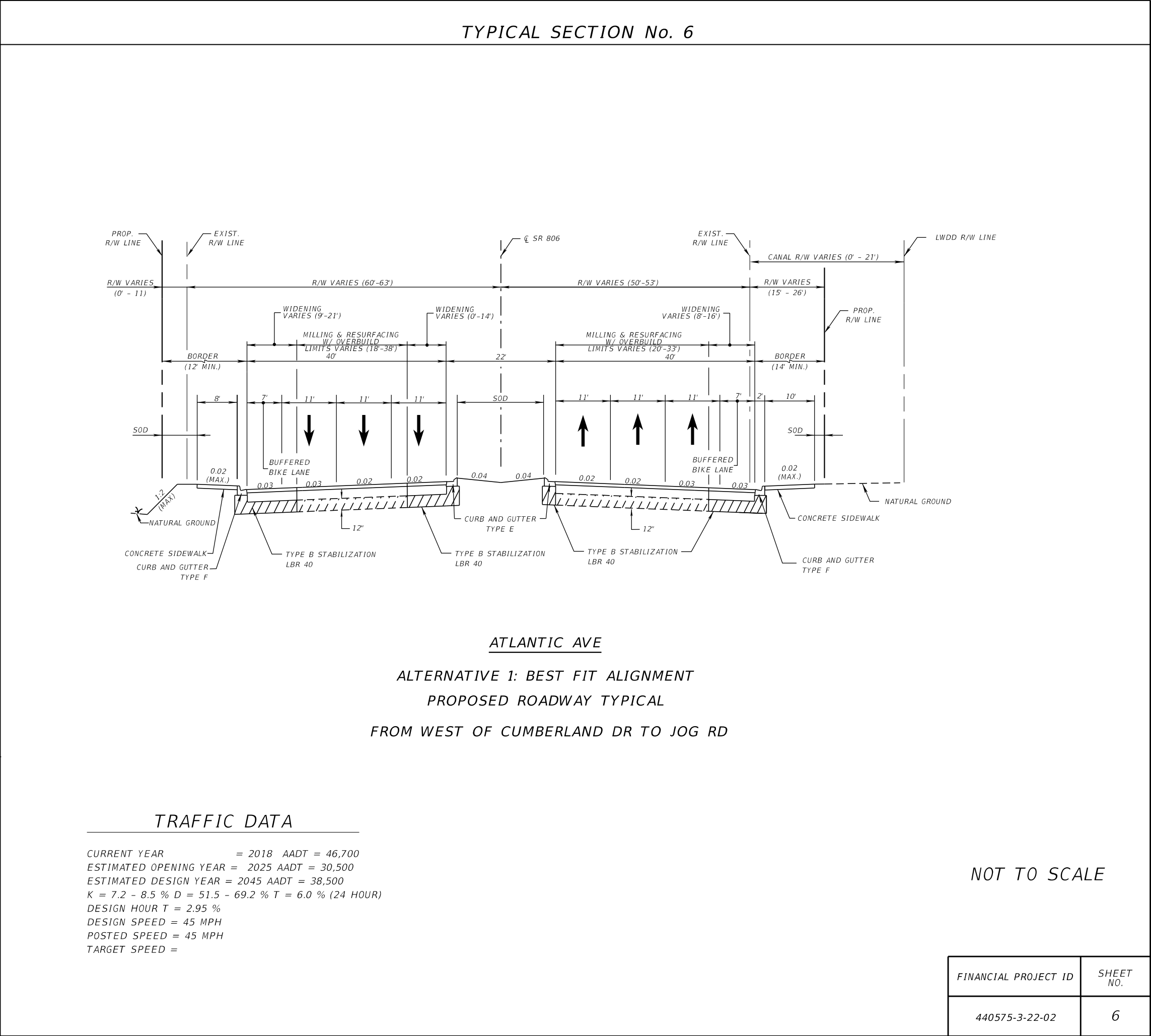
6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing

7 - BOTH MEDIAN TYPES

NEW CONSTRUCTION / RECONSTRUCTION

RESURFACING (LA FACILITIES)

RRR (ARTERIALS & COLLECTORS)



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PROJECT CONTROLS

CONTEXT CLASSIFICATION

()	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
()	C2 : RURAL	()	C4 : URBAN GENERAL
()	C2T : RURAL TOWN	()	C5 : URBAN CENTER
()	C3R : SUBURBAN RES.	()	C6 : URBAN CORE
()	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

☐ INTERSTATE	☐ MAJOR COLLECTOR
☐ FREEWAY/EXPWY.	☐ MINOR COLLECTOR
☒ PRINCIPAL ARTERIAL	☐ LOCAL
☐ MINOR ARTERIAL	

HIGHWAY SYSTEM

() NATIONAL HIGHWAY SYSTEM
() STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
() OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

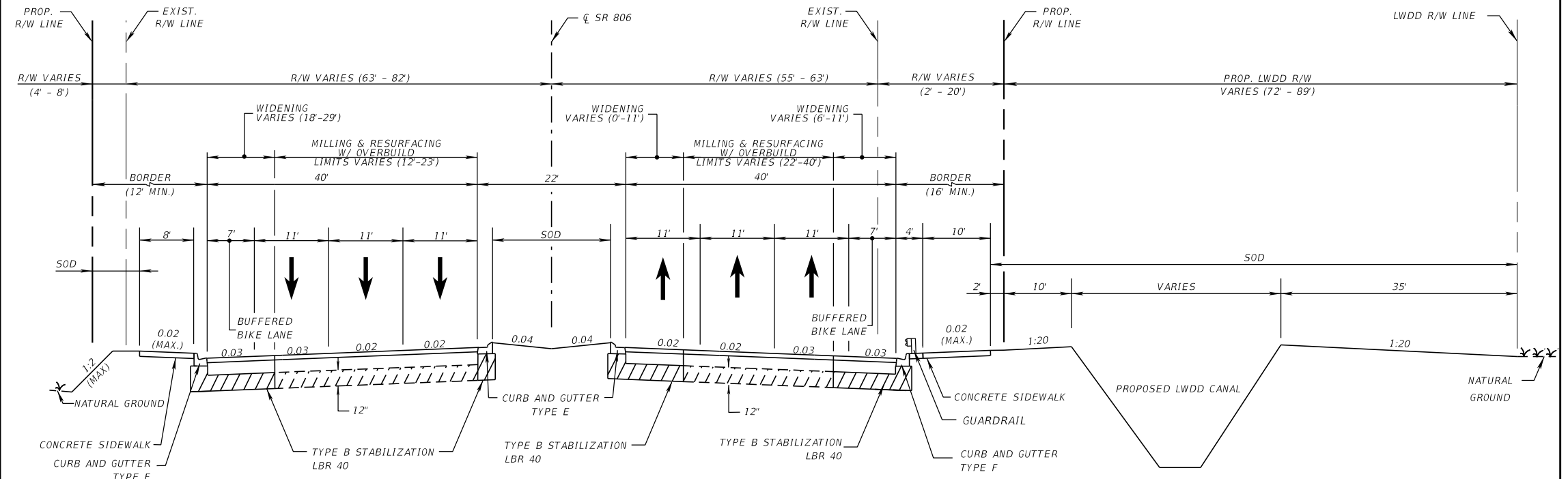
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

() NEW CONSTRUCTION / RECONSTRUCTION
() RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 1



ATLANTIC AVE

ALTERNATIVE 2: SOUTH ALIGNMENT
PROPOSED ROADWAY TYPICAL
FROM EAST OF LWDD E-2 CANAL TO EAGLE POINT DRIVE

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 45,600
ESTIMATED OPENING YEAR = 2025 AADT = 30,500
ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
DESIGN HOUR T = 3.00 %
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED =

NOT TO SCALE

<i>FINANCIAL PROJECT ID</i>	<i>SHEET NO.</i>
440575-3-22-02	1

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PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 2

ATLANTIC AVE

ALTERNATIVE 2: SOUTH ALIGNMENT
(WITH DOUBLE 54" PIPES)
PROPOSED ROADWAY TYPICAL

FROM EAGLE POINT DRIVE TO LEGENDS WAY

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 44,200
ESTIMATED OPENING YEAR = 2025 AADT = 30,500
ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
DESIGN HOUR T = 2.95 %
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	2

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PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 3

ATLANTIC AVE

ALTERNATIVE 2: SOUTH ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM LEGENDS WAY TO 370 FEET WEST OF MICHELANGELO BLVD

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 42,500

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

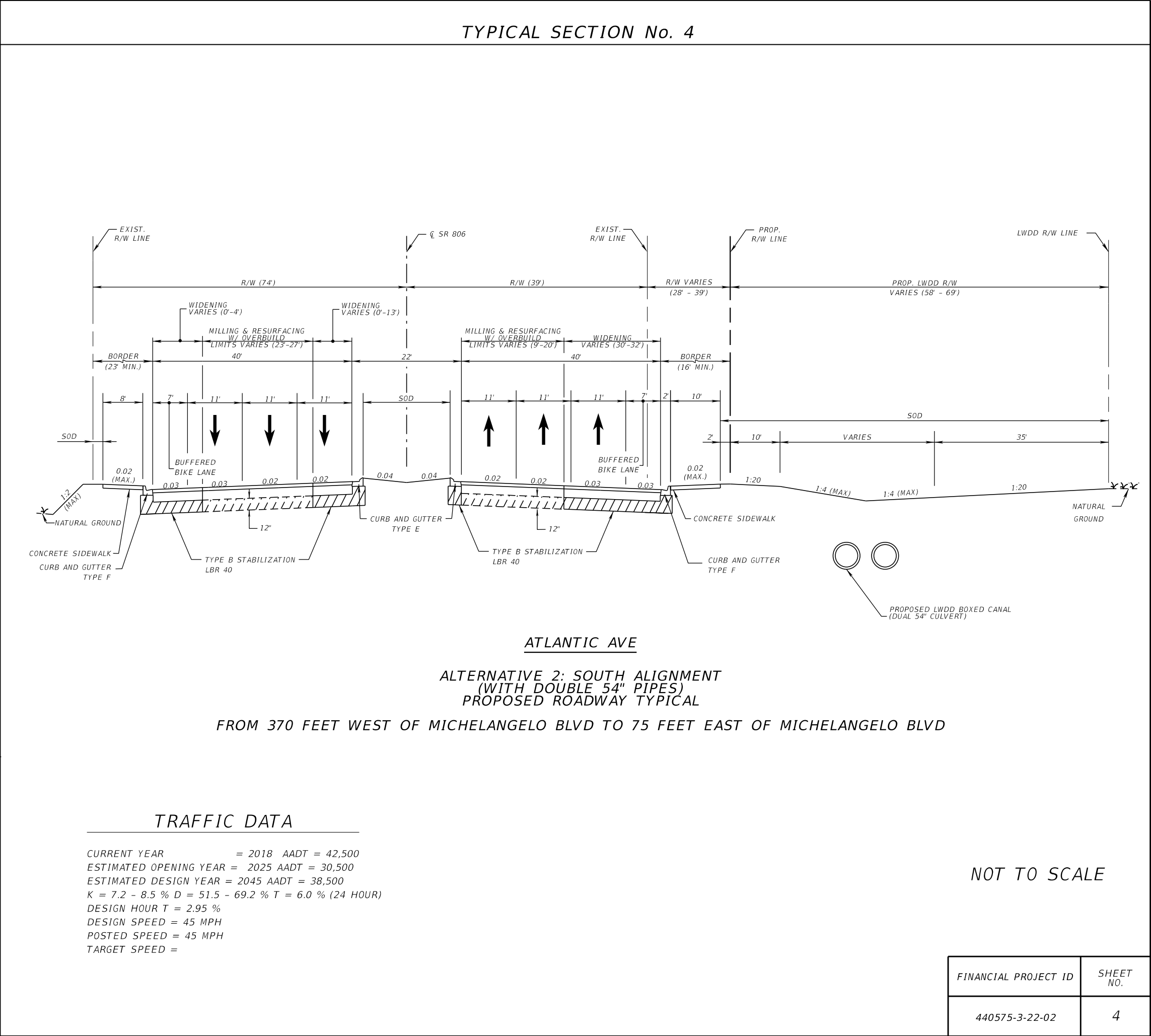
NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	3

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8/17/20219:28:25 AM

PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



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PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) () RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 5

ATLANTIC AVE

ALTERNATIVE 2: SOUTH ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM 75 FEET EAST OF MICHELANGELO BLVD TO WEST OF CUMBERLAND DR

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 39,900

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	5

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PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 6

The diagram illustrates a cross-section of a roadway with the following components from left to right: a 6' shoulder (R/W VARIES 0' - 6'), a 12' minimum border, a 40' wide milling and resurfacing area with a 22' shoulder, a 22' shoulder, a 40' wide milling and resurfacing area with a 2' shoulder, and a 10' shoulder (R/W VARIES 17' - 30'). The roadway includes two 11' travel lanes in each direction, a 7' buffered bike lane, and a 2' shoulder. The diagram also shows various engineering notes such as 'WIDENING VARIES (0'-22')', 'MILLING & RESURFACING W/ OVERBUILD LIMITS VARIES (20'-27')', 'CURB AND GUTTER TYPE E', 'TYPE B STABILIZATION LBR 40', and 'CONCRETE SIDEWALK CURB AND GUTTER TYPE F'. The diagram is labeled 'ATLANTIC AVE' and 'ALTERNATIVE 2: SOUTH ALIGNMENT'.

ATLANTIC AVE

ALTERNATIVE 2: SOUTH ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM WEST OF CUMBERLAND DR TO JOG RD

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 46,700

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED =

NOT TO SCALE

FINANCIAL PROJECT ID

440575-3-22-02

SHEET NO.

6

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PROJECT CONTROLS
CONTEXT CLASSIFICATION C1 : NATURAL (X) C3C : SUBURBAN COMM. C2 : RURAL () C4 : URBAN GENERAL C2T : RURAL TOWN () C5 : URBAN CENTER C3R : SUBURBAN RES. () C6 : URBAN CORE N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION INTERSTATE () MAJOR COLLECTOR FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL MINOR ARTERIAL
HIGHWAY SYSTEM NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing () 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 1

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3: BEST FIT ALIGNMENT

PROPOSED ROADWAY TYPICAL

SOUTHBOUND TURNPIKE INTERSECTION TO EAST OF LWDD E-2 CANAL

CL STA. 987+00.00 TO STA. 990+62.70

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 45,600

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 3.00 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	

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5/10/2023 2:42:52 PM

PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 2

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3: BEST FIT ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM EAST OF LWDD E-2 CANAL TO EAGLE POINT DRIVE

℄ STA. 990+62.70 TO STA. 1022+66.00

TRAFFIC DATA

CURRENT YEAR = 2018

AADT = 45,600

ESTIMATED OPENING YEAR = 2025

AADT = 30,500

ESTIMATED DESIGN YEAR = 2045

AADT = 38,500

K = 7.2 - 8.5 %

D = 51.5 - 69.2 %

T = 6.0 % (24 HOUR)

DESIGN HOUR T = 3.00 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID

440575-3-22-02

SHEET NO.

* GUARDRAIL OCCURS FROM EAST OF LWDD E-2 CANAL TO LEXINGTON CLUB BLVD.

5/10/2023 2:43:41 PM

PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 3

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3: BEST FIT ALIGNMENT
(WITH DOUBLE 54" PIPES)
PROPOSED ROADWAY TYPICAL

FROM EAGLE POINT DRIVE TO LEGENDS WAY

CL STA. 1022+66.00 TO STA. 1037+00.00

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 44,200
ESTIMATED OPENING YEAR = 2025 AADT = 30,500
ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
DESIGN HOUR T = 2.95 %
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	

* ROW LIMITS INCLUDE THE DEDICATED ROW AT THE TERRA NOVA DEVELOPMENT.

5/10/2023 2:44:28 PM

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PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 4

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3: BEST FIT ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM LEGENDS WAY TO 370 FEET WEST OF MICHELANGELO BLVD

℄ STA. 1037+00.00 TO STA. 1045+70.00

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	

TRAFFIC DATA

CURRENT YEAR = 2018

AADT = 42,500

ESTIMATED OPENING YEAR = 2025

AADT = 30,500

ESTIMATED DESIGN YEAR = 2045

AADT = 38,500

K = 7.2 - 8.5 %

D = 51.5 - 69.2 %

T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED = 45 MPH

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PROJECT CONTROLS

CONTEXT CLASSIFICATION	
() C1 : NATURAL	(X) C3C : SUBURBAN COMM.
() C2 : RURAL	() C4 : URBAN GENERAL
() C2T : RURAL TOWN	() C5 : URBAN CENTER
() C3R : SUBURBAN RES.	() C6 : URBAN CORE
() N/A : L.A. FACILITY	

- ### FUNCTIONAL CLASSIFICATION
- | | |
|------------------------|---------------------|
| () INTERSTATE | () MAJOR COLLECTOR |
| () FREEWAY/EXPWY. | () MINOR COLLECTOR |
| (X) PRINCIPAL ARTERIAL | () LOCAL |
| () MINOR ARTERIAL | |

HIGHWAY SYSTEM

() NATIONAL HIGHWAY SYSTEM

() STRATEGIC INTERMODAL SYSTEM

(X) STATE HIGHWAY SYSTEM

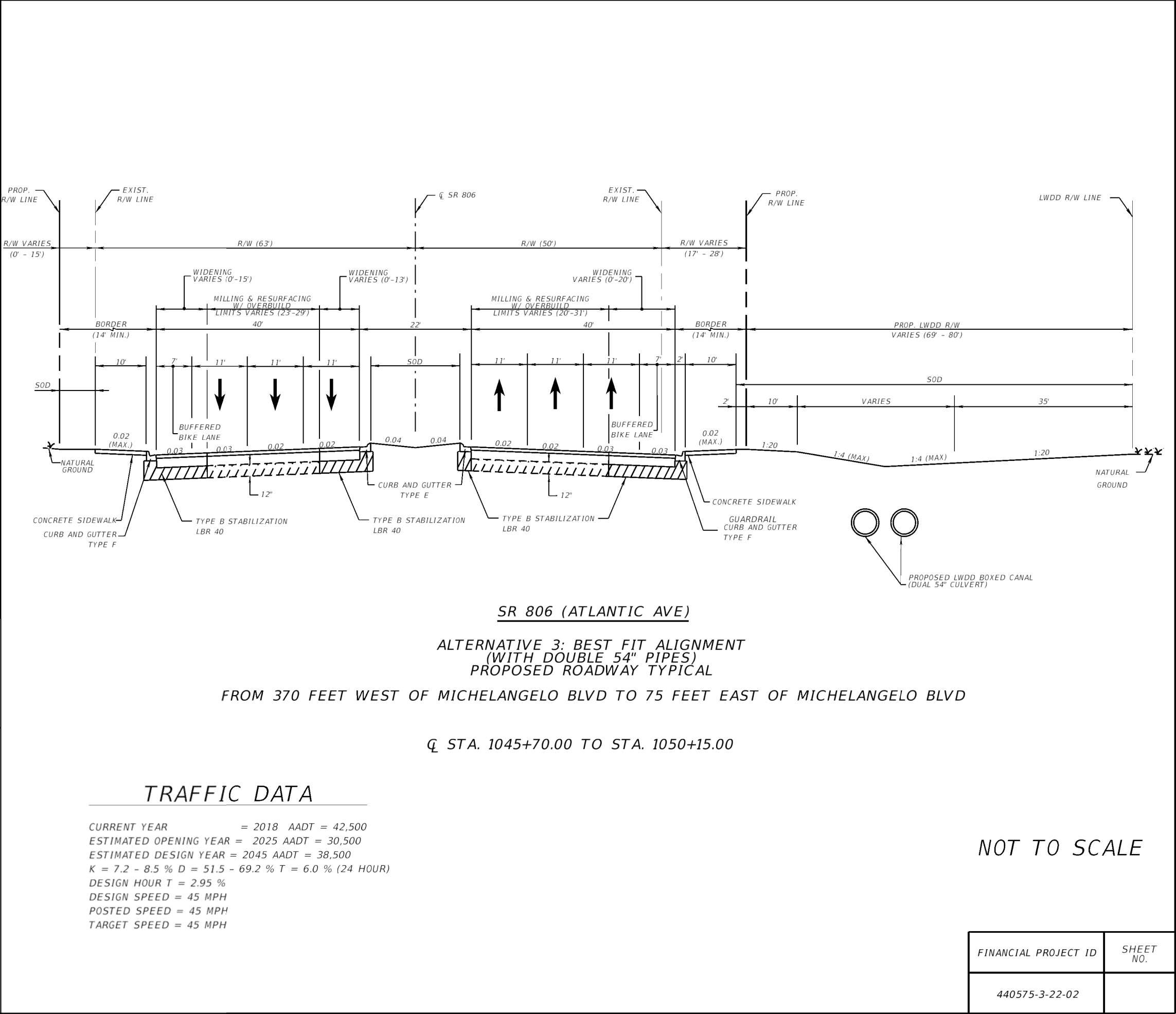
() OFF-STATE HIGHWAY SYSTEM

- ## ACCESS CLASSIFICATION
- () 1 - FREEWAY
 - () 2 - RESTRICTIVE w/Service Roads
 - () 3 - RESTRICTIVE w/660 ft. Connection Spacing
 - () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
 - (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
 - () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
 - () 7 - BOTH MEDIAN TYPES

<u>CRITERIA</u>	
()	NEW CONSTRUCTION / RECONSTRUCTION
()	RESURFACING (LA FACILITIES)
(X)	RRR (ARTERIALS & COLLECTORS)

- POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*
-

TYPICAL SECTION No. 5



FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	

PROJECT CONTROLS
CONTEXT CLASSIFICATION () C1 : NATURAL (X) C3C : SUBURBAN COMM. () C2 : RURAL () C4 : URBAN GENERAL () C2T : RURAL TOWN () C5 : URBAN CENTER () C3R : SUBURBAN RES. () C6 : URBAN CORE () N/A : L.A. FACILITY
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (X) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (X) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES
CRITERIA () NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) (X) RRR (ARTERIALS & COLLECTORS)
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 6

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3: BEST FIT ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM 75 FEET EAST OF MICHELANGELO BLVD TO WEST OF CUMBERLAND DR

Q STA. 1050+15.00 TO STA. 1058+10.00

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 39,900

ESTIMATED OPENING YEAR = 2025 AADT = 30,500

ESTIMATED DESIGN YEAR = 2045 AADT = 38,500

K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)

DESIGN HOUR T = 2.95 %

DESIGN SPEED = 45 MPH

POSTED SPEED = 45 MPH

TARGET SPEED = 45 MPH

FINANCIAL PROJECT ID

440575-3-22-02

SHEET NO.

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5/10/2023 2:45:41 PM

PROJECT CONTROLS

CONTEXT CLASSIFICATION

()

C1 : NATURAL

(X)

C3C : SUBURBAN COMM.

()

C2 : RURAL

()

C4 : URBAN GENERAL

()

C2T : RURAL TOWN

()

C5 : URBAN CENTER

()

C3R : SUBURBAN RES.

()

C6 : URBAN CORE

()

N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

()

INTERSTATE

()

MAJOR COLLECTOR

()

FREEWAY/EXPWY.

()

MINOR COLLECTOR

(X)

PRINCIPAL ARTERIAL

()

LOCAL

()

MINOR ARTERIAL

HIGHWAY SYSTEM

()

NATIONAL HIGHWAY SYSTEM

()

STRATEGIC INTERMODAL SYSTEM

(X)

STATE HIGHWAY SYSTEM

()

OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

()

1 - FREEWAY

()

2 - RESTRICTIVE w/Service Roads

()

3 - RESTRICTIVE w/660 ft. Connection Spacing

()

4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing

(X)

5 - RESTRICTIVE w/440 ft. Connection Spacing

()

6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing

()

7 - BOTH MEDIAN TYPES

CRITERIA

()

NEW CONSTRUCTION / RECONSTRUCTION

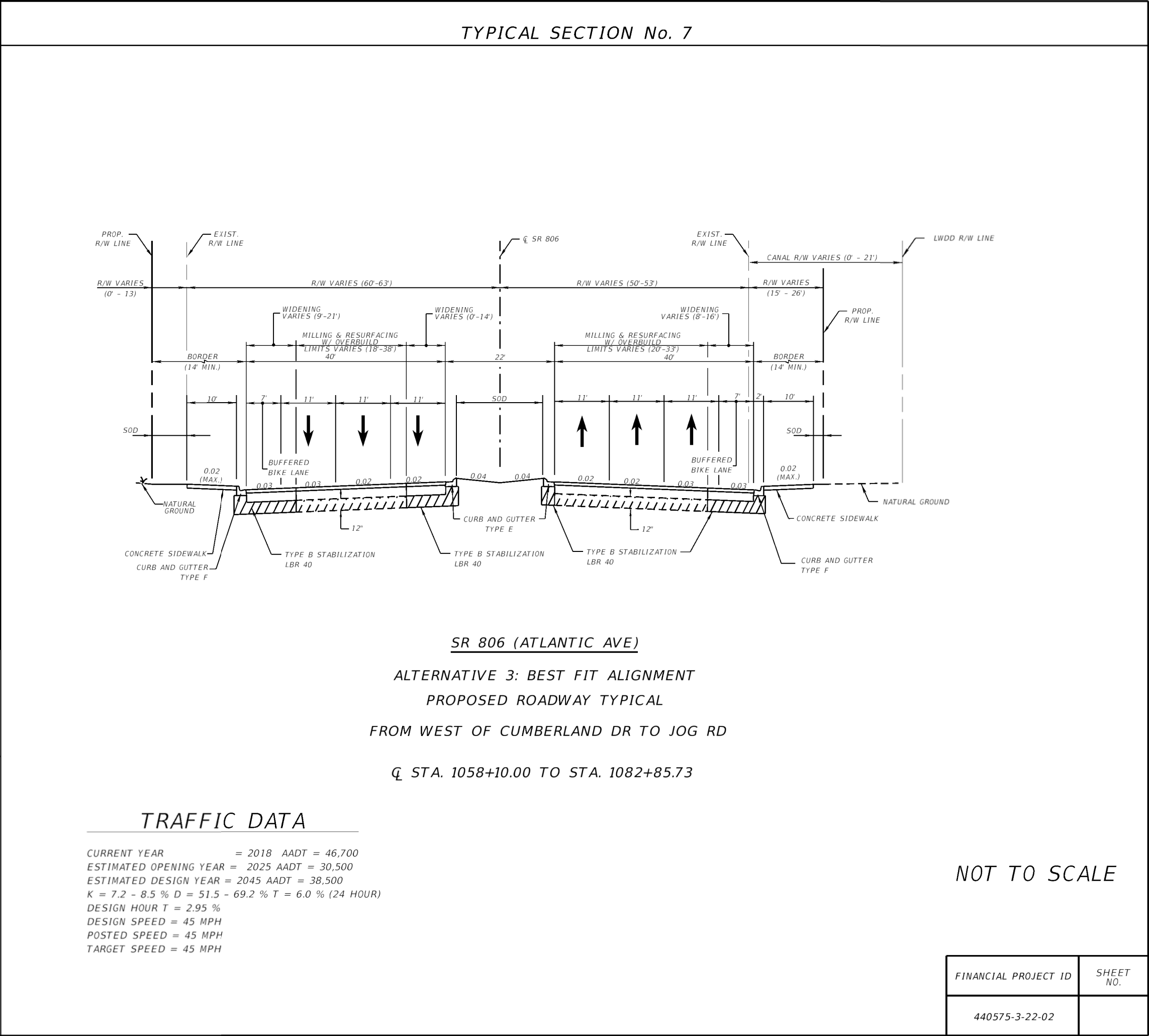
()

RESURFACING (LA FACILITIES)

(X)

RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



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PROJECT CONTROLS

CONTEXT CLASSIFICATION

<u>FUNCTIONAL CLASSIFICATION</u>	
() INTERSTATE	() MAJOR COLLECTOR
() FREEWAY/EXPWY.	() MINOR COLLECTOR
(X) PRINCIPAL ARTERIAL	() LOCAL
() MINOR ARTERIAL	

- ### HIGHWAY SYSTEM
- () NATIONAL HIGHWAY SYSTEM
 - () STRATEGIC INTERMODAL SYSTEM
 - (X) STATE HIGHWAY SYSTEM
 - () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

- CRITERIA**
- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 1

Diagram illustrating the proposed roadway typical section for SR 806 (Atlantic Ave). The section shows a 65-foot wide section with a 3-foot shoulder, followed by a 40-foot wide section with a 3-foot shoulder. The 65-foot section includes a 11-foot shoulder, a 7-foot buffered bike lane, and four 11-foot travel lanes. The 40-foot section includes a 11-foot shoulder, a 7-foot buffered bike lane, and four 11-foot travel lanes. The diagram also shows existing and proposed curbs, gutters, sidewalks, and guardrails. The right-of-way (R/W) varies from 90 feet to 96.5 feet. The diagram is labeled 'LIMITS OF CONSTRUCTION' and 'CONST. SR 806'.

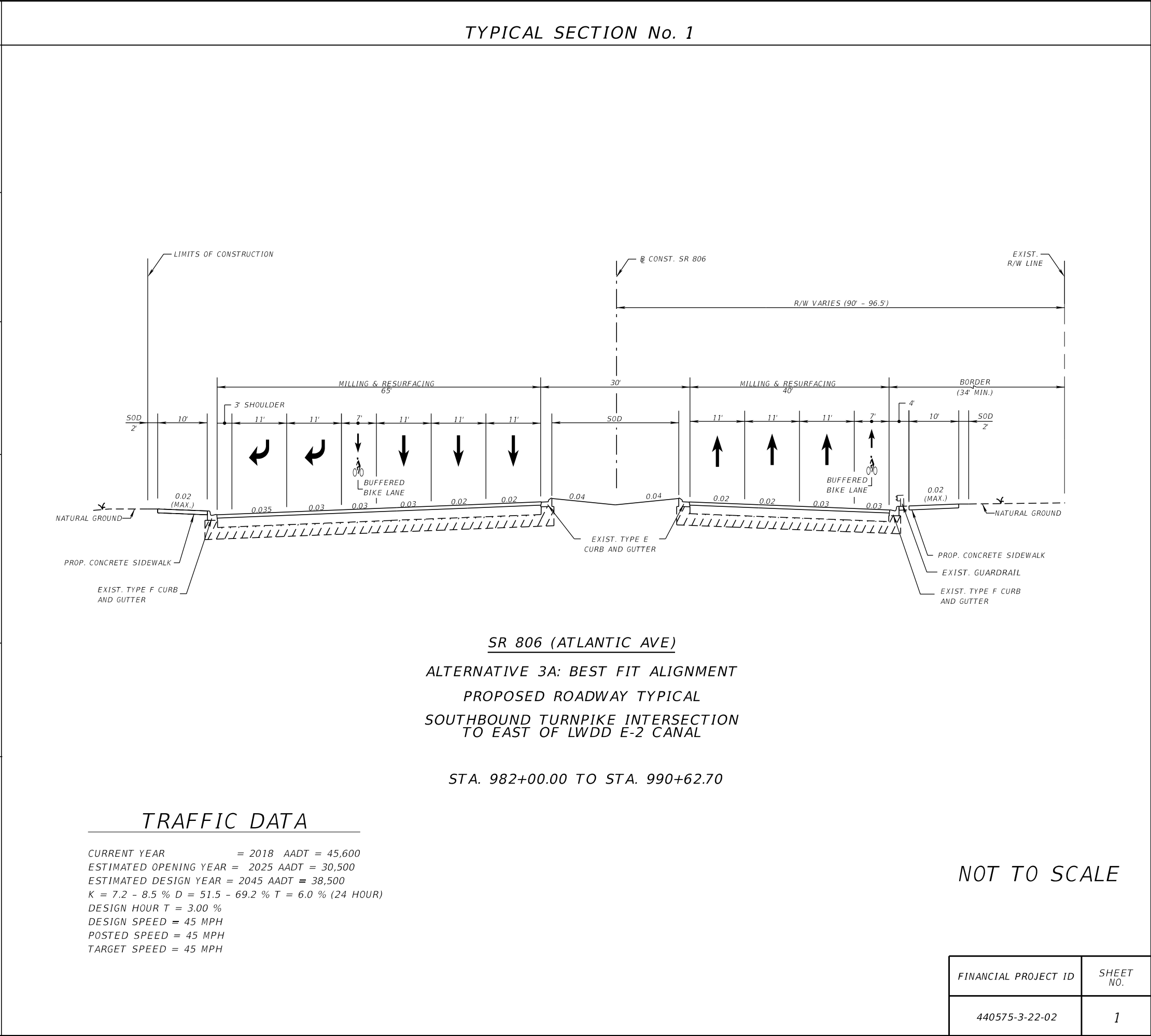
SR 806 (ATLANTIC AVE)
ALTERNATIVE 3A: BEST FIT ALIGNMENT
PROPOSED ROADWAY TYPICAL
SOUTHBOUND TURNPIKE INTERSECTION
TO EAST OF LWDD E-2 CANAL
STA. 982+00.00 TO STA. 990+62.70

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 45,600
ESTIMATED OPENING YEAR = 2025 AADT = 30,500
ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
DESIGN HOUR T = 3.00 %
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	1



!

PROJECT CONTROLS

CONTEXT CLASSIFICATION

<u>FUNCTIONAL CLASSIFICATION</u>	
() INTERSTATE	() MAJOR COLLECTOR
() FREEWAY/EXPWY.	() MINOR COLLECTOR
(X) PRINCIPAL ARTERIAL	() LOCAL
() MINOR ARTERIAL	

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - *FREEWAY*
- () 2 - *RESTRICTIVE w/Service Roads*
- () 3 - *RESTRICTIVE w/660 ft. Connection Spacing*
- () 4 - *NON-RESTRICTIVE w/2640 ft. Signal Spacing*
- (X) 5 - *RESTRICTIVE w/440 ft. Connection Spacing*
- () 6 - *NON-RESTRICTIVE w/1320 ft. Signal Spacing*
- () 7 - *BOTH MEDIAN TYPES*

<u>CRITERIA</u>	
()	NEW CONSTRUCTION / RECONSTRUCTION
()	RESURFACING (LA FACILITIES)
(X)	RRR (ARTERIALS & COLLECTORS)

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

TYPICAL SECTION No. 2

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3A: BEST FIT ALIGNMENT PROPOSED ROADWAY TYPICAL FROM EAST OF LWDD E-2 CANAL TO LEGENDS WAY

STA. 990+62.70 TO STA. 1037+00.00

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 45,600
 ESTIMATED OPENING YEAR = 2025 AADT = 30,500
 ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
 K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
 DESIGN HOUR T = 3.00 %
 DESIGN SPEED = 45 MPH
 POSTED SPEED = 45 MPH
 TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	2

* 6' SWK OCCURS FROM HAGEN RANCH ROAD TO LEGENDS WAY
 ** 5' BIKE LANE OCCURS FROM HAGEN RANCH ROAD TO LEGENDS WAY
 *** 8' SWK OCCURS FROM EAGLE POINT DRIVE TO LEGENDS WAY

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NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	2

* 6' SWK OCCURS FROM HAGEN RANCH ROAD TO LEGENDS WAY
 ** 5' BIKE LANE OCCURS FROM HAGEN RANCH ROAD TO LEGENDS WAY
 *** 8' SWK OCCURS FROM EAGLE POINT DRIVE TO LEGENDS WAY

PROJECT CONTROLS

CONTEXT CLASSIFICATION

<u>FUNCTIONAL CLASSIFICATION</u>	
() INTERSTATE	() MAJOR COLLECTOR
() FREEWAY/EXPWY.	() MINOR COLLECTOR
(X) PRINCIPAL ARTERIAL	() LOCAL
() MINOR ARTERIAL	

- ## HIGHWAY SYSTEM
- () NATIONAL HIGHWAY SYSTEM
 - () STRATEGIC INTERMODAL SYSTEM
 - (X) STATE HIGHWAY SYSTEM
 - () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

- CRITERIA**
- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 3

PROPOSED ROADWAY TYPICAL

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3A: BEST FIT ALIGNMENT

FROM LEGENDS WAY TO WEST OF CUMBERLAND DR

STA. 1037+00.00 TO STA. 1058+10.00

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 42,500
 ESTIMATED OPENING YEAR = 2025 AADT = 30,500
 ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
 K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
 DESIGN HOUR T = 2.95 %
 DESIGN SPEED = 45 MPH
 POSTED SPEED = 45 MPH
 TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	3

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3A: BEST FIT ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM LEGENDS WAY TO WEST OF CUMBERLAND DR

STA. 1037+00.00 TO STA. 1058+10.00

CURRENT YEAR = 2018 AADT = 42,500
ESTIMATED OPENING YEAR = 2025 AADT = 30,500
ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
DESIGN HOUR T = 2.95 %
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	3

PROJECT CONTROLS

CONTEXT CLASSIFICATION

<u>FUNCTIONAL CLASSIFICATION</u>	
() INTERSTATE	() MAJOR COLLECTOR
() FREEWAY/EXPWY.	() MINOR COLLECTOR
(X) PRINCIPAL ARTERIAL	() LOCAL
() MINOR ARTERIAL	

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

CRITERIA

() NEW CONSTRUCTION / RECONSTRUCTION

() RESURFACING (LA FACILITIES)

(X) RRR (ARTERIALS & COLLECTORS)

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

TYPICAL SECTION No. 4

SR 806 (ATLANTIC AVE)

ALTERNATIVE 3A: BEST FIT ALIGNMENT

PROPOSED ROADWAY TYPICAL

FROM WEST OF CUMBERLAND DR TO JOG RD

STA. 1058+10.00 TO STA. 1076+00.00
STA. 1089+40.00 TO STA. 1099+47.19

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 46,700
ESTIMATED OPENING YEAR = 2025 AADT = 30,500
ESTIMATED DESIGN YEAR = 2045 AADT = 38,500
K = 7.2 - 8.5 % D = 51.5 - 69.2 % T = 6.0 % (24 HOUR)
DESIGN HOUR T = 2.95 %
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	4

FINANCIAL PROJECT ID	SHEET NO.
440575-3-22-02	4

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APPENDIX B
TRAFFIC DATA FOR NOISE STUDY

TRAFFIC DATA FOR NOISE STUDY

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s): N/A
 FPID Number(s): 440575-3-22-02
 State/Federal Route No.: SR 806
 Road Name: West Atlantic Avenue
 Project Description: PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
 Segment Description: West Atlantic Ave from Turnpike SB Ramps to Turnpike NB Ramps
 Section Number: 93030000
 Mile Post To/From: From MP 1.748 To MP 1.972

Existing Facility:	4-Lane Divided	D =	57.75	%
Year:	2018	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2013	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

No Build Alternative (Design Year):	4-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	3643	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	3087	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	3643	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD *Doust* Date: 10/21/2020
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.
 FDOT Reviewer Trang Phan *Trang Phan* Date: 1/4/21
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s): N/A
 FPID Number(s): 440575-3-22-02
 State/Federal Route No.: SR 806
 Road Name: West Atlantic Avenue
 Project Description: PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
 Segment Description: West Atlantic Ave from Turnpike NB Ramps to Stone Quarry Blvd
 Section Number: 93030000
 Mile Post To/From: From MP 1.972 To MP 2.193

Existing Facility:	4-Lane Divided	D =	57.75	%
Year:	2018	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2230	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

No Build Alternative (Design Year):	4-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	3193	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	3087	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	3193	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD Doust Date: 10/21/2020
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer Trang Phan Trang Phan Date: 1/4/21
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s): N/A
 FPID Number(s): 440575-3-22-02
 State/Federal Route No.: SR 806
 Road Name: West Atlantic Avenue
 Project Description: PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
 Segment Description: West Atlantic Ave from Stone Quarry Blvd to Hagen Ranch Rd
 Section Number: 93030000
 Mile Post To/From: From MP 2.193 To MP 2.548

Existing Facility:	4-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2018	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	2287	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

No Build Alternative (Design Year):	4-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3276	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	3087	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3276	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD *Doust* Date: 10/21/2020
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.
 FDOT Reviewer: Trang Phan *Trang Phan* Date: 1/4/21
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s): N/A
 FPID Number(s): 440575-3-22-02
 State/Federal Route No.: SR 806
 Road Name: West Atlantic Avenue
 Project Description: PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
 Segment Description: West Atlantic Ave from Hagen Ranch Rd to Legends Way
 Section Number: 93030000
 Mile Post To/From: From MP 2.548 To MP 2.692

Existing Facility:	4-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2018	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	2096	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

No Build Alternative (Design Year):	4-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3002	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	3087	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3002	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD *Doust* Date: 10/21/2020
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer Trang Phan *Trang Phan* Date: 1/4/21
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s): N/A
 FPID Number(s): 440575-3-22-02
 State/Federal Route No.: SR 806
 Road Name: West Atlantic Avenue
 Project Description: PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
 Segment Description: West Atlantic Ave from Legends Way to Cumberland Dr
 Section Number: 93030000
 Mile Post To/From: From MP 2.692 To MP 3.078

Existing Facility:	4-Lane Divided	D =	57.75	%
Year:	2018	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2065	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

No Build Alternative (Design Year):	4-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2955	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	3087	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2955	MT =	1.89	% of Design Hour Volume
Posted Speed:	45	HT =	0.65	% of Design Hour Volume
		B =	0.31	% of Design Hour Volume
		MC =	0.14	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD *Doust* Date: 10/21/2020
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer Trang Phan *Trang Phan* Date: 1/4/21
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s): N/A
 FPID Number(s): 440575-3-22-02
 State/Federal Route No.: SR 806
 Road Name: West Atlantic Avenue
 Project Description: PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
 Segment Description: West Atlantic Ave from Cumberland Dr to Seville Terrace
 Section Number: 93030000
 Mile Post To/From: From MP 3.078 To MP 3.376

Existing Facility:	4-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2018	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	2205	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

No Build Alternative (Design Year):	4-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3157	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	3087	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3157	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD *Doust* Date: 10/21/2020
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer Trang Phan *Trang Phan* Date: 1/4/21
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s): N/A
 FPID Number(s): 440575-3-22-02
 State/Federal Route No.: SR 806
 Road Name: West Atlantic Avenue
 Project Description: PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
 Segment Description: West Atlantic Ave from Seville Terrace to Jog rd
 Section Number: 93030000
 Mile Post To/From: From MP 3.376 To MP 3.560

Existing Facility:	5-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2018	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2546	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	2417	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

No Build Alternative (Design Year):	5-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2546	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3462	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
		T24 =	6.0	% of 24 Hour Volume
Year:	2045	Tpeak =	3.0	% of Design Hour Volume
		MT =	1.89	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	3087	HT =	0.65	% of Design Hour Volume
Demand Peak Hour Volume:	3462	B =	0.31	% of Design Hour Volume
Posted Speed:	45	MC =	0.14	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD *Doust* Date: 10/21/2020
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.
 FDOT Reviewer Trang Phan *Trang Phan* Date: 1/4/21
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s):	N/A
FPID Number(s):	440575-3-22-02
State/Federal Route No.:	SR 806
Road Name:	West Atlantic Avenue
Project Description:	PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
Segment Description:	West Atlantic Ave from Permission Ave to Turnpike SB Ramp
Section Number:	93030000
Mile Post To/From:	MP 1.525 to MP 1.748

Existing Facility:	4-Lane Divided	D =	57.75	%
Year:	2018	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	1998	MT =	1.97	% of Design Hour Volume
Posted Speed:	45	HT =	1.36	% of Design Hour Volume
		B =	0.38	% of Design Hour Volume
		MC =	0.12	% of Design Hour Volume

No Build Alternative (Design Year):	4-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2006	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	3146	MT =	1.97	% of Design Hour Volume
Posted Speed:	45	HT =	1.36	% of Design Hour Volume
		B =	0.38	% of Design Hour Volume
		MC =	0.12	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	3087	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	3146	MT =	1.97	% of Design Hour Volume
Posted Speed:	45	HT =	1.36	% of Design Hour Volume
		B =	0.38	% of Design Hour Volume
		MC =	0.12	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By:	Ehsan Doustmohammadi, PhD	<i>Doust</i>
	Print Name	Signature

Date: 12/02/2020

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer	Trang Phan	<i>Trang Phan</i>
	Print Name	Signature

Date: 1/4/21

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s):	N/A
FPID Number(s):	440575-3-22-02
State/Federal Route No.:	SR 806
Road Name:	West Atlantic Avenue
Project Description:	PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
Segment Description:	West Atlantic Ave from Jog Rd to Turnpike El Calire Ranch Rd
Section Number:	93030000
Mile Post To/From:	MP 3.560 to MP 3.850

Existing Facility:	6-Lane Divided	D =	57.75	%
Year:	2018	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	3087	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2060	MT =	1.68	% of Design Hour Volume
Posted Speed:	45	HT =	0.81	% of Design Hour Volume
		B =	0.27	% of Design Hour Volume
		MC =	0.19	% of Design Hour Volume

No Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	3087	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2950	MT =	1.68	% of Design Hour Volume
Posted Speed:	45	HT =	0.81	% of Design Hour Volume
		B =	0.27	% of Design Hour Volume
		MC =	0.19	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	57.75	%
Year:	2045	T24 =	6.0	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	3087	Tpeak =	3.0	% of Design Hour Volume
Demand Peak Hour Volume:	2950	MT =	1.68	% of Design Hour Volume
Posted Speed:	45	HT =	0.81	% of Design Hour Volume
		B =	0.27	% of Design Hour Volume
		MC =	0.19	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD
Print Name Signature

Date: 12/02/2020

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer Trang Phan
Print Name Signature

Date: 1/4/21

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s):	N/A
FPID Number(s):	440575-3-22-02
State/Federal Route No.:	N/A
Road Name:	Jog Road
Project Description:	PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
Segment Description:	Jog Rd North of Atlantic Ave
Section Number:	93000051
Mile Post To/From:	MP 5.88 to MP 6.93

Existing Facility:	6-Lane Divided	D =	59.5	%
Year:	2018	T24 =	4.6	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2778	Tpeak =	2.3	% of Design Hour Volume
Demand Peak Hour Volume:	1612	MT =	1.29	% of Design Hour Volume
Posted Speed:	45	HT =	0.34	% of Design Hour Volume
		B =	0.23	% of Design Hour Volume
		MC =	0.11	% of Design Hour Volume

No Build Alternative (Design Year):	6-Lane Divided	D =	59.5	%
Year:	2045	T24 =	4.6	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2646	Tpeak =	2.3	% of Design Hour Volume
Demand Peak Hour Volume:	2308	MT =	1.29	% of Design Hour Volume
Posted Speed:	45	HT =	0.34	% of Design Hour Volume
		B =	0.23	% of Design Hour Volume
		MC =	0.11	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	59.5	%
Year:	2045	T24 =	4.6	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2646	Tpeak =	2.3	% of Design Hour Volume
Demand Peak Hour Volume:	2308	MT =	1.29	% of Design Hour Volume
Posted Speed:	45	HT =	0.34	% of Design Hour Volume
		B =	0.23	% of Design Hour Volume
		MC =	0.11	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By:	Ehsan Doustmohammadi, PhD	<i>Doust</i>
	Print Name	Signature

Date: 12/02/2020

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer	Trang Phan	<i>Trang Phan</i>
	Print Name	Signature

Date: 1/4/21

TRAFFIC DATA FOR NOISE STUDIES

Federal Aid Number(s):	N/A
FPID Number(s):	440575-3-22-02
State/Federal Route No.:	N/A
Road Name:	Jog Road
Project Description:	PD&E Services for SR-806/Atlantic Ave from Turnpike to Jog Rd
Segment Description:	Jog Rd South of Atlantic Ave
Section Number:	93000051
Mile Post To/From:	MP 5.490 to MP 5.880

Existing Facility:	6-Lane Divided	D =	59.5	%
Year:	2018	T24 =	4.6	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2778	Tpeak =	2.3	% of Design Hour Volume
Demand Peak Hour Volume:	2287	MT =	1.86	% of Design Hour Volume
Posted Speed:	45	HT =	0.53	% of Design Hour Volume
		B =	0.23	% of Design Hour Volume
		MC =	0.20	% of Design Hour Volume

No Build Alternative (Design Year):	6-Lane Divided	D =	59.5	%
Year:	2045	T24 =	4.6	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2778	Tpeak =	2.3	% of Design Hour Volume
Demand Peak Hour Volume:	3272	MT =	1.86	% of Design Hour Volume
Posted Speed:	45	HT =	0.53	% of Design Hour Volume
		B =	0.23	% of Design Hour Volume
		MC =	0.20	% of Design Hour Volume

Build Alternative (Design Year):	6-Lane Divided	D =	59.5	%
Year:	2045	T24 =	4.6	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2778	Tpeak =	2.3	% of Design Hour Volume
Demand Peak Hour Volume:	3272	MT =	1.86	% of Design Hour Volume
Posted Speed:	45	HT =	0.53	% of Design Hour Volume
		B =	0.23	% of Design Hour Volume
		MC =	0.20	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Ehsan Doustmohammadi, PhD
 Print Name Signature

Date: 12/02/2020

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer Trang Phan
 Print Name Signature

Date: 1/4/21

TNM 2.5 Traffic Volume Input

Year / Roadway Segment / SR-806/Atlantic Ave.	Peak Hour LOS C Directional Volume ¹	Peak Hour Demand Volume ²	Posted Speed	Traffic Volume for TNM 2.5
Existing (2018)				
Persimmon Ave to Turnpike SB Ramp	2,006	1,998	45	1,998
No Build (2045)				
Persimmon Ave to Turnpike SB Ramp	2,006	3,146	45	3,146
Build (2045)				
Persimmon Ave to Turnpike SB Ramp	3,087	3,146	45	3,146
Existing (2018)				
Turnpike SB Ramps to Turnpike NB Ramps	2,006	2,013	45	2,013
No Build (2045)				
Turnpike SB Ramps to Turnpike NB Ramps	2,006	3,643	45	3,643
Build (2045)				
Turnpike SB Ramps to Turnpike NB Ramps	3,087	3,643	45	3,643
Existing (2018)				
From Turnpike NB Ramps to Stone Quarry Blvd.	2,006	2,230	45	2,230
No Build (2045)				
From Turnpike NB Ramps to Stone Quarry Blvd.	2,006	3,193	45	3,193
Build (2045)				
From Turnpike NB Ramps to Stone Quarry Blvd.	3,087	3,193	45	3,193
Existing (2018)				
Stone Quarry Blvd. to Hagen Ranch Rd.	2,006	2,287	45	2,287
No Build (2045)				
Stone Quarry Blvd. to Hagen Ranch Rd.	2,006	3,276	45	3,276
Build (2045)				
Stone Quarry Blvd. to Hagen Ranch Rd.	3,087	3,276	45	3,276

TNM 2.5 Traffic Volume Input

Year / Roadway Segment / SR-806/Atlantic Ave.	Peak Hour LOS C Directional Volume ¹	Peak Hour Demand Volume ²	Posted Speed	Traffic Volume for TNM 2.5
Existing (2018)				
Hagen Ranch Rd. to Legends Way	2,006	2,096	45	2,096
No Build (2045)				
Hagen Ranch Rd. to Legends Way	2,006	3,002	45	3,002
Build (2045)				
Hagen Ranch Rd. to Legends Way	3,087	3,002	45	3,002
Existing (2018)				
Legends Way to Cumberland Dr.	2,006	2,065	45	2,065
No Build (2045)				
Legends Way to Cumberland Dr.	2,006	2,955	45	2,955
Build (2045)				
Legends Way to Cumberland Dr.	3,087	2,955	45	2,955
Existing (2018)				
Cumberland Dr. to Seville Terrace	2,006	2,205	45	2,205
No Build (2045)				
Cumberland Dr. to Seville Terrace	2,006	3,157	45	3,157
Build (2045)				
Cumberland Dr. to Seville Terrace	3,087	3,157	45	3,157
Existing (2018)				
Seville Terrace to Jog Rd.	2,546	2,417	45	2,417
No Build (2045)				
Seville Terrace to Jog Rd.	2,546	3,462	45	3,462
Build (2045)				
Seville Terrace to Jog Rd.	3,087	3,462	45	3,462

TNM 2.5 Traffic Volume Input				
Year / Roadway Segment / SR-806/Atlantic Ave.	Peak Hour LOS C Directional Volume ¹	Peak Hour Demand Volume ²	Posted Speed	Traffic Volume for TNM 2.5
Existing (2018)				
Jog Rd. to El Claire Ranch Rd.	3,087	2,060	45	2,060
No Build (2045)				
Jog Rd. to El Claire Ranch Rd.	3,087	2,950	45	2,950
Build (2045)				
Jog Rd. to El Claire Ranch Rd.	3,087	2,950	45	2,950

¹ LOS C traffic volume applied to each roadway direction.

² Demand traffic volume applied to each roadway direction based on D Factor.

TNM 2.5 Traffic Volume Input				
Year / Roadway Segment / Jog Road	Peak Hour LOS C Directional Volume ¹	Peak Hour Demand Volume ²	Posted Speed	Traffic Volume for TNM 2.5
Existing (2018)				
N. of Atlantic Avenue	2,778	1,612	45	1,612
No Build (2045)				
N. of Atlantic Avenue	2,646	2,308	45	2,308
Build (2045)				
N. of Atlantic Avenue	2,646	2,308	45	2,308
Existing (2018)				
S. of Atlantic Avenue	2,778	2,287	45	2,287
No Build (2045)				
S. of Atlantic Avenue	2,778	3,272	45	3,272
Build (2045)				
S. of Atlantic Avenue	2,778	3,272	45	3,272

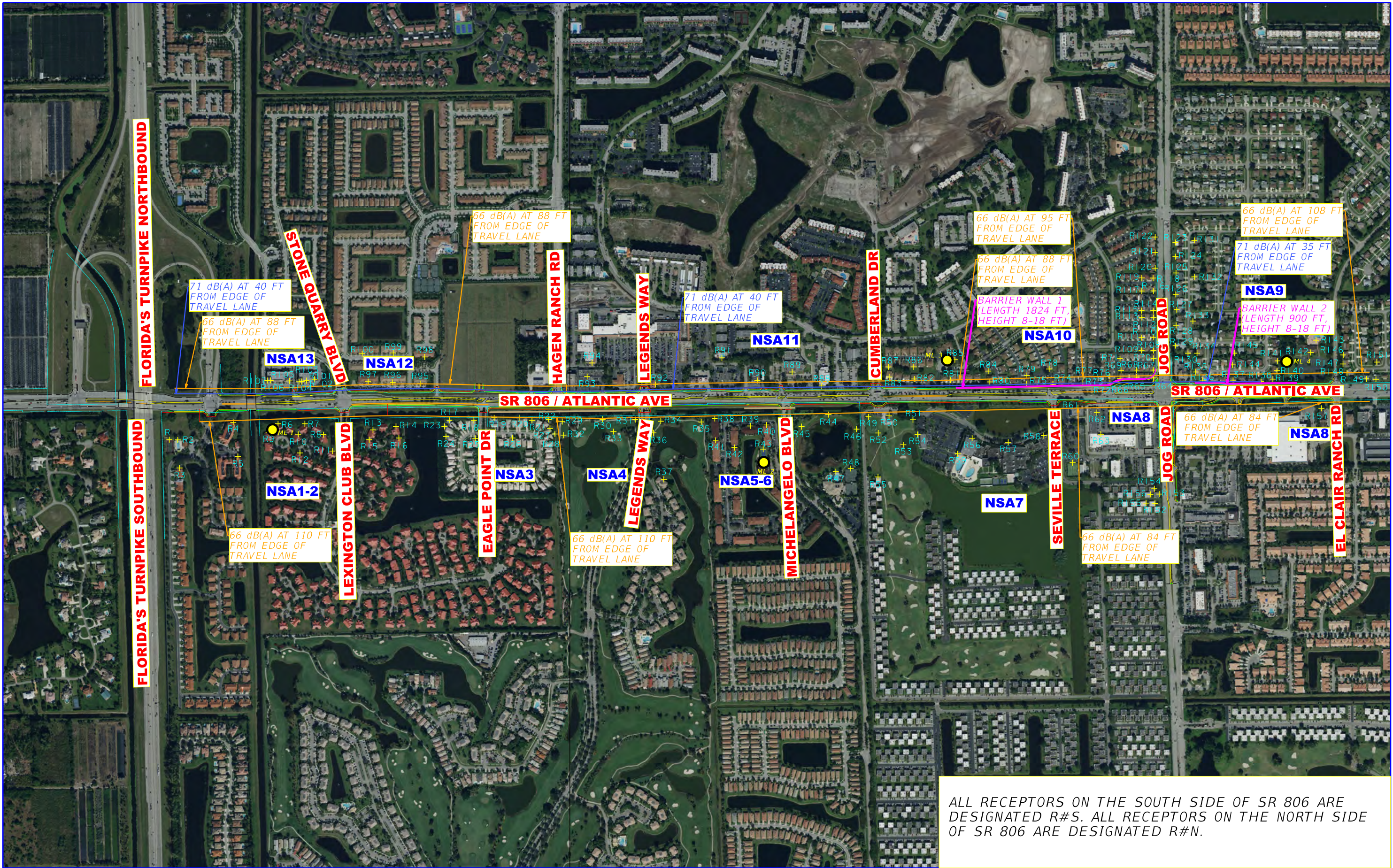
¹ LOS C traffic volume applied to each roadway direction.

² Demand traffic volume applied to each roadway direction based on D Factor.

SR 806/Atlantic Avenue Peak Hour Traffic Volumes For TNM 2.5 Model												
Persimmon to Turnpike	Existing Year 2018 Condition 4 Lane Divided				No Build Alternative 2045 Condition 4 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	1,998 VPH	Cars	1110.0000	812.0000	3,146 VPH	1747.0000	1278.0000		3,146 VPH	1747.0000	1278.0000	
	Demand	MT	23.0000	17.0000	Demand	36.0000	26.0000		Demand	36.0000	26.0000	
	D=57.75%	HT	16.0000	11.0000	D=57.75%	25.0000	18.0000		D=57.75%	25.0000	18.0000	
		Bus	4.0000	3.0000		7.0000	5.0000			7.0000	5.0000	
		MC	1.0000	1.0000		2.0000	2.0000			2.0000	2.0000	
	45 MPH	1154.0000	844.0000		1817.0000	1329.0000			1817.0000	1329.0000		
Turnpike SB/NB Ramps	Existing Year 2018 Condition 4 Lane Divided				No Build Alternative 2045 Condition 4 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,013 VPH	Cars	1127.0000	824.0000	3,643 VPH	2040.0000	1493.0000		3,643 VPH	2040.0000	1493.0000	
	Demand	MT	22.0000	16.0000	Demand	40.0000	29.0000		Demand	40.0000	29.0000	
	D=57.75%	HT	8.0000	6.0000	D=57.75%	14.0000	10.0000		D=57.75%	14.0000	10.0000	
		Bus	4.0000	3.0000		7.0000	5.0000			7.0000	5.0000	
		MC	2.0000	1.0000		3.0000	2.0000			3.0000	2.0000	
	45 MPH	1163.0000	850.0000		2104.0000	1539.0000			2104.0000	1539.0000		
Turnpike NB Ramps/Stone Quarry Blvd. to Hagen Ranch Rd.	Existing Year 2018 Condition 4 Lane Divided				No Build Alternative 2045 Condition 4 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,230 VPH	Cars	1250.0000	914.0000	3,193 VPH	1788.0000	1309.0000		3,193 VPH	1788.0000	1309.0000	
	Demand	MT	24.0000	18.0000	Demand	35.0000	25.0000		Demand	35.0000	25.0000	
	D=57.75%	HT	8.0000	6.0000	D=57.75%	12.0000	9.0000		D=57.75%	12.0000	9.0000	
		Bus	4.0000	3.0000		6.0000	4.0000			6.0000	4.0000	
		MC	2.0000	1.0000		3.0000	2.0000			3.0000	2.0000	
	45 MPH	1288.0000	942.0000		1844.0000	1349.0000			1844.0000	1349.0000		
Stone Quarry Blvd. to Hagen Ranch Rd.	Existing Year 2018 Condition 4 Lane Divided				No Build Alternative 2045 Condition 4 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,287 VPH	Cars	1281.0000	938.0000	3,276 VPH	1835.0000	1343.0000		3,276 VPH	1835.0000	1343.0000	
	Demand	MT	25.0000	18.0000	Demand	36.0000	26.0000		Demand	36.0000	26.0000	
	D=57.75%	HT	9.0000	6.0000	D=57.75%	12.0000	9.0000		D=57.75%	12.0000	9.0000	
		Bus	4.0000	3.0000		6.0000	4.0000			6.0000	4.0000	
		MC	2.0000	1.0000		3.0000	2.0000			3.0000	2.0000	
	45 MPH	1321.0000	966.0000		1892.0000	1384.0000			1892.0000	1384.0000		
Hagen Ranch Rd. to Legends Way	Existing Year 2018 Condition 4 Lane Divided				No Build Alternative 2045 Condition 4 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,096 VPH	Cars	1173.0000	859.0000	3,002 VPH	1683.0000	1230.0000		3,002 VPH	1683.0000	1230.0000	
	Demand	MT	23.0000	17.0000	Demand	33.0000	24.0000		Demand	33.0000	24.0000	
	D=57.75%	HT	8.0000	6.0000	D=57.75%	11.0000	8.0000		D=57.75%	11.0000	8.0000	
		Bus	4.0000	3.0000		5.0000	4.0000			5.0000	4.0000	
		MC	2.0000	1.0000		2.0000	2.0000			2.0000	2.0000	
	45 MPH	1210.0000	886.0000		1734.0000	1268.0000			1734.0000	1268.0000		
Legends Way to Cumberland Dr.	Existing Year 2018 Condition 4 Lane Divided				No Build Alternative 2045 Condition 4 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,065 VPH	Cars	1155.0000	847.0000	2,955 VPH	1656.0000	1211.0000		2,955 VPH	1656.0000	1211.0000	
	Demand	MT	23.0000	16.0000	Demand	32.0000	24.0000		Demand	32.0000	24.0000	
	D=57.75%	HT	8.0000	6.0000	D=57.75%	11.0000	8.0000		D=57.75%	11.0000	8.0000	
		Bus	4.0000	3.0000		5.0000	4.0000			5.0000	4.0000	
		MC	2.0000	1.0000		2.0000	2.0000			2.0000	2.0000	
	45 MPH	1192.0000	873.0000		1706.0000	1249.0000			1706.0000	1249.0000		
Cumberland Dr. to Seville Terrace	Existing Year 2018 Condition 4 Lane Divided				No Build Alternative 2045 Condition 4 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,205 VPH	Cars	1235.0000	904.0000	3,157 VPH	1768.0000	1294.0000		3,157 VPH	1768.0000	1294.0000	
	Demand	MT	24.0000	18.0000	Demand	34.0000	25.0000		Demand	34.0000	25.0000	
	D=57.75%	HT	8.0000	6.0000	D=57.75%	12.0000	9.0000		D=57.75%	12.0000	9.0000	
		Bus	4.0000	3.0000		6.0000	4.0000			6.0000	4.0000	
		MC	2.0000	1.0000		3.0000	2.0000			3.0000	2.0000	
	45 MPH	1273.0000	932.0000		1823.0000	1334.0000			1823.0000	1334.0000		
Seville Terrace to Jog Rd.	Existing Year 2018 Condition 5 Lane Divided				No Build Alternative 2045 Condition 5 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,417 VPH	Cars	1355.0000	991.0000	3,462 VPH	1939.0000	1418.0000		3,462 VPH	1939.0000	1418.0000	
	Demand	MT	26.0000	19.0000	Demand	38.0000	28.0000		Demand	38.0000	28.0000	
	D=57.75%	HT	9.0000	7.0000	D=57.75%	13.0000	10.0000		D=57.75%	13.0000	10.0000	
		Bus	4.0000	3.0000		6.0000	5.0000			6.0000	5.0000	
		MC	2.0000	1.0000		3.0000	2.0000			3.0000	2.0000	
	45 MPH	1396.0000	1021.0000		1999.0000	1463.0000			1999.0000	1463.0000		
Jog Rd to EL Clair Rd.	Existing Year 2018 Condition 6 Lane Divided				No Build Alternative 2045 Condition 6 Lane Divided				Build Alternative 2045 Condition 6 Lane Divided			
	2,060 VPH	Cars	1155.0000	844.0000	2,950 VPH	1653.0000	1210.0000		2,950 VPH	1653.0000	1210.0000	
	Demand	MT	20.0000	15.0000	Demand	29.0000	21.0000		Demand	29.0000	21.0000	
	D=57.75%	HT	10.0000	7.0000	D=57.75%	14.0000	10.0000		D=57.75%	14.0000	10.0000	
		Bus	3.0000	2.0000		5.0000	3.0000			5.0000	3.0000	
		MC	2.0000	2.0000		3.0000	2.0000			3.0000	2.0000	
	45 MPH	1190.0000	870.0000		1704.0000	1246.0000			1704.0000	1246.0000		

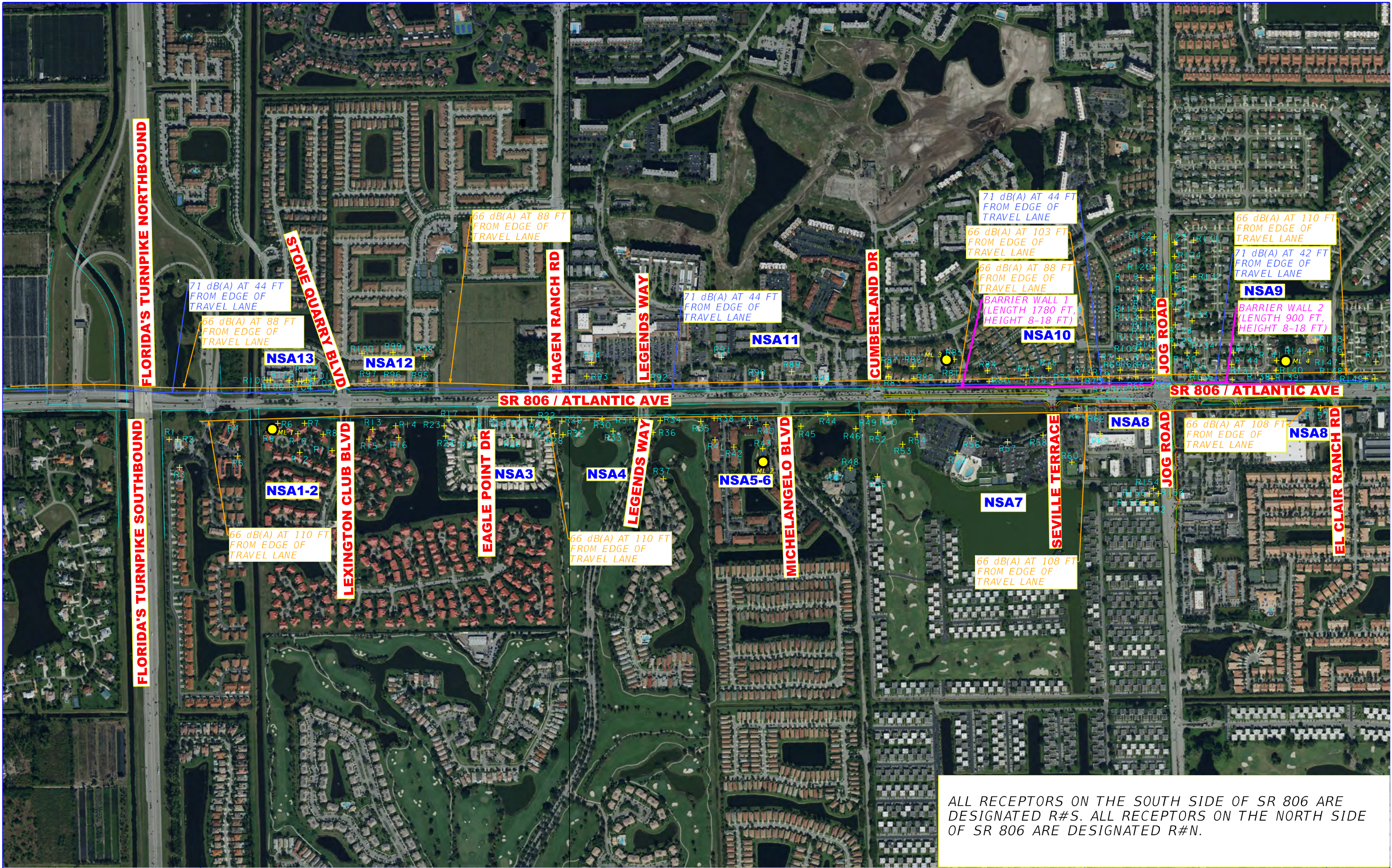
Jog Road Peak Hour Traffic Volumes For TNM 2.5 Model													
Existing Year 2018 Condition 3 Lanes					No Build Alternative 2045 Condition 3 Lanes					Build Alternative 2045 Condition 3 Lanes			
Jog Rd. NB S. of SR 806	926 VPH	Cars	900.0000		1,325 VPH	1287.0000		1,325 VPH	1287.0000				
	Demand	MT	17.0000		Demand	25.0000		Demand	25.0000				
	D=40.50%	HT	5.0000		D=40.50%	7.0000		D=40.50%	7.0000				
		Bus	2.0000			3.0000			3.0000				
		MC	2.0000			3.0000			3.0000				
		45 MPH	926.0000			1325.0000			1325.0000				
Existing Year 2018 Condition 3 Lanes					No Build Alternative 2045 Condition 3 Lanes					Build Alternative 2045 Condition 3 Lanes			
Jog Rd. NB N. of SR 806	653 VPH	Cars	640.0000		935 VPH	917.0000		935 VPH	917.0000				
	Demand	MT	8.0000		Demand	12.0000		Demand	12.0000				
	D=40.50%	HT	2.0000		D=40.50%	3.0000		D=40.50%	3.0000				
		Bus	2.0000			2.0000			2.0000				
		MC	1.0000			1.0000			1.0000				
		45 MPH	653.0000			935.0000			935.0000				
Existing Year 2018 Condition 3 Lanes					No Build Alternative 2045 Condition 3 Lanes					Build Alternative 2045 Condition 3 Lanes			
Jog Rd. SB N. of SR 806	959 VPH	Cars	941.0000		1,373 VPH	1345.0000		1,373 VPH	1345.0000				
	Demand	MT	12.0000		Demand	18.0000		Demand	18.0000				
	D=59.50%	HT	3.0000		D=59.50%	5.0000		D=59.50%	5.0000				
		Bus	2.0000			3.0000			3.0000				
		MC	1.0000			2.0000			2.0000				
		45 MPH	959.0000			1373.0000			1373.0000				
Existing Year 2018 Condition 3 Lanes					No Build Alternative 2045 Condition 3 Lanes					Build Alternative 2045 Condition 3 Lanes			
Jog Rd. SB S. of SR 806	1,361 VPH	Cars	1323.0000		1,947 VPH	1893.0000		1,947 VPH	1893.0000				
	Demand	MT	25.0000		Demand	36.0000		Demand	36.0000				
	D=59.50%	HT	7.0000		D=59.50%	10.0000		D=59.50%	10.0000				
		Bus	3.0000			4.0000			4.0000				
		MC	3.0000			4.0000			4.0000				
		45 MPH	1361.0000			1947.0000			1947.0000				

APPENDIX C
NOISE ANALYSIS MAPS

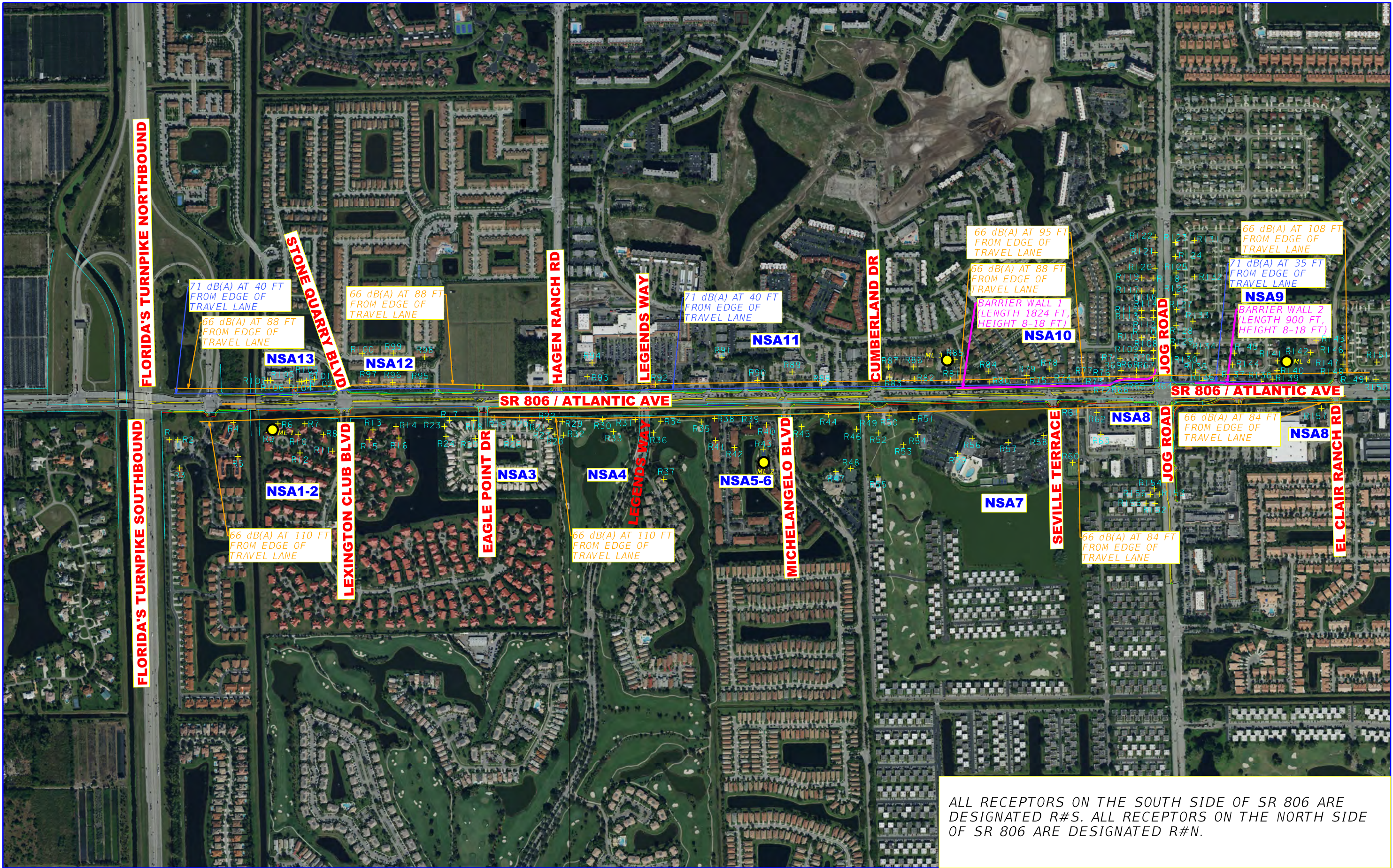


ALL RECEPTORS ON THE SOUTH SIDE OF SR 806 ARE DESIGNATED R#S. ALL RECEPTORS ON THE NORTH SIDE OF SR 806 ARE DESIGNATED R#N.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



ALL RECEPTORS ON THE SOUTH SIDE OF SR 806 ARE DESIGNATED R#S. ALL RECEPTORS ON THE NORTH SIDE OF SR 806 ARE DESIGNATED R#N.



ALL RECEPTORS ON THE SOUTH SIDE OF SR 806 ARE DESIGNATED R#S. ALL RECEPTORS ON THE NORTH SIDE OF SR 806 ARE DESIGNATED R#N.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

APPENDIX D
NOISE MEASUREMENT DATA SHEETS

Site/Run #: ML1
LD 001

Noise Measurement Data Sheet

Date: 07/27/2021

Measurement Taken By: Bernard Kinney Jr., INCE

09:57:15-10:27:15

Project: SR-806 /Atlantic Avenue FPID 440575-3-22-02 FDOT 4 / SCG

Site ID: ML1 Residential Lexington House # 7930B

Weather Conditions: Clear: ☒ Partly Cloudy: Cloudy: Other:

Temperature: Start: 90.8 End: 90.3 (°F)

Wind Direction: Start: ENE 075 End: ENE 072

Wind Speed (Start): Min: 0.0 Max: 1.6 Average: 1.4 (mph)

Wind Speed (End): Min: 0.0 Max: 1.5 Average: 1.1 (mph)

Humidity: Start: 58.4 End: 60.6 (%)

Equipment Data

Sound Level Meter: Larson Davis 831-Type 1 Serial Number: 0004153

Date of Last Traceable Calibration: SLM /PRM/MIC 07/12/2021 CAL 06/25/2021

Calibration: Start: 114.00 End: 114.00 Difference: 0.07 dB

Battery: Start: 5.9V 98.4 % End: 5.9 V 99.2 %

Weighting Scale: A Response: Slow

Calibrator: Larson Davis CAL 200 Serial Number: 8533

Results: Leq: 55.8/55.8/54.9
in dB(A)

Major Noise Sources: SR-806 / Atlantic Avenue Highway Traffic - 4 / 6 Lane Divided Roadway

Background Noise Sources: Lawn Equipment

Other Notes/Observations:

SR-806 /Atlantic Avenue PD&E Noise Study From FL. Turnpike to Jog Road

MN PRM831 SN 012499 MN 377B02 SN 113988 GPS HOLUX MN M-215+ SN 215+ L70700105

Observed Traffic Data

Site #: ML1

Run #: 1

See Table 4

Vehicle Types	EB Direction		WB Direction			
	Volume	Speed	Volume	Speed	Volume	Speed
Auto						
Medium Truck						
Heavy Truck						
Bus						
Motorcycle						

Site Sketch



General Information					
Serial Number	04153				
Model	Model 831				
Firmware Version	2.403				
Filename	831_Data.001				
User	Bernard Kinney Jr., INCE				
Job Description	Model Validation Measurements				
Location	Atlantic Avenue - FLTNPK to Jog Road				
Measurement Description	SCG - SR-806/Atlantic Avenue PDE Validation FPID440575-3-22-02				
Latitude	26° 27.179'			ft	
Longitude	-80° 10.263'				
Altitude	35.4				
Start Time	Tuesday, 2021 July 27 09:57:15				
Stop Time	Tuesday, 2021 July 27 10:27:15				
Duration	00:30:00.0				
Run Time	00:30:00.0				
Pause	00:00:00.0				
Pre Calibration	Tuesday, 2021 July 27 09:49:12				
Post Calibration	Tuesday, 2021 July 27 10:29:01				
Calibration Deviation	0.07 dB				
Note					
ML 1 Residential / Lexington R6S					
Overall Data					
LAeq			55.5	dB	
LASmax	2021 Jul 27 09:57:15		72.5	dB	
LApeak (max)	2021 Jul 27 10:24:06		90.6	dB	
LASmin	2021 Jul 27 10:19:18		47.2	dB	
LCeq			68.6	dB	
LAeq			55.5	dB	
LCeq - LAeq			13.1	dB	
LAIeq			58.1	dB	
LAeq			55.5	dB	
LAIeq - LAeq			2.5	dB	
Ldn			55.5	dB	
LDay 07:00-22:00			55.5	dB	
LNight 22:00-07:00			---	dB	
Lden			55.5	dB	
LDay 07:00-19:00			55.5	dB	
LEvening 19:00-22:00			---	dB	
LNight 22:00-07:00			---	dB	
LAE			88.1	dB	
EA			71.76	µPa²h	
EA8			1.148	mPa²h	
EA40			5.741	mPa²h	
# Overloads			0		
Overload Duration			0.0	s	
# OBA Overloads			0		
OBA Overload Duration			0.0	s	
Statistics					
LAS1.00			61.0	dBA	
LAS5.00			58.2	dBA	
LAS10.00			57.6	dBA	
LAS50.00			55.0	dBA	
LAS90.00			51.3	dBA	
LAS99.00			48.3	dBA	
LAS > 50.0 dB (Exceedence Counts / Duration)		9 / 1778.5		s	
LAS > 60.0 dB (Exceedence Counts / Duration)		7 / 38.0		s	
LApeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0		s	
LApeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0		s	
LApeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0		s	
Dose					
Name			OSHA-1		
Dose			---	%	
Projected Dose			---	%	
TWA (Projected)			---	dBA	
TWA (t)			---	dBA	
Lep (t)			43.5	dBA	

Exchange Rate	5	dB
Threshold	90.0	dBA
Criterion Level	90.0	dBA
Criterion Duration	8.0	h
RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamp	PRM831	
Microphone Correction	Off	
Integration Method	Linear	
OBA Range	Normal	
OBA Bandwidth	1/1 and 1/3	
OBA Freq. Weighting	Z Weighting	
OBA Max Spectrum	At Lmax	
Gain	+0	dB
Under Range Limit	26.6	dB
Under Range Peak	77.0	dB
Noise Floor	17.5	dB
Overload	144.5	dB

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	57.3	61.6	62.9	67.0	61.4	50.3	49.6	52.9	47.0	41.0	41.1	44.3
LZSmax	60.4	66.3	61.7	64.3	59.7	58.5	69.4	61.5	69.4	57.2	44.0	44.7
LZSmin	49.4	54.3	56.4	57.8	50.5	42.7	42.3	42.5	37.6	37.7	40.8	44.2

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	51.5	51.6	54.0	55.2	57.3	57.8	58.3	57.7	58.4	60.7	62.4	63.4
LZSmax	52.0	47.3	54.2	55.2	58.2	56.6	57.8	56.3	57.1	59.8	61.2	59.3
LZSmin	42.4	42.6	43.6	46.2	47.2	48.5	49.7	50.3	50.8	52.8	52.1	49.3

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	44.2	41.9	39.4	37.7	35.6	34.9	35.4	36.3	37.3	38.3	39.3	40.9
LZSmx	62.1	66.8	64.3	56.5	43.9	41.9	40.1	38.6	39.2	39.5	39.4	41.0
LZSmin	33.5	32.1	31.9	32.2	32.7	33.6	34.7	35.9	37.0	38.1	39.1	40.7

Preamp	Date	dB re. 1V/Pa
PRM831	27 Jul 2021 10:28:59	-27.0
PRM831	27 Jul 2021 09:49:12	-27.1
PRM831	27 Jul 2021 09:48:58	-27.1
PRM831	14 Jul 2021 18:39:59	-27.0
PRM831	14 Jul 2021 18:39:36	-27.0
PRM831	14 Jul 2021 18:39:20	-27.0
PRM831	14 Jul 2021 13:56:00	-26.9
PRM831	12 Jul 2021 20:09:39	-27.0
PRM831	12 Jul 2021 13:10:28	-26.7
PRM831	12 Jul 2021 13:03:44	-27.0
PRM831	12 Jul 2021 13:01:38	-26.0

General Information									
Serial Number		04153							
Model		Model 831							
Firmware Version		2.403							
Filename		831_Data.001							
Measurement Records:		3							

NOTE: Only five metrics can be displayed on screen. To view spectra and other metrics use the export feature.									
Record #	Date	Time	Duration	LAeq	LAE	LASmax	LASmin	LApeak	(max)
1	21/07/27	09:57:15	00:10:00.0	55.8	83.6	72.5	49.0	84.5	
2	21/07/27	10:07:15	00:10:00.0	55.8	83.6	61.6	49.4	75.0	
3	21/07/27	10:17:15	00:10:00.0	54.9	82.7	62.3	47.2	90.6	

SR 806 Atlantic Avenue

ML-1 7930 B Lexington Residential

Legend

📍 26° 27.179' -80° 10.263'

ML1



26° 27.179' -80° 10.263'



Site/Run #: ML2
LD 002

Noise Measurement Data Sheet

Date: 07/27/2021

Measurement Taken By: Bernard Kinney Jr., INCE

10:54:22-11:24:22

Project: SR-806 /Atlantic Avenue FPID 440575-3-22-02 FDOT 4 / SCG

Site ID: ML2 Residential Murano Clubhouse 15005/ Tennis Court

Weather Conditions: Clear: ☒ Partly Cloudy: Cloudy: Other:

Temperature: Start: 91.2 End: 91.2 (°F)

Wind Direction: Start: ESE 107 End: SE 132

Wind Speed (Start): Min: 0.0 Max: 3.4 Average: 2.6 (mph)

Wind Speed (End): Min: 0.0 Max: 3.9 Average: 2.5 (mph)

Humidity: Start: 54.9 End: 56.7 (%)

Equipment Data

Sound Level Meter: Larson Davis 831-Type 1 Serial Number: 0004153

Date of Last Traceable Calibration: SLM /PRM/MIC 07/12/2021 CAL 06/25/2021

Calibration: Start: 114.00 End: 114.00 Difference: -0.01 dB

Battery: Start: 6.0V 100.5 % End: 6.2 V 102.2 %

Weighting Scale: A Response: Slow

Calibrator: Larson Davis CAL 200 Serial Number: 8533

Results: Leq: 53.1/56.2*/51.7
in dB(A)

Major Noise Sources: SR-806 / Atlantic Avenue Highway Traffic - 4 / 6 Lane Divided Roadway

Background Noise Sources: Lawn Equipment / T2 Trash Truck with alarms - Interference

Other Notes/Observations:

SR-806 /Atlantic Avenue PD&E Noise Study From FL. Turnpike to Jog Road

MN PRM831 SN 012499 MN 377B02 SN 113988 GPS HOLUX MN M-215+ SN 215+ L70700105

Observed Traffic Data

Site #: ML2

Run #: 1

See Table 4

Vehicle Types	EB Direction		WB Direction			
	Volume	Speed	Volume	Speed	Volume	Speed
Auto						
Medium Truck						
Heavy Truck						
Bus						
Motorcycle						

Site Sketch



General Information				
Serial Number			04153	
Model			Model 831	
Firmware Version			2.403	
Filename			831_Data.002	
User			Bernard Kinney Jr., INCE	
Job Description			Model Validation Measurements	
Location			Atlantic Avenue - FLTNPK to Jog Road	
Measurement Description	SCG - SR-806/Atlantic Avenue PDE Validation	FPID440575-3-22-02		
Latitude			26° 27.136'	
Longitude			-80° 9.470'	
Altitude			22.6	ft
Start Time		Tuesday, 2021 July 27 10:54:22		
Stop Time		Tuesday, 2021 July 27 11:24:22		
Duration			00:30:00.0	
Run Time			00:30:00.0	
Pause			00:00:00.0	
Pre Calibration		Tuesday, 2021 July 27 10:48:40		
Post Calibration		Tuesday, 2021 July 27 11:26:07		
Calibration Deviation			-0.01 dB	

Note				
ML 2 Residential / Tennis Court / Murano R43S				

Overall Data				
LAeq			54.1	dB
LASmax	2021 Jul 27 11:05:13		77.3	dB
LApeak (max)	2021 Jul 27 11:05:13		97.5	dB
LASmin	2021 Jul 27 11:18:12		48.1	dB
LCeq			64.2	dB
LAeq			54.1	dB
LCeq - LAeq			10.1	dB
LA1eq			59.1	dB
LAeq			54.1	dB
LA1eq - LAeq			5.0	dB
Ldn			54.1	dB
LDay 07:00-22:00			54.1	dB
LNight 22:00-07:00			---	dB
Lden			54.1	dB
LDay 07:00-19:00			54.1	dB
LEvening 19:00-22:00			---	dB
LNight 22:00-07:00			---	dB
LAE			86.6	dB
EA			50.98	µPa ² h
EA8			815.6	µPa ² h
EA40			4.078	mPa ² h
# Overloads			0	
Overload Duration			0.0	s
# OBA Overloads			0	
OBA Overload Duration			0.0	s

Statistics				
LAS1.00			61.4	dBA
LAS5.00			57.6	dBA
LAS10.00			56.3	dBA
LAS50.00			51.3	dBA
LAS90.00			49.2	dBA
LAS99.00			48.5	dBA
LAS > 50.0 dB (Exceedence Counts / Duration)		3 / 1794.2		s
LAS > 60.0 dB (Exceedence Counts / Duration)		8 / 34.5		s
LApeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0		s
LApeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0		s
LApeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0		s

Dose				
Name			OSHA-1	
Dose			---	%
Projected Dose			---	%
TWA (Projected)			---	dBA
TWA (t)			---	dBA
Lep (t)			42.0	dBA

Settings												
Exchange Rate											5	dB
Threshold											90.0	dBA
Criterion Level											90.0	dBA
Criterion Duration											8.0	h
RMS Weight											A Weighting	
Peak Weight											A Weighting	
Detector											Slow	
Preamp											PRM831	
Microphone Correction											Off	
Integration Method											Linear	
OBA Range											Normal	
OBA Bandwidth											1/1 and 1/3	
OBA Freq. Weighting											Z Weighting	
OBA Max Spectrum											At Lmax	
Gain											+0	dB
Under Range Limit											26.6	dB
Under Range Peak											77.0	dB
Noise Floor											17.5	dB
Overload											144.5	dB

1/1 Spectra												
Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	53.3	55.5	60.4	60.8	58.2	51.0	50.9	48.6	46.8	44.0	41.9	44.3
LZSmax	52.3	55.5	64.8	62.1	59.5	64.5	72.6	72.1	71.0	68.6	59.6	47.8
LZSmin	44.4	49.2	55.2	55.2	50.3	45.1	46.5	41.0	40.3	39.5	41.2	44.2

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	49.8	47.8	47.7	48.7	51.6	51.2	53.5	56.9	56.0	55.7	56.1	56.4
LZSmax	45.7	44.9	49.6	51.6	49.2	51.1	59.0	62.4	58.4	59.5	57.4	57.2
LZSmin	36.5	35.6	39.0	41.1	42.9	43.3	47.2	47.8	49.3	49.9	48.2	49.6

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	54.0	54.9	49.7	46.3	47.1	44.7	44.9	46.7	46.9	43.4	42.7	45.1
LZSmax	56.0	55.8	54.5	64.4	50.8	47.1	64.0	48.9	71.9	67.7	65.2	68.5
LZSmin	45.2	45.8	40.8	38.9	41.1	37.1	39.3	41.5	39.9	35.9	36.0	36.2

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	42.3	42.4	41.1	41.1	38.8	36.9	36.7	37.1	37.5	38.3	39.3	40.9
LZSmax	63.3	69.0	65.0	63.3	66.1	60.2	57.2	55.1	49.0	45.3	40.9	41.0
LZSmin	36.0	35.2	34.7	34.4	34.4	34.7	35.5	36.3	37.1	38.1	39.1	40.7

Calibration History												
Preamp					Date					dB re. 1V/Pa		
PRM831					27 Jul 2021	11:26:04				-27.0		
PRM831					27 Jul 2021	10:48:39				-27.0		
PRM831					27 Jul 2021	10:48:25				-27.0		
PRM831					27 Jul 2021	10:48:12				-27.0		
PRM831					27 Jul 2021	10:28:59				-27.0		
PRM831					27 Jul 2021	09:49:12				-27.1		
PRM831					27 Jul 2021	09:48:58				-27.1		
PRM831					14 Jul 2021	18:39:59				-27.0		
PRM831					14 Jul 2021	18:39:36				-27.0		
PRM831					14 Jul 2021	18:39:20				-27.0		
PRM831					14 Jul 2021	13:56:00				-26.9		

General Information								
Serial Number	04153							
Model	Model 831							
Firmware Version	2.403							
Filename	831_Data.002							
Measurement Records:	3							

NOTE: Only five metrics can be displayed on screen.
To view spectra and other metrics use the export feature.

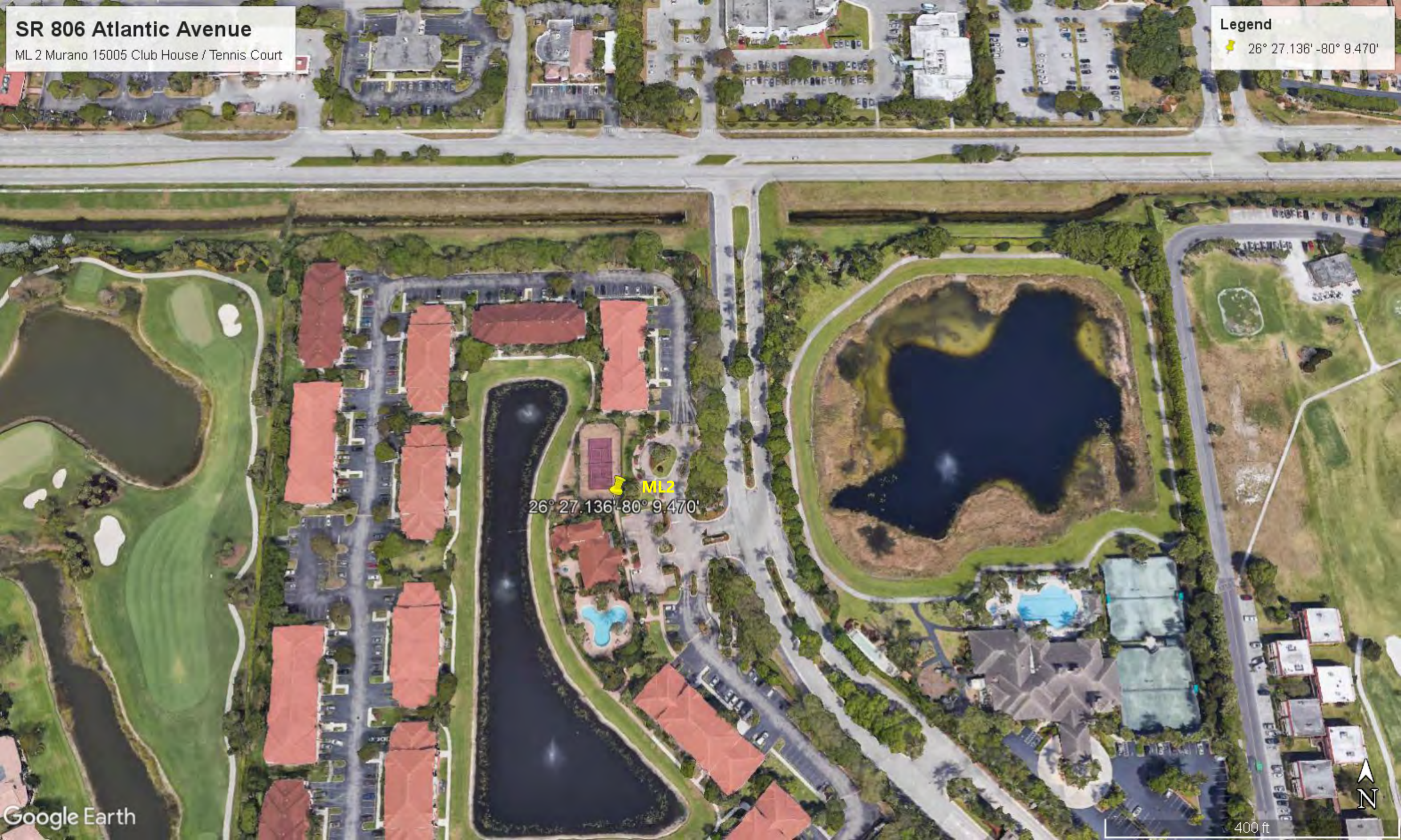
Record #	Date	Time	Duration	LAeq	LAE	LASmax	LASmin	LApeak (max)
1	21/07/27	10:54:22	00:10:00.0	53.1	80.8	75.3	48.8	81.4
2	21/07/27	11:04:22	00:10:00.0	56.2	84.0	77.3	49.1	97.5
3	21/07/27	11:14:22	00:10:00.0	51.7	79.5	69.5	48.1	87.8

SR 806 Atlantic Avenue

ML 2 Murano 15005 Club House / Tennis Court

Legend

📍 26° 27.136' -80° 9.470'



ML2
26° 27.136' -80° 9.470'

Site/Run #: ML3
LD 003

Noise Measurement Data Sheet

Date: 07/27/2021

Measurement Taken By: Bernard Kinney Jr., INCE

11:42:09-12:12:09

Project: SR-806 /Atlantic Avenue FPID 440575-3-22-02 FDOT 4 / SCG

Site ID: ML3 Residential Moonlit Way House # 6831

Weather Conditions: Clear: ☒ Partly Cloudy: Cloudy: Other:

Temperature: Start: 93.4 End: 95.2 (°F)

Wind Direction: Start: SE 127 End: SE 127

Wind Speed (Start): Min: 0.0 Max: 2.1 Average: 1.6 (mph)

Wind Speed (End): Min: 0.0 Max: 2.7 Average: 1.6 (mph)

Humidity: Start: 54.0 End: 52.4 (%)

Equipment Data

Sound Level Meter: Larson Davis 831-Type 1 Serial Number: 0004153

Date of Last Traceable Calibration: SLM /PRM/MIC 07/12/2021 CAL 06/25/2021

Calibration: Start: 114.00 End: 114.00 Difference: -0.06 dB

Battery: Start: 6.4V 103.1 % End: 6.2 V 102.0 %

Weighting Scale: A Response: Slow

Calibrator: Larson Davis CAL 200 Serial Number: 8533

Results: Leq: 53.5/55.4/55.2
in dB(A)

Major Noise Sources: SR-806 / Atlantic Avenue Highway Traffic - 4 / 6 Lane Divided Roadway

Background Noise Sources:

Other Notes/Observations:

SR-806 /Atlantic Avenue PD&E Noise Study From FL. Turnpike to Jog Road

MN PRM831 SN 012499 MN 377B02 SN 113988 GPS HOLUX MN M-215+ SN 215+ L70700105

Observed Traffic Data

Site #: ML3

Run #: 1

See Table 4

Vehicle Types	EB Direction		WB Direction			
	Volume	Speed	Volume	Speed	Volume	Speed
Auto						
Medium Truck						
Heavy Truck						
Bus						
Motorcycle						

Site Sketch



General Information				
Serial Number	04153			
Model	Model 831			
Firmware Version	2.403			
Filename	831_Data.003			
User	Bernard Kinney Jr., INCE			
Job Description	Model Validation Measurements			
Location	Atlantic Avenue - FLTNPK to Jog Road			
Measurement Description	SCG - SR-806/Atlantic Avenue PDE Validation FPID440575-3-22-02			
Latitude	26° 27.277'			
Longitude	-80° 9.171'			
Altitude	31.5			ft
Start Time	Tuesday, 2021 July 27 11:42:09			
Stop Time	Tuesday, 2021 July 27 12:12:09			
Duration	00:30:00.0			
Run Time	00:30:00.0			
Pause	00:00:00.0			
Pre Calibration	Tuesday, 2021 July 27 11:40:01			
Post Calibration	Tuesday, 2021 July 27 12:13:58			
Calibration Deviation	-0.06 dB			
Note				
ML 3 Residential / Moonlit / R85N				
Overall Data				
LAeq			54.8	dB
LASmax	2021 Jul 27 12:05:32		68.4	dB
LApeak (max)	2021 Jul 27 12:00:20		85.0	dB
LASmin	2021 Jul 27 11:43:25		48.0	dB
LCeq			66.4	dB
LAeq			54.8	dB
LCeq - LAeq			11.6	dB
LAIeq			57.4	dB
LAeq			54.8	dB
LAIeq - LAeq			2.6	dB
Ldn			54.8	dB
LDay 07:00-22:00			54.8	dB
LNight 22:00-07:00			---	dB
Lden			54.8	dB
LDay 07:00-19:00			54.8	dB
LEvening 19:00-22:00			---	dB
LNight 22:00-07:00			---	dB
LAE			87.3	dB
EA			60.21	µPa²h
EA8			963.4	µPa²h
EA40			4.817	mPa²h
# Overloads			0	
Overload Duration			0.0	s
# OBA Overloads			0	
OBA Overload Duration			0.0	s
Statistics				
LAS1.00			63.2	dBA
LAS5.00			58.4	dBA
LAS10.00			56.8	dBA
LAS50.00			53.4	dBA
LAS90.00			50.8	dBA
LAS99.00			48.7	dBA
LAS > 50.0 dB (Exceedence Counts / Duration)		3 / 1799.7		s
LAS > 60.0 dB (Exceedence Counts / Duration)		11 / 76.7		s
LApeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0		s
LApeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0		s
LApeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0		s
Dose				
Name	OSHA-1			
Dose	---			%
Projected Dose	---			%
TWA (Projected)	---			dBA
TWA (t)	---			dBA
Lep (t)	42.7			dBA

Settings												
Exchange Rate											5	dB
Threshold											90.0	dBA
Criterion Level											90.0	dBA
Criterion Duration											8.0	h
RMS Weight											A Weighting	
Peak Weight											A Weighting	
Detector											Slow	
Preamp											PRM831	
Microphone Correction											Off	
Integration Method											Linear	
OBA Range											Normal	
OBA Bandwidth											1/1 and 1/3	
OBA Freq. Weighting											Z Weighting	
OBA Max Spectrum											At Lmax	
Gain											+0	dB
Under Range Limit											26.7	dB
Under Range Peak											77.0	dB
Noise Floor											17.5	dB
Overload											144.6	dB

1/1 Spectra												
Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	62.2	60.6	62.4	64.4	57.5	52.2	50.8	51.0	47.2	42.0	41.3	44.3
LZSmax	71.3	67.3	64.8	64.0	59.1	56.3	70.2	63.3	57.4	49.3	42.0	44.4
LZSmin	47.2	51.1	56.2	55.9	50.9	46.3	41.9	44.4	40.4	38.5	40.8	44.1

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	58.9	57.2	55.8	55.0	56.3	56.0	56.1	57.1	59.3	59.3	60.9	58.2
LZSmax	60.0	59.1	59.0	63.0	61.9	63.9	58.1	57.3	62.5	61.5	57.4	55.9
LZSmin	38.0	37.9	39.9	42.2	43.2	46.2	47.0	47.7	53.4	47.2	50.4	48.7

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	53.9	53.1	50.1	48.5	47.9	45.0	45.0	46.6	46.3	46.1	46.8	45.8
LZSmax	53.2	50.7	57.2	50.7	49.8	53.6	65.4	68.0	64.0	59.7	59.4	52.6
LZSmin	46.1	45.5	41.9	41.4	41.8	39.1	36.7	36.5	37.2	38.8	39.9	39.5

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	43.9	41.9	40.8	38.6	36.8	35.8	35.8	36.5	37.3	38.3	39.2	40.9
LZSmax	51.7	51.6	54.3	47.3	43.5	39.3	36.8	36.9	37.6	38.5	39.5	40.9
LZSmin	37.1	34.9	34.0	33.5	33.4	33.9	34.8	35.9	37.0	38.0	39.0	40.7

Calibration History												
Preamp											dB re. 1V/Pa	
PRM831	27 Jul 2021 12:13:56										-27.1	
PRM831	27 Jul 2021 11:39:59										-27.0	
PRM831	27 Jul 2021 11:39:45										-27.0	
PRM831	27 Jul 2021 11:26:04										-27.0	
PRM831	27 Jul 2021 10:48:39										-27.0	
PRM831	27 Jul 2021 10:48:25										-27.0	
PRM831	27 Jul 2021 10:48:12										-27.0	
PRM831	27 Jul 2021 10:28:59										-27.0	
PRM831	27 Jul 2021 09:49:12										-27.1	
PRM831	27 Jul 2021 09:48:58										-27.1	
PRM831	14 Jul 2021 18:39:59										-27.0	

General Information								
Serial Number	04153							
Model	Model 831							
Firmware Version	2.403							
Filename	831_Data.003							
Measurement Records:	3							

NOTE: Only five metrics can be displayed on screen. To view spectra and other metrics use the export feature.								
Record #	Date	Time	Duration	LAeq	LAE	LASmax	LASmin	LApeak (max)
1	21/07/27	11:42:09	00:10:00.0	53.5	81.2	66.1	48.0	73.8
2	21/07/27	11:52:09	00:10:00.0	55.4	83.2	66.6	48.9	85.0
3	21/07/27	12:02:09	00:10:00.0	55.2	83.0	68.4	49.2	84.7

SR 806 Atlantic Avenue

ML3 6831 Moonlit Way Residential

Legend

📍 26° 27.277' -80° 9.171'

26° 27.277' -80° 9.171'

ML3 📍



Site/Run #: ML4
LD 004

Noise Measurement Data Sheet

Date: 07/27/2021

Measurement Taken By: Bernard Kinney Jr., INCE

12:34:09-13:04:09

Project: SR-806 /Atlantic Avenue FPID 440575-3-22-02 FDOT 4 / SCG

Site ID: ML4 Residential Clubhouse # 6269

Weather Conditions: Clear: Partly Cloudy: X Cloudy: Other:

Temperature: Start: 90.6 End: 90.1 (°F)

Wind Direction: Start: SSE 169 End: S 171

Wind Speed (Start): Min: 0.0 Max: 3.0 Average: 1.1 (mph)

Wind Speed (End): Min: 0.0 Max: 4.9 Average: 1.6 (mph)

Humidity: Start: 57.7 End: 56.7 (%)

Equipment Data

Sound Level Meter: Larson Davis 831-Type 1 Serial Number: 0004153

Date of Last Traceable Calibration: SLM /PRM/MIC 07/12/2021 CAL 06/25/2021

Calibration: Start: 114.00 End: 114.00 Difference: -0.05 dB

Battery: Start: 6.3V 102.3 % End: 6.3 V 102.6 %

Weighting Scale: A Response: Slow

Calibrator: Larson Davis CAL 200 Serial Number: 8533

Results: Leq: 55.3/55.4/55.7
in dB(A)

Major Noise Sources: SR-806 / Atlantic Avenue Highway Traffic - 4 / 6 Lane Divided Roadway

Background Noise Sources:

Other Notes/Observations:

SR-806 /Atlantic Avenue PD&E Noise Study From FL. Turnpike to Jog Road

MN PRM831 SN 012499 MN 377B02 SN 113988 GPS HOLUX MN M-215+ SN 215+ L70700105

Observed Traffic Data

Site #: ML4

Run #: 1

See Table 4

Vehicle Types	EB Direction		WB Direction			
	Volume	Speed	Volume	Speed	Volume	Speed
Auto						
Medium Truck						
Heavy Truck						
Bus						
Motorcycle						

Site Sketch



General Information				
Serial Number				04153
Model				Model 831
Firmware Version				2.403
Filename				831_Data.004
User				Bernard Kinney Jr., INCE
Job Description				Model Validation Measurements
Location				Atlantic Avenue - FLTNPK to Jog Road
Measurement Description				SCG - SR-806/Atlantic Avenue PDE Validation FPID440575-3-22-02
Latitude				26° 27.278'
Longitude				-80° 8.628'
Altitude				29.5
Start Time				Tuesday, 2021 July 27 12:34:09
Stop Time				Tuesday, 2021 July 27 13:04:09
Duration				00:30:00.0
Run Time				00:30:00.0
Pause				00:00:00.0
Pre Calibration				Tuesday, 2021 July 27 12:27:52
Post Calibration				Tuesday, 2021 July 27 13:05:32
Calibration Deviation				-0.05 dB
Note				
ML 4 Residential / R141N				
Overall Data				
LAeq				55.5 dB
LASmax	2021 Jul 27 12:56:24			63.4 dB
LApeak (max)	2021 Jul 27 12:39:25			79.4 dB
LASmin	2021 Jul 27 12:36:40			45.8 dB
LCeq				67.4 dB
LAeq				55.5 dB
LCeq - LAeq				11.9 dB
LAIEq				56.2 dB
LAeq				55.5 dB
LAIEq - LAeq				0.8 dB
Ldn				55.5 dB
LDay 07:00-22:00				55.5 dB
LNight 22:00-07:00				--- dB
Lden				55.5 dB
LDay 07:00-19:00				55.5 dB
LEvening 19:00-22:00				--- dB
LNight 22:00-07:00				--- dB
LAE				88.0 dB
EA				70.62 µPa²h
EA8				1.130 mPa²h
EA40				5.650 mPa²h
# Overloads				0
Overload Duration				0.0 s
# OBA Overloads				0
OBA Overload Duration				0.0 s
Statistics				
LAS1.00				60.6 dBA
LAS5.00				59.1 dBA
LAS10.00				58.3 dBA
LAS50.00				54.6 dBA
LAS90.00				50.4 dBA
LAS99.00				46.4 dBA
LAS > 50.0 dB (Exceedence Counts / Duration)	6 / 1738.4			s
LAS > 60.0 dB (Exceedence Counts / Duration)	10 / 81.3			s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0			s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0			s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0			s
Dose				
Name				OSHA-1
Dose	---			%
Projected Dose	---			%
TWA (Projected)	---			dBA
TWA (t)	---			dBA
Lep (t)	43.4			dBA

Settings												
Exchange Rate											5	dB
Threshold											90.0	dBA
Criterion Level											90.0	dBA
Criterion Duration											8.0	h
RMS Weight											A Weighting	
Peak Weight											A Weighting	
Detector											Slow	
Preamp											PRM831	
Microphone Correction											Off	
Integration Method											Linear	
OBA Range											Normal	
OBA Bandwidth											1/1 and 1/3	
OBA Freq. Weighting											Z Weighting	
OBA Max Spectrum											At Lmax	
Gain											+0	dB
Under Range Limit											26.7	dB
Under Range Peak											77.0	dB
Noise Floor											17.5	dB
Overload											144.6	dB

1/1 Spectra												
Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	66.0	62.1	63.3	65.0	60.7	49.0	47.5	52.4	48.9	41.5	41.3	44.3
LZSmax	74.1	65.4	65.9	71.3	63.1	53.0	55.9	60.3	57.2	50.3	44.7	44.4
LZSmin	45.3	52.1	58.0	57.1	50.7	40.2	40.5	41.8	38.5	37.9	40.8	44.2

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	62.6	61.1	59.4	58.0	57.2	56.7	58.8	58.1	58.8	59.3	61.1	60.2
LZSmax	73.8	72.2	66.6	65.0	60.4	57.9	60.5	61.6	61.7	63.2	67.6	69.5
LZSmin	38.0	37.9	38.9	41.7	44.4	46.9	52.2	51.8	50.5	51.5	50.9	49.5

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	57.3	55.9	53.5	46.7	42.7	39.8	41.0	42.1	44.4	46.8	48.4	47.6
LZSmax	59.6	58.2	57.8	51.1	46.3	43.4	46.4	49.5	54.4	54.9	55.7	55.7
LZSmin	46.8	45.2	40.5	37.1	34.2	33.3	33.7	35.2	36.4	37.2	36.8	36.1

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	45.9	44.0	41.0	38.3	36.1	35.2	35.7	36.4	37.3	38.3	39.3	40.9
LZSmax	54.1	52.9	49.2	46.9	45.5	43.8	41.8	39.4	37.8	38.3	39.4	41.0
LZSmin	34.7	33.3	32.4	32.4	32.9	33.6	34.7	35.9	37.0	38.0	39.1	40.7

Calibration History												
Preamp											dB re. 1V/Pa	
PRM831	27 Jul 2021 13:05:30										-27.1	
PRM831	27 Jul 2021 12:27:51										-27.0	
PRM831	27 Jul 2021 12:27:36										-27.0	
PRM831	27 Jul 2021 12:27:22										-27.0	
PRM831	27 Jul 2021 12:27:08										-27.0	
PRM831	27 Jul 2021 12:26:54										-27.0	
PRM831	27 Jul 2021 12:26:28										-27.1	
PRM831	27 Jul 2021 12:13:56										-27.1	
PRM831	27 Jul 2021 11:39:59										-27.0	
PRM831	27 Jul 2021 11:39:45										-27.0	
PRM831	27 Jul 2021 11:26:04										-27.0	

General Information								
Serial Number	04153							
Model	Model 831							
Firmware Version	2.403							
Filename	831_Data.004							
Measurement Records:	3							

NOTE: Only five metrics can be displayed on screen.
To view spectra and other metrics use the export feature.

Record #	Date	Time	Duration	LAeq	LAE	LASmax	LASmin	LApeak (max)
1	21/07/27	12:34:09	00:10:00.0	55.3	83.1	63.1	45.8	79.4
2	21/07/27	12:44:09	00:10:00.0	55.4	83.2	62.1	46.7	77.5
3	21/07/27	12:54:09	00:10:00.0	55.7	83.5	63.4	47.9	77.5

SR 806 Atlantic Avenue

ML4 6269 Club House / Residential

Legend

📍 26° 27.278' -80° 8.628'

ML4

📍 26° 27.278' -80° 8.628'



APPENDIX E
NOISE AND VIBRATION SENSITIVE SITES

Construction Noise and Vibration Sensitive Sites
(a partial listing of potential sites)

Noise	Vibration
Eye Centers/Clinics Medical Centers Hospitals Geriatric Centers Sound Recording Studios TV/Radio Stations Residences Technical Laboratories Hearing Testing Centers Theaters Schools Motels/Hotels Funeral Homes Libraries Meditation Centers Churches/Shrines Parks Day Care Centers Outdoor Theaters	Eye Centers/Clinics Medical Centers Hospitals Geriatric Centers Sound Recording Studios TV/Radio Stations Residences Technical Laboratories Antiques Shops Museums Historic Buildings
Note: This list is not meant to be all inclusive or exclusive, but rather an indication of the type of sites likely to be sensitive to construction noise and/or vibration.	
Source: FDOT Noise and Vibration Task Team; August 17, 1999.	

APPENDIX F
NOISE CONTOUR TABLE

**Appendix F
Noise Contour Table
SR-806 / Atlantic Avenue
Florida Turnpike to Jog Road
Build Alternatives**

Roadway Segment: SR806 / Atlantic Avenue	Activity Category	FDOT NAC dB(A)	Number of Travel Lanes	Distance from Closest Edge of Travel Lane Alternative 1A	Distance from Closest Edge of Travel Lane Alternative 1B	Distance from Closest Edge of Travel Lane Alternative 2A
SR806 – Turnpike to Seville Terrace EB	B, C	66	6	110 Ft.	110 Ft.	110 Ft.
SR806 – Seville Terrace to E. of Jog Rd. EB	B, C	66	6	84 Ft.	108 Ft.	84 Ft.
SR806 – E. of Jog Rd. to Seville Terrace WB	B, C	66	6	108 Ft.	110 Ft.	108 Ft.
SR806 – Seville Terrace to Turnpike WB	B, C	66	6	95-88 Ft.	103-88 Ft.	95-88 Ft.
SR806 – E. of Jog Rd. to Seville Terrace WB	E	71	6	35-40 Ft.	42-44 Ft.	35-40 Ft.