PROJECT DEVELOPMENT & ENVIRONMENT NOISE STUDY REPORT

Turnpike (SR 91) Widening from SR 60 to Clay Whaley Road

Osceola County, Florida

Financial Project ID Number: 423374-3



Prepared For: FLORIDA'S TURNPIKE ENTERPRISE

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EXECUTIVE SUMMARY

Florida's Turnpike Enterprise (FTE), part of the Florida Department of Transportation (FDOT), is conducting a Project Development and Environment (PD&E) Study for the proposed widening of Florida's Turnpike Mainline (State Road 91 [SR 91]) in Osceola County. The study evaluates potential social, economic, physical, and environmental effects to identify the most appropriate solution to meet future transportation needs.

The project corridor extends approximately 45.5 miles, from north of SR 60 at Yeehaw Junction (Mile Post [MP] 193) to south of Clay Whaley Road in St. Cloud (MP 238.5). Within this segment, the Turnpike is currently a four-lane (two lanes in each direction) limited-access toll facility. Alternatives under study would expand the roadway to six-lanes (three in each direction) between SR 60 and the planned Southport Connector Expressway, and to eight-lanes (four in each direction) between the Southport Connector Expressway and Clay Whaley Road.

Traffic noise was analyzed at 388 NAC B receptors representing 1,637 residences and one Noise Abatement Criteria (NAC) C Special Land Use (SLU) receptor. Of these, 470 residences and one SLU receptor are predicted to approach or exceed the NAC under the 2050 Build condition and are therefore considered impacted. Noise barriers were evaluated for these impacted noise-sensitive sites. The analysis concluded that barriers are a feasible and reasonable method of abatement for two noise-sensitive areas, providing at least a 5 dB(A) reduction for 399 impacted residences.

Statement of Likelihood

FTE is committed to the construction of feasible and reasonable noise abatement measures. Two potential barrier systems have been identified as feasible and reasonable, contingent upon the following conditions:

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

During design, FTE will also review land use to identify any noise-sensitive sites permitted after completion of the noise study but before the project's official Date of Public Knowledge (DPK). If such sites are identified, they will be evaluated for traffic noise impacts and abatement considerations.

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1.0 INTRODUCTION

Florida's Turnpike Enterprise, part of the Florida Department of Transportation (FDOT), is conducting a Project Development and Environment (PD&E) Study for the proposed widening of Florida's Turnpike Mainline (SR 91) from north of SR 60 to south of Clay Whaley Road in Osceola County. This PD&E Study represents the second phase of FDOT's project development process and involves the combined efforts of engineers, planners, and scientists to collect and analyze project-related information. The purpose of this process is to evaluate potential social, economic, physical, and environmental effects and to identify the most appropriate solution to meet the community's transportation needs.

As part of this PD&E Study, noise studies are being conducted in accordance with federal and state requirements. These studies evaluate existing and future traffic noise conditions, identify noise-sensitive land uses, and determine whether noise abatement measures are reasonable and feasible. Final noise wall locations, if warranted, will be determined during the subsequent Design Phase.

The project corridor extends approximately 45.5 miles along Florida's Turnpike Mainline (SR 91), from north of SR 60 (Yeehaw Junction – Mile Post 193) to south of Clay Whaley Road (St. Cloud – Mile Post 238.5). The Turnpike Mainline within this segment is currently a four-lane (two lanes in each direction) limited-access toll facility. The PD&E Study is evaluating alternatives to widen the facility to three general toll lanes in each direction from north of SR 60 to the planned Southport Connector Expressway, and to four general toll lanes in each direction from the Southport Connector Expressway to south of Clay Whaley Road.

The proposed improvements are intended to:

- Increase capacity to accommodate projected traffic volumes of freight and passenger vehicles associated with regional growth.
- Improve facility operations and enhance roadside safety features.
- Support the Turnpike's role as a designated emergency evacuation route by the Florida Division of Emergency Management.

This Noise Study Report documents the methodology, analysis, and findings of the traffic noise evaluation conducted for the proposed improvements. The results will inform decisions regarding potential noise abatement measures and ensure compliance with applicable federal and state noise regulations.

Figure 1: Project Location Map

Post 236.5

Post 236.5

BEGIN PROJECT Map Post 195

1.1 Project Background

Florida's Turnpike Mainline (SR 91) serves as a critical north—south transportation corridor within the state, providing mobility for passenger vehicles, freight traffic, and regional travelers. The study corridor extends approximately 45.5 miles from north of SR 60 (Yeehaw Junction – Mile Post 193) to south of Clay Whaley Road (St. Cloud – Mile Post 238.5) in Osceola County. This segment of the Turnpike is currently a four-lane, limited-access toll facility with two lanes in each direction.

The Florida Department of Transportation (FDOT), through Florida's Turnpike Enterprise, is evaluating alternatives to widen the facility in order to address projected traffic growth, improve operations, and enhance safety. The proposed improvements include:

- Widening from four lanes to six general toll lanes (three in each direction) between north of SR
 60 and the planned Southport Connector Expressway.
- Widening from four lanes to eight general toll lanes (four in each direction) between the Southport Connector Expressway and south of Clay Whaley Road.

These improvements are intended to:

- Increase capacity to accommodate future traffic volumes associated with regional growth and development.
- Improve overall traffic operations and enhance roadside safety features.
- Support the Turnpike's designation as a statewide emergency evacuation route by the Florida Division of Emergency Management.

The PD&E Study process ensures that engineering, environmental, and community considerations are fully integrated into project development. As part of this process, noise studies are conducted to evaluate potential impacts to adjacent noise-sensitive land uses and to determine whether noise abatement measures are warranted.

2.0 METHODOLOGY

The traffic noise study was performed in accordance with *Code of Federal Regulations, Title 23, Part 772* (23 CFR 772) Procedures for Abatement of Highway Traffic Noise and Construction Noise¹ using methodology established by the Florida Department of Transportation (FDOT) in the *Project Development and Environment Manual, Part 2, Chapter 18 (FDOT, July 31, 2024)*² and FDOT's *Traffic Noise Modeling and Analysis Practitioners Handbook*³. Predicted noise levels were produced using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM), version 2.5.

2.1 Noise Metrics

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. All noise levels are reported as hourly equivalent noise levels [Leq(h)]. The Leq is defined as "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"¹. Use of the dB(A) and Leq(h) metrics to evaluate traffic noise is consistent with 23 CFR 772¹.

2.2 Traffic Data

Traffic noise is heavily dependent on both traffic speed and traffic volume with the amount of noise generated by traffic increasing as the vehicle speed and number of vehicles increases. The traffic conditions that result in the highest noise levels for roadways are the hourly traffic volumes that represent Level of Service (LOS) C traffic conditions because they represent maximum service volumes under stable flow conditions.

Traffic volumes and vehicle mix (e.g., cars, medium trucks, heavy trucks, motorcycles, and buses) were predicted for the design year (2050) under the Build condition. For Florida's Turnpike roadway segments, LOS C hourly traffic volumes were compared to predicted design year demand hourly volumes and the lower of the two was used in the model, consistent with Section 18.2.1.5 of the FDOT PD&E Manual. For ramps, hourly traffic demand volumes were utilized. Traffic volumes and speeds used in the analysis are provided in Appendix A.

2.3 Noise Abatement Criteria and Considerations

Noise-sensitive sites are any property where frequent exterior and/or interior human use occurs and where a lowered noise level would provide a benefit. FHWA has established noise levels at which noise abatement must be considered for various types of noise-sensitive sites. These levels, which are used by the FTE for the purpose of evaluating traffic noise, are referred to as the Noise Abatement Criteria (NAC). As shown in Table 2-1, the NAC vary by activity category. Noise abatement measures are considered when predicted traffic noise levels approach or exceed the NAC. FDOT defines "approach" as within one dB(A) of the applicable FHWA criterion. For comparison purposes, typical noise levels for common indoor and outdoor activities are provided in Figure 3.

Noise abatement measures must also be considered when a substantial increase in traffic noise will occur as a direct result of the transportation project. The FDOT PD&E Manual² defines a substantial increase as 15 or more dB(A) above existing conditions. A substantial increase typically occurs in areas where traffic noise is a minor component of the existing noise environment but would become a major component after the project is constructed (e.g., new alignment project). The proposed concept design for this project follows the existing alignment of Florida's Turnpike and the results from the PD&E noise analysis indicated that a substantial increase in traffic noise will not occur.

Table 2-1 – FHWA Noise Abatement Criteria

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

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

(Based on Table 1 of 23 CFR Part 772)

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.

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.

Figure 3 – Typical Noise Levels

Common Outdoor Activities	Noise Level dB(A)	Common Indoor Activities
Jet Fly-Over 1000 ft.	110	Rock Band
Control Mayor et 2 ft	100	
Gas Lawn Mower at 3 ft.	90	
Diesel Truck at 50 ft., at 50 mph		Food Blender at 3 ft.
	80	Garbage Disposal at 3 ft.
Noise Urban Area (Daytime)		
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		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (Background)
	20	
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing
Source: California Dept. of Transportation;	Technical Noise Su	upplement: Oct 1998: Page 18.

Source: California Dept. of Transportation; Technical Noise Supplement; Oct 1998; Page 18.

3.0 TRAFFIC NOISE ANALYSIS AND ABATEMENT ASSESSMENT

3.1 Model Verification

To verify the accuracy of the TNM 2.5 noise model, field measurements were taken within the project limits following procedures documented in FHWA's Noise Measurement Field Guide⁴ (FHWA, June 2018). Noise monitoring was performed on October 7, 2025, using Larson Davis LxT noise monitors. All monitoring events were 10 minutes in duration, which is consistent with methodology documented in the FDOT PD&E Manual². The noise monitors were calibrated using a CAL200 calibrator before and after each event. Typical vehicle speeds were established by sampling with a Decatur Scout handheld radar gun. Vehicles generally traveled within 5 miles per hour (mph) of the 70-mph posted speed limit on Florida's Turnpike. Traffic volumes by vehicle classification were recorded for each monitoring event and then extrapolated to one-hour equivalent volumes for input within the TNM.

Two locations were used to validate the ability of the TNM to accurately predict traffic noise for this project. The locations of the validation sites are shown on the project aerials in Appendix D as receptor points VAL-001 and VAL-002. Measurements were taken for three validation events at each validation site. Receptor point VAL-001 is located near Milepost 238 on the Southbound side of Florida's Turnpike at approximately Station 4447+00. Receptor point VAL-002 is located north of Friars Cove Road on the Northbound side of Florida's Turnpike at approximately Station 4366+00.

The results of the monitoring events are summarized in Table 3-1. As shown in Table 3-1, the variance between the measured and predicted noise levels were 3.0 dB or less for all validation events. Therefore, the noise model is predicting traffic related noise for this project within the level of accuracy specified in the FDOT PD&E Manual².

Table 3-1 – TNM Validation Results Summary

Location	Validation Event	TNM Predicted (dB(A))	Field Measured (dB(A))	Variance (dB(A))
V/AL 0041	VS-01-R1	79.0	76.5	2.5
VAL-001 ¹ (Location 1)	VS-01-R2	78.8	75.8	3.0
(Location 1)	VS-01-R3	77.9	75.1	2,8
	VS-02-R1	75.7	73.5	2.2
VAL-002 ¹ (Location 2)	VS-02-R2	75.6	73.4	2.2
(Location 2)	VS-02-R3	75.9	74.3	1.6

¹ Measurements Taken 10/7/2025.

3.2 Noise-sensitive Sites and Impact Analysis

The analysis evaluated noise-sensitive sites within the project limits, including residential properties and Special Land Use (SLU) areas. Receptors representing these sites were digitized in the noise model in accordance with the FDOT *PD&E Manual*². Receptor placement followed these criteria:

- **Residential receptors:** Located in areas of frequent exterior use (e.g., patio or lanai) or at the corner of the residential building closest to the primary traffic noise source.
- Special Land Use (SLU) receptors: Placed in areas with frequent outdoor human use. For large SLU areas, such as parks or schoolyards, receptors were arranged in a grid pattern to capture spatial variability in outdoor use.
- Representative receptor: Used to model clusters of residences with similar characteristics, where a single receptor represents multiple sites.
- Ground floor receptors: Positioned at a height of 5 feet above ground elevation.

Receptor locations are illustrated on the project aerials in Appendix D.

3.2.1 Receptor Naming System:

Each receptor is identified by a unique alphanumeric code that reflects its NAC classification and location:

- 1. First Letter: "R" for residential receptors or "N" for SLU receptors.
- 2. **Next Two Letters:** indicate the roadway side (e.g., "NB" for northbound, "SB" for southbound).
- 3. Next Two-Digit Number: Represents the Common Noise Environment (CNE) identifier.
- 4. **Final Three-Digit Number:** Separated by a dash, this denotes the specific receptor (e.g., BNB02-002 is the 2nd residential receptor in the 2nd CNE on the northbound side).

Predicted noise levels are included in Appendix B-1 (residential receptors) and Appendix B-2 (SLU receptors), while receptor locations are illustrated in Appendix D.

3.3 Noise Abatement Analysis

To evaluate noise abatement measures, the analysis grouped receptors into Common Noise Environments (CNEs). Noise barriers were considered to mitigate traffic noise by obstructing the sound path between the roadway and noise-sensitive sites. Effective barriers are sufficiently long, continuous (without gaps), and of adequate height.

A noise barrier must meet both feasibility and reasonableness criteria to be considered for construction:

Feasibility Criteria:

Must provide at least a 5 dB(A) reduction in traffic noise to at least two impacted receptors.

Must consider design, construction, safety, access, ROW constraints, maintenance, drainage, and utility factors.

Reasonableness Criteria:

- Must meet FDOT's Noise Reduction Design Goal (NRDG), reducing noise at least 7 dB(A) for at least one benefited receptor.
- Must satisfy FDOT's cost threshold of \$64,000 per benefited receptor (defined as a receptor receiving at least a 5 dB(A) reduction). The current unit cost used to evaluate cost reasonableness is \$40 per square foot, covering materials and labor.
- Must incorporate community feedback from affected property owners and residents.

Within the project limits, noise barrier locations were assessed based on the following criteria:

- Non-shoulder noise barriers located outside the clear recovery zone but within the ROW were initially considered at heights ranging from 8 to 22 feet in 2-foot increments.
- If a non-shoulder noise barrier could not provide feasible and reasonable abatement for an impacted receptor, a shoulder noise barrier was evaluated.
 - When placed on a structure (e.g., bridge, retaining wall), a shoulder noise barrier was limited to a maximum height of 8 feet.
 - When located on an embankment or ground-mounted, the maximum height was 14 feet.

Noise barriers were evaluated to identify the maximum number of impacted receptors eligible for at least a 5 dB(A) reduction in traffic-related noise. Site-specific constraints, such as overhead utilities, may limit barrier effectiveness, preventing some impacted receptors from achieving the full reduction.

In certain locations, noise barriers may also benefit receptors that are not predicted to approach or exceed the NAC. Since abatement is not required for these receptors, barrier lengths or heights are not increased solely to enhance their benefit. However, if a non-impacted receptor receives noise reduction due to proximity to an impacted receptor, it is included in the cost-reasonableness analysis based on cost per benefited receptor. This evaluation approach is consistent with FHWA noise abatement policy and guidance, including criteria for feasibility, reasonableness, and cost-effectiveness.

3.4 Special Use Site Analysis

The evaluation of noise impacts and potential abatement at Special Land Use (SLU) sites was conducted in accordance with the *FDOT Methodology to Evaluate Highway Traffic Noise at Special Land Uses* (July 2025)⁵. This updated methodology replaces the 1997/2009 guidance and addresses key limitations in the former approach, including outdated NAC references, inconsistent treatment of SLUs and adjacent residences, and the absence of a standardized evaluation template.

SLUs are defined as non-residential noise-sensitive sites that fall under FHWA's Noise Abatement Criteria (NAC) Activity Categories A, C, D, and E. These include schools, parks, places of worship, medical facilities, and other land uses with frequent outdoor human activity. The updated methodology introduces a structured seven-step process—summarized in the SLU Methodology Flowchart (Figure 3)—that begins with identifying impacted SLU receptors and culminates in documentation of findings. The process includes optional screening, barrier optimization, cost-effectiveness analysis, engineering feasibility review, and public involvement.

Special Land Use Evaluation Methodology Step Based on TNM output, are areas of frequent human use impacted at the SLU? 1 · NO YES 💗 Identify Proceed to Step 2 Do not evaluate a barrier for the SLU. Impagi Proceed to Step 3. Preliminary Is the SLU Isolated? screening can not be performed YES Coordinate with the District Noise Specialist. Do the isolated SLU have at least NO not evaluate a barrier for the SLU. Document 6 person-hours of use per year? decision process in the project files Is the project a PD&E Study? Coordinate with the District Noise Specialist and proceed to Step 3. liminary river desired by the SLU? receptors and an unadjusted noise barrier Run TNM. Barrier Optimize the M Evaluation/ Optimization from the noise barr is the noise barrier cost-effective ba Determine Cost-Proceed to Step 5 Effectiveness ent decision process in the project files YES is the project a PD&E Study? or public involvement (Step 6). Skip to Step 7. NO. Complete an Engineering review by coordinating with the project's Engineer of Record (EOR). Noise barrier should not be recommended. Document Did the Engineering Feasibility Review engineering review results in dentify any fatal flaws that would prevent Engineering the project files. Continue the construction of the noise barrier? Review with public involvement in (After PD&E) NO. Document engineering review results in the project files. Proceed to Step 6. Perform public involvement activities to ascertain the SLU property owner's desire for a noise barrier 6 (after PD&E only; PD&E phase skip to Step 7) Public Involvement Provide the SLU Worksheet Noise Barrier Master Table and SLU Tabs, Engineering Review (if performed), and documentation of Public Involvement activities (if applicable) in the NSR/DNSR. Document Findings

Figure 3 – SLU Methodology Flowchart

For specific situations that are not addressed by this methodology contact the District's Noise Specialist.

A key enhancement in the updated methodology is the Equivalent Residence (ER) approach, which enables combined evaluation of impacted SLUs and adjacent impacted residential receptors. This approach converts SLU usage into residential equivalents based on person-hours of outdoor use. One ER is defined as 22,163 person-hours per year, based on an average Florida residence with 2.53 occupants available 24 hours per day, year-round. This conversion allows for a unified cost-effectiveness analysis when SLUs and residential receptors are served by the same barrier. This definition is established in FDOT's July 2025 Methodology to Evaluate Highway Traffic Noise at Special Land Uses⁵.

To streamline analysis, the methodology includes an optional preliminary screening step to identify isolated or low-usage SLUs that are unlikely to meet abatement criteria. If an SLU does not meet minimum usage thresholds or if the property owner declines abatement consideration during the Design or Design-Build phase, further analysis may be discontinued. For SLUs that proceed to full evaluation, noise barriers must meet FDOT's feasibility and reasonableness criteria, including a cost threshold of \$64,000 per benefited receptor or ER and a unit cost of \$40 per square foot. The analysis also incorporates FDOT's Noise Reduction Design Goal (NRDG), which requires a minimum 7 dB(A) reduction for at least one benefited receptor or ER.

The SLU evaluation process, including ER calculations, barrier optimization, and cost-effectiveness results, is documented in Appendix E. This documentation follows the standardized format provided in the FDOT methodology to ensure consistency and transparency across projects.

3.5 Common Noise Environments on Northbound Side of Florida's Turnpike 3.5.1 Central Acres (CNE NB01)

Central Acres is located on the northbound side of Florida's Turnpike, north of State Road 60. This area is shown on Sheets 1-5 of the project aerials in Appendix D. The noise model for this area includes 12 NAC B receptor points representing 12 residences. Noise levels at three residences are predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1.

Noise barriers were evaluated to abate traffic-related noise for impacted receptors. One barrier configuration achieved a 7 dB(A) reduction at a single receptor and provided at least a 5 dB(A) reduction at two impacted receptors. However, all configurations exceeded the allowable cost threshold of \$64,000 per benefited receptor. The limited feasibility and cost-effectiveness of noise abatement in this area are primarily due to the low residential density and the substantial distance between the residences, the roadway, and potential barrier locations.

As a result, noise barriers are not considered a reasonable and feasible method to abate traffic-related noise for CNE NB01. Table 3-2 summarizes the barrier configurations evaluated for this segment.

Table 3-2 – Central Acres (CNE NB01)

		Length ¹		No of	Noise Reduction at Impacted Residences			Num	ber of Benef	ited Resi	Impacted	Total	Cost per	
		(feet)	Location	No. of Impacts	5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)	Res. Not Benefited ⁴	Estimated Cost⁵	Benefited Residence
	22	760	ROW ⁶	3	1	1	1	3	0	3	7.0	0	\$668,800	\$222,933
	20	500	ROW ⁶	3	1	0	1	2	0	2	7.2	1	\$400,000	\$200,000
	18	500	ROW ⁶	3	1	0	1	2	0	2	6.9	1	\$360,000	\$180,000
Ī	16	500	ROW ⁶	3	1	0	1	2	0	2	6.5	1	\$320,000	\$160,000
	14	500	ROW ⁶	3	0	0	1	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷

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

3.5.2 Single-Family Residences between Kenansville Road and Lake Marian Road (CNE NB02)

Multiple single-family residences are located on the northbound side of Florida's Turnpike between Kenansville Road and Lake Marian Road, within CNE NB02. The area is shown on Sheets 5-25 of the project aerials in Appendix D. The noise model for this area includes six NAC B receptor points representing six residences. Of these, one receptor is predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1.

Noise barriers were not evaluated for this segment, as a minimum of two impacted noise-sensitive locations must be benefitted for noise abatement to be considered feasible. In addition to the limited number of impacted receptors, a maintenance access road located between the impacted residence and the Turnpike precludes the construction of a noise barrier in this area.

As a result, no barrier configuration was considered reasonable or feasible for CNE NB02.

Single-Family Residences between Marian Road and S Canoe Creek Road (CNE NB03)

Multiple single-family residences are located on the northbound side of Florida's Turnpike between Lake Marian Road and S Canoe Creek Road, within CNE NB03. This area is shown on Sheets 25 and 26 of the project aerials in Appendix D. The noise model for this area includes 11 NAC B receptor points representing 11 residences. Noise levels at two residences are predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1.

² Benefited residences with predicted noise levels that approach or exceed the NAC.

³ Benefited residences with predicted noise levels that do not approach the NAC.
⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft2

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida's Turnpike.

⁷ Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no further analysis was conducted.

Noise barriers were evaluated to abate traffic-related noise for impacted receptors. One configuration achieved a 7 dB(A) reduction at a single receptor and provided at least a 5 dB(A) reduction at two impacted receptors. However, all configurations exceeded the allowable cost threshold of \$64,000 per benefited receptor.

The inability to meet FDOT's feasibility and reasonableness criteria is primarily due to the low residential density and the distance between the residences, the roadway, and potential barrier locations, which limits acoustic effectiveness. As a result, noise barriers are not considered a reasonable and feasible method to abate traffic-related noise for CNE NB03. Table 3-3 summarizes the barrier configurations evaluated for this segment.

Table 3-3 – Multiple Single-Family Residences (CNE NB03)

		Location	LOCATION I		Reduct		Numbe	r of Benefi	ted Res	idences	Impacted	Total	Cost per
Height (feet)	Length ¹ (feet)	Location	No. of Impacts	5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)	Res. Not Benefited ⁴	Estimated Cost ⁵	Benefited Residence
22	600	ROW ⁶	2	1	0	1	2	0	2	9.7	0	528000	\$264,000
20	600	ROW ⁶	2	1	0	1	2	0	2	9.2	0	\$480,000	\$240,000
18	600	ROW ⁶	2	0	0	1	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷

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

3.5.4 Multiple Single-Family Residences near Canoe Creek (CNE NB05)

Multiple single-family residences are located on the northbound side of Florida's Turnpike between Canoe Creek and N Canoe Creek Road. This area is shown on Sheets 60 and 61 of the project aerials in Appendix D. Two NAC B receptor points representing two residences were included in the noise model. Predicted noise levels are not expected to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Because a minimum of two impacted noise-sensitive locations must be benefitted for noise abatement to be considered feasible, noise abatement was not evaluated for this segment. Predicted noise levels are shown in Appendix B-1.

3.5.5 Multiple Single-Family Residences off Friars Cove Rd (CNE NB06)

Multiple single-family residences off Friars Cove Road are located on the northbound side of Florida's Turnpike south of Friars Cove Road. This area is shown on Sheets 61-71 of the project aerials in Appendix D. The noise model for this area includes four NAC B receptor points representing four residences. Of these, one receptor is predicted to approach or exceed the applicable Noise Abatement

² Benefited residences with predicted noise levels that approach or exceed the NAC.

³ Benefited residences with predicted noise levels that do not approach the NAC.

⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft2.

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida's Turnpike.

⁷ Noise barrier system did not meet the feasibility criterion of providing at least 5 dB(A) reduction at two impacted receptors; therefore, no further analysis was conducted.

Criteria (NAC) under the Build condition for the design year (2050). Because a minimum of two impacted noise-sensitive locations must be benefitted for noise abatement to be considered feasible, noise abatement was not evaluated for this segment. Predicted noise levels are shown in Appendix B-1.

3.5.6 Esprit, Deer Creek West, Mallard Pond, & Keystone Pointe (CNE NB07)

Esprit, Deer Creek West, Mallard Pond, and Keystone Pointe are located on the northbound side of Florida's Turnpike north of Friars Cove Road. This area is shown on Sheets 71-75 of the project aerials in Appendix D. The noise model for this area includes 197 NAC B receptor points representing 918 residences. Of these, 85 receptor points representing 280 residences are predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1.

Noise barriers were evaluated to abate traffic-related noise for the residences in CNE NB07. Based on this evaluation, a noise barrier system located along the right-of-way and outer edge of the northbound shoulder could provide a 7 dB(A) reduction at one or more receptors and at least a 5 dB(A) reduction at two or more impacted receptors. This noise barrier does not exceed the allowable \$64,000 per benefited receptor and is therefore considered a cost-reasonable method to abate traffic-related noise impacts for the residences in CNE NB07.

It should be noted that some impacted receptors adjacent to Friars Cove Road could not receive a benefit due to traffic noise from that roadway, which cannot be mitigated by barriers placed within the Turnpike right-of-way. Table 3-4 summarizes the barrier configuration evaluated for CNE NB07.

Table 3-4 – Esprit, Deer Creek West, Mallard Pond, & Keystone Pointe (CNE NB07)

Height	Length ¹	Location	- I Incation	No. of		e Reducti ted Resid		Num	ber of Benef	fited Resi	dences	Impacted	Total	Cost per
(feet)	(feet)	Location	Impacts	5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)	Res. Not Benefited⁴	Estimated Cost ⁵	Benefited Residence	
22	6560	ROW ⁶												
14	150	SH ⁷												
8	100	SH ⁷												
14	150	SH ⁷	280	2	6	268	276	225	501	10.0	4	\$11,012,000	\$21,980	
22	5340	ROW ⁶												
8	100	SH ⁷												
14	550	SH ⁷												

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

² Benefited residences with predicted noise levels that approach or exceed the NAC.

 $^{^{\}rm 3}$ Benefited residences with predicted noise levels that do not approach the NAC.

⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft² for all barriers.

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida's Turnpike.

 $^{^{7}\,\}mathrm{SH}$ –Noise barrier located on the Shoulder (SH) of the Florida's Turnpike.

3.5.7 Whaley's Landing, Cypress Pointe, & La Senda Church Playground (CNE NB08)

Whaley's Landing, Cypress Pointe, and La Senda Church Playground are located on the northbound side of Florida's Turnpike between station 4455+00 and Clay Whaley Road. This area is shown on Sheets 75-77 of the project aerials in Appendix D. The noise model for this area includes 48 NAC B receptor points representing 143 residences and one NAC C receptor (0.49 ERs) representing one playground. Noise levels at 53 residences and one SLU receptor (0.49 ERs), for a total of 53.49 ERs, are predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1 for residential sites and Appendix B-2 for SLU sites. SLU ER calculations are provided in Appendix E on sheet NB08-01.

Noise barriers were evaluated for these residential sites to abate traffic-related noise. Based on this evaluation, the potential noise barrier systems analyzed could not meet the allowable cost threshold of \$64,000 per benefited residence. The low residential density, wide spacing between homes, and the presence of Old Canoe Creek Road—an additional source of traffic noise located behind the first row of homes—further reduced the acoustic effectiveness of barriers placed within the Turnpike right-of-way.

For these reasons, noise barriers are not considered a reasonable and feasible method to abate traffic-related noise impacts for the ERs in CNE NB08. Table 3-5 summarizes the barrier configuration evaluated for this segment.

Table 3-5 – Whaley's Landing, Cypress Pointe, and La Senda Church Playground (CNE NB08)

Height	Length ¹	Location	Location	Location	Location	No. of		e Reducti cted Resid		Num	ber of Benef	ited Resi	dences	Impacted	Total	Cost per
(feet)	(feet)	Location	Impacts	5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)	Res. Not Benefited ⁴	Estimated Cost ⁵	Benefited Residence			
22	4810	ROW ⁶	53.49	1	0	19.49	20.49	0	20.49	9.9	33	\$4,232,800	\$206,579			
20	4810	ROW ⁶	53.49	1	0	18.49	19.49	0	19.49	9.6	34	\$3,848,000	\$197,435			
18	4810	ROW ⁶	53.49	0	1	17.49	18.49	0	18.49	9.2	35	\$3,463,200	\$187,301			
16	4810	ROW ⁶	53.49	0	1	17.49	18.49	0	18.49	8.5	35	\$3,078,400	\$166,490			
14	5120	SH ⁷	53.49	1	2	17.49	20.49	0	20.49	8.2	33	\$2,867,200	\$139,932			
12	5120	SH ⁷	53.49	1	1.49	17	19.49	0	19.49	7.5	34	\$2,457,600	\$126,095			
10	5120	SH ⁷	53.49	4	3	0	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸			

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

² Benefited residences with predicted noise levels that approach or exceed the NAC.

³ Benefited residences with predicted noise levels that do not approach the NAC.

⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft² for all barriers.

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida's Turnpike.

 $^{^{7}\,\}mathrm{SH}$ –Noise barrier located on the Shoulder (SH) of the Florida's Turnpike.

⁸ Noise barrier system did not meet the feasibility criterion of providing at least 5 dB(A) reduction at two impacted receptors; therefore, no further analysis was conducted.

3.6 Common Noise Environments on Southbound Side of Florida's Turnpike 3.6.1 Single-Family Residences north of SR 60 (CNE SB01)

Multiple single-family residences are located on the southbound side of Florida's Turnpike north of SR 60. This area is shown on Sheets 1-5 of the project aerials located in Appendix D. Two NAC B receptor points representing two residences were included in the noise model. Predicted noise levels are not expected to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Because a minimum of two impacted noise-sensitive locations must be benefitted for noise abatement to be considered feasible, noise abatement was not evaluated for this segment. Predicted noise levels are shown in Appendix B-1.

3.6.2 Single-Family Residences between Kenansville Road and Lake Marian Road (CNE SB02)

Multiple single-family residences are located on the southbound side of Florida's Turnpike between S Kenansville Road and Lake Marian Road. This area is shown on Sheets 5-24 of the project aerials located in Appendix D. In this area, five NAC B receptor points, representing five residences, were added to the model. Of these receptors, one NAC B receptor point is expected to approach or exceed the NAC for the Build Condition in the design year (2050). Because a minimum of two impacted noise-sensitive locations must be benefitted for noise abatement to be feasible, noise abatement was not considered for this CNE. The predicted noise levels for residential sites are shown in Appendix B-1.

3.6.3 Single-Family Residences between Lake Marian Road and South Canoe Creek Road (CNE SB03)

Multiple single-family residences are located on the southbound side of Florida's Turnpike between Lake Marian Road and South Canoe Creek Road. This area is shown on Sheets 24-26 of the project aerials in Appendix D. The noise model for this area includes 11 NAC B receptor points representing 12 residences. Of these, four residences are predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1.

Noise barriers were evaluated for these residential sites to abate traffic-related noise. Based on this evaluation, none of the potential noise barrier systems analyzed could meet the allowable cost threshold of \$64,000 per benefited residence. The low density and wide spacing of homes in this area limited the number of benefited residences, resulting in cost per benefited residence exceeding the allowable threshold.

For these reasons, noise barriers are not considered a reasonable and feasible method to abate trafficrelated noise impacts for the residences in CNE SB03. Table 3-6 summarizes the barrier configuration evaluated for this segment.

Table 3-6 – Multiple Single-Family Residences (CNE SB03)

Height (feet)	Height Length¹ (feet) Location	_	Location	No. of		e Reducti cted Resid		Num	ber of Benef	ited Resi	dences	Impacted	Total	Cost per
		Impacts	5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)	Res. Not Benefited ⁴	Estimated Cost⁵	Benefited Residence		
14	1500	SH ⁷	4	4	0	0	4	0	4	5.2	0	\$840,000	\$210,000	
22	1200	ROW ⁶	4	4	0	0	4	0	4	5.5	0	\$1,056,000	\$264,000	
22	1200	ROW ⁶	4	1	2	1	4	0	4	6.3	0	\$1,392,000	\$348,000	
14	600	SH ⁷	,	Ţ		1	7	0	۲	0.5	0	71,332,000	73-10,000	
20	1200	ROW ⁶	4	1	3	0	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	
14	600	SH ⁷	4	<i></i>	3	U	II/a*	II/a*	II/a*	II/a*	II/a*	II/a*	II/a*	

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

3.6.4 Single-Family Residences between Canoe Creek and Lake Cypress Road (CNE SB05)

Multiple single-family residences are located on the southbound side of Florida's Turnpike between Canoe Creek and Lake Cypress Road. This area is shown on Sheets 60-71 of the project aerials in Appendix D. The noise model for this area includes four NAC B receptor points representing four residences. Of these, two receptors are predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1.

Noise barriers were evaluated for these residential sites to abate traffic-related noise. Based on this evaluation, none of the potential noise barrier systems analyzed could meet the allowable cost threshold of \$64,000 per benefited residence. The low density and limited number of benefited residences in this area resulted in cost per benefited residence exceeding the allowable threshold. In addition, traffic noise from Canoe Creek Road—located behind the first row of homes—contributes to the overall noise environment and cannot be mitigated by barriers placed within the Turnpike right-ofway, further reducing the effectiveness of those barriers.

For these reasons, noise barriers are not considered a reasonable and feasible method to abate traffic-related noise impacts for the residences in CNE SB05. Table 3-7 summarizes the barrier configuration evaluated for this segment.

² Benefited residences with predicted noise levels that approach or exceed the NAC.

³ Benefited residences with predicted noise levels that do not approach the NAC.

⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft2 for all barriers.

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida's Turnpike.

⁷ SH –Noise barrier located on the Shoulder (SH) of the Florida's Turnpike

⁸ Noise barrier system did not meet the feasibility criterion of providing at least 5 dB(A) reduction at two impacted receptors; therefore, no further analysis was conducted.

Table 3-7 – Multiple Single-Family Residences (CNE SB05)

Hoight	Length¹ Locatio	Length¹ (feet) Location	Location	Location	- I Incation	- Incation	No. of		e Reducti cted Resid		Num	ber of Benef	ited Resi	dences	Impacted	Total	Cost per
(feet)	_		Impacts	5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)	Res. Not Benefited ⁴	Estimated Cost ⁵	Benefited Residence				
22	1000	ROW ⁶	2	1	0	1	2	0	2	6.5	0	\$1,440,000	\$720,000				
14	1000	SH ⁷	2	1	U	1	2	U	2	0.5	U	\$1,440,000	\$720,000				
20	1000	ROW ⁶	2	1	1	0	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸				
14	1000	SH ⁷		,	1	U	n/a°	II/ d°	II/ d°	II/ d°	II/ d°	II/a ^s	II/ d°				
22	1000	ROW ⁶	2	2	0	0	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸				
14	1200	SH ⁷	2	2	0	0	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸				

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

3.6.5 Eden at Cross Prairie & The Meadow at Cross Prairie (CNE SB06)

Eden at Cross Prairie and The Meadow at Cross Prairie are located on the southbound side of Florida's Turnpike between Friars Cove Road and Clay Whaley Road. This area is located outside the mapped area on Sheets 71-77 of the project aerials in Appendix D. The noise model for this area includes 86 NAC B receptor points representing 518 residences. Noise levels at 123 residences are predicted to approach or exceed the applicable Noise Abatement Criteria (NAC) under the Build condition for the design year (2050). Predicted noise levels are shown in Appendix B-1.

Noise barriers were evaluated to abate traffic-related noise for the residences in CNE SB06. Based on this evaluation, a noise barrier system located along the right-of-way and outer edge of the southbound shoulder could provide a 7 dB(A) reduction at one or more receptors and at least a 5 dB(A) reduction at two or more impacted receptors. This noise barrier does not exceed the allowable \$64,000 per benefited receptor and is therefore considered a cost-reasonable method to abate traffic-related noise impacts for the residences in CNE SB06. Table 3-8 summarizes the barrier configuration evaluated for CNE SB06.

Table 3-8 – Eden at Cross Prairie and The Meadow at Cross Prairie (CNE SB06)

Hoight	Height Length¹ Locati		No. of		e Reducti ted Resid		Num	ber of Benef	ited Resi	dences	Impacted	Total	Cost per
(feet)	(feet)	Location	Impacts	5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)	Res. Not Benefited ⁴	Estimated Cost ⁵	Benefited Residence
22	6140	ROW ⁶											
14	450	SH ⁷	123	_	2	114	123	102	225	10.7		\$5,771,200	\$25,650
8	100	SH ⁷	123	6	3	114	123	102	225	10.7	U	β5,771,200	323,03U
14	150	SH ⁷											

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

² Benefited residences with predicted noise levels that approach or exceed the NAC.

³ Benefited residences with predicted noise levels that do not approach the NAC.

⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft2 for all barriers.

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida's Turnpike.

⁷ SH –Noise barrier located on the Shoulder (SH) of the Florida's Turnpike

⁸ Noise barrier system did not meet the feasibility criterion of providing at least 5 dB(A) reduction at two impacted receptors; therefore, no further analysis was conducted

² Benefited residences with predicted noise levels that approach or exceed the NAC.

³ Benefited residences with predicted noise levels that do not approach the NAC.

⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

 $^{^{5}}$ Unit cost of \$40/ft $^{2}\,for\,all\,barriers.$

 $^{^{\}rm 6}\,\text{ROW}$ –Noise barrier located on the Right of Way (ROW) of the Florida's Turnpike.

⁷ SH –Noise barrier located on the Shoulder (SH) of the Florida's Turnpike

4.0 CONCLUSIONS

Within the project limits, noise levels were predicted at 388 NAC B receptors representing 1,637 residences and one NAC C SLU receptor. Of these, 469 residences and one SLU receptor are predicted to approach or exceed the NAC under the 2050 Build condition and are therefore considered impacted.

Noise barriers were evaluated for the impacted noise-sensitive sites. The results of the noise barrier evaluation conclude that noise barriers (see Table 4-1 for more detail on the noise barriers) are a feasible and reasonable method to abate traffic related noise impacts for two noise-sensitive areas and will provide at least a 5 dB(A) benefit to 399 impacted residences.

Table 4-1 – Noise Barrier Evaluation Summary

Noise Barrier System (CNEs included in	Number of Impacted	Noise Barrier Height	Noise Barrier Length	Noise Barrier	Total Preliminary	Potentially	f Residences Benefited by a Barrier	Total Noise Barrier System Cost Per Benefited
barrier system)	Residences	(ft.)	(ft.) ¹	Location	Barrier Cost ²	Impacted	Total ³	Residence
		22	6560	ROW ⁴				
#1		14	150	SH⁵				
(NB07)		8	100	SH⁵				
Esprit, Deer Creek	280	14	150	SH⁵	\$11,012,000	276	501	\$21,980
West, Mallard Pond, &		22	5340	ROW ⁴				
Keystone Pointe		8	100	SH⁵				
		14	550	SH ⁵				
#2		22	6140	ROW ⁴				
(SB06)	122	14	450	SH⁵	Ar 774 200		225	425.650
Eden at Cross Prairie & The Meadow at	123	8	100	SH⁵	\$5,771,200	123	225	\$25,650
Cross Prairie		14	150	SH⁵				

¹ Full height is for length indicated. The length for any required taper in height at a shoulder noise barrier termination would be in addition to the length indicated.

4.1 Statement of Likelihood

FTE is committed to the construction of feasible and reasonable noise abatement measures. Two potentially feasible and reasonable noise barrier systems have been identified for this project contingent upon the following conditions:

- Final recommendations on the construction of abatement measures are determined during the project's final design and through the public involvement process.
- Detailed noise analyses during the final design process support the need, feasibility, and reasonableness of providing abatement.
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost-reasonable criterion.
- Community input on types, heights, and locations of the noise barrier(s) is obtained by FTE; and

² Unit cost of \$40/ft² for all noise barriers

³ Total includes impacted/benefited residences and residences with a predicted noise level that does not approach or exceed 67 dBA, but are incidentally benefited.

⁴ ROW - Right of Way noise barrier

⁵ SH - Shoulder noise barrier

Safety and engineering aspects have been reviewed and any conflicts or issues resolved.

A land use review will be performed during the design phase to identify all noise-sensitive sites that may have received a building permit subsequent to the noise study, but prior to the project's DPK. The date that the State Environmental Impact Report (SEIR) is approved by FTE will be the DPK. If the review identifies noise-sensitive sites that have been permitted prior to the DPK, then those sensitive sites will be evaluated during the design phase for traffic noise impacts and abatement considerations.

5.0 CONSTRUCTION NOISE AND VIBRATION

During the construction phase of the proposed project, short-term noise may be generated by stationary and mobile construction equipment. The construction noise will be temporary at any location and will be controlled by adherence to the most recent edition of FDOT's Standard Specifications for Road and Bridge Construction⁴.

Using the listing of sensitive sites found in FDOT's Project Development and Environment Manual, residents were identified as the only land use potentially sensitive to vibration that could occur during construction. If during final design it is determined that measures to control vibration are necessary, the project's construction provisions can be modified as needed.

6.0 PUBLIC INVOLVEMENT

To promote compatibility between land use planning and Florida's Turnpike, the distance between the edge of Florida's Turnpike outside travel lane and the point where the roadway related noise is predicted to reach the NAC for each activity category was estimated. These estimates are referred to as noise contours and are shown in Appendix C. These estimates provide the general distance at which the noise approaches or exceeds the NAC for each activity type.

A virtual and in-person public hearing was held on February 18 and February 20, 2025 (respectively). The in-person meeting was held at 1590 9th Street SW, Vero Beach, Florida. Elected officials, interested parties, and property owners in the affected area were invited. The virtual meeting had 15 members of the public attend, while the in-person meeting had 16 attendees, including one elected official. A total of 15 comments were given during the public hearing comment period mostly pertaining to the noise, guide sign placement and environmental impacts. One comment was made during the virtual meeting regarding noise at the Hidden Pines Estate Neighborhood. Four comments were made during the inperson meeting, addressing concerns related to noise impacts at the Saint Lucie Farm Preserve, potential effects on lands held by the Seminole nation and other property owners, and environmental concerns including impacts on wildlife, local waterways and the natural surrounding natural habitat.

7.0 REFERENCES

- Federal Highway Administration. Procedures for Abatement of Highway Traffic Noise and Construction Noise. Title 23, Code of Federal Regulations, Part 772 (23 CFR Part 772). Washington, D.C.: FHWA, July 13, 2010.
- 2. **Florida Department of Transportation**. *Project Development and Environment (PD&E) Manual Part 2, Chapter 18*. Tallahassee, FL: FDOT, Jul. 31, 2024.
- 3. **Florida Department of Transportation**. *Traffic Noise Modeling and Analysis Practitioners Handbook*. Tallahassee, FL: FDOT, July 2025.
- 4. **Federal Highway Administration**. *Noise Measurement Handbook*. Washington, D.C.: FHWA, Jun. 2018.
- 5. Florida Department of Transportation. *Methodology to Evaluate Highway Traffic Noise at Special Land Uses.* Tallahassee, FL: FDOT, July 2025.
- 6. **Florida Department of Transportation**. *Standard Specifications for Road and Bridge Construction*. Tallahassee, FL: FDOT, Jul. 2023.

Appendix A Traffic Data

Highway Traffic Noise: Traffic Data																	
Project Name	Turnpike Widening PD&E St	udy from SR 60 to South of CI	ay Whaley Ro	oad													
Project Number	423374-3																
Condition	Existing																
Year	2024																
	Roadway D	Oetails			Traffic Details												
Roadway Name	From	То	Roadway Type	Number of Lanes (in 1 direction)	Two-Way LOS C AADT (if applicable)	LOS C Peak Hour Peak Direction (PHPD)	Demand Two- Way AADT (if applicable)	Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)	% Automobiles	%Medium Trucks	% Heavy Trucks	%Buses	% Motorcycles	Standard K- factor (if applicable)	D-factor (if applicable)	Posted Speed (mph)	
Turnpike Mainline	North of SR 60	South of Clay Whaley Road	Mainline	2	47,400	2,930	35,000	2,250	84%	4.13%	11.03%	0.46%	0.12%	10.5%	58.8%	70	
Turnpike Mainline	North of Clay	Whaley Road	Mainline	2	55,400	3,120	60,200	3,390	84%	4.13%	11.03%	0.46%	0.12%	10.5%	53.6%	70	
SR 60 NB-Off		-	Ramp	1	11,000	1,160	3,100	370	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25	
SR 60 NB-On		-	Ramp	1	11,000	1,160	2,300	340	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25	
SR 60 SB-Off		-	Ramp	1	11,000	1,160	2,300	350	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25	
SR 60 SB-On			Ramp	1	11,000	1,160	3,100	370	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25	
SR 60	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	2	43,400	2,190	8,400	420	71%	9.15%	17.74%	1.48%	0.85%	9.5%	53.2%	45	
Canoe Creek Road / CR 523		K Mainline (MM 208.5)	Arterial	1	8,000	430	1,800	100	88%	8.44%	2.03%	0.73%	0.40%	10.0%	53.8%	40	
Canoe Creek Road / CR 523	North of TPK Me	ainline (MM 229.5)	Arterial	1	8,000	430	6,000	320	88%	8.44%	2.03%	0.73%	0.40%	10.0%	53.8%	40	
Friars Cove Road	East and West of TR	PK Mainline (MM 236)	Arterial	1	8,200	440	1,000	50	92%	3.65%	3.33%	0.63%	0.16%	10.0%	53.8%	35	
Old Canoe Creek Road	MM 238	MM 240	Arterial	1	7,800	440	18,800	1,050	93%	5.18%	0.68%	0.24%	0.46%	10.0%	56.0%	45	
Clay Whaley Road	East of TPK Ma	inline (MM 239.5)	Arterial	1	8,000	430	16,400	880	88%	7.50%	2.82%	1.17%	0.42%	10.0%	53.8%	35	
Clay Whaley Road	West of TPK Ma	ainline (MM 239.5)	Arterial	1	8,000	430	9,800	530	88%	7.50%	2.82%	1.17%	0.42%	10.0%	53.8%	35	
Notes:																	
I certify that the above inform Prepared By:	ation is accurate and appro	opriate for use with the traffic	noise analys	sis.		Fehinto	ola Sanusi			Signatu	ire		Date:	12/6/	2024		
I have reviewed and concur Reviewer:	that the above informati	on is appropriate for use w	ith the traffi	ic noise a	nalysis.	Emam	B. Emam			Signati			Date:	12/6/	2024		

		F	lighway	Traffic I	Noise: Tr	affic Dat	а									
Project Name	Turnpike Widening PD&E Study from SR 60 t	o South of Clay Whaley Road														
Project Number	423374-3															
Condition	No-Build															
Year	2050															
	Roadway Do	etails							Tra	ffic Detai	ls					
Roadway Name	From	То	Roadway Type	Number of Lanes (in 1 direction)	Two-Way LOS C AADT (if applicable)	LOS C Peak Hour Peak Direction (PHPD)	Demand Two- Way AADT (if applicable)	Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)	% Automobiles	% Medium Trucks	% Heavy Trucks	% Buses	% Motorcycles	Standard K- factor (if applicable)	D-factor (if applicable)	Posted Speed (mph)
Tumpike Mainline	North of SR 60	South of Southport / Northeast Connector	Mainline	2	53,200	2,910	77,400	4,100	82%	4.63%	12.37%	0.51%	0.14%	10.0%	54.7%	70
Turnpike Mainline	North of Southport / Northeast Connector	South of Clay Whaley / Nolte Road	Mainline	2	63,200	3,330	87,800	4,560	82%	4.63%	12.37%	0.51%	0.14%	10.0%	52.7%	70
Turnpike Mainline	North of Clay Wh	aley / Nolte Road	Mainline	1	59,400	3,330	150,200	8,330	82%	4.63%	12.37%	0.51%	0.14%	10.0%	56.1%	70
SR 60 NB-Off	-		Ramp	1	12,200	1,290	5,800	700	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 NB-On			Ramp	1	12,200	1,290	5,200	660	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-Off		-	Ramp	1	12,200	1,290	5,200	660	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-On			Ramp	1	12,200	1,290	5,800	700	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
Southport / Northeast Connector NB-Off			Ramp	1	23,000	1,520	10,600	1,400	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
Southport / Northeast Connector NB-On			Ramp	2	46,000	3,040	15,800	2,090	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
Southport / Northeast Connector SB-Off			Ramp	2	46,000	3,040	15,800	2,090	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
Southport / Northeast Connector SB-On			Ramp	1	23,000	1,520	10,600	1,400	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
SR 60	East of Furnpike Mainline	West of Turnpike Mainline	Arterial	2	42,200	2,130	15,400	780	64%	11.21%	21.72%	1.81%	1.04%	9.5%	53.2%	45
Cance Creek Road / CR 523	East and West of TPR	Mainline (MM 208.5)	Arterial	1	11,800	640	3,600	190	87%	9.47%	2.28%	0.82%	0.45%	10.0%	53.8%	40
Cance Creek Road / CR 523	North of TPK Mai	nline (MM 229.5)	Arterial	1	11,800	640	18,800	1,010	87%	9.47%	2.28%	0.82%	0.45%	10.0%	53.8%	40
Friars Cove Road	East and West of TP	K Mainline (MM 236)	Arterial	1	11,800	640	22,000	1,180	88%	5.83%	5.32%	1.01%	0.26%	10.0%	53.8%	35
Old Canoe Creek Road	MM 238	MM 240	Arterial	1	12,000	640	29,600	1,570	87%	9.93%	1.30%	0.46%	0.89%	9.5%	56.0%	45
Clay Whaley Road Notes:	East and West of TPk	Mainline (MM 239.5)	Arterial	1	11,800	640	28,600	1,540	86%	8.64%	3.26%	1.35%	0.49%	10.0%	53.8%	35
Prepared By:	tion is accurate and appropriate for use with the state of the state o					Fehinto	la Sanusi			Signati	ıre		Date:	12/6/	2024	
Reviewer:						Emam	B. Emam			Signati	ıre		Date:	12/6/	2024	

		H	lighway	Traffic I	Noise: Tr	affic Dat	а									
Project Name	Turnpike Widening PD&E Study from SR 60 t	o South of Clay Whaley Road														
Project Number	423374-3															
Condition	Build															
Year	2050															
	Roadway D	etails							Tra	affic Detai	ils					
Roadway Name	From	То	Roadway Type	Number of Lanes (in 1 direction)	Two-Way LOS C AADT (if applicable)	LOS C Peak Hour Peak Direction (PHPD)	Demand Two- Way AADT (if applicable)	Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)	% Automobiles	% Medium Trucks	% Heavy Trucks	% Buses	% Motorcycles	Standard K- factor (if applicable)	D-factor (if applicable)	Posted Speed (mph)
Turnpike Mainline	North of SR 60	South of Southport / Northeast Connector	Mainline	3	76,600	4,190	77,400	4,100	82%	4.63%	12.37%	0.51%	0.14%	10.0%	54.7%	70
Turnpike Mainline	North of Southport / Northeast Connector	South of Clay Whaley / Nolte Road	Mainline	4	124,400	6,560	87,800	4,560	82%	4.63%	12.37%	0.51%	0.14%	10.0%	52.7%	70
Turnpike Mainline	North of Clay Wh	aley / Nolte Road	Mainline	4	117,000	6,560	150,200	8,330	82%	4.63%	12.37%	0.51%	0.14%	10.0%	56.1%	70
SR 60 NB-Off	-	-	Ramp	1	12,200	1,290	5,800	700	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 NB-On		-	Ramp	1	12,200	1,290	5,200	660	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-Off		-	Ramp	- 1	12,200	1,290	5,200	660	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-On		=	Ramp	1	12,200	1,290	5,800	700	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
Southport / Northeast Connector NB-Off			Ramp	1	23,000	1,520	10,600	1,400	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
Southport / Northeast Connector NB-On	-	-	Ramp	2	46,000	3,040	15,800	2,090	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
Southport / Northeast Connector SB-Off	-		Ramp	2	46,000	3,040	15,800	2,090	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
Southport / Northeast Connector SB-On			Ramp	1	23,000	1,520	10,600	1,400	91%	2.32%	6.19%	0.51%	0.14%	11.0%	60.0%	55
SR 60	East of Tumpike Mainline	West of Turnpike Mainline	Arterial	2	42,200	2,130	15,400	780	64%	11.21%	21.72%	1.81%	1.04%	9.5%	53.2%	45
Canoe Creek Road / CR 523	East and West of TP		Arterial	1	11,800	640	3,600	190	87%	9.47%	2.28%	0.82%	0.45%	10.0%	53.8%	40
Canoe Creek Road / CR 523		nline (MM 229.5)	Arterial	1	11,800	640	18,800	1,010	87%	9.47%	2.28%	0.82%	0.45%	10.0%	53.8%	40
Friars Cove Road		K Mainline (MM 236)	Arterial	1	11,800	640	22,000	1,180	88%	5.83%	5.32%	1.01%	0.26%	10.0%	53.8%	35
Old Canoe Creek Road	MM 238	MM 240	Arterial	1	12,000	640	29,600	1,570	87%	9.93%	1.30%	0.46%	0.89%	9.5%	56.0%	45
Notes:	East and West of TPI	Mainline (MM 239.5)	Arterial	1	11,800	640	28,600	1,540	86%	8.64%	3.26%	1.35%	0.49%	10.0%	53.8%	35
I certify that the above information of the prepared By:	ttion is accurate and appropriate for use with the	ne traffic noise analysis.				Fehinto	ola Sanusi			•	•	•	Date:	12/6	/2024	
I have reviewed and concur Reviewer:	that the above information is appropriate	for use with the traffic noise analysis.				Emam	B. Emam			Signati	ure		Date:	12/6	/2024	
										Signatu	ure					

Appendix B-1 – Residential Properties Predicted Noise Levels

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Rece	eptor						
NB01	RNB01-001	1	В	67	66	63.9	No	Central Acres
NB01	RNB01-002	1	В	67	66	62.7	No	Central Acres
NB01 NB01	RNB01-003 RNB01-004	1	ВВ	67 67	66 66	64.4 58.9	No No	Central Acres Central Acres
NB01	RNB01-004	1	В	67	66	58.6	No	Central Acres
NB01	RNB01-006	1	В	67	66	58.4	No	Central Acres
NB01	RNB01-007	1	В	67	66	63.9	No	Central Acres
NB01 NB01	RNB01-008	1	В	67	66	64.6 68.2	No Yes	Central Acres
NB01	RNB01-009 RNB01-010	1	В	67	66 66	70.4	Yes	Central Acres Central Acres
NB01	RNB01-011	1	В	.67	66	74.6	Yes	Central Acres
NB01	RNB01-012	1	В	67	66	65.7	No	Central Acres
NB02	RNB02-001	1	В	67	66	65.0	No	Single Family Residence
NB02 NB02	RNB02-002 RNB02-003	1	B	67 67	66 66	60.5 67.2	No Yes	Single Family Residence Single Family Residence
NB02 NB02	RNB02-003 RNB02-004	1	В	67	66	62.5	No Yes	Single Family Residence Single Family Residence
NB02	RNB02-005	1	В	67	66	64.3	No	Single Family Residence
NB02	RNB02-006	1	В	67	66	58.1	No	Single Family Residence
NB03	RNB03-001	1	В	67	66	75.4	Yes	Single Family Residence
NB03	RNB03-002	1	В	67	66	69.2	Yes	Single Family Residence
NB03	RNB03-003	1	В	67	66	65.8	No	Single Family Residence
NB03 NB03	RNB03-004 RNB03-005	1	B B	67 67	66 66	65.4 59.6	No No	Single Family Residence Single Family Residence
NB03	RNB03-006	1	В	67	66	58.0	No No	Single Family Residence
NB03	RNB03-007	1	В	67	66	58.4	No	Single Family Residence
NB03	RNB03-008	1	В	67	66	59.0	No	Single Family Residence
NB03	RNB03-009	1	В	67	66	57.9	No	Single Family Residence
NB03	RNB03-010	1	В	67	66	57.9	No	Single Family Residence
NB03 NB05	RNB03-011 RNB05-001	1	B B	67 67	66 66	65.0 56.8	No No	Single Family Residence Single Family Residence
NB05	RNB05-002	1	В	67	66	58.1	No	Single Family Residence
NB06	RNB06-001	1	В	67	66	56.3	No	Single Family Residence
NB06	RNB06-002	1	В	67	66	61.0	No	Single Family Residence
NB06	RNB06-003	1	В	67	66	62.8	No	Single Family Residence
NB06 NB07	RNB06-004	1 5	В	67 67	66	68.1 62.3	Yes	Single Family Residence
NB07 NB07	RNB07-001 RNB07-002	5	B B	67	66 66	65.2	No No	Esprit Esprit
	RNB07-002	4	В	67	66	68.3	Yes	Esprit
NB07	RNB07-004	2	В	67	66	70.8	Yes	Esprit
NB07	RNB07-005	1	В	67	66	74.4	Yes	Esprit
NB07	RNB07-006	2	В	67	66	75.4	Yes	Esprit
NB07 NB07	RNB07-007 RNB07-008	6 6	B B	67 67	66 66	76.2 69.4	Yes Yes	Esprit Esprit
NB07	RNB07-009	8	В	67	66	64.1	No	Esprit
NB07	RNB07-010	4	В	67	66	60.4	No	Esprit
NB07	RNB07-011	15	В	67	66	57.3	No	Esprit
NB07	RNB07-012	6	В	67	66	58.6	No	Esprit
NB07	RNB07-013	3	В	67	66	60.3	No No	Esprit Esprit
NB07 NB07	RNB07-014 RNB07-015	5 7	B B	67 67	66 66	63.5 70.2	No Yes	Esprit Esprit
NB07	RNB07-015	9	В	67	66	74.7	Yes	Esprit
NB07	RNB07-017	5	В	67	66	61.3	No	Esprit
NB07	RNB07-018	2	В	67	66	59.2	No	Esprit
NB07	RNB07-019	3	В	67	66	70.6	Yes	Esprit
NB07	RNB07-020	6	В	67	66	75.3	Yes	Esprit
NB07 NB07	RNB07-021 RNB07-022	3	B B	67 67	66 66	70.4 66.5	Yes Yes	Esprit Esprit
NB07	RNB07-022 RNB07-023	3	В	67	66	63.4	No Yes	Esprit Esprit
NR01	KNB07-023	3	R	6/	66	b3.4	INO	Esprit

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Rece	eptor						
NB07	RNB07-024	5	В	67	66	61.2	No	Esprit
NB07 NB07	RNB07-025 RNB07-026	25 10	B B	67 67	66 66	58.2 59.2	No No	Esprit Esprit
NB07	RNB07-027	2	В	67	66	60.9	No	Esprit Esprit
NB07	RNB07-028	4	В	67	66	62.5	No	Esprit
NB07	RNB07-029	6	В	67	66	66.1	Yes	Esprit
NB07	RNB07-030	4	B	67	66	70.2	Yes	Esprit
NB07 NB07	RNB07-031 RNB07-032	2	В	67 67	66 66	75.6 74.2	Yes Yes	Esprit Esprit
NB07	RNB07-033	4	В	67	66	70.9	Yes	Esprit
NB07	RNB07-034	8	В	67	66	67.4	Yes	Esprit
NB07	RNB07-035	8	В	67	66	63.0	No	Esprit
NB07 NB07	RNB07-036 RNB07-037	5 7	B	67 67	66	60.3 62.3	No No	Esprit Esprit
NB07	RNB07-037	8	В	67	66	65.9	No	Esprit Esprit
NB07	RNB07-039	2	В	67	66	73.5	Yes	Esprit
NB07	RNB07-040	2	В	67	66	72.0	Yes	Esprit
NB07	RNB07-041	8	В	67	66	65.0	No	Esprit
NB07 NB07	RNB07-042 RNB07-043	10	B B	67 67	66 66	61.1 59.3	No No	Esprit
NB07	RNB07-043	14	В	67	66	58.4	No	Esprit Esprit
NB07	RNB07-045	7	В	67	66	62.7	No	Esprit
NB07	RNB07-046	3	В	67	66	68.2	Yes	Esprit
NB07	RNB07-047	2	В	67	66	69.7	Yes	Esprit
NB07	RNB07-048	1	В	67	66	70.9	Yes	Esprit
NB07 NB07	RNB07-049 RNB07-050	2	B B	67 67	66	70.0 65 .5	Yes No	Esprit Esprit
NB07	RNB07-050	3	В	67	66	64.3	No	Esprit
NB07	RNB07-052	4	В	67	66	62.9	No	Esprit
NB07	RNB07-053	4	В	67	66	60.4	No	Esprit
NB07	RNB07-054	6	В	67	66	58.9	No	Esprit
NB07 NB07	RNB07-055 RNB07-056	5 4	B B	67 67	66 66	62.5 66.4	No Yes	Esprit Esprit
NB07	RNB07-057	5	В	67	66	63.9	No	Esprit
NB07	RNB07-058	6	В	67	66	60.8	No	Esprit
NB07	RNB07-059	3	В	67	66	73.6	Yes	Bristol Cove
NB07	RNB07-060	1	В	67	66	73.4	Yes	Bristol Cove
NB07 NB07	RNB07-061	2	B B	67	66	72.2		Bristol Cove
NB07	RNB07-062 RNB07-063	3	В	67 67	66 66	68.7 65.7	Yes No	Bristol Cove Bristol Cove
NB07	RNB07-064	7	В	67	66	63.1	No	Bristol Cove
NB07	RNB07-065	9	В	67	66	60.0	No	Bristol Cove
NB07	RNB07-066	7	В	67	66	63.6	No	Bristol Cove
NB07	RNB07-067 RNB07-068	9	В	67	66	64.2		Bristol Cove
NB07 NB07	RNB07-068 RNB07-069	5 4	<u>В</u> В	67 67	66 66	73.0 69.7	Yes Yes	Bristol Cove Bristol Cove
NB07	RNB07-009	5	В	67	66	73.7	Yes	Bristol Cove
NB07	RNB07-071	6	В	67	66	65.8		Bristol Cove
NB07	RNB07-072	8	В	67	66	61.7	No	Bristol Cove
NB07	RNB07-073	3	В	67	66	62.6	No	Bristol Cove
NB07 NB07	RNB07-074 RNB07-075	4	<u>В</u> В	67 67	66 66	73.1 69.8	Yes Yes	Bristol Cove Bristol Cove
NB07 NB07	RNB07-075	7	В	67	66	64.6	No	Bristol Cove
NB07	RNB07-077	12	В	67	66	61.0	No	Bristol Cove
NB07	RNB07-078	11	В	67	66	58.4	No	Bristol Cove
NB07	RNB07-079	7	В	67	66	61.0	No	Bristol Cove
NB07	RNB07-080	8	В	67	66	63.7	No	Deer Creek West
NB07	RNB07-081	3	В	67	66	69.8	Yes	Deer Creek West

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Rece	eptor						
	RNB07-082	3	В	67	66	73.5	Yes	Deer Creek West
	RNB07-083 RNB07-084	3	B B	67 67	66 66	76.1 71.3	Yes Yes	Deer Creek West Deer Creek West
	RNB07-085	4	В	67	66	64.9	No	Deer Creek West
	RNB07-086	3	В	67	66	61.1	No	Deer Creek West
	RNB07-087	5	В	67	66	76.5	Yes	Deer Creek West
	RNB07-088	6	В	67	66	65.7	No	Deer Creek West
	RNB07-089 RNB07-090	5	В	67 67	66 66	64.0 61.7	No No	Deer Creek West Deer Creek West
	RNB07-090	4	В	67	66	76.4	Yes	Deer Creek West
NB07	RNB07-092	8	В	67	66	68.3	Yes	Deer Creek West
	RNB07-093	6	В	67	66	62.7	No	Deer Creek West
	RNB07-094	10	В	67	66	58.8	No	Deer Creek West
	RNB07-095 RNB07-096	6	В	67 67	66 66	64.2 77.0	No Yes	Deer Creek West Deer Creek West
	RNB07-096	1	В	67	66	75.6	Yes	Deer Creek West
	RNB07-098	2	В	67	66	73.1	Yes	Deer Creek West
	RNB07-099	3	В	67	66	69.5	Yes	Deer Creek West
	RNB07-100	4	В	67	66	65.5	No	Mallard Pond
	RNB07-101	3	В	67	66	62.3	No	Mallard Pond
	RNB07-102 RNB07-103	4	B B	67 67	66 66	60.2 76.3	No Yes	Mallard Pond Mallard Pond
	RNB07-103	1	В	67	66	76.3	Yes	Mallard Pond
	RNB07-105	2	В	67	66	72.5	Yes	Mallard Pond
	RNB07-106	3	В	67	66	68.1	Yes	Mallard Pond
	RNB07-107	3	В	67	66	64.8	No	Mallard Pond
	RNB07-108	3	В	67	66	62.2	No	Mallard Pond
	RNB07-109 RNB07-110	3	<u>В</u> В	67 67	66 66	61.3	No No	Mallard Pond Mallard Pond
	RNB07-111	4	В	67	66	71.1	Yes	Mallard Pond
	RNB07-112	10	В	67	66	76.4	Yes	Mallard Pond
	RNB07-113	5	В	67	66	71.8	Yes	Mallard Pond
	RNB07-114	3	В	67	66	67.5	Yes	Mallard Pond
	RNB07-115	4	В	67	66	63.6	No	Mallard Pond
	RNB07-116 RNB07-117	2 4	B B	67 67	66 66	61.9 60.4	No No	Mallard Pond Mallard Pond
	RNB07-117	10	В	67	66	58.1	No	Mallard Pond
	RNB07-119	9	В	67	66	60.2		Mallard Pond
NB07	RNB07-120	10	В	67	66	62.7		Mallard Pond
	RNB07-121	4	В	67	66	64.7	No	Mallard Pond
	RNB07-122	3	В	67	66	67.8	Yes	Mallard Pond
	RNB07-123 RNB07-124	3	B B	67 67	66 66	71.8 76.1	Yes Yes	Mallard Pond Mallard Pond
	RNB07-125	2	В	67	66	76.2	Yes	Mallard Pond
	RNB07-126	3	В	67	66	75.2	Yes	Mallard Pond
NB07	RNB07-127	3	В	67	66	70.0	Yes	Mallard Pond
	RNB07-128	3	В	67	66	65.5	No	Mallard Pond
	RNB07-129	3	В	67	66	63.5	No	Mallard Pond
	RNB07-130 RNB07-131	5 11	<u>В</u> В	67 67	66 66	58.7 58.9	No No	Mallard Pond Mallard Pond
	RNB07-131	3	В	67	66	60.3	No	Mallard Pond
	RNB07-133	5	В	67	66	63.1	No	Mallard Pond
NB07	RNB07-134	5	В	67	66	68.6	Yes	Mallard Pond
	RNB07-135	5	В	67	66	74.0	Yes	Mallard Pond
NB07	RNB07-136	9	В	67	66	76.0		Mallard Pond
NIDOT		. 2	В	67	66	70.2	Yes	Mallard Pond
	RNB07-137 RNB07-138	2	В	67	66	68.4	Yes	Mallard Pond

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Rece	eptor						
NB07	RNB07-140	3	В	67	66	62.4	No	Mallard Pond
NB07	RNB07-141	5	В	67	66	60.8	No	Mallard Pond
NB07 NB07	RNB07-142 RNB07-143	6	B B	67 67	66 66	57.9 59.1	No No	Mallard Pond Mallard Pond
NB07	RNB07-143	10	В	67	66	60.4	No	Mallard Pond
NB07	RNB07-145	6	В	67	66	62.2	No	Mallard Pond
NB07	RNB07-146	4	В	67	66	62.4	No	Mallard Pond
NB07	RNB07-147	6	В	67	66	64.9	No	Mallard Pond
NB07 NB07	RNB07-148 RNB07-149	6	В	67 67	66 66	71.6 75.9	Yes Yes	Mallard Pond Mallard Pond
NB07 NB07	RNB07-149	3	В	67	66	71.9	Yes	Mallard Pond Mallard Pond
NB07	RNB07-151	1	В	67	66	75.8	Yes	Mallard Pond
NB07	RNB07-152	1	В	67	66	72.1	Yes	Mallard Pond
NB07	RNB07-153	2	В	67	66	71.0	Yes	Mallard Pond
NB07	RNB07-154	2	В	67	66	69.0	Yes	Mallard Pond
NB07 NB07	RNB07-155 RNB07-156	5	B	67 67	66 66	64.1 61.1	No No	Mallard Pond Mallard Pond
NB07	RNB07-156	7	В	67	66	59.0	No	Mallard Pond
NB07	RNB07-158	8	В	67	66	57.1	No	Keystone Pointe
NB07	RNB07-159	14	В	67	66	57.0	No	Keystone Pointe
NB07	RNB07-160	6	В	67	66	57.3	No	Keystone Pointe
NB07	RNB07-161	4	В	67	66	54.5	No	Keystone Pointe
NB07 NB07	RNB07-162	3	В	67	66	70.8	Yes	Keystone Pointe
NB07 NB07	RNB07-163 RNB07-164	1 2	B B	67 67	66 66	70.9 70.2	Yes Yes	Keystone Pointe Keystone Pointe
NB07	RNB07-165	1	В	67	66	67.6	Yes	Keystone Pointe
NB07	RNB07-166	6	В	67	66	56.9	No	Keystone Pointe
NB07	RNB07-167	6	В	67	66	57.3	No	Keystone Pointe
NB07	RNB07-168	3	В	67	66	60.7	No	Keystone Pointe
NB07	RNB07-169	3	В	67	66	57.9	No	Keystone Pointe
NB07 NB07	RNB07-170 RNB07-171	2	B B	67 67	66 66	56.0 75.3	No Yes	Keystone Pointe Keystone Pointe
NB07	RNB07-171	1	В	67	66	74.4	Yes	Keystone Pointe
NB07	RNB07-173	2	В	67	66	71.5	Yes	Keystone Pointe
NB07	RNB07-174	2	В	67	66	66.5	Yes	Keystone Pointe
NB07	RNB07-175	2	В	67	66	64.1	No	Keystone Pointe
NB07	RNB07-176	4	В	67	66	58.9	No	Keystone Pointe
NB07 NB07	RNB07-177 RNB07-178	4 5	B B	67 67	66 66	55.9 59.1	No No	Keystone Pointe Keystone Pointe
NB07	RNB07-179	6	В	67	66	59.1	No	Keystone Pointe Keystone Pointe
NB07	RNB07-180	8	В	67	66	59.9	No	Keystone Pointe
NB07	RNB07-181	4	В	67	66	75.5	Yes	Keystone Pointe
NB07	RNB07-182	4	В	67	66	63.0	No	Keystone Pointe
NB07	RNB07-183	3	В	67	66	56.1	No	Keystone Pointe
NB07 NB07	RNB07-184 RNB07-185	3	B B	67 67	66 66	57.2 75.7	No Yes	Keystone Pointe Keystone Pointe
NB07	RNB07-186	3	В	67	66	63.1	No	Keystone Pointe Keystone Pointe
NB07	RNB07-187	3	В	67	66	62.5	No	Keystone Pointe
NB07	RNB07-188	1	В	67	66	76.1	Yes	Keystone Pointe
NB07	RNB07-189	1	В	67	66	75.1	Yes	Keystone Pointe
NB07	RNB07-190	2	В	67	66	72.0	Yes	Keystone Pointe
NB07 NB07	RNB07-191 RNB07-192	3	<u>В</u> В	67 67	66 66	68.0 65.3	Yes No	Keystone Pointe Keystone Pointe
NB07	RNB07-192 RNB07-193	3	В	67	66	56.6	No	Keystone Pointe Keystone Pointe
NB07	RNB07-194	4	В	67	66	60.4	No	Keystone Pointe
NB07	RNB07-195	2	В	67	66	58.1	No	Keystone Pointe
NB07	RNB07-196	6	В	67	66	57.9	No	Keystone Pointe
NB07	RNB07-197	3	В	67	66	55.7	No	Keystone Pointe

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Rece	eptor						
NB08	RNB08-198	2	В	67	66	59.4		Whaleys Landing
NB08 NB08	RNB08-199	1	В	67	66	60.3	No No	Whaleys Landing
NB08	RNB08-200 RNB08-201	1	B B	67 67	66 66	60.9 61.7	No No	Whaleys Landing Whaleys Landing
NB08	RNB08-202	1	В	67	66	62.8		Whaleys Landing
NB08	RNB08-203	6	В	67	66	66.8	Yes	Whaleys Landing
NB08	RNB08-204	1	В	67	66	64.9	No	Whaleys Landing
NB08 NB08	RNB08-205 RNB08-206	4	В	67 67	66 66	62.6 68.8	No Yes	Whaleys Landing Whaleys Landing
NB08	RNB08-207	1	В	67	66	64.7	No	Whaleys Landing
NB08	RNB08-208	1	В	67	66	66.5	Yes	Whaleys Landing
NB08	RNB08-209	1	В	67	66	71.4	Yes	Whaleys Landing
NB08 NB08	RNB08-210 RNB08-211	1	B	67 67	66	63.7 71.8	No Yes	Canoe Creek Lakes Whaleys Landing
NB08	RNB08-212	5	В	67	66	65.6	No	Canoe Creek Lakes
NB08	RNB08-213	5	В	67	66	58.2	No	Canoe Creek Lakes
NB08	RNB08-214	4	В	67	66	69.5	Yes	Canoe Creek Lakes
NB08	RNB08-215	1	В	67	66	72.9	Yes	Whaleys Landing
NB08	RNB08-216	1	В	67	66	73.3	Yes Yes	Whaleys Landing
NB08 NB08	RNB08-217 RNB08-218	4 12	B B	67 67	66 66	68.6 58.4	No	Canoe Creek Lakes Canoe Creek Lakes
NB08	RNB08-219	18	В	67	66	55.9	No	Canoe Creek Lakes
NB08	RNB08-220	1	В	67	66	72.8	Yes	Whaleys Landing
NB08	RNB08-221	1	В	67	66	73.2	Yes	Whaleys Landing
NB08	RNB08-222	1	В	67	66	73.0	Yes	Whaleys Landing
NB08 NB08	RNB08-223 RNB08-224	4 10	B B	67 67	66	68.4 56.7	Yes No	Canoe Creek Lakes Canoe Creek Lakes
NB08	RNB08-225	5	В	67	66	56.3	No	Canoe Creek Lakes
NB08	RNB08-226	5	В	67	66	54.6	No	Canoe Creek Lakes
NB08	RNB08-227	4	В	67	66	57.9	No	Canoe Creek Lakes
NB08	RNB08-228	5	В	67	66	70.3	Yes	Canoe Creek Lakes
NB08 NB08	RNB08-229	1	В	67	66 66	72.5	Yes	Whaleys Landing
NB08	RNB08-230 RNB08-231	1	B B	67 67	66	74.7 73.8	Yes Yes	Whaleys Landing Whaleys Landing
NB08	RNB08-232	4	В	67	66	70.5	Yes	Canoe Creek Lakes
NB08	RNB08-233	5	В	67	66	56.8	No	Canoe Creek Lakes
NB08	RNB08-234	1	В	67	66	74.2	Yes	Whaleys Landing
	RNB08-235	1	В	67	66	74.6	Yes	Whaleys Landing
NB08 NB08	RNB08-236 RNB08-237	5 3	B B	67 67	66 66	69.5 57.3	Yes No	Canoe Creek Lakes Canoe Creek Lakes
NB08	RNB08-238	1	В	67	66	75.3	Yes	Whaleys Landing
NB08	RNB08-239	1	В	67	66	74.8	Yes	Whaleys Landing
NB08	RNB08-240	1	В	67	66	70.7	Yes	Canoe Creek Lakes
NB08	RNB08-241	1	В	67	66	74.4	Yes	Whaleys Landing
NB08 NB08	RNB08-242 RNB08-243	1	В В	67 67	66 66	74.5 74.2	Yes Yes	Whaleys Landing Whaleys Landing
NB08	RNB08-244	1	В	67	66	73.5	Yes	Whaleys Landing Whaleys Landing
NB08	RNB08-245	5	В	67	66	57.5	No	Cypress Point
SB01	RSB01-001	1	В	67	66	58.5	No	Single Family Residence
SB01	RSB01-002	1	В	67	66	57.3	No	Single Family Residence
SB02 SB02	RSB02-001 RSB02-002	1	В В	67 67	66 66	65.6 66.0	No Yes	Single Family Residence Single Family Residence
SB02	RSB02-002 RSB02-003	1	В	67	66	60.9	No	Single Family Residence Single Family Residence
SB02	RSB02-004	1	В	67	66	61.8	No	Single Family Residence
SB02	RSB02-005	1	В	67	66	65.3	No	Single Family Residence
SB03	RSB03-001	1	В	67	66	64.7	No	Single Family Residence
SB03	RSB03-002	1	В	67	66	65.2	No	Single Family Residence
SB03	RSB03-003	1	В	67	66	63.0	No	Single Family Residence

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Rece	eptor						
SB03	RSB03-004	1	В	67	66	69.2	Yes	Single Family Residence
SB03	RSB03-005	2	В	67	66	67.2	Yes	Single Family Residence
SB03 SB03	R\$B03-006 R\$B03-007	1	B B	67 67	66 66	63.7 66.1	No Yes	Single Family Residence Single Family Residence
SB03	R\$B03-008	1	В	67	66	60.9	No	Single Family Residence
SB03	RSB03-009	1	В	67	66	58.1	No	Single Family Residence
SB03	RSB03-010	1	В	67	66	58.9	No	Single Family Residence
SB03 SB05	RSB03-011 RSB05-001	1	В	67 67	66 66	56.5 63.8	No No	Single Family Residence Single Family Residence
SB05	RSB05-002	1	В	67	66	67.5	Yes	Single Family Residence
SB05	RSB05-003	1	В	67	66	67.5	Yes	Single Family Residence
SB05	RSB05-004	1	В	67	66	58.5	No	Single Family Residence
SB06 SB06	RSB06-001 RSB06-002	2	B	67 67	66	73.0 68.7	Yes Yes	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-002	6	В	67	66	65.8	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-004	5	В	67	66	62.5	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-005	8	В	67	66	60.4	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-006	A	В	67	66	59.9	No	Eden & The Meadow at Cross Prairie
SB06 SB06	RSB06-007 RSB06-008	4	B B	67 67	66 66	62.9 68.7	No Yes	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-009	6	В	67	66	60.5	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-010	22	В	67	66	57.9	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-011	10	В	67	66	61.7	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-012	25	В	67	66	59.1	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-013	4	В	67	66	61.6	No	Eden & The Meadow at Cross Prairie
SB06 SB06	RSB06-014 RSB06-015	3	B B	67 67	66 66	65.6 69.9	No Yes	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-016	1	В	67	66	72.4	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-017	1	В	67	66	73.7	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-018	6	В	67	66	61.9	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-019	12	B B	67	66	59.9	No	Eden & The Meadow at Cross Prairie
SB06 SB06	RSB06-020 RSB06-021	22 10	В	67 67	66 66	58.6 60.8	No No	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-022	6	В	67	66	59.3	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-023	6	В	67	66	71.8	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-024	1	В	67	66	73.2	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-025	3	В	67	66	70.8 66.0	Yes	Eden & The Meadow at Cross Prairie
SB06 SB06	RSB06-026 RSB06-027	3 8	B B	67 67	66 66	65.7	No	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-028	6	В	67	66	65.7	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-029	16	В	67	66	59.5	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-030	8	В	67	66	56.2	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-031	11	В	67	66	57.3	No	Eden & The Meadow at Cross Prairie
SB06 SB06	RSB06-032 RSB06-033	6 6	B B	67 67	66 66	66.3 64.7	Yes No	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-034	11	В	67	66	57.0		Eden & The Meadow at Cross Prairie
SB06	RSB06-035	15	В	67	66	56.2	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-036	17	В	67	66	55.6	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-037	11	В	67	66	57.3	No	Eden & The Meadow at Cross Prairie
SB06 SB06	RSB06-038 RSB06-039	2 4	<u>В</u> В	67 67	66 66	63.0 64.8	No No	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-040	10	В	67	66	58.7	No	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
SB06	RSB06-041	12	В	67	66	63.7	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-042	8	В	67	66	55.9	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-043	5	В	67	66	56.3	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-044	8	В	67	66	52.9	No No	Eden & The Meadow at Cross Prairie
SB06 SB06	RSB06-045 RSB06-046	8 1	B B	67 67	66 66	64.8 71.2	No Yes	Eden & The Meadow at Cross Prairie Eden & The Meadow at Cross Prairie
0000	110000-040	_ ' _	ם	υı	00	11.2	162	Lucii & The Meadow at 01055 Flattle

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Rece	eptor						
SB06	RSB06-047	3	В	67	66	72.9	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-048	2	В	67	66	74.0	Yes	Eden & The Meadow at Cross Prairie
SB06	R\$B06-049	2	В	67	66	75.3	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-050	4	В	67	66	64.0	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-051	8	В	67	66	59.0	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-052	12	В	67	66	57.4	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-053	5	В	67	66	58.4	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-054	4	В	67	66	73.4	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-055	8	В	67	66	64.3	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-056	14	В	67	66	66.5	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-057	10	В	67	66	58.7	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-058	5	В	67	66	62.0	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-059	2	В	67	66	76.1	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-060	6	В	67	66	74.6	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-061	5	В	67	66	67.1	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-062	3	В	67	66	62.5	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-063	2	В	67	66	75.7	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-064	4	В	67	66	74.3	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-065	5	В	67	66	72.1	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-066	5	В	67	66	65.3	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-067	2	В	67	66	73.4	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-068	3	В	67	66	75.1	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-069	1	В	67	66	75.8	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-070	3	В	67	66	70.2	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-071	1	В	67	66	75.7	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-072	3	В	67	66	74.6	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-073	5	В	67	66	73.3	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-074	2	В	67	66	72.7	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-075	3	В	67	66	74.2	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-076	4	В	67	66	71.0	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-077	4	В	67	66	68.3	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-078	2	В	67	66	64.8	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-079	2	В	67	66	57.7	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-080	4	В	67	66	61.6	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-081	2	В	67	66	72.8	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-082	3	В	67	66	71.5	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-083	1	В	67	66	68.8	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-084	3	В	67	66	66.7	Yes	Eden & The Meadow at Cross Prairie
SB06	RSB06-085	2	В	67	66	64.6	No	Eden & The Meadow at Cross Prairie
SB06	RSB06-086	5	В	67	66	62.2	No	Eden & The Meadow at Cross Prairie

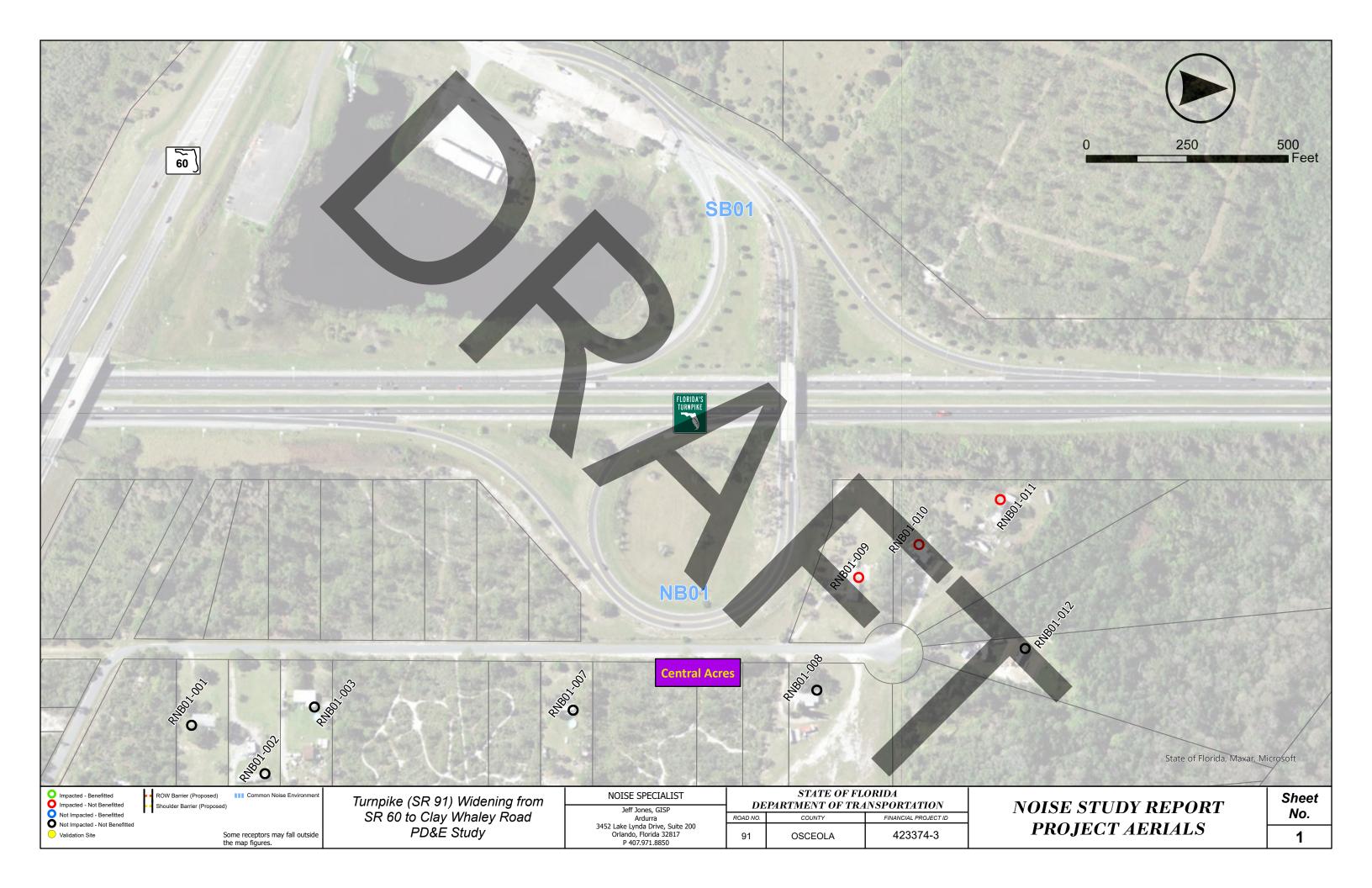
Appendix B-2 – Special Land Use Sites Predicted Noise Levels

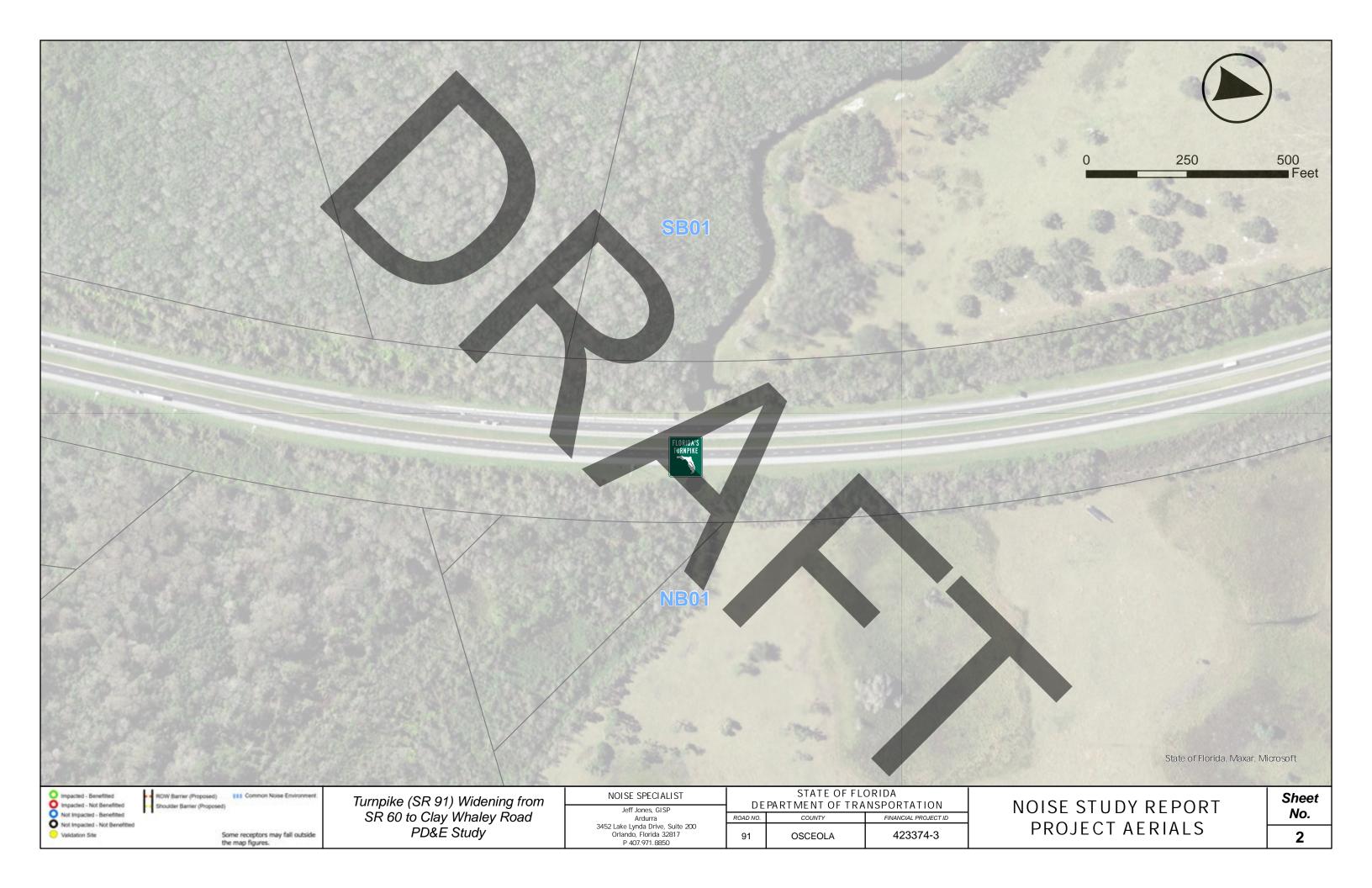
Appendix B-2

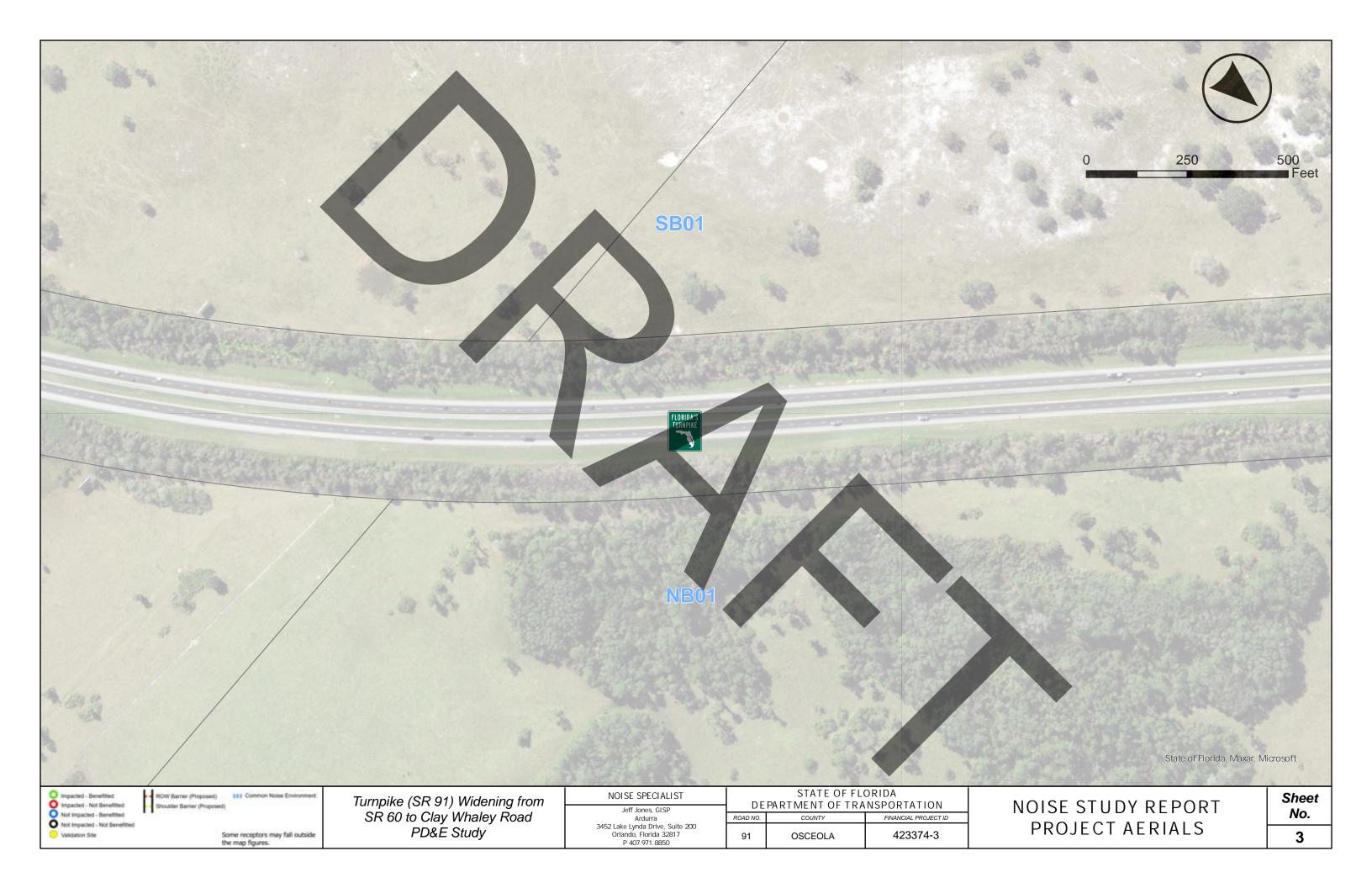
Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2042 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X Impacted Receptor								
NB08	NNB08-001	0.49	С	67	66	71.8	Yes	La Senda Church Playground

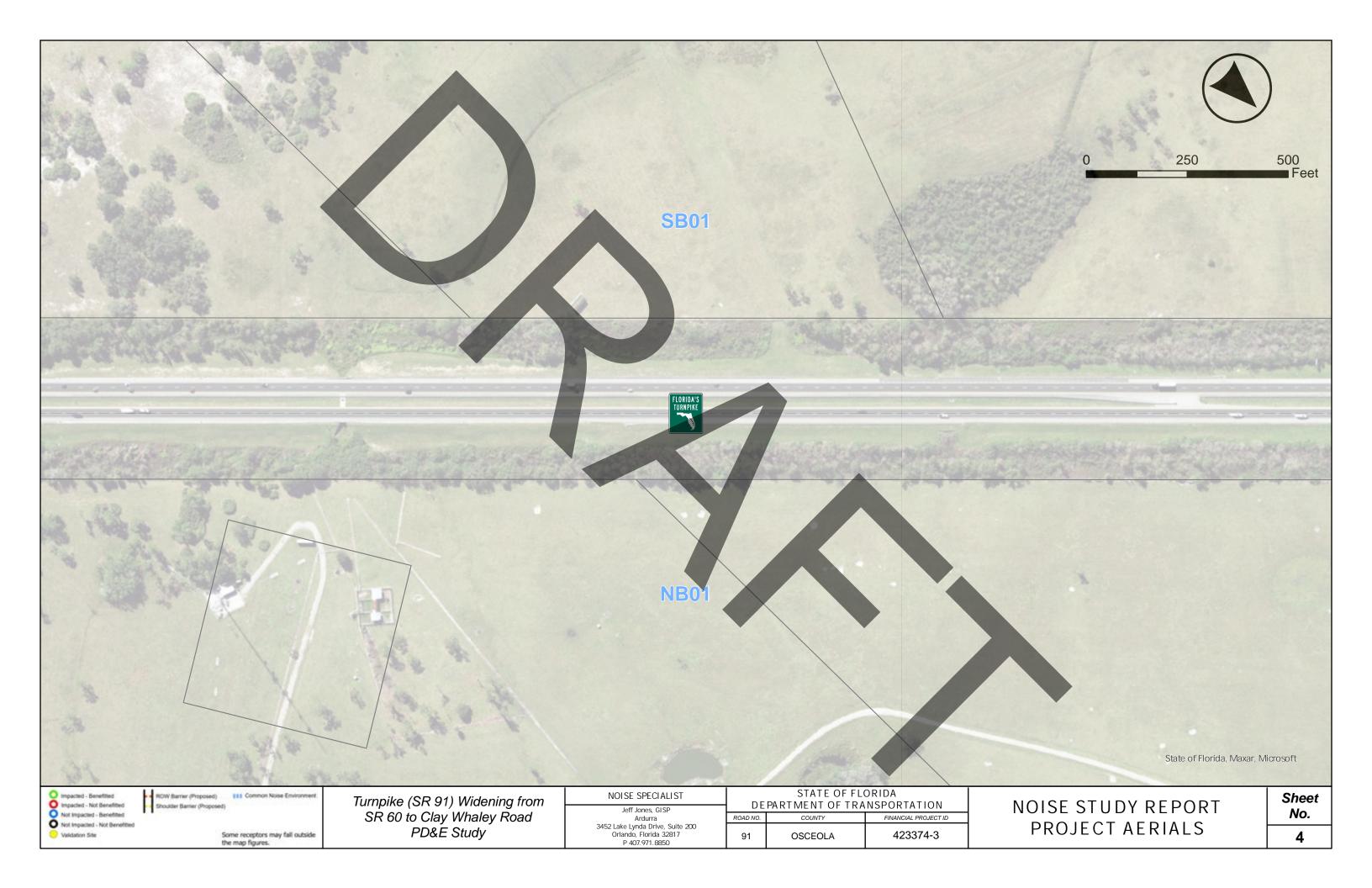
Appendix C Project Noise Contours

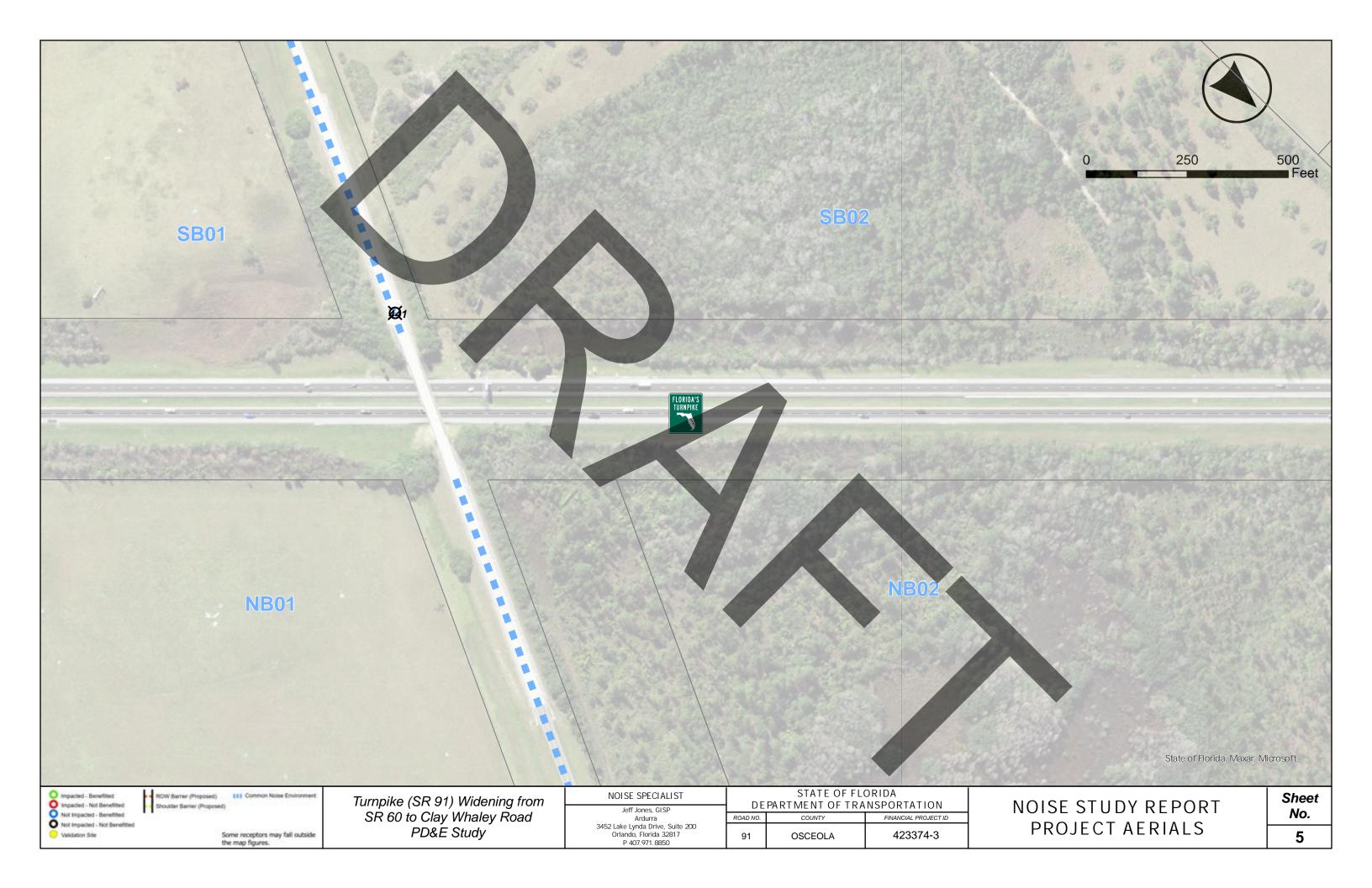
Appendix D Project Aerials

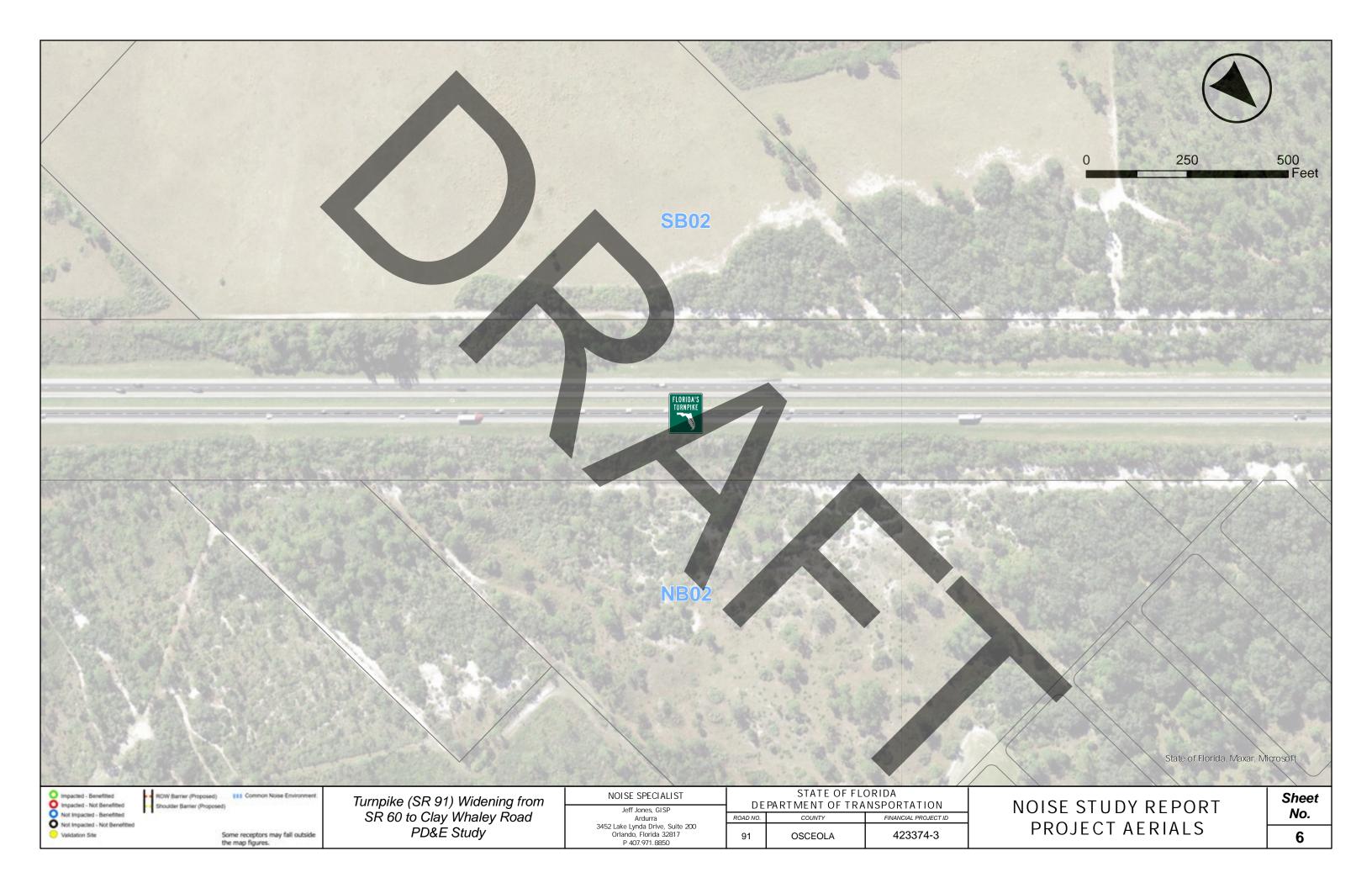


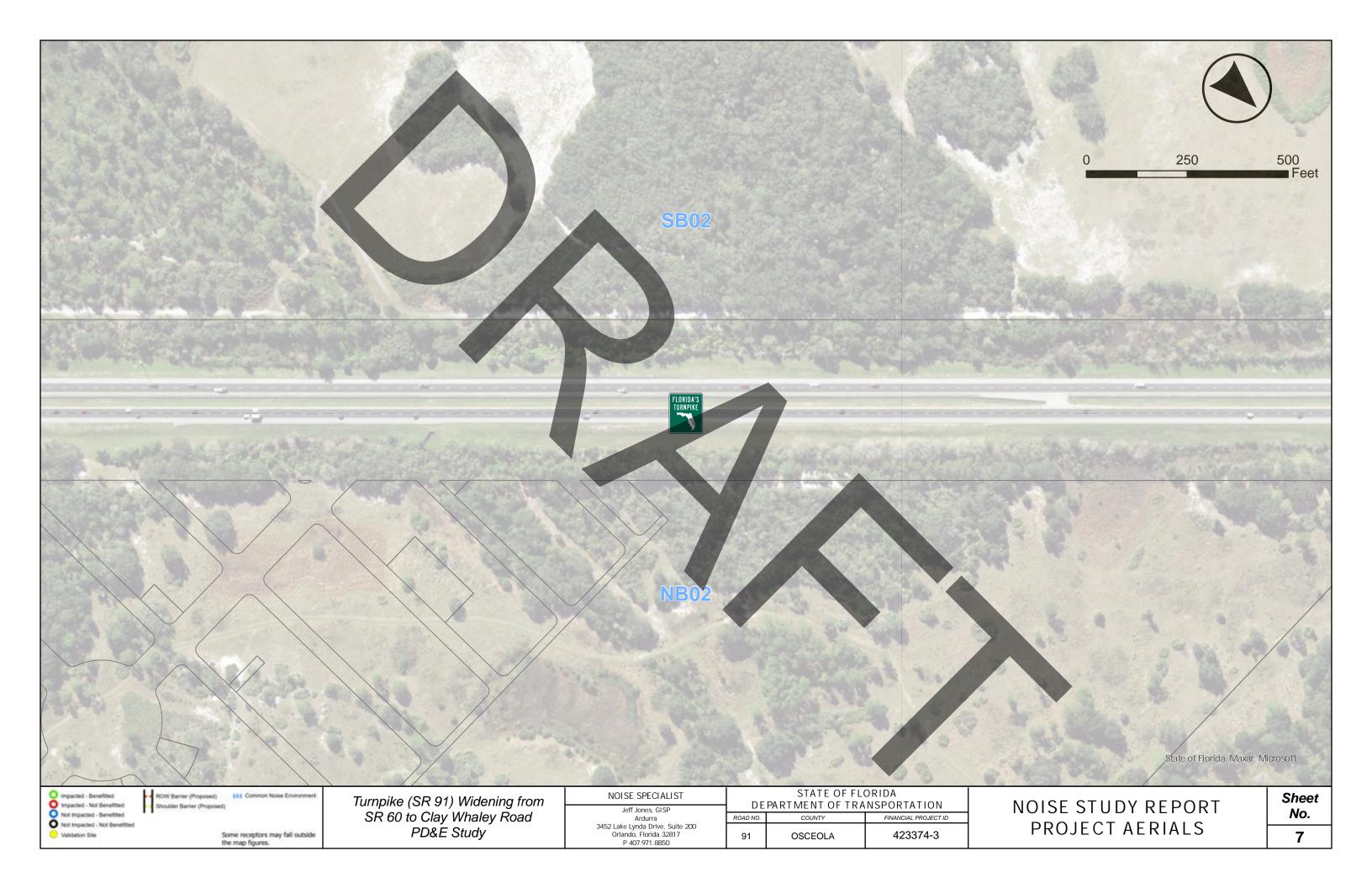


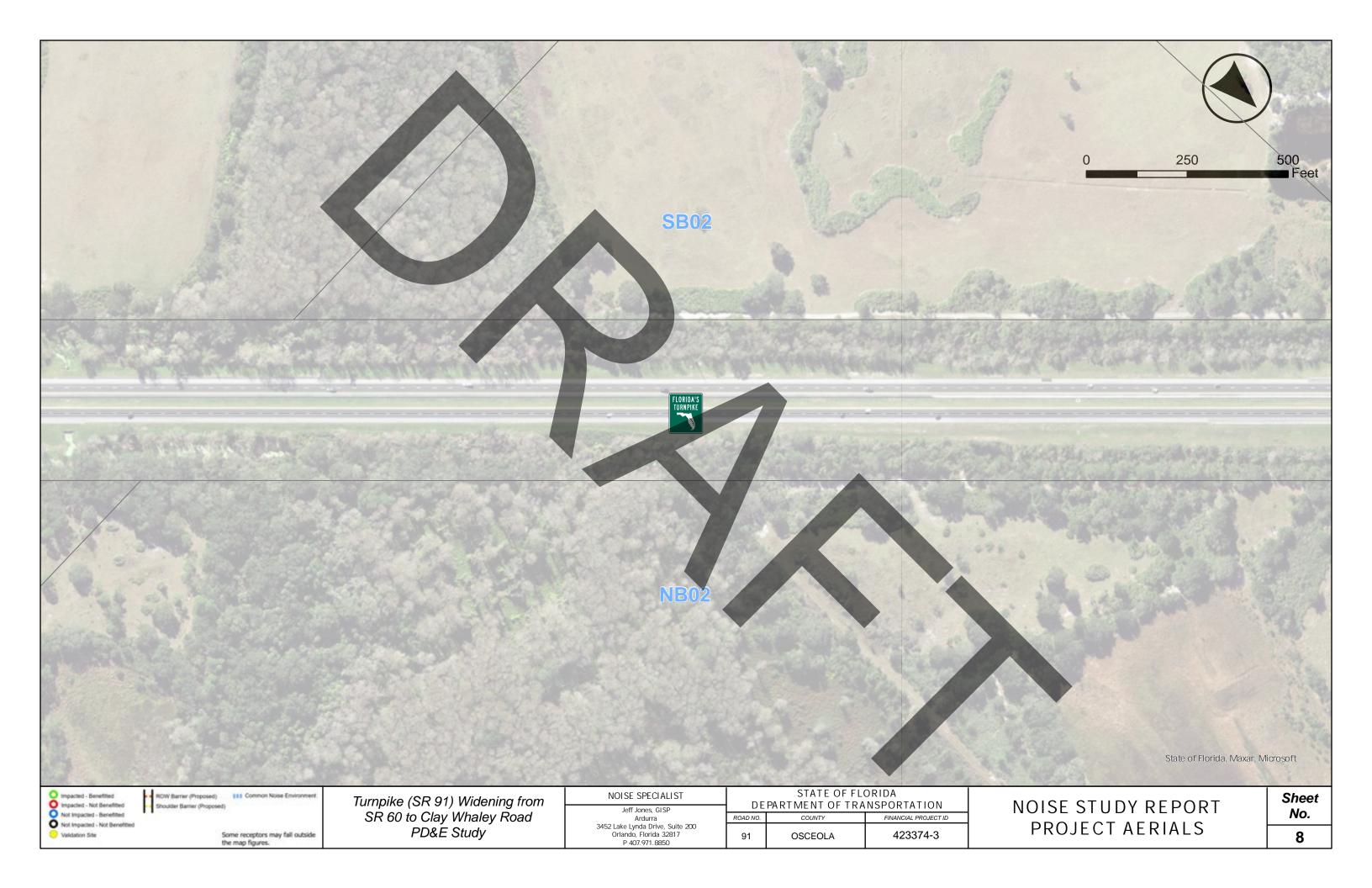


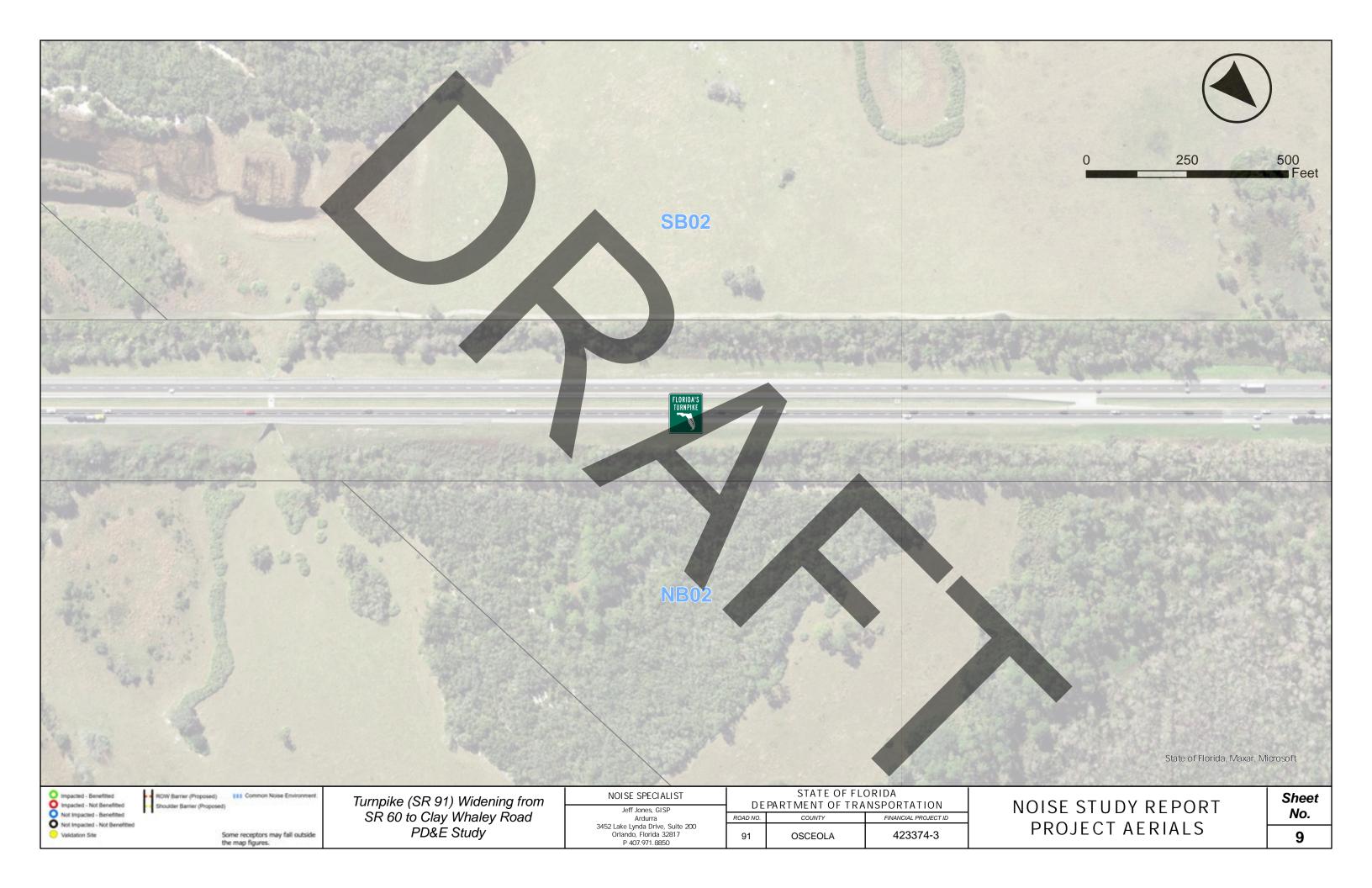


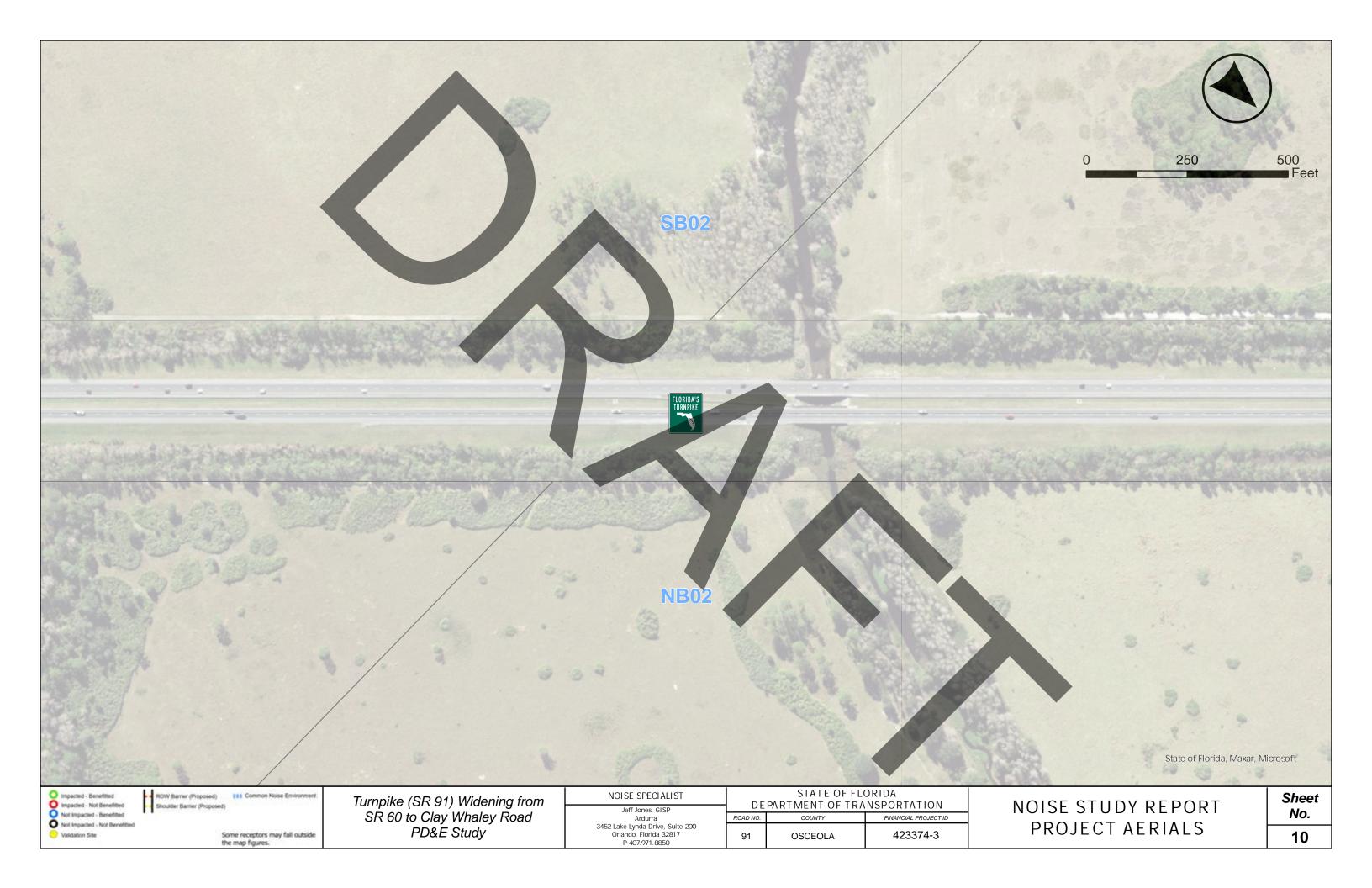


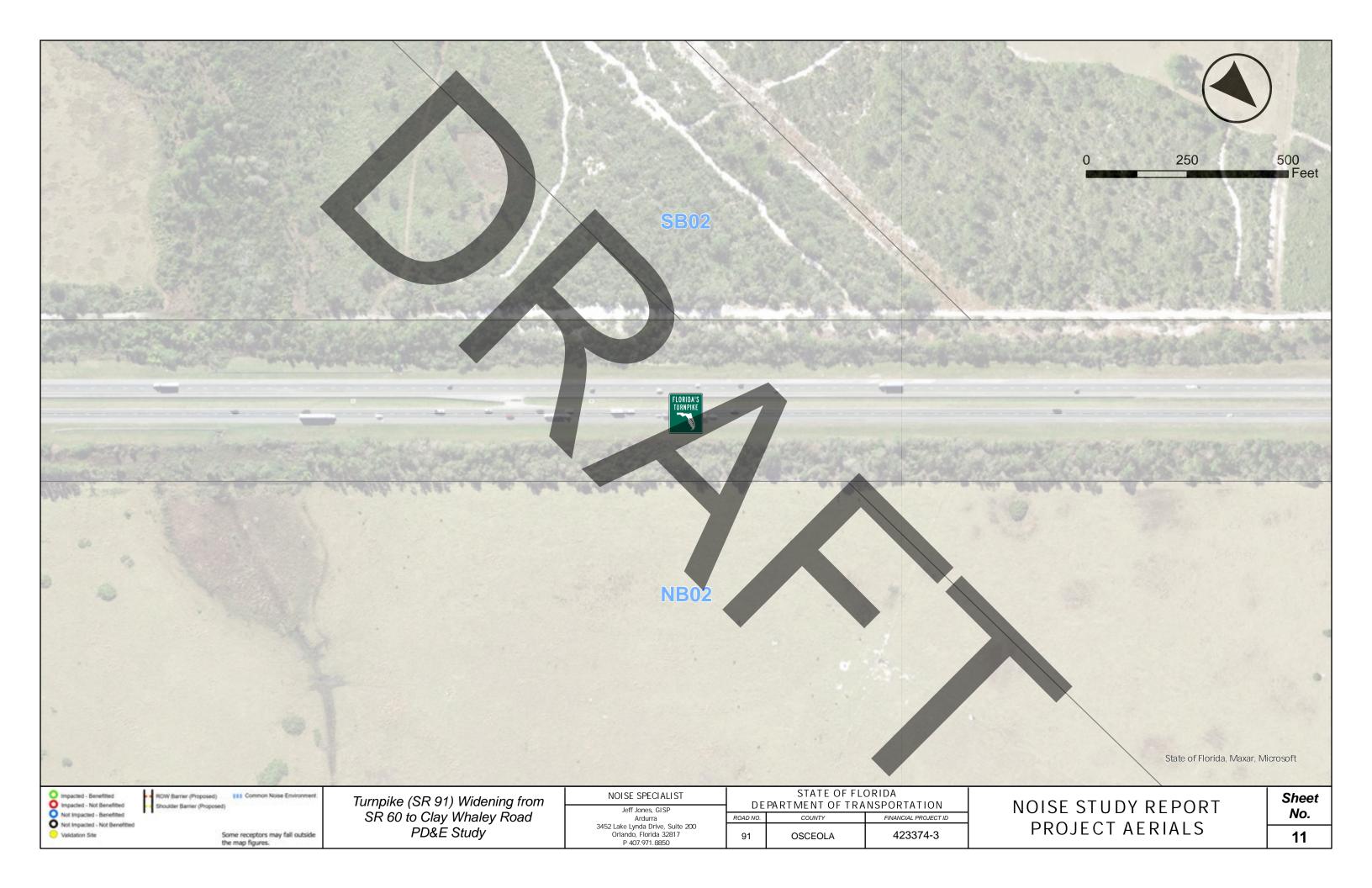


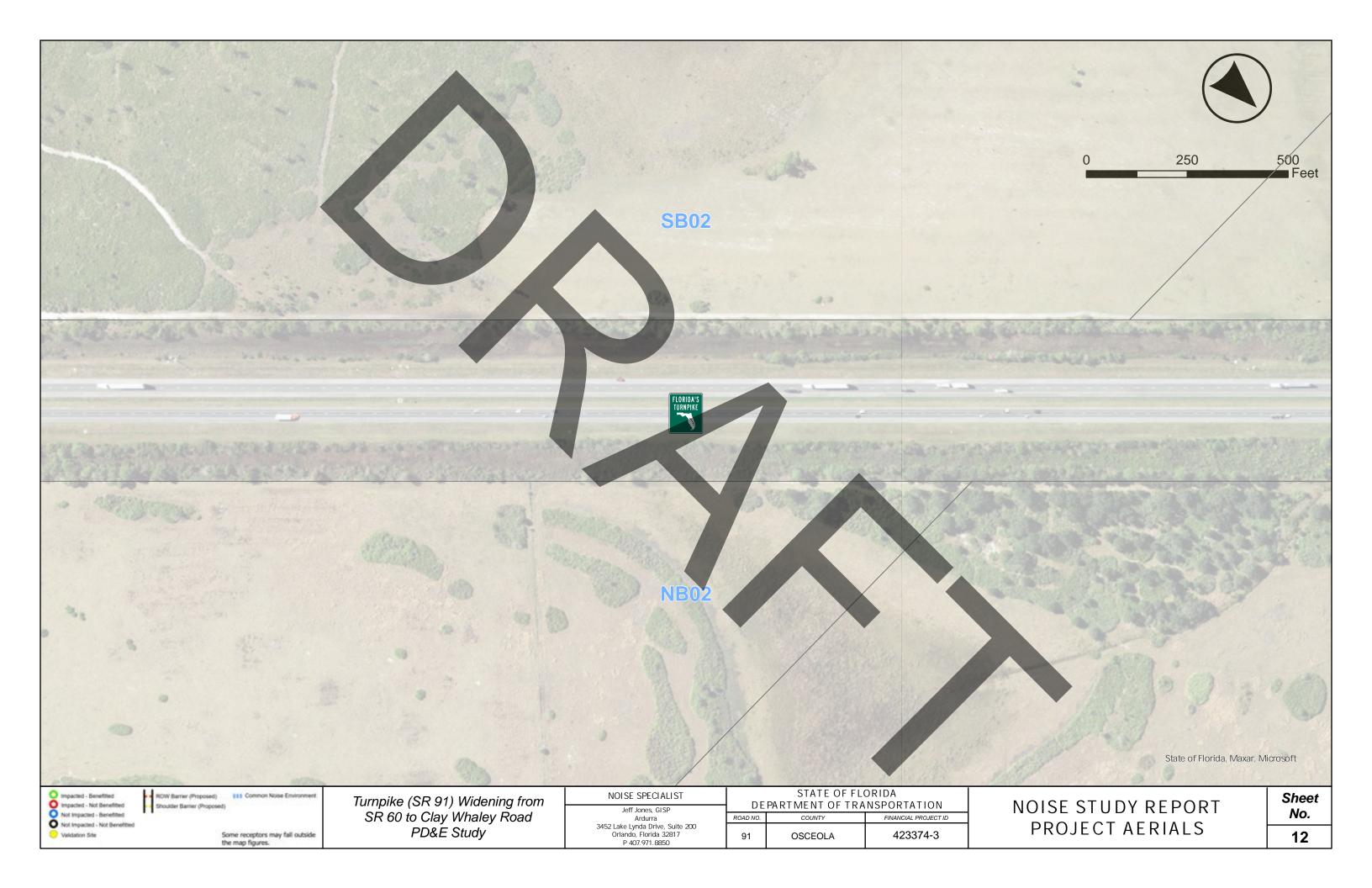


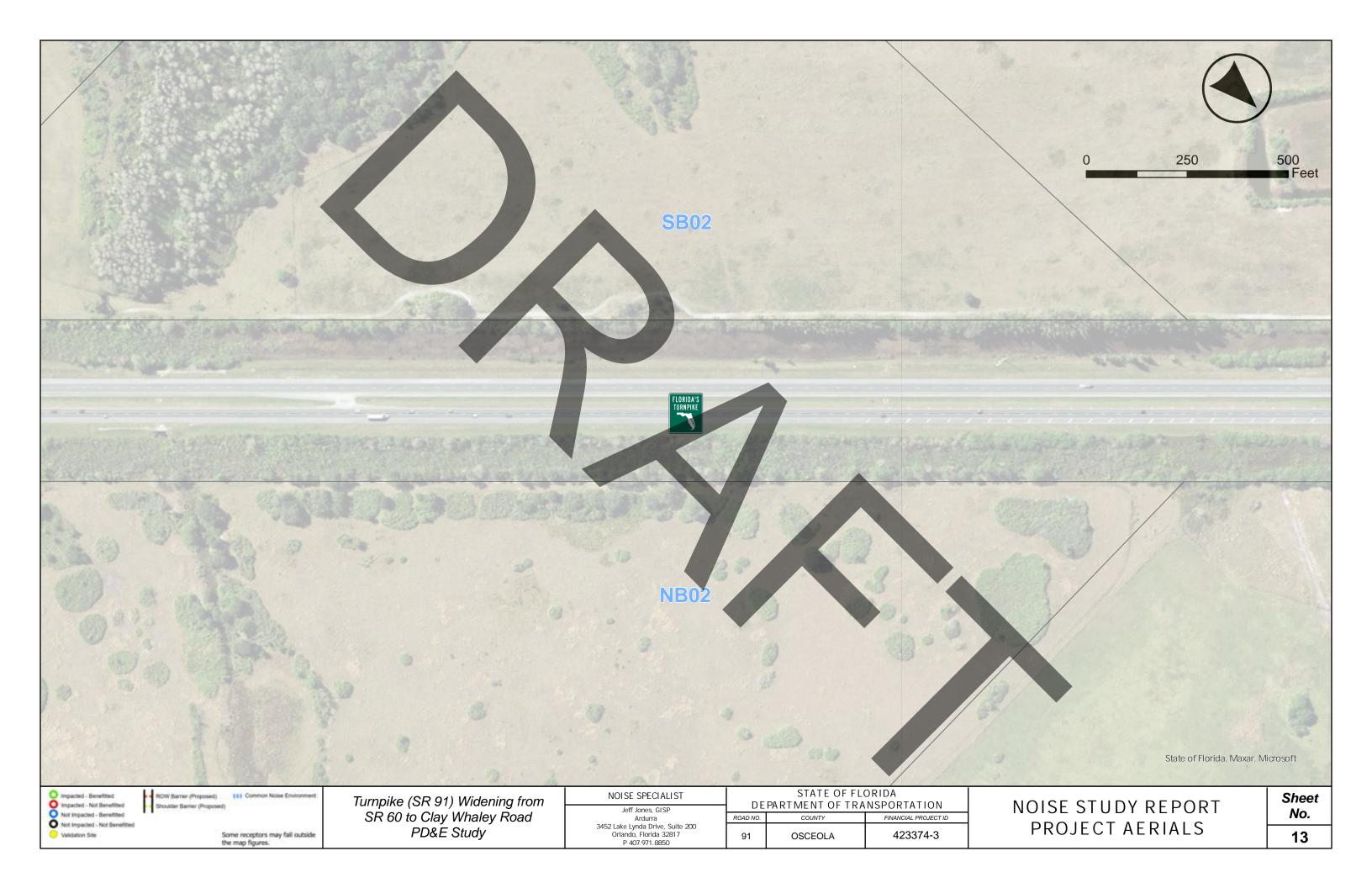


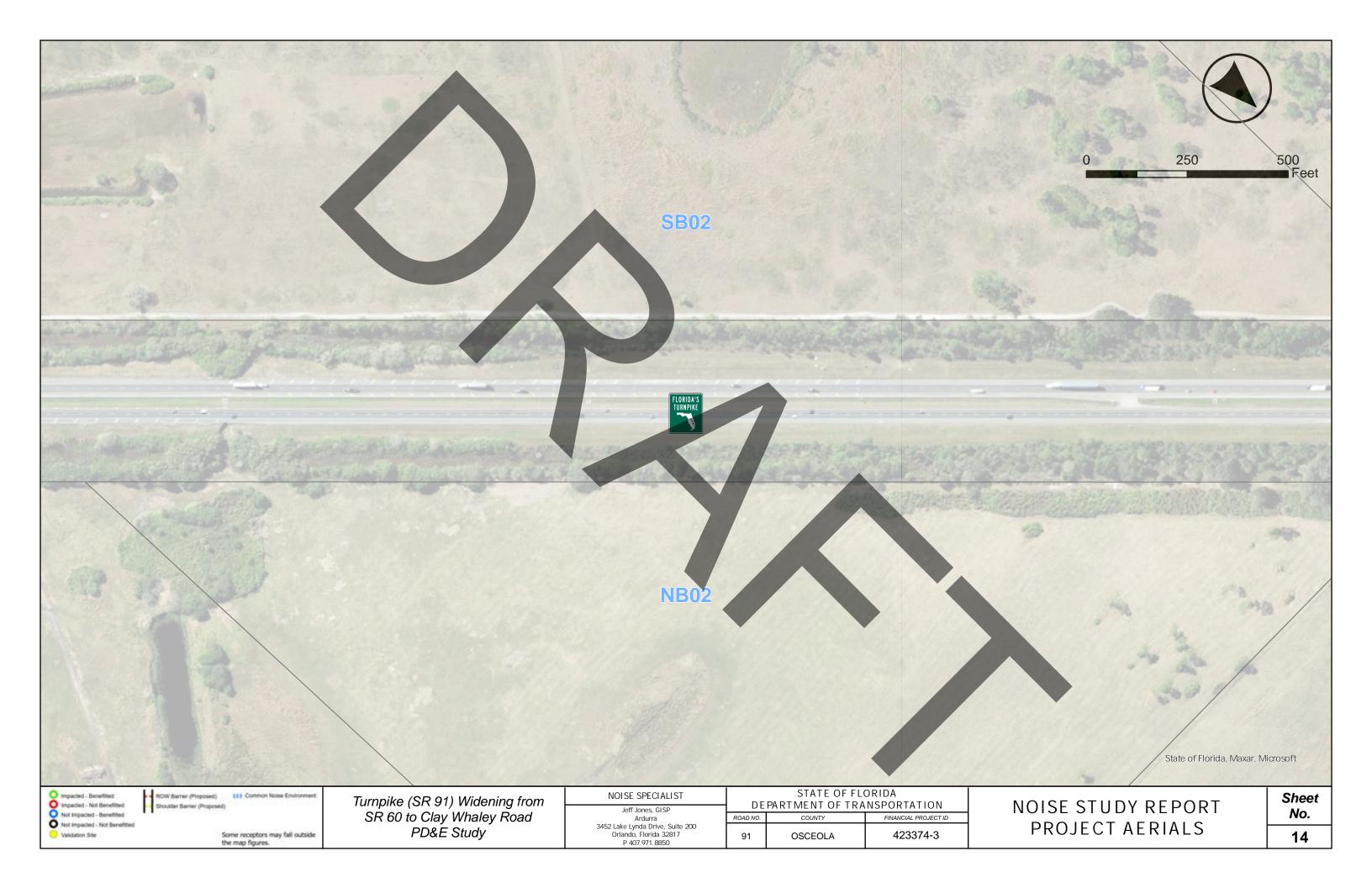


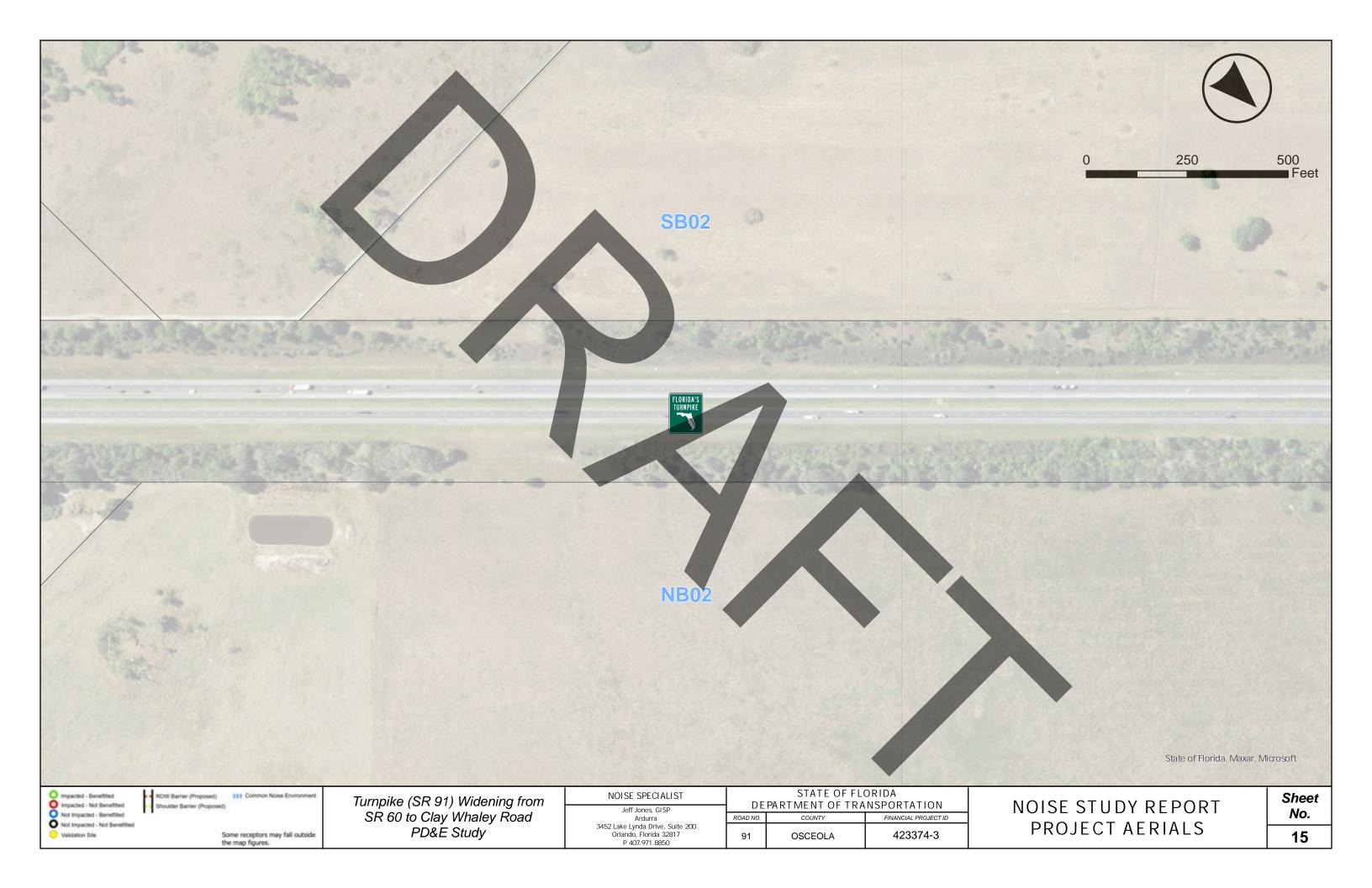


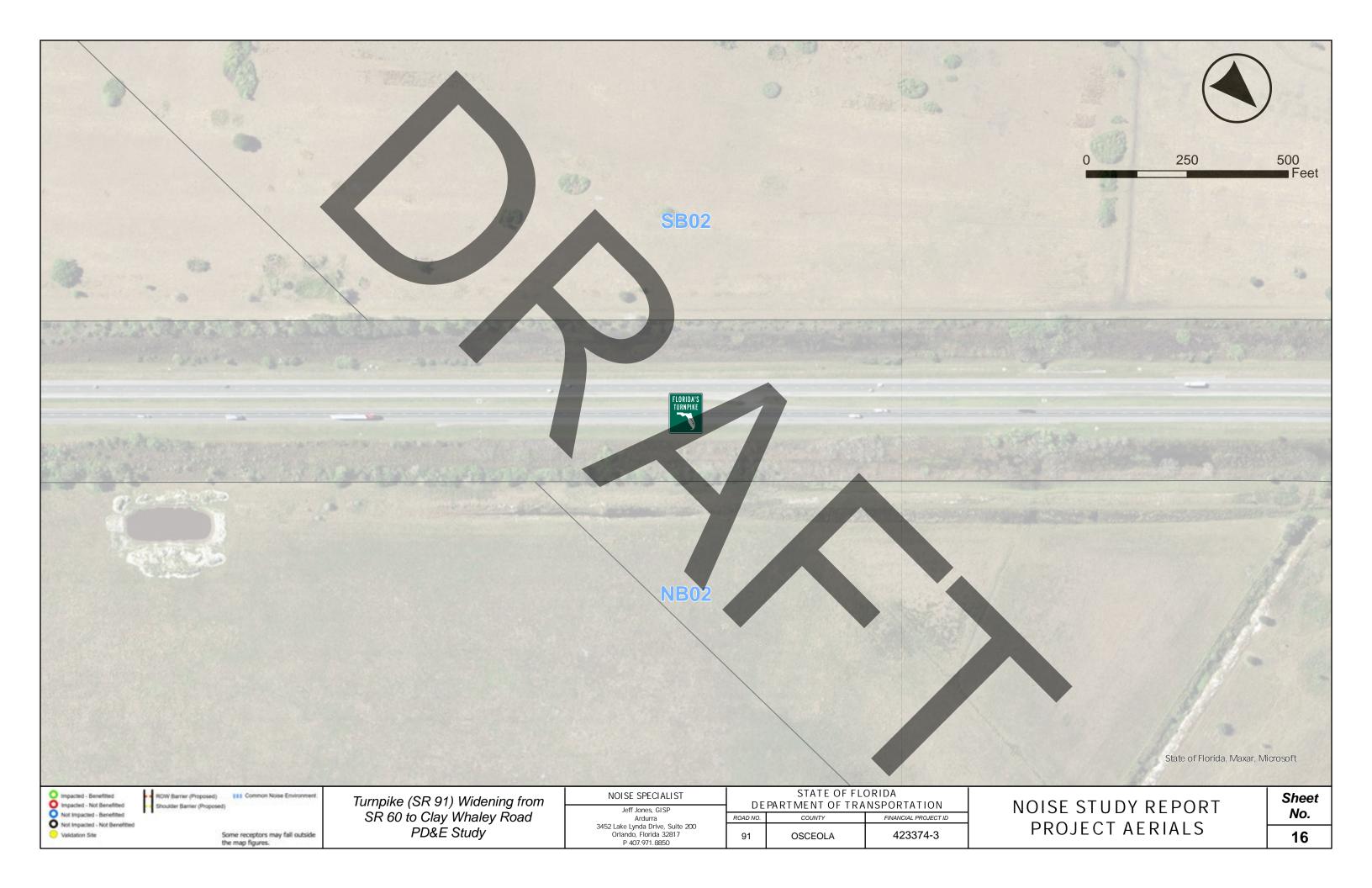


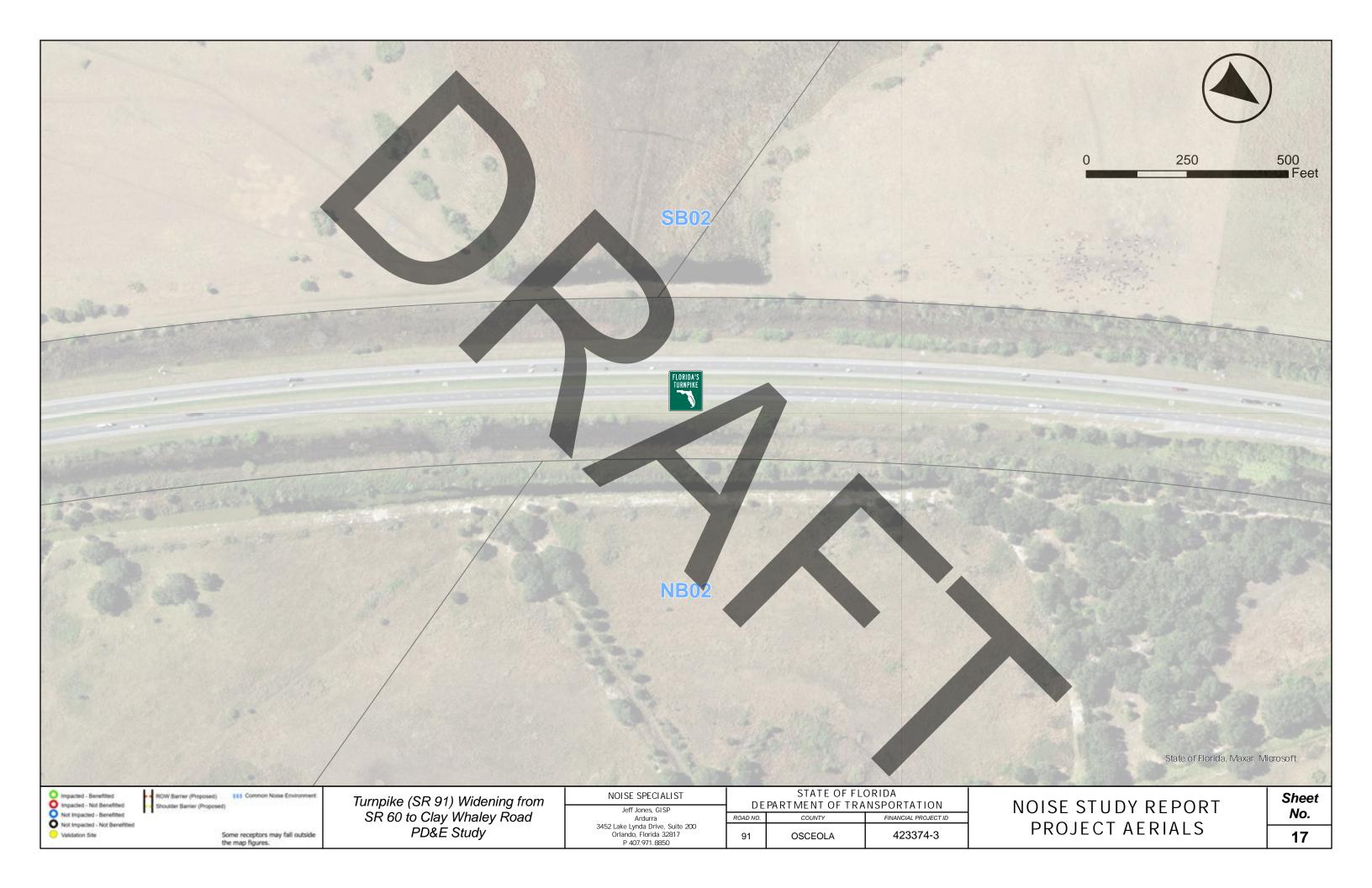


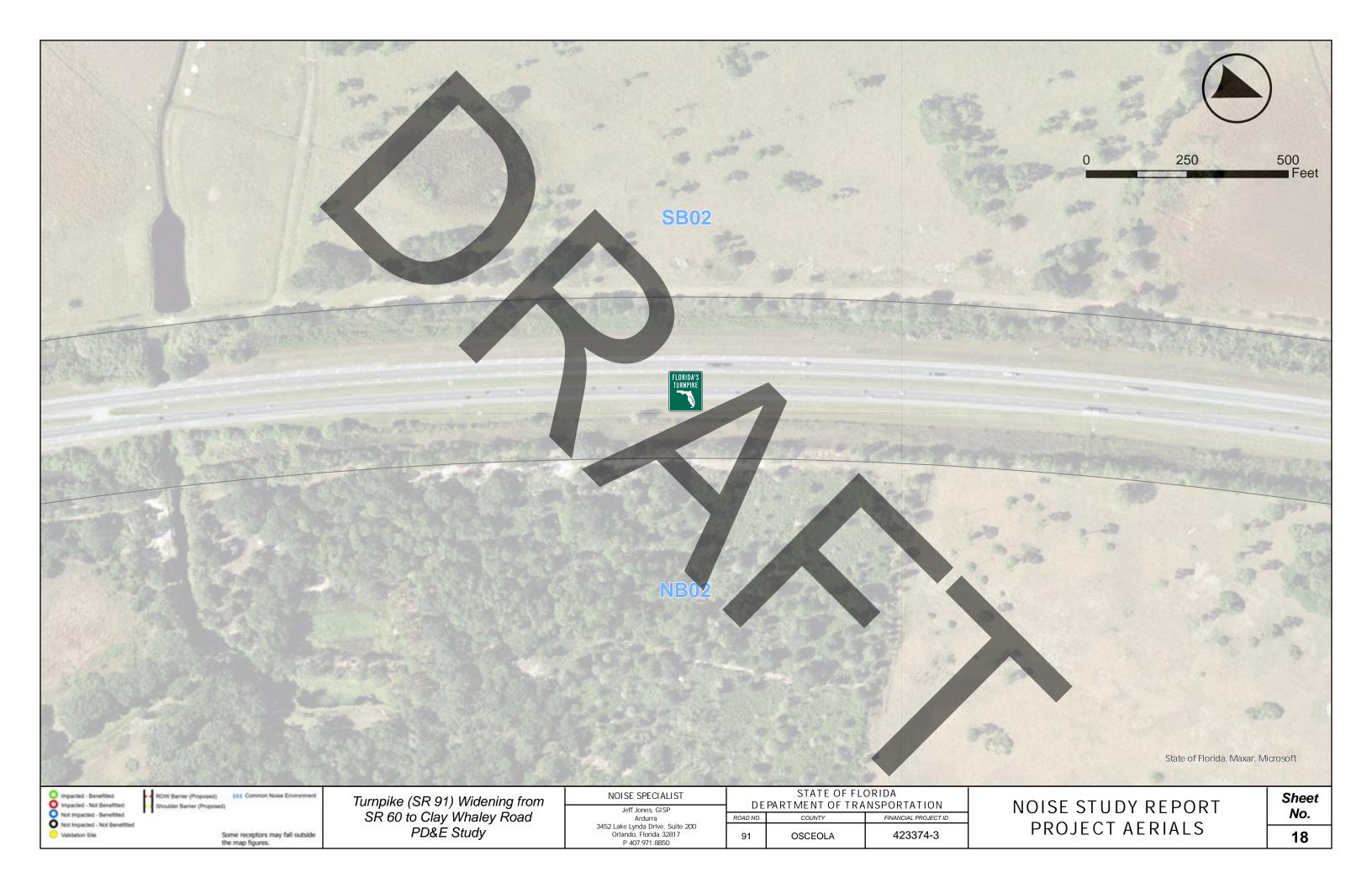


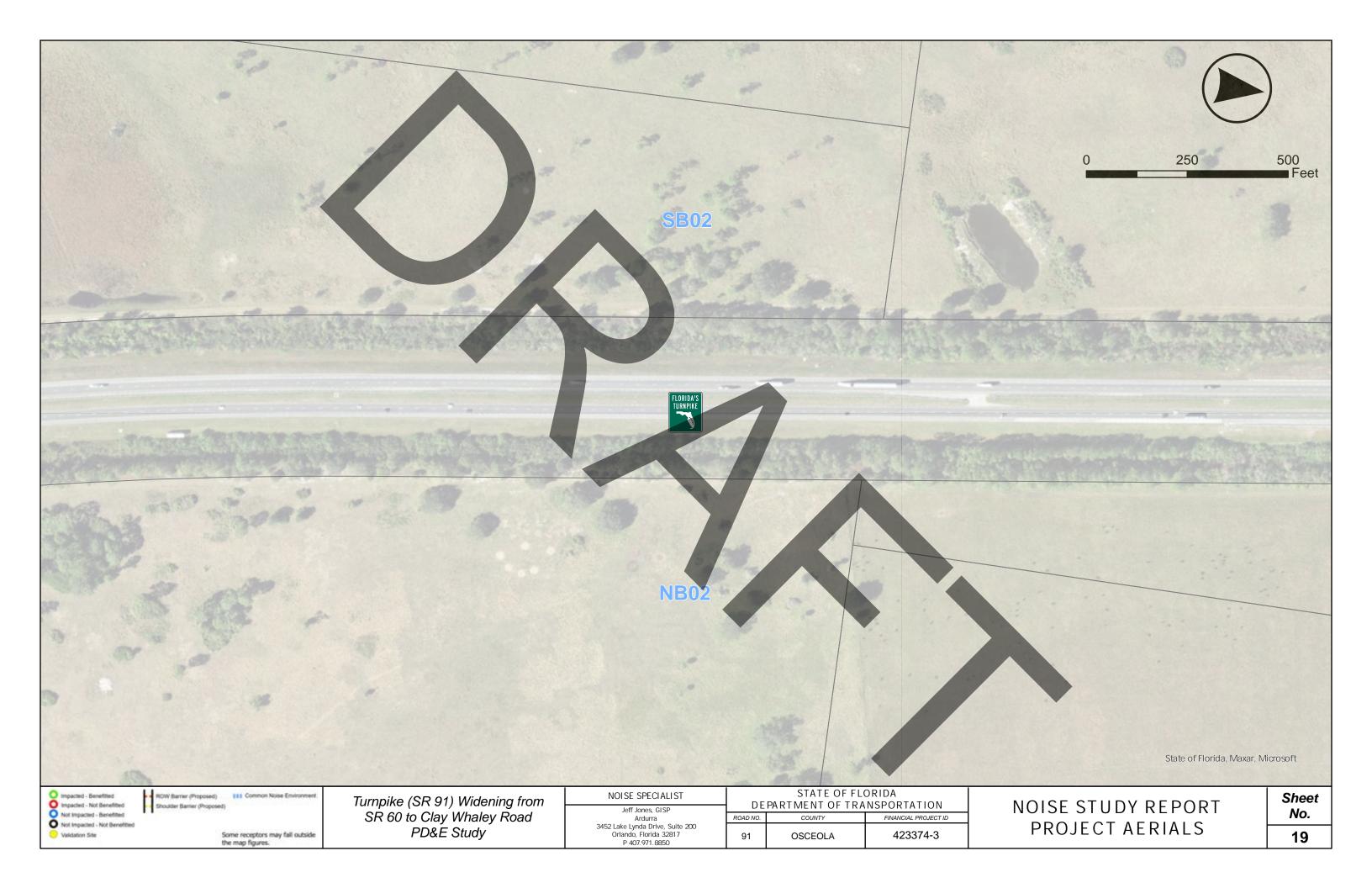


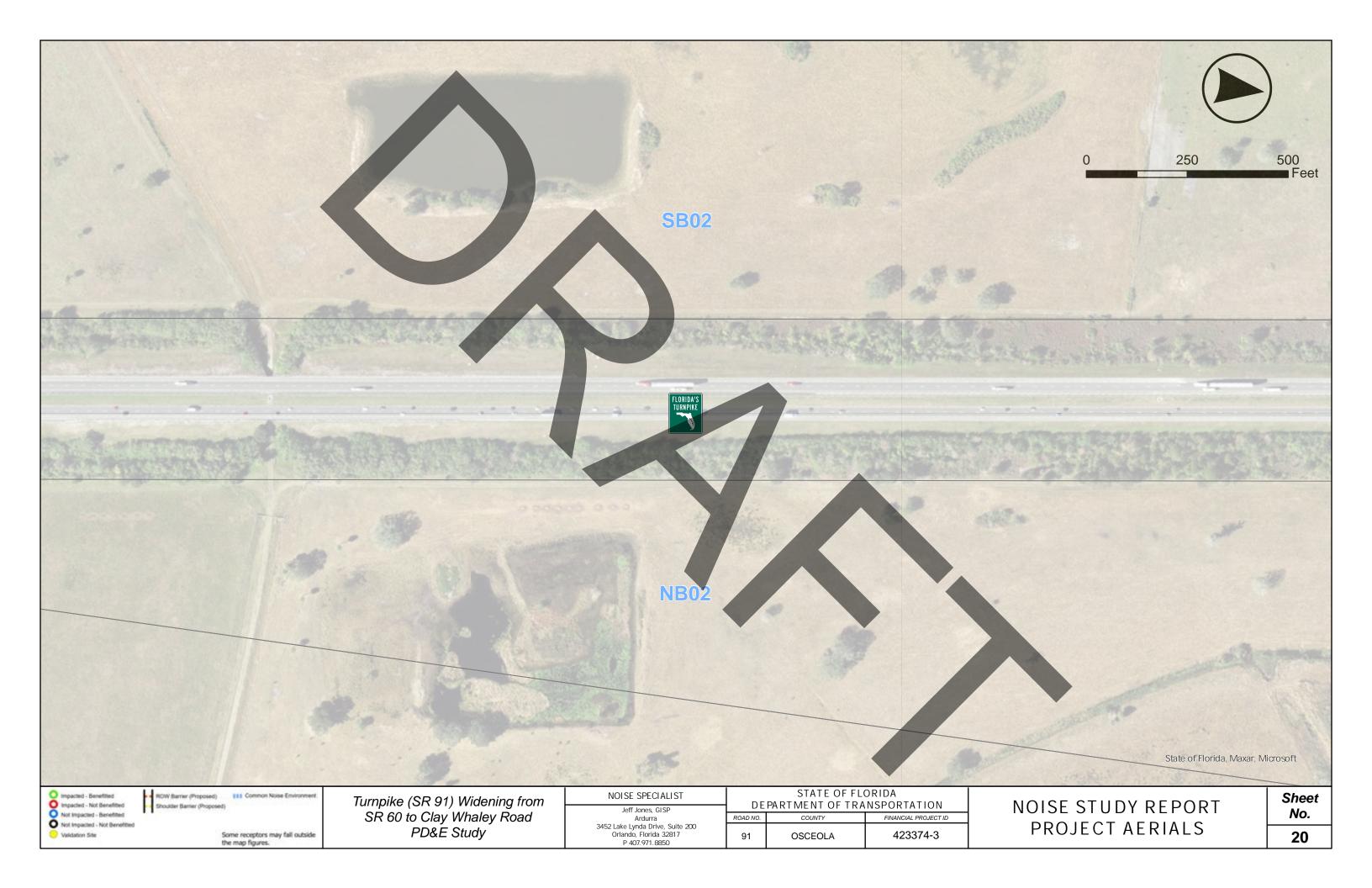


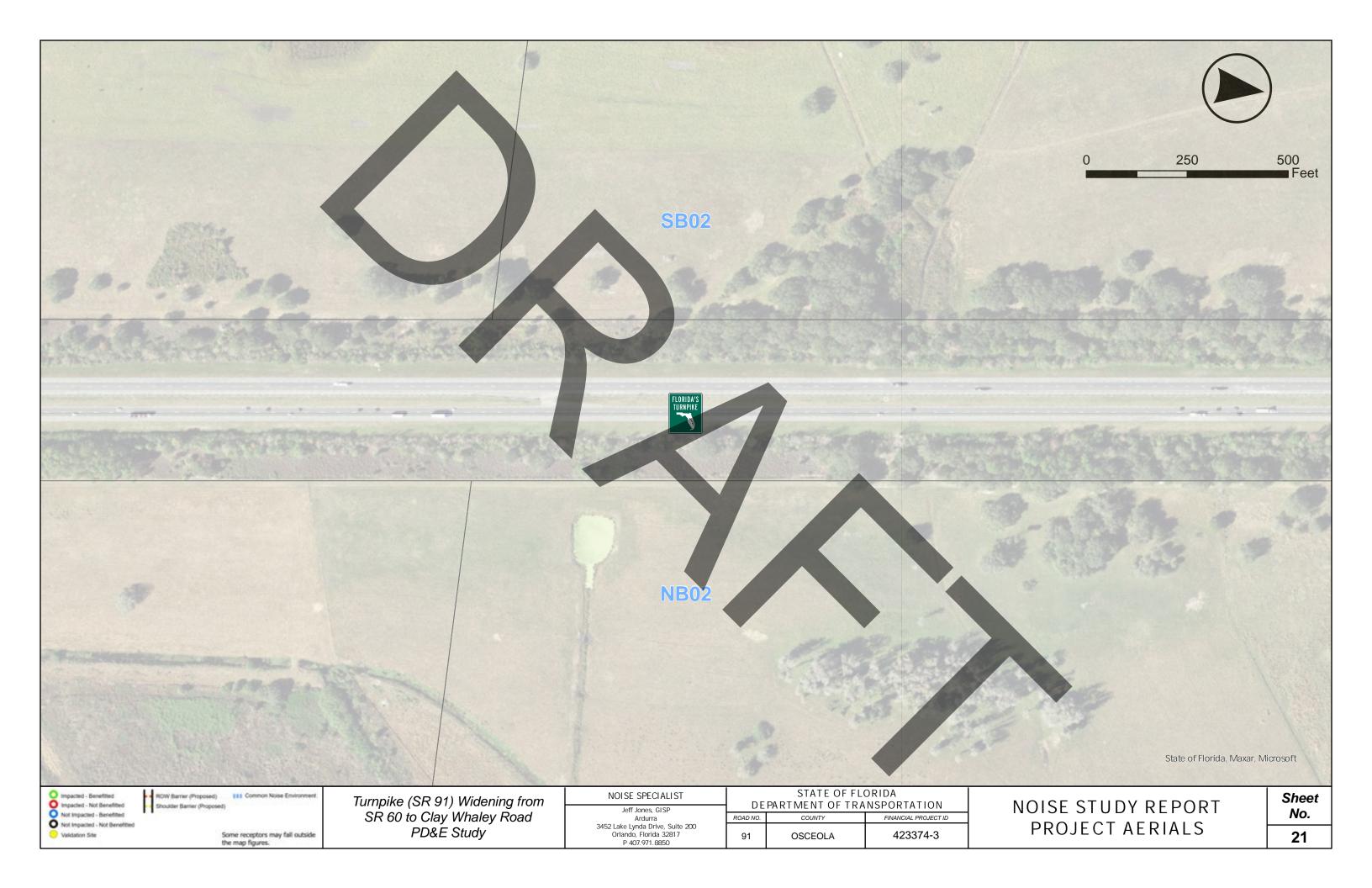


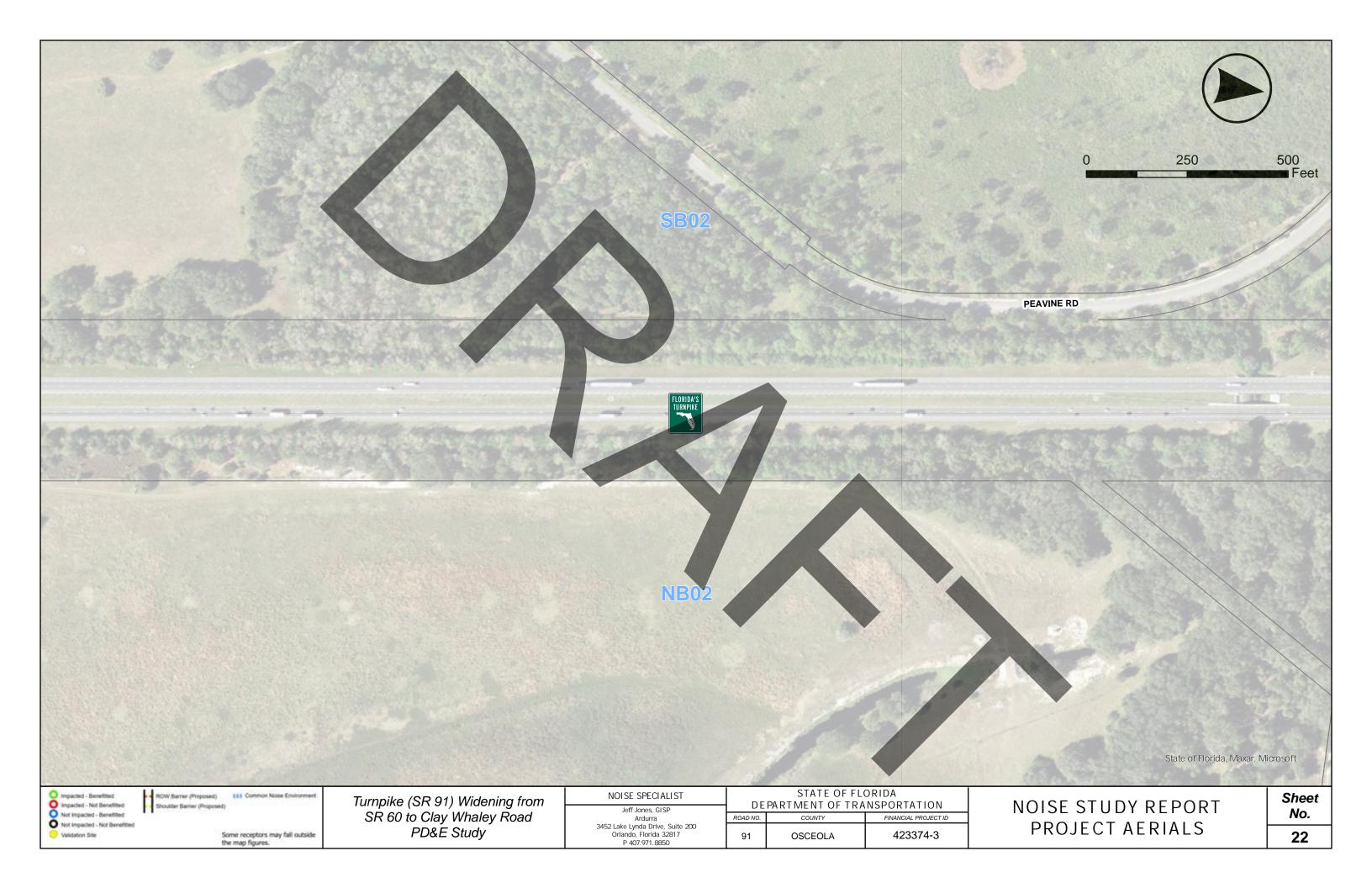


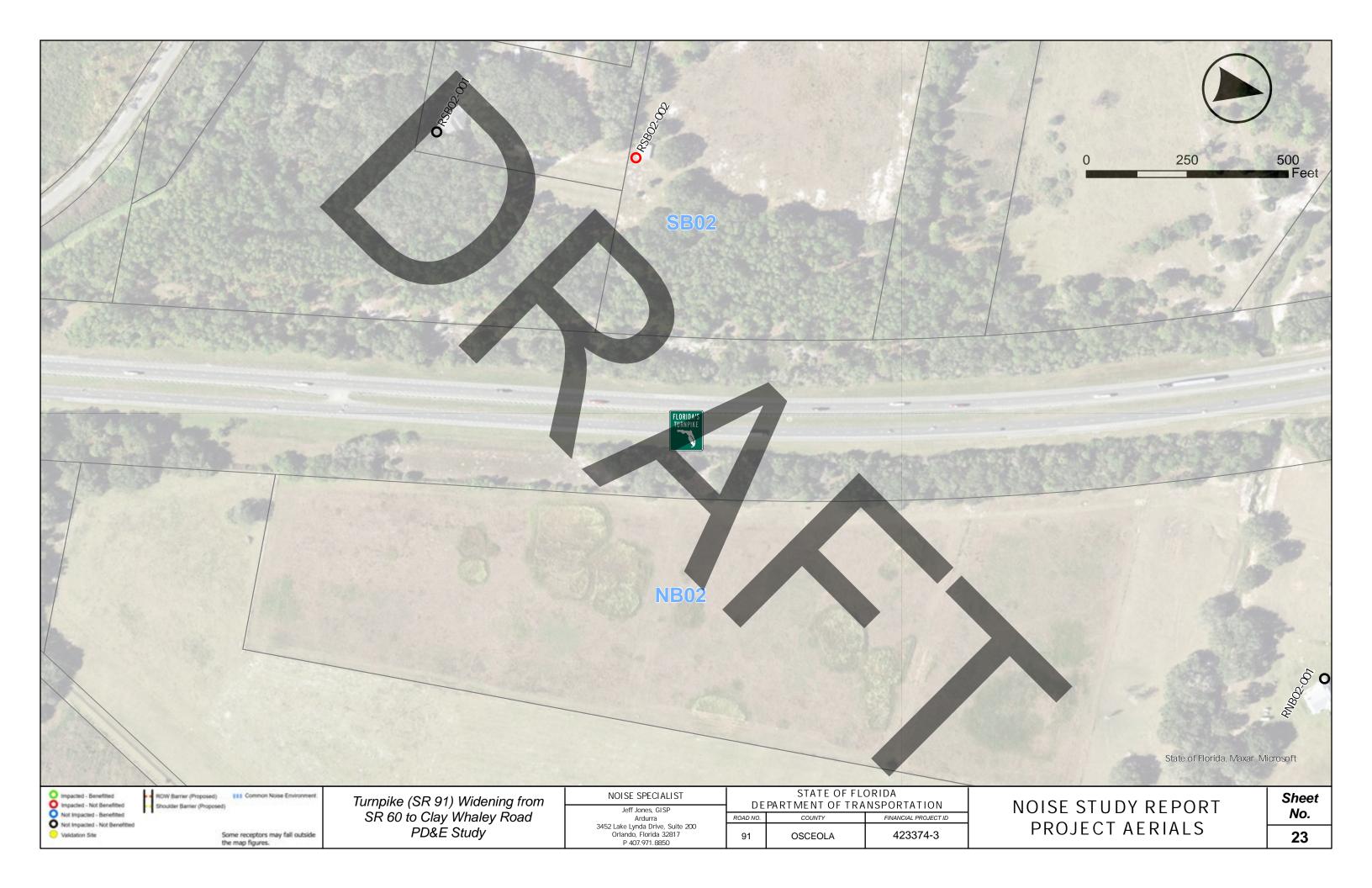


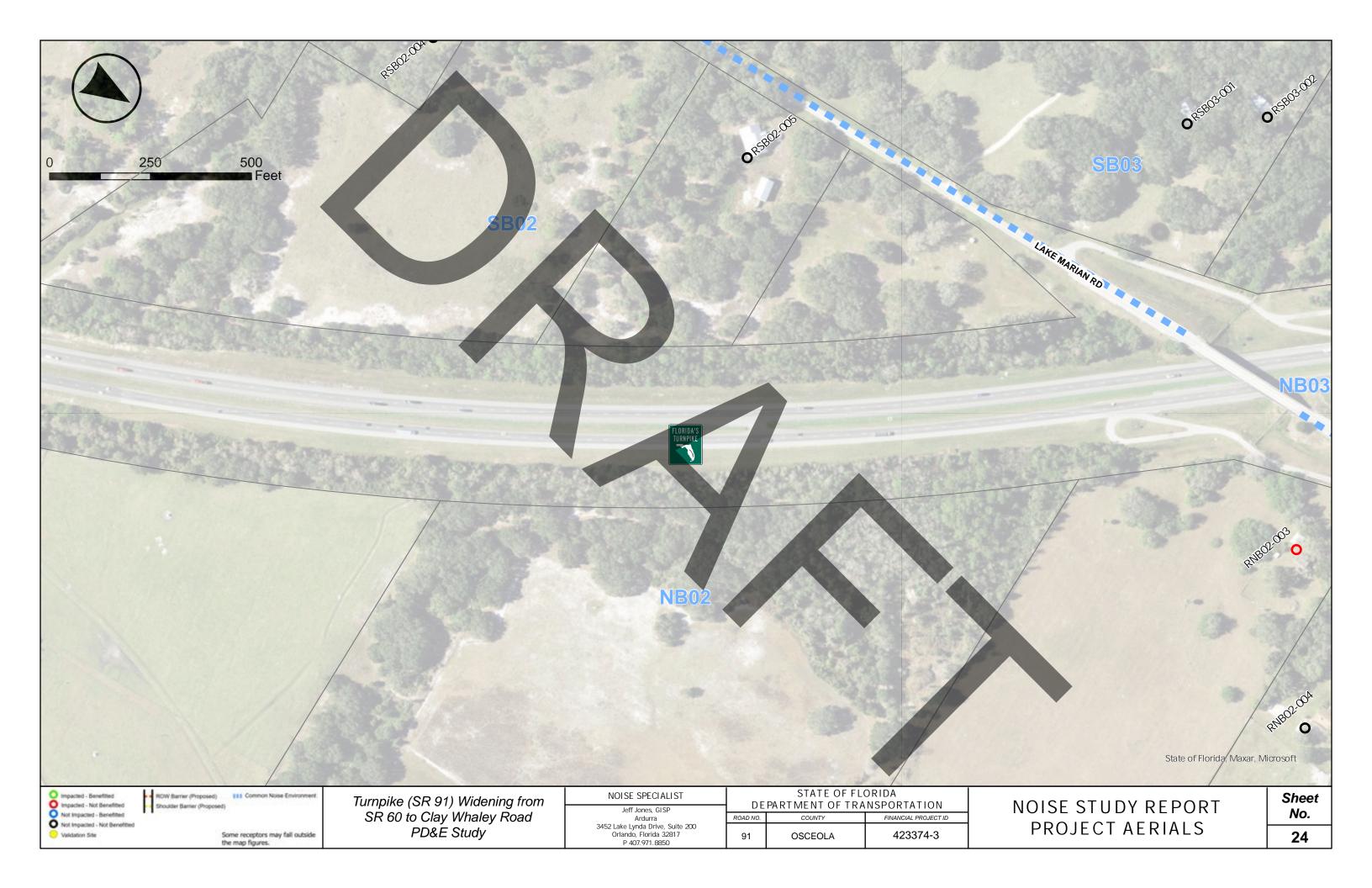


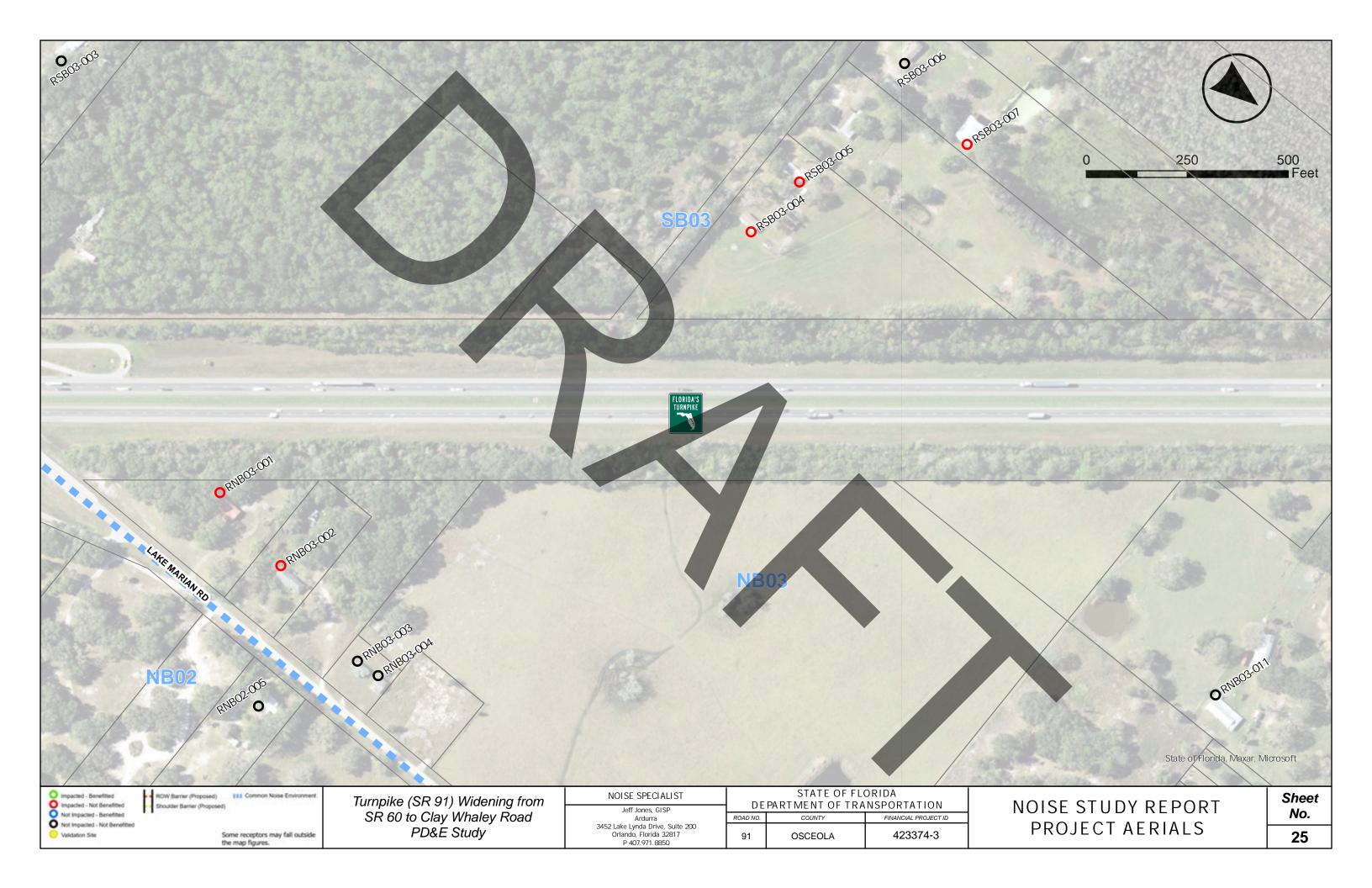


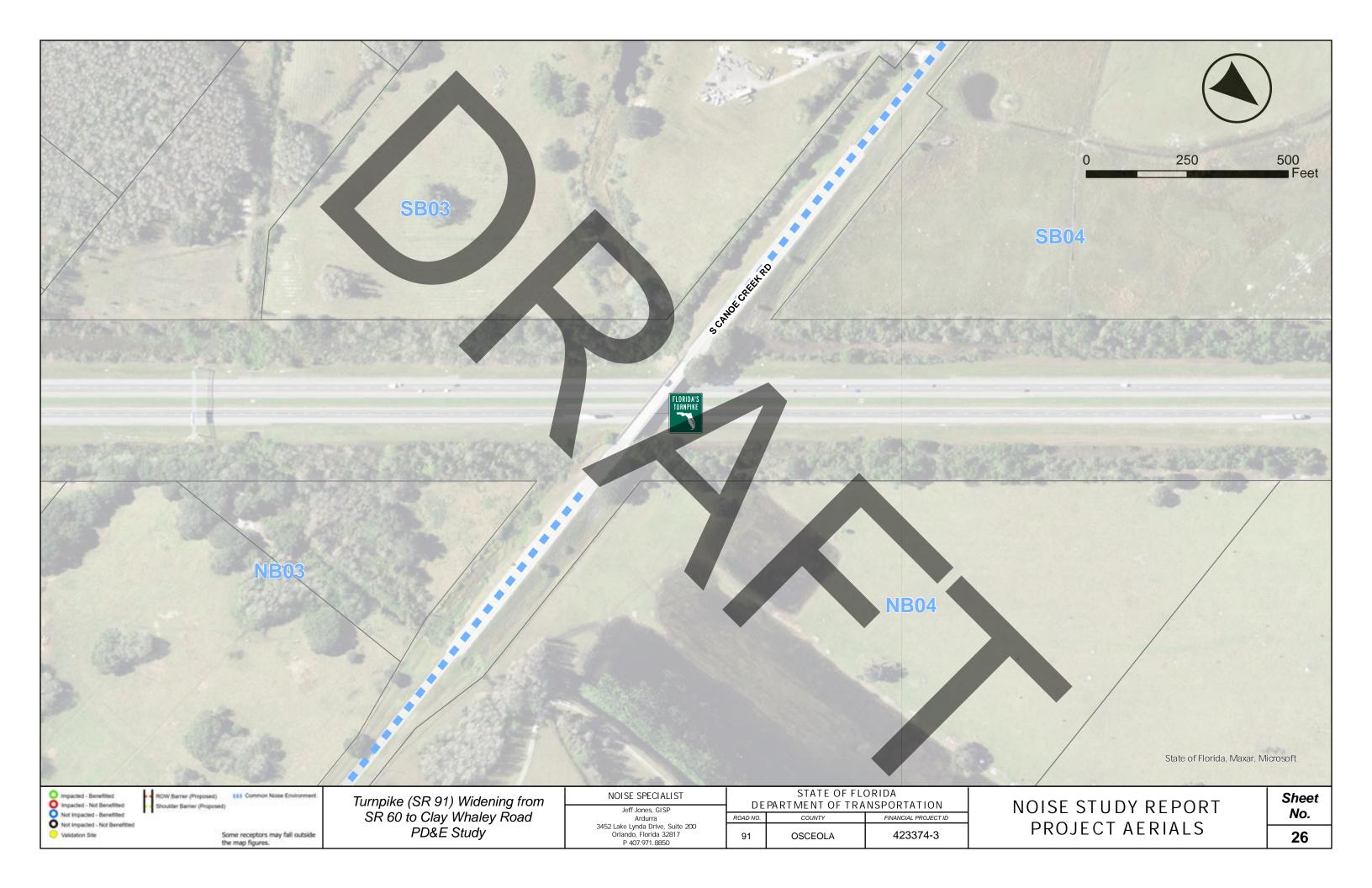


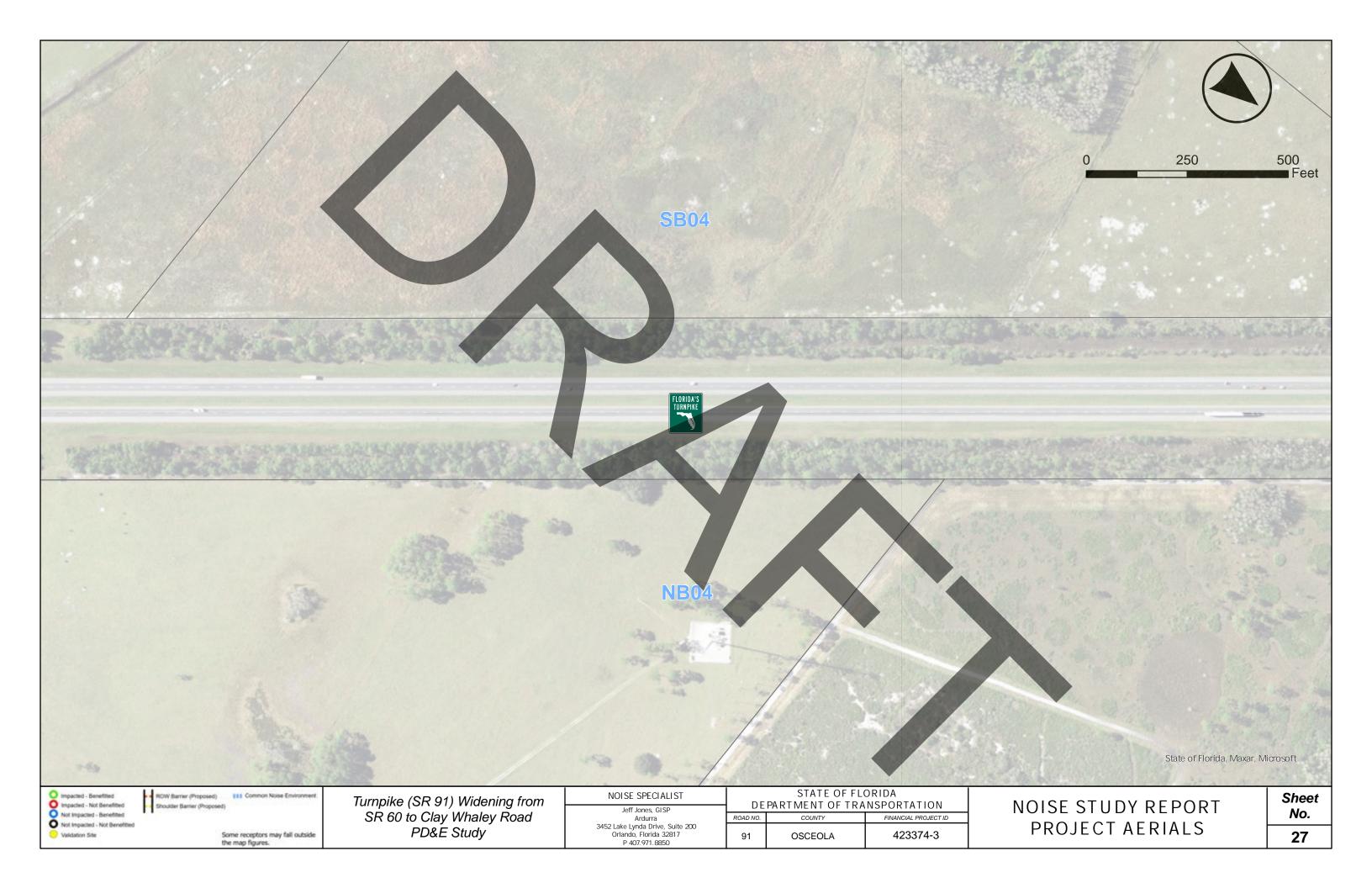


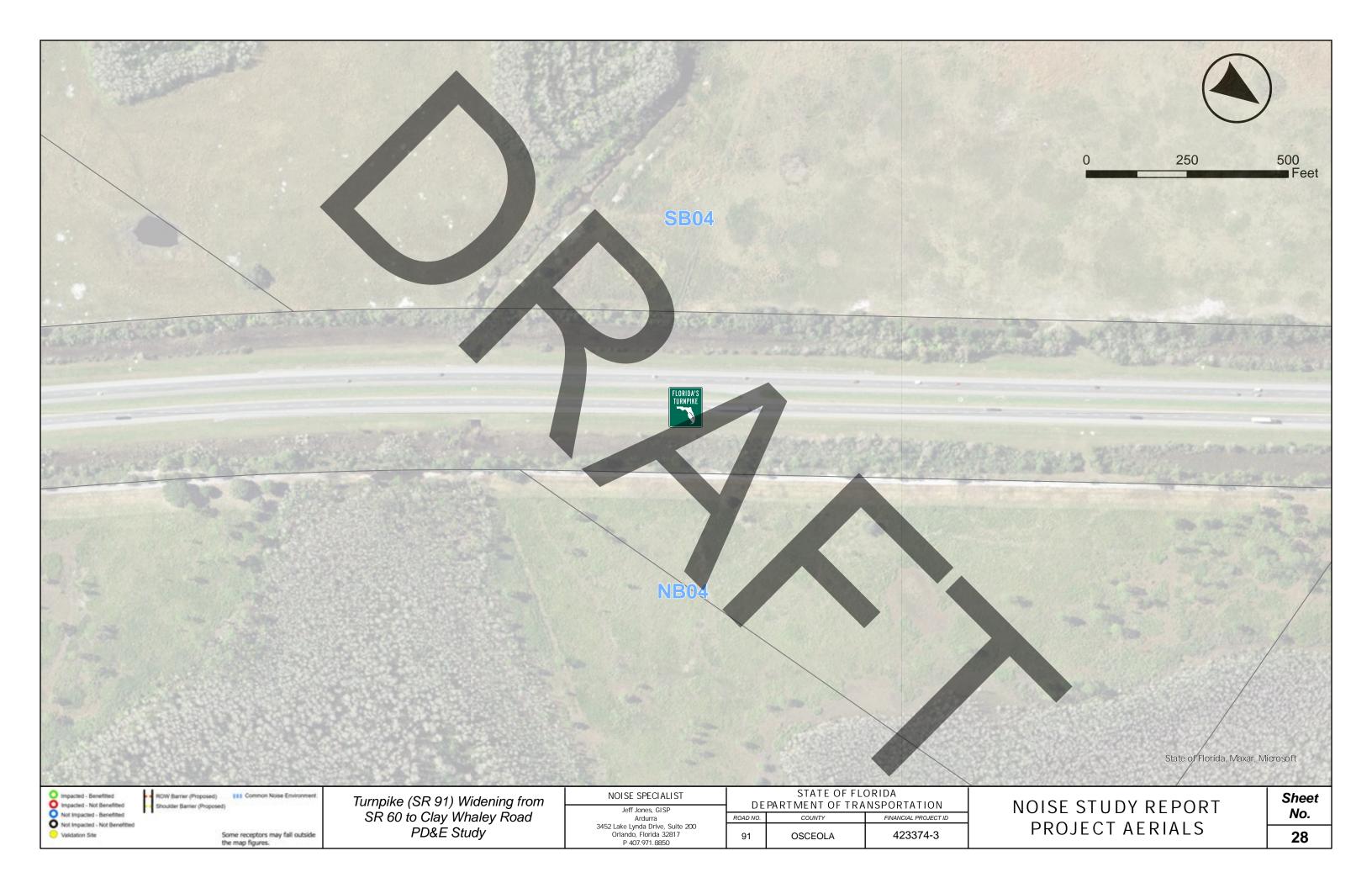


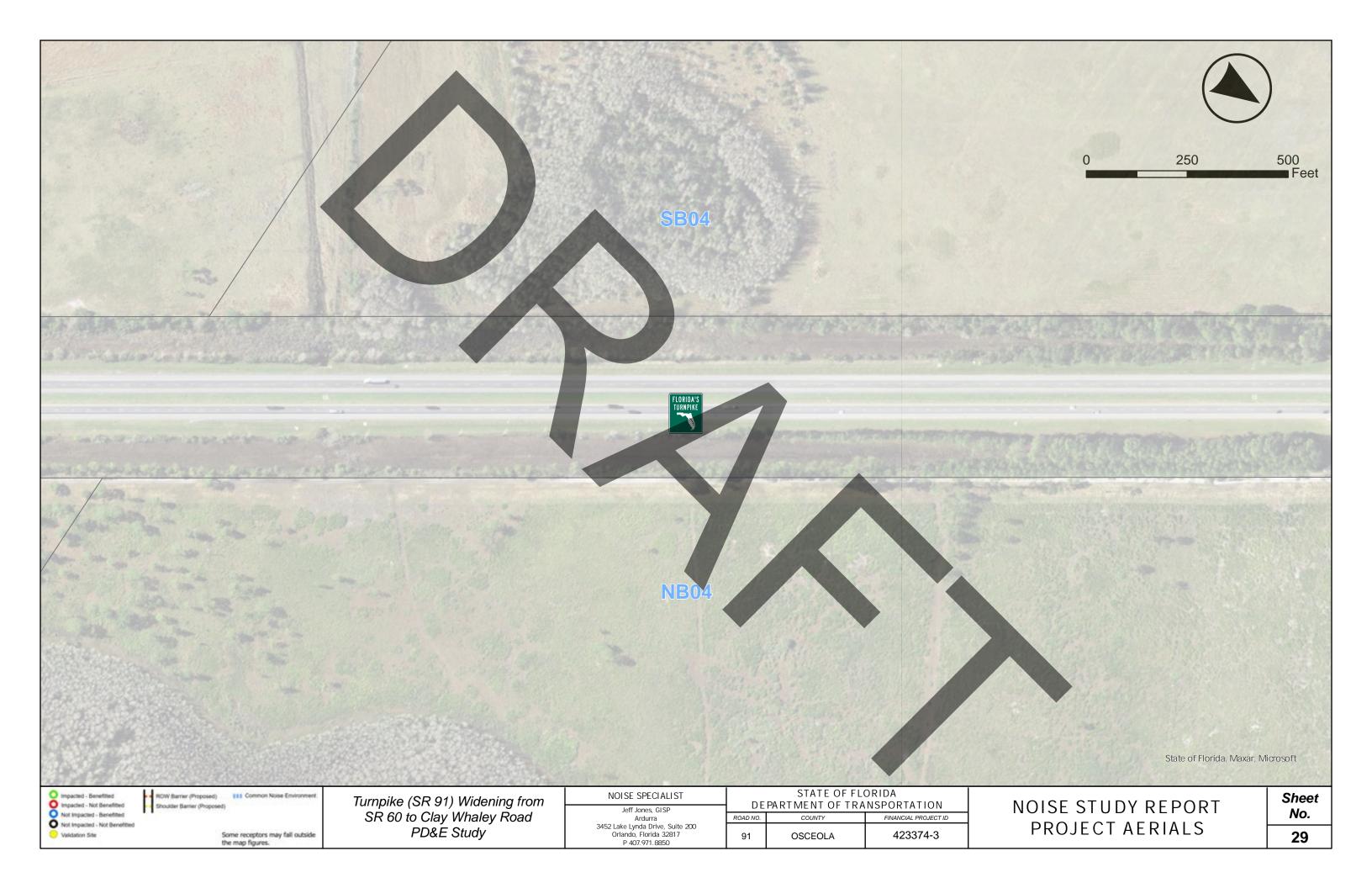


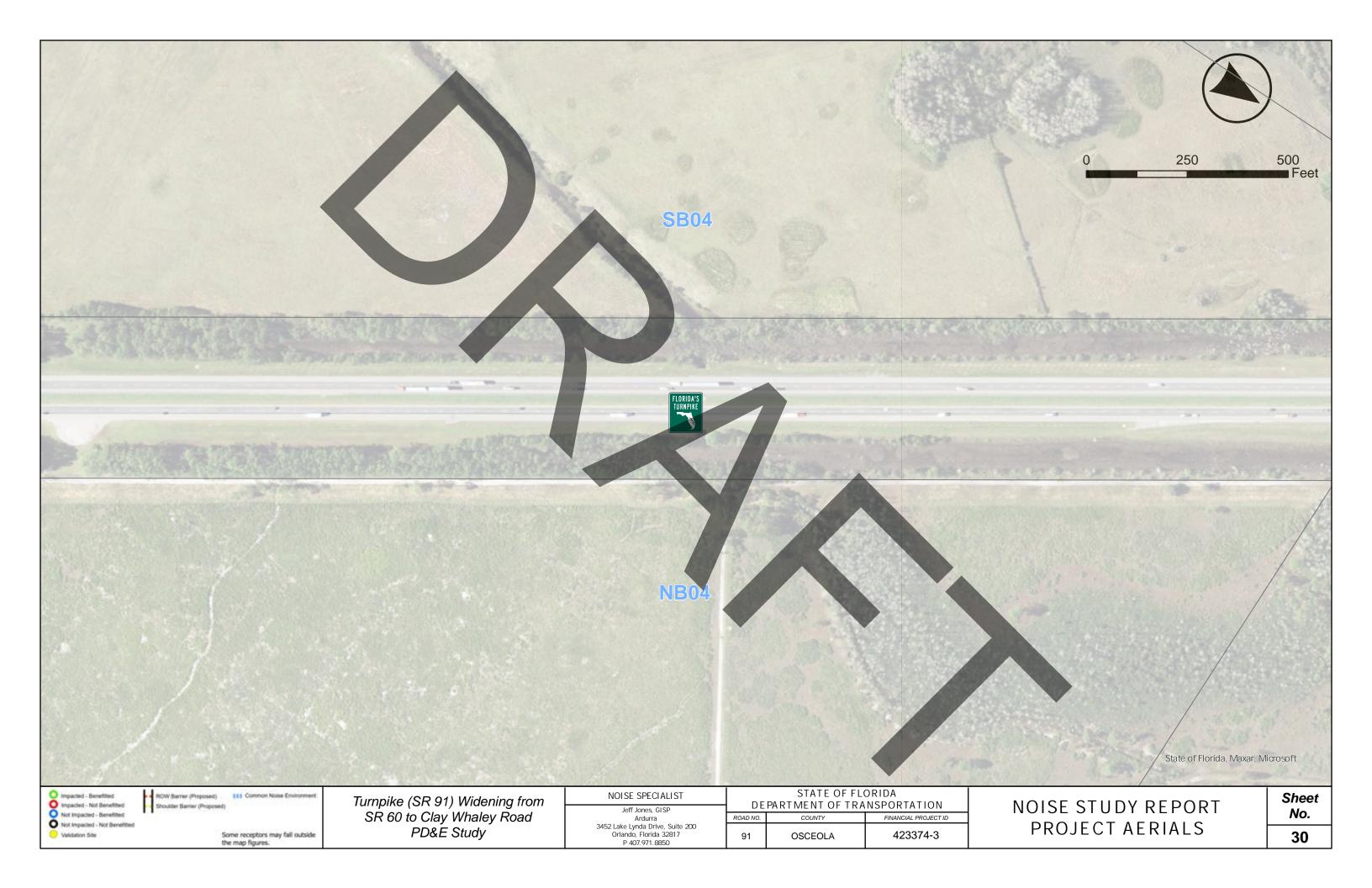


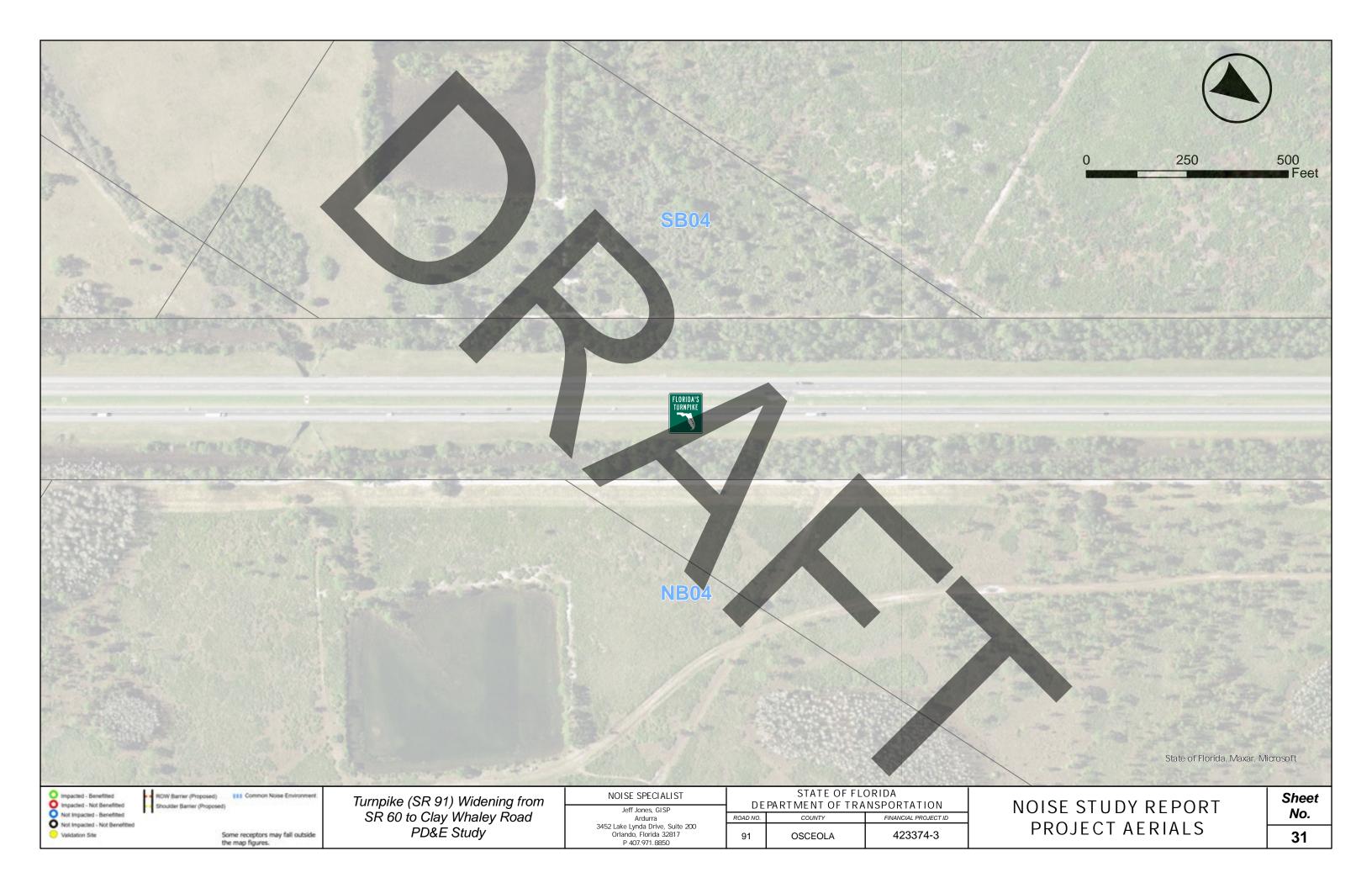


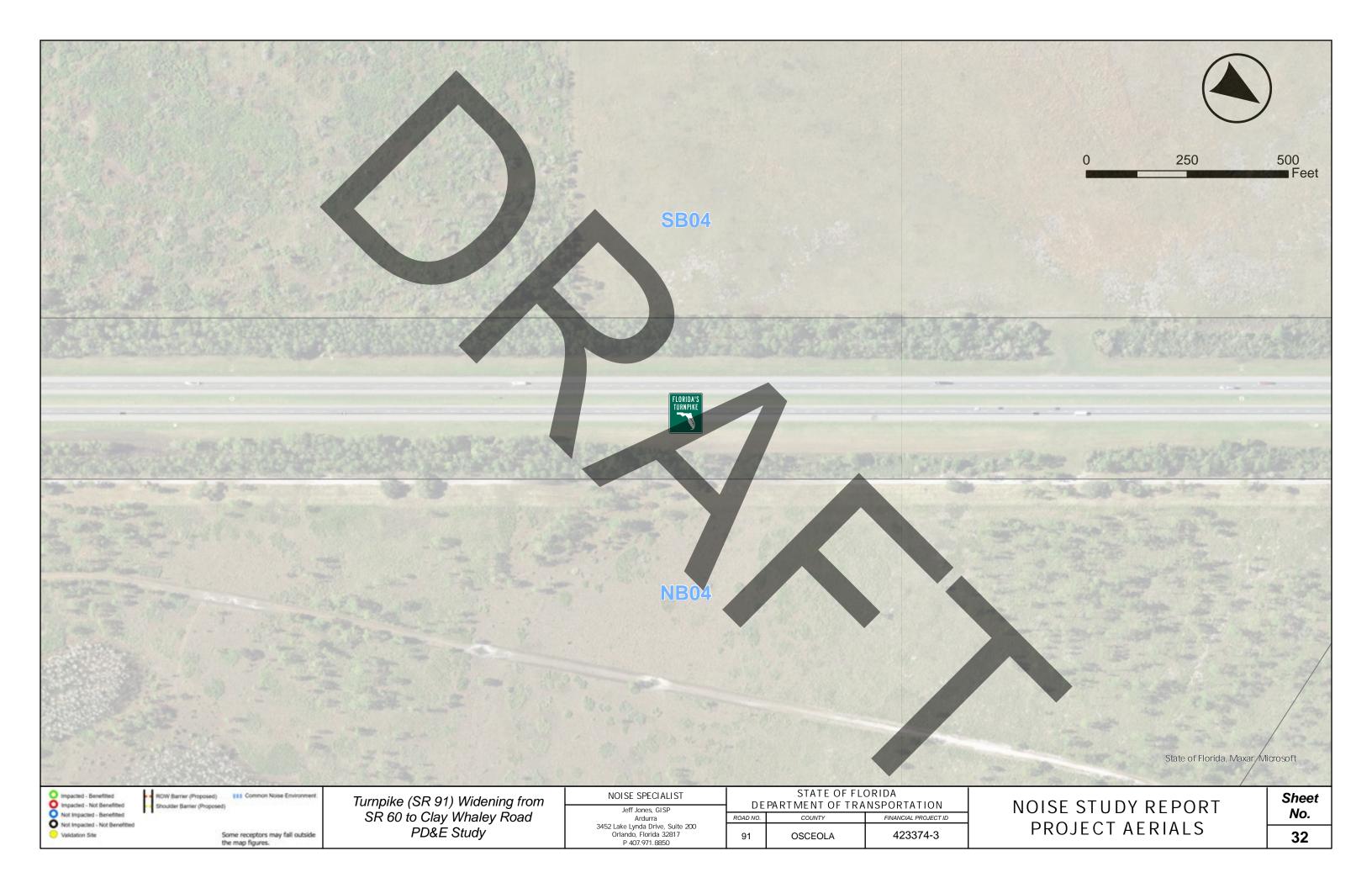


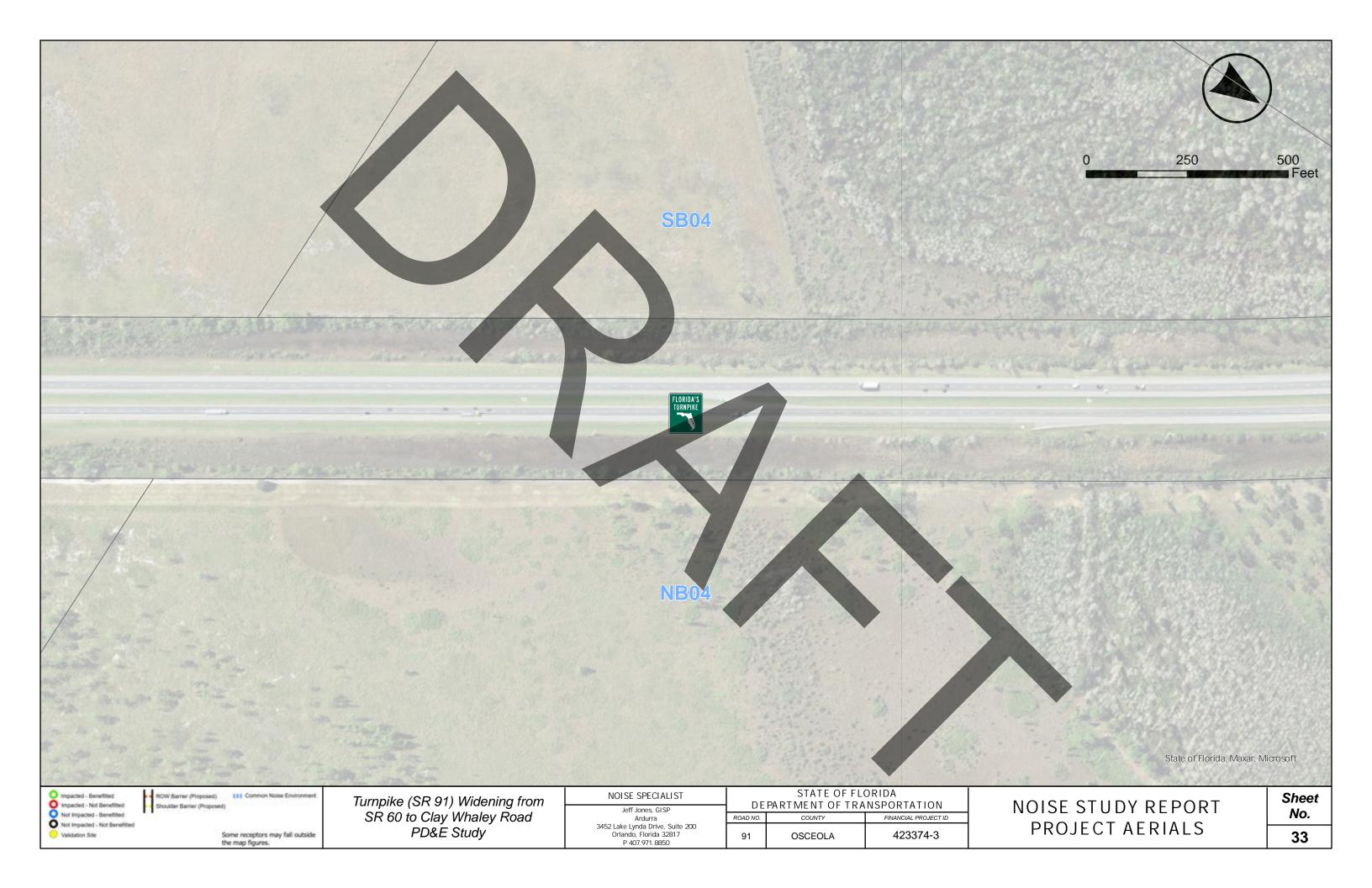


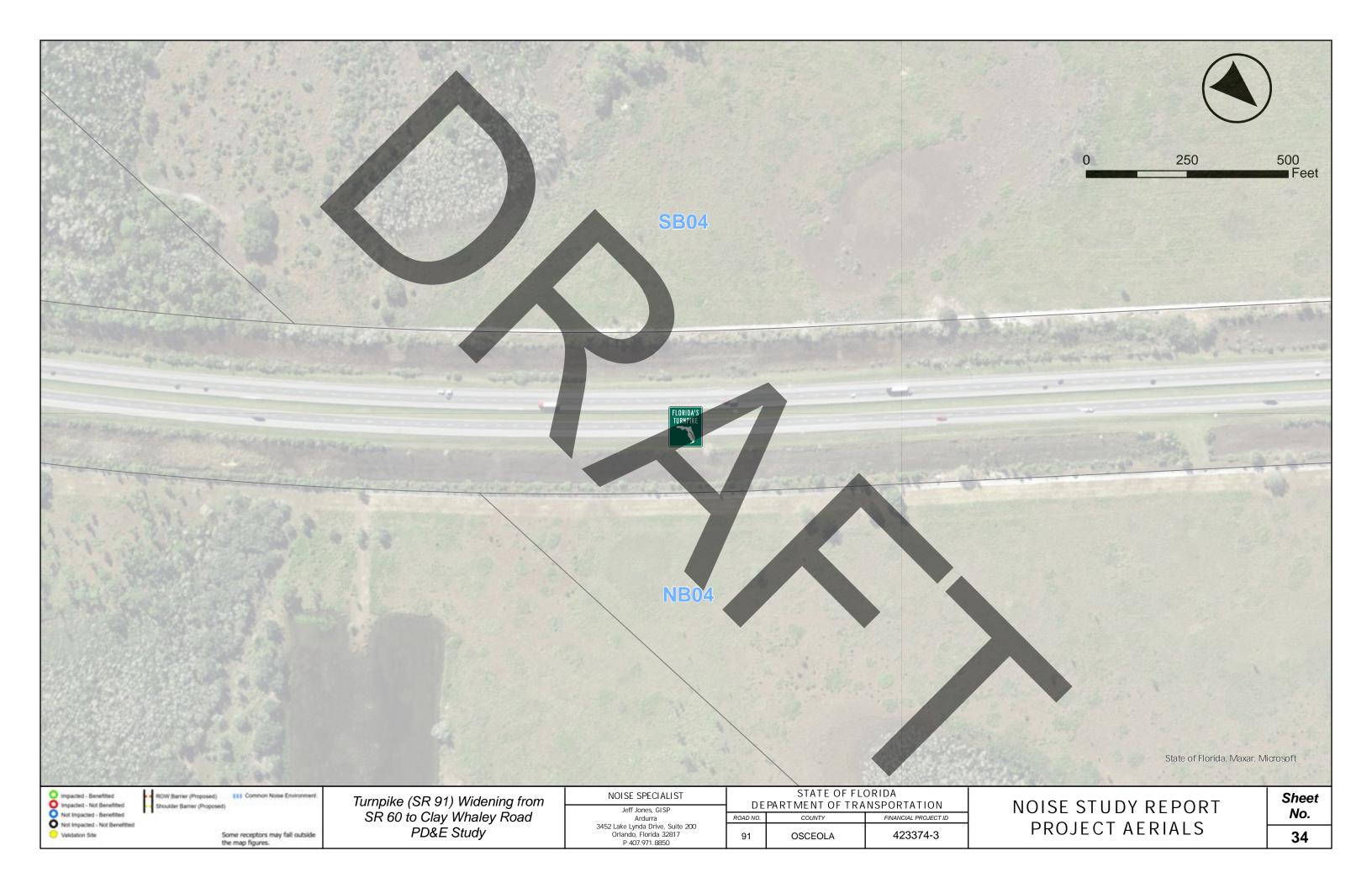


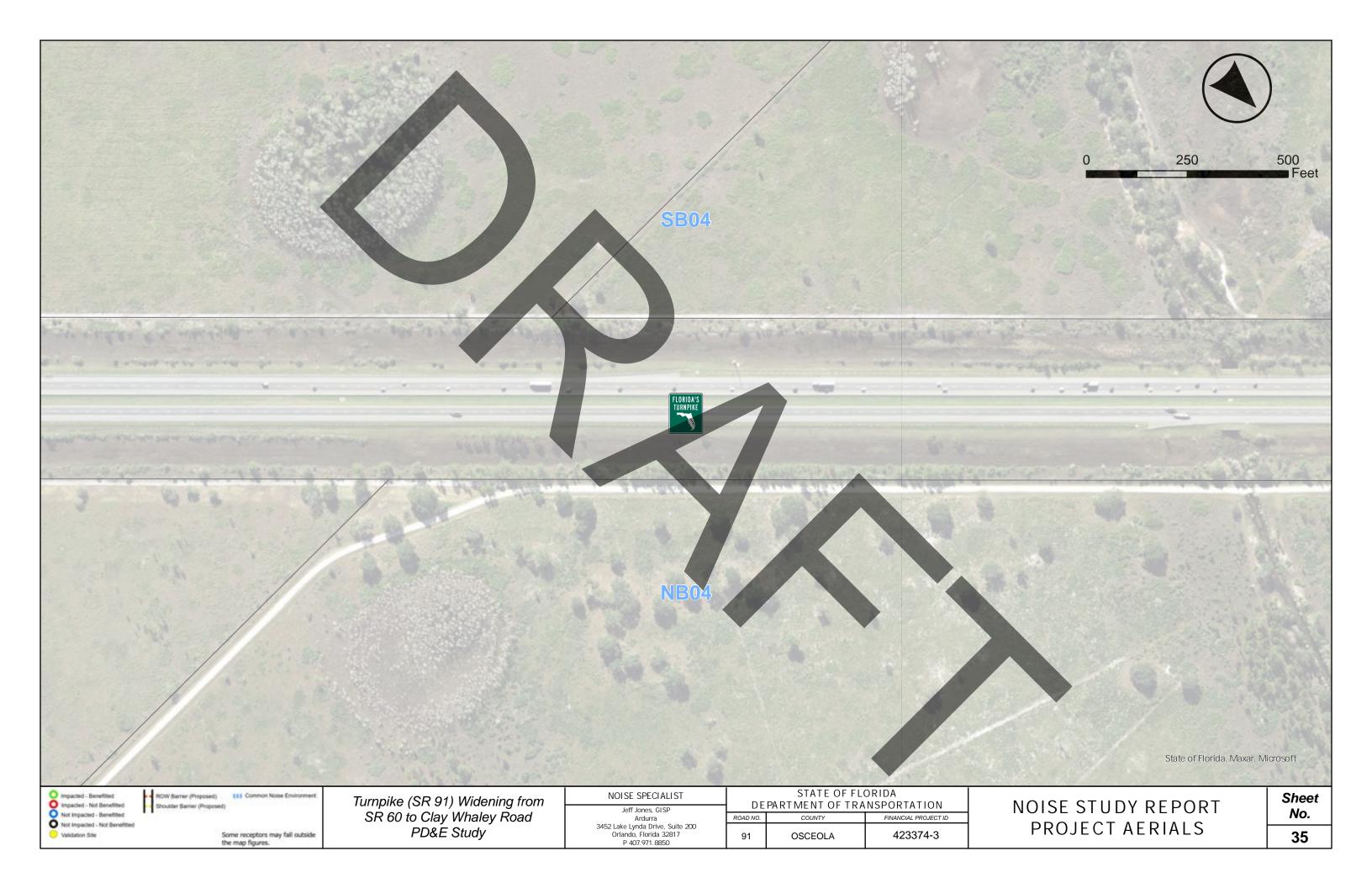


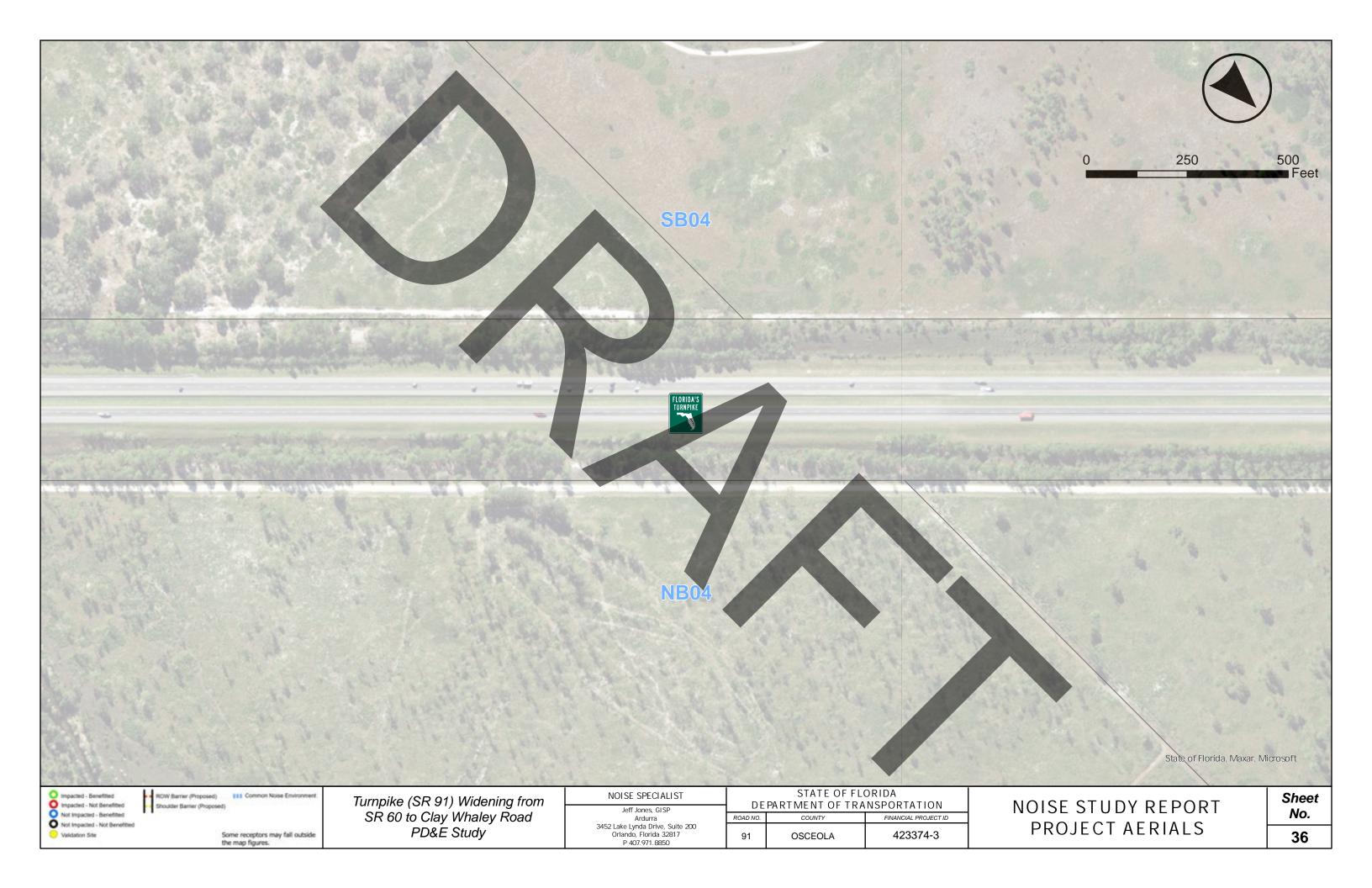


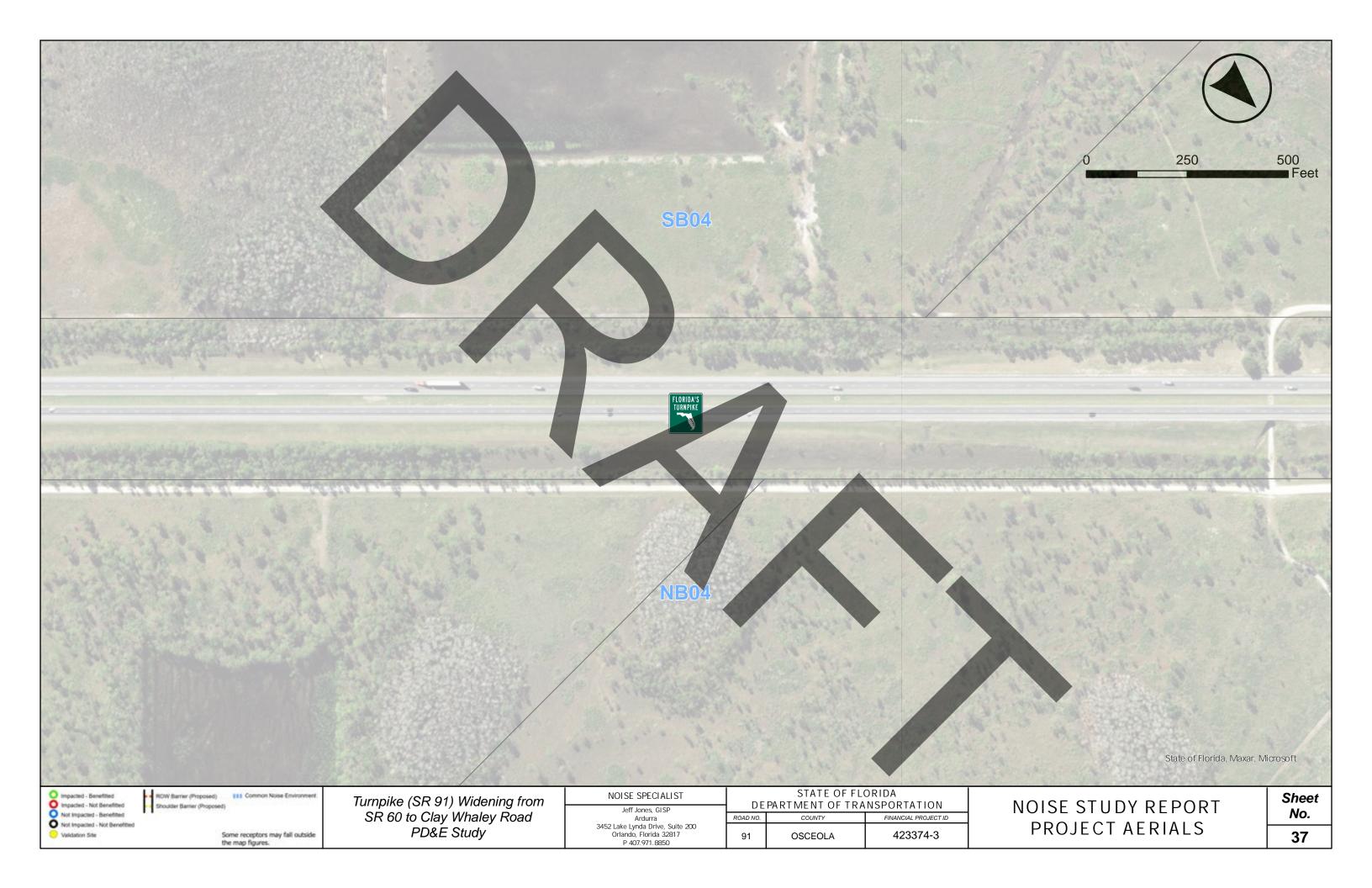


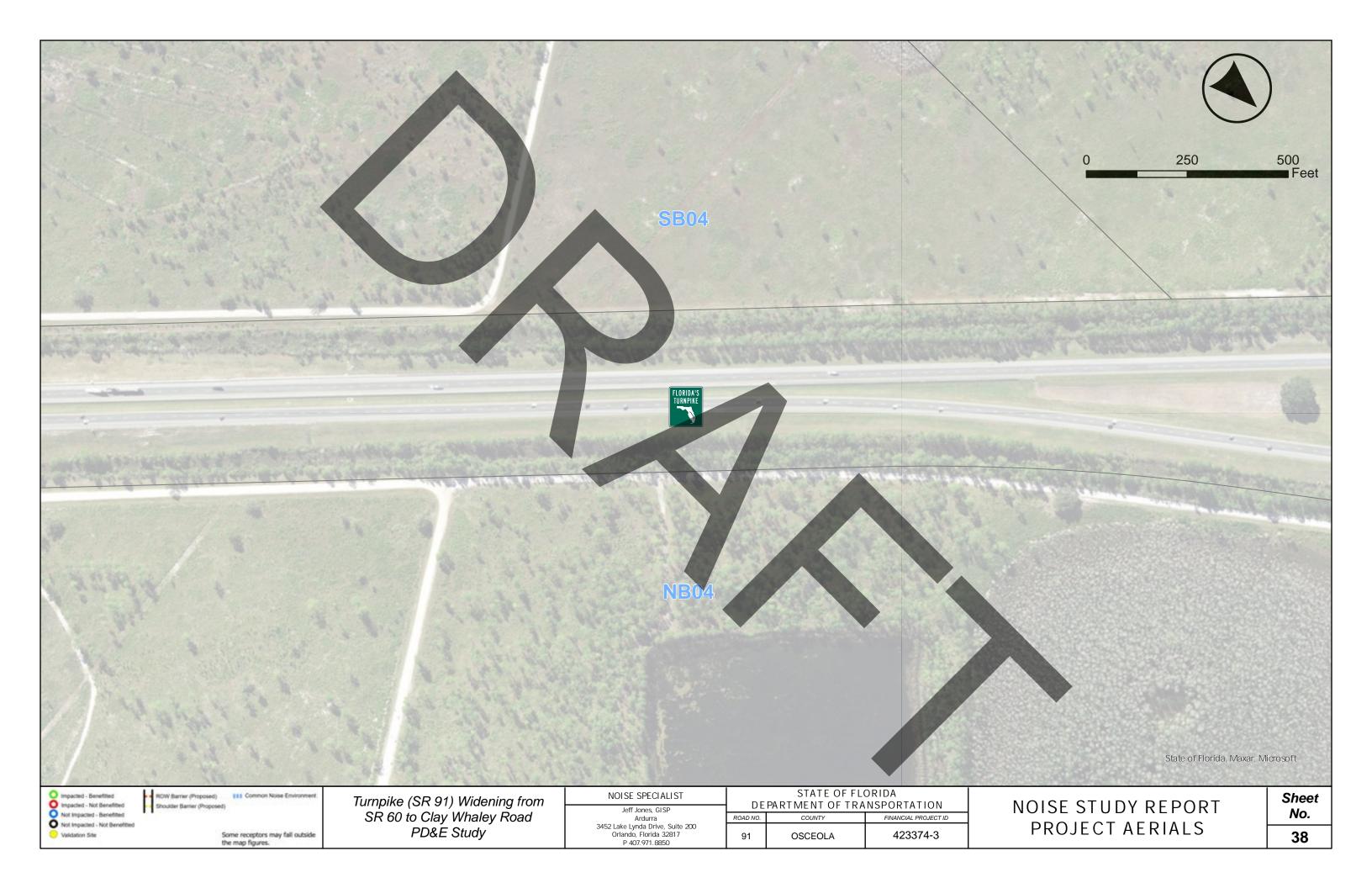


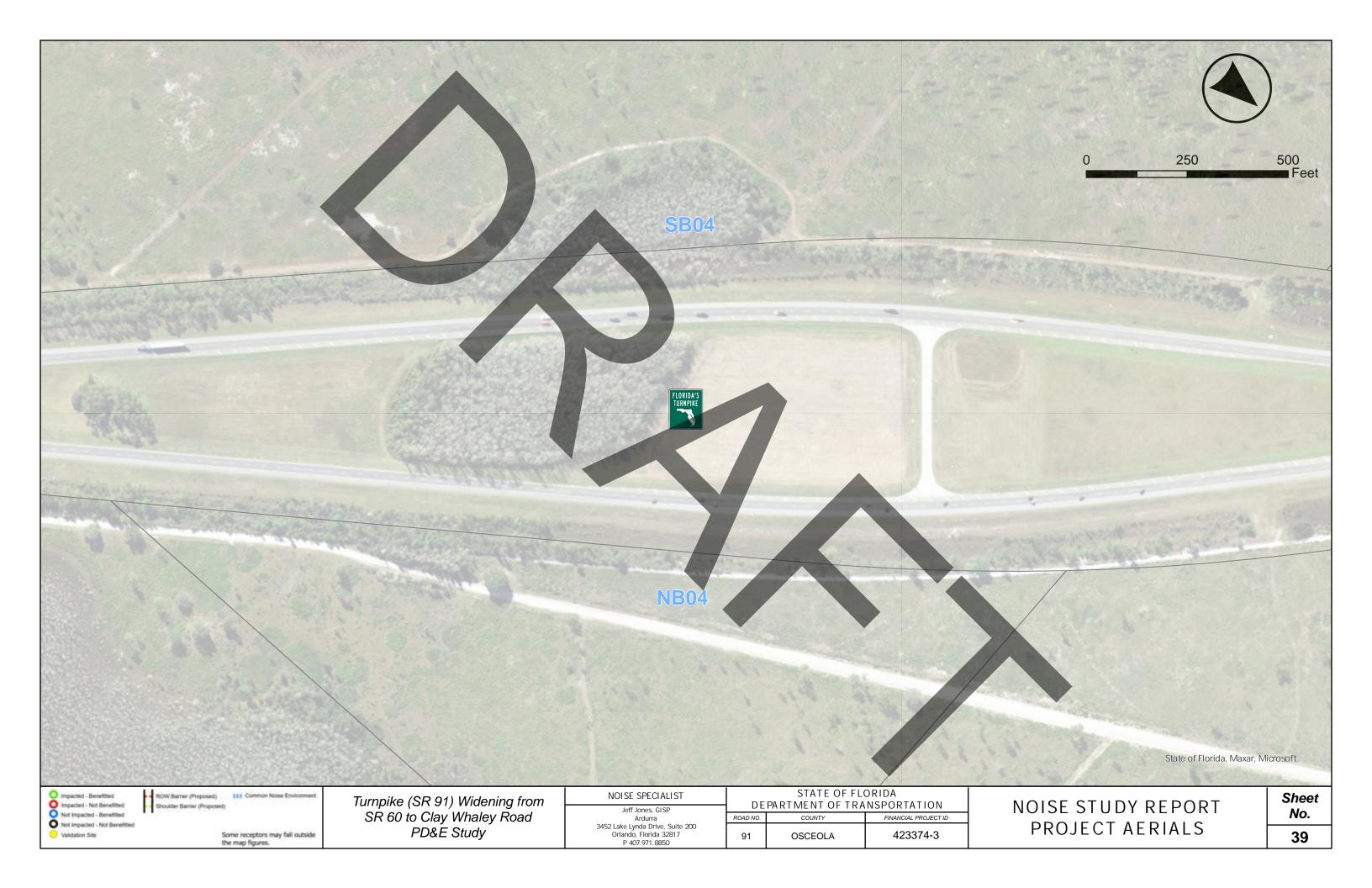


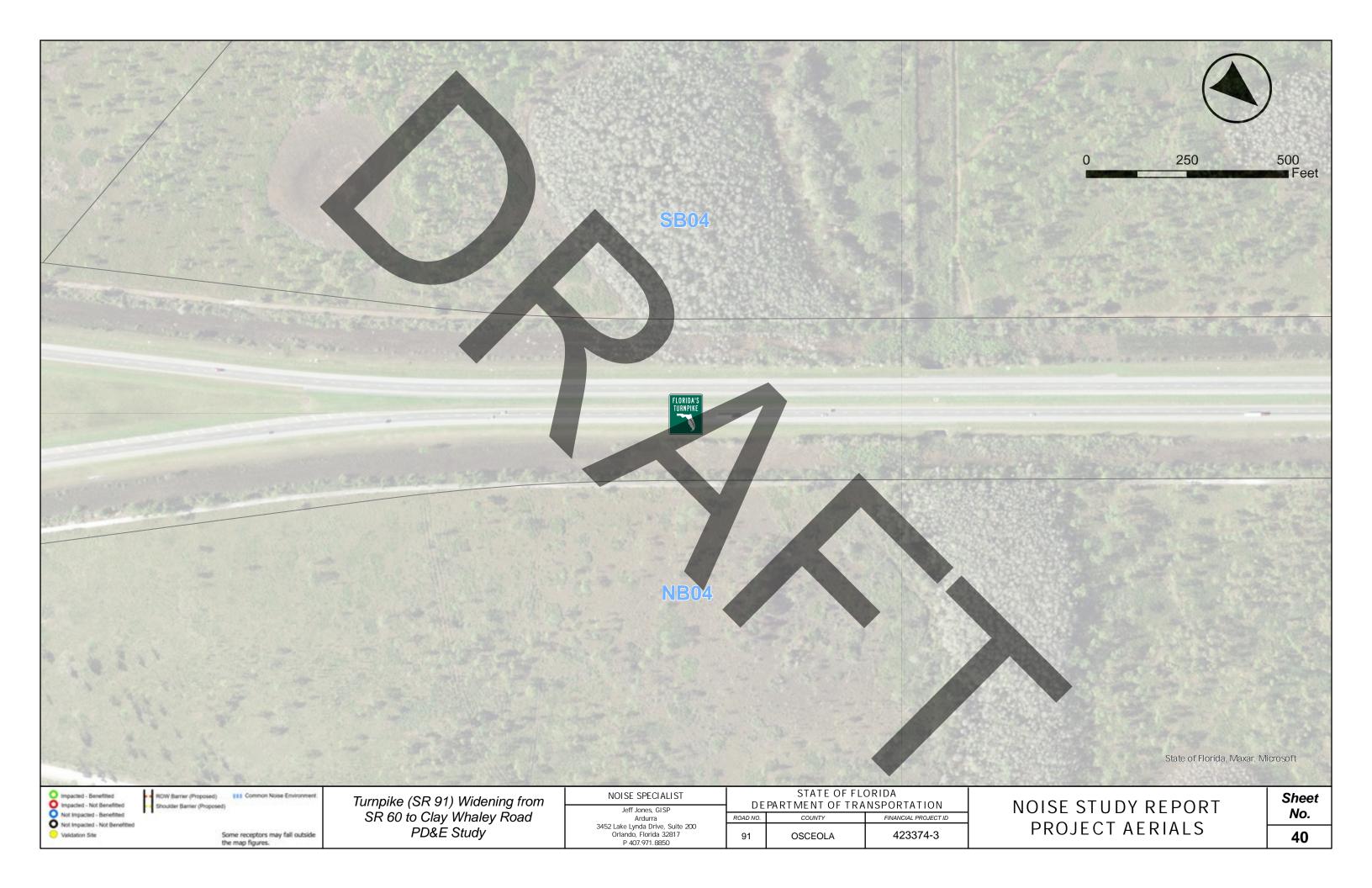


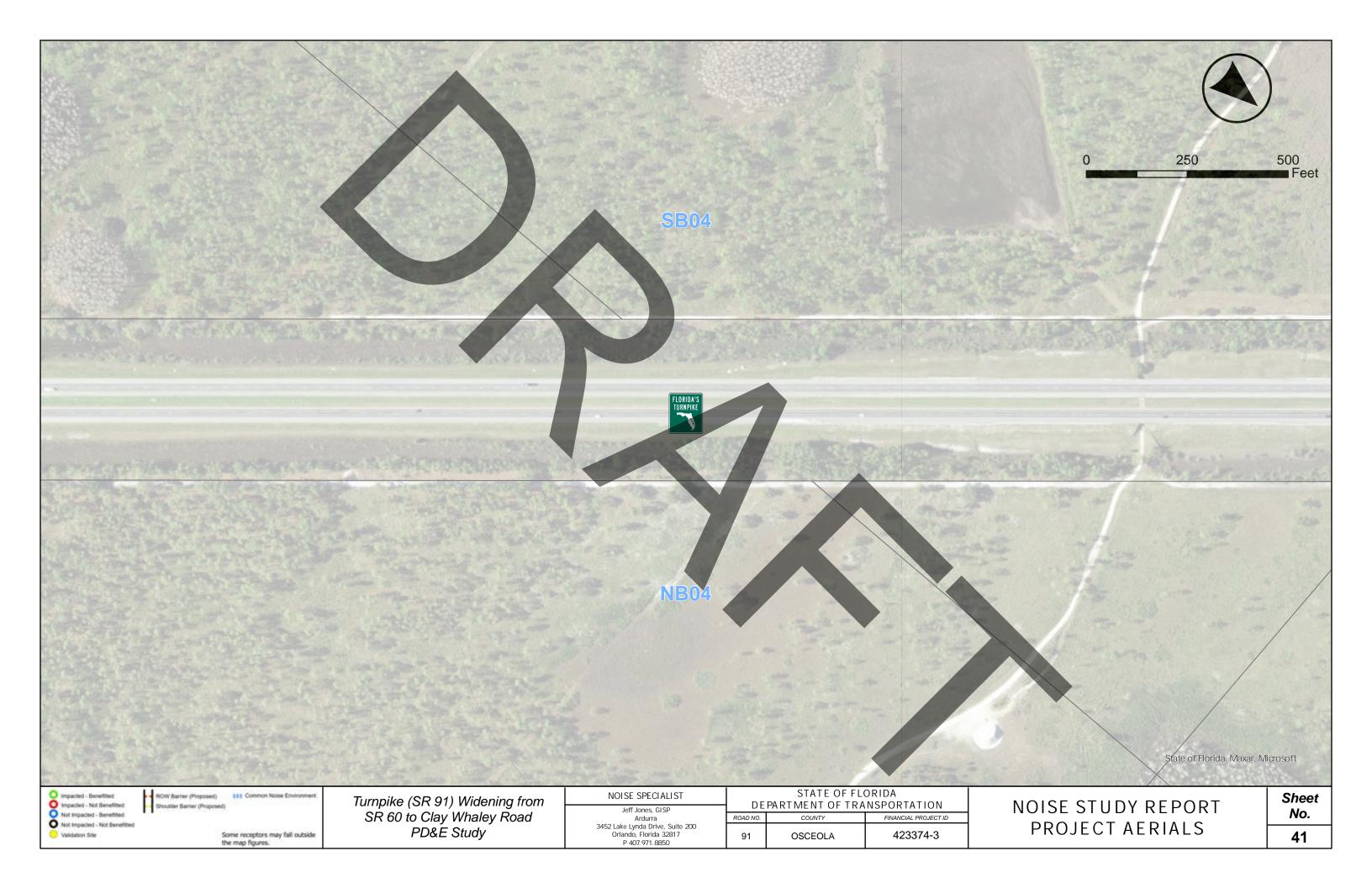


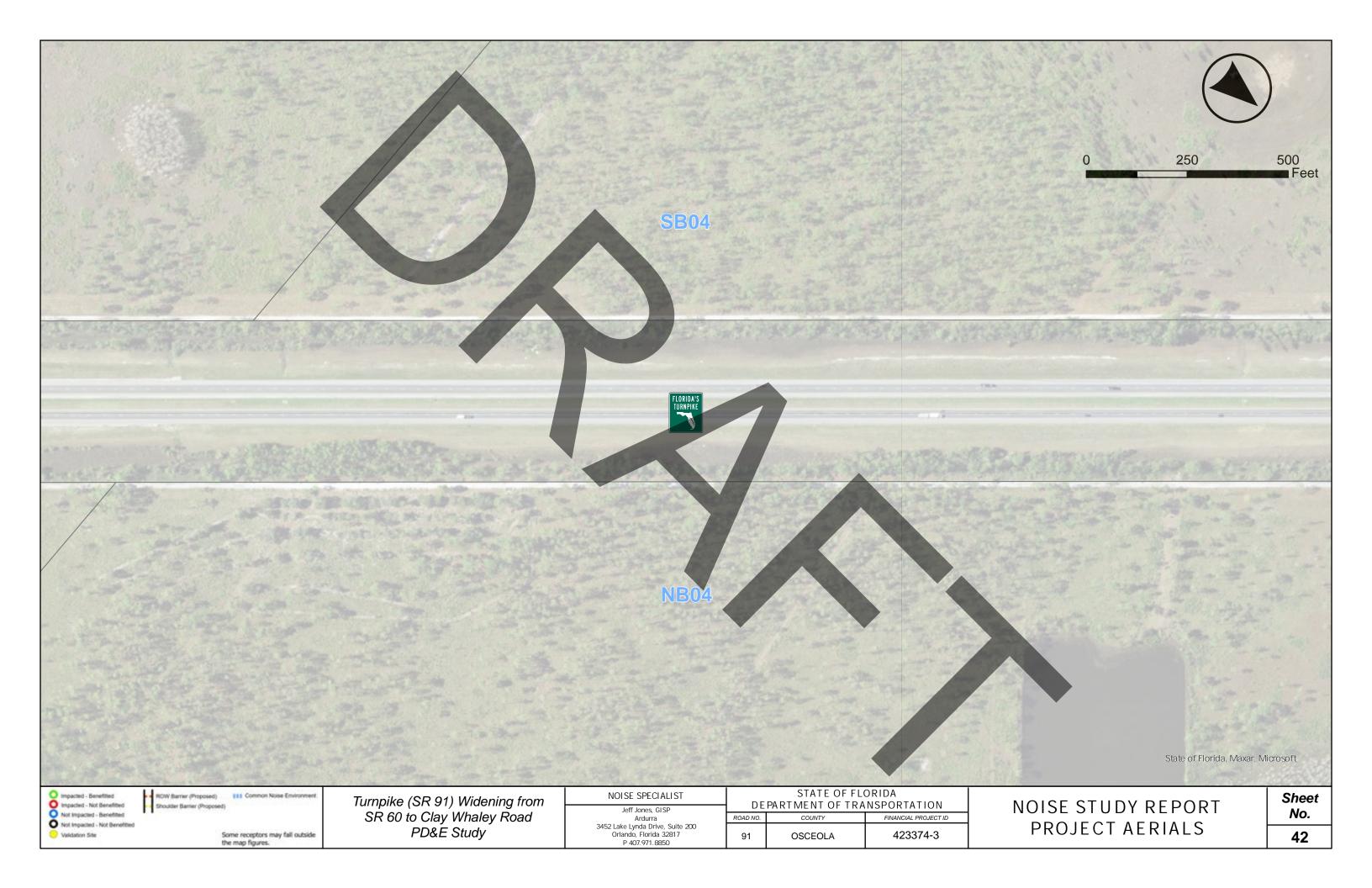


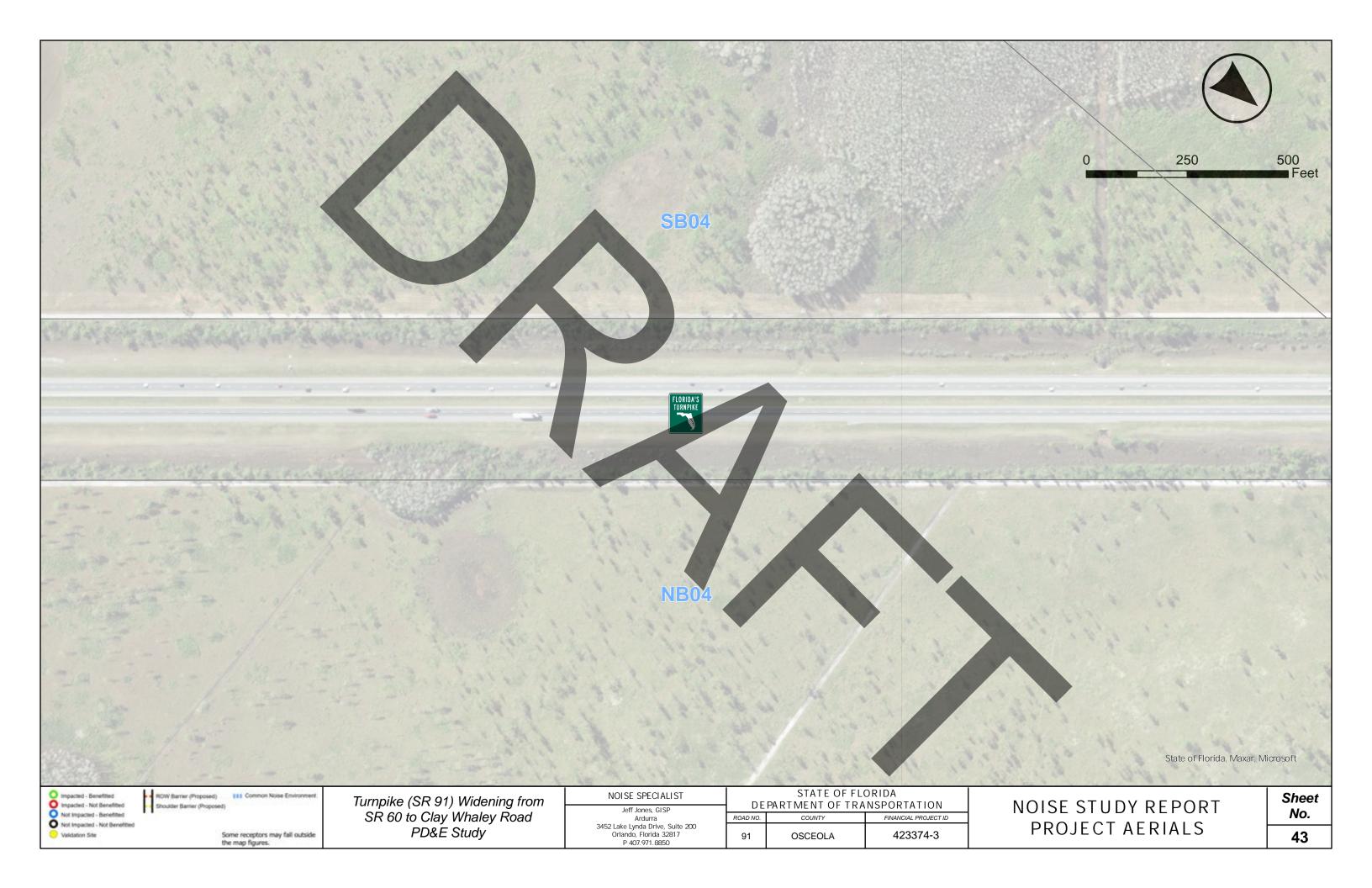


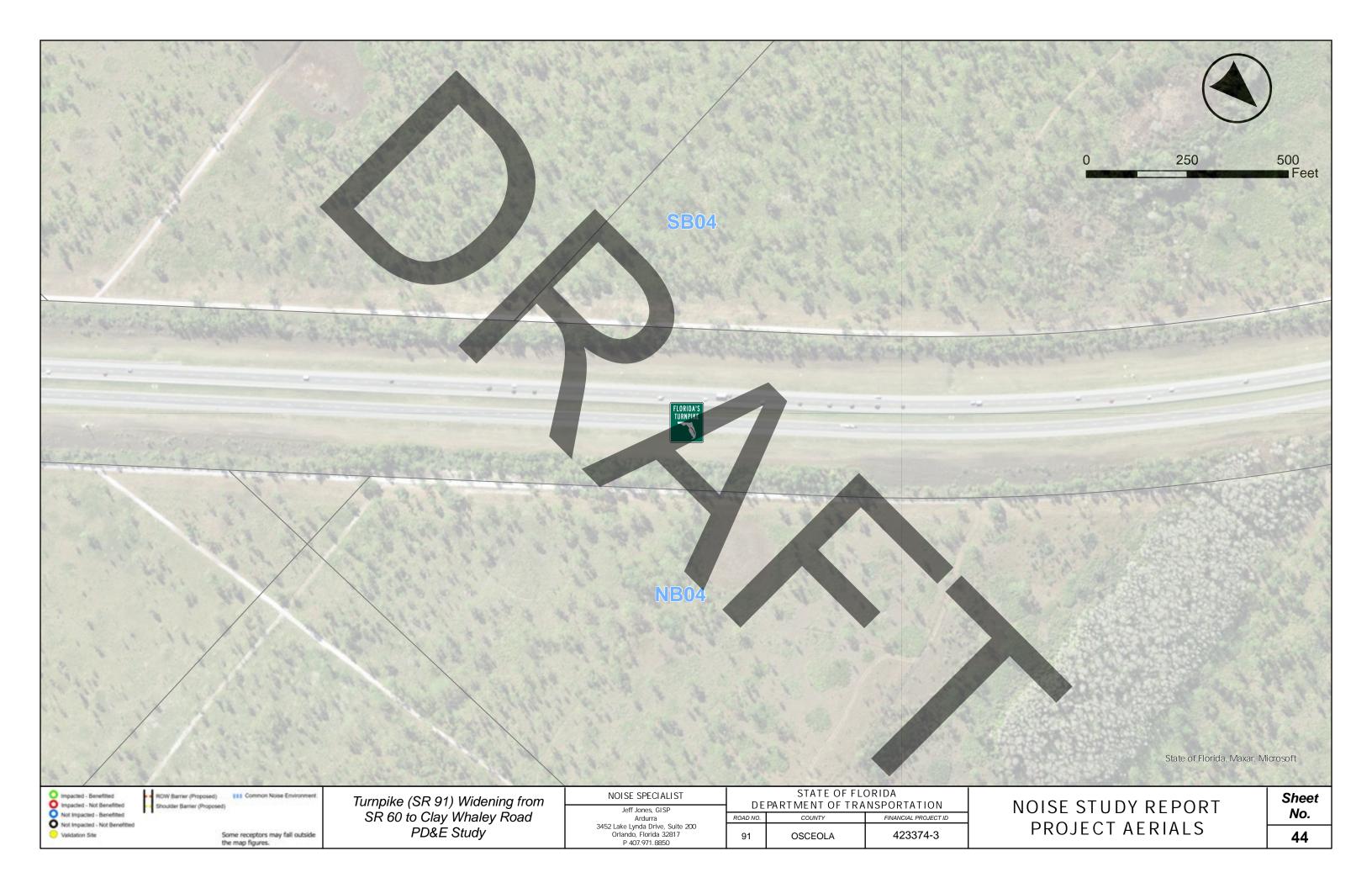


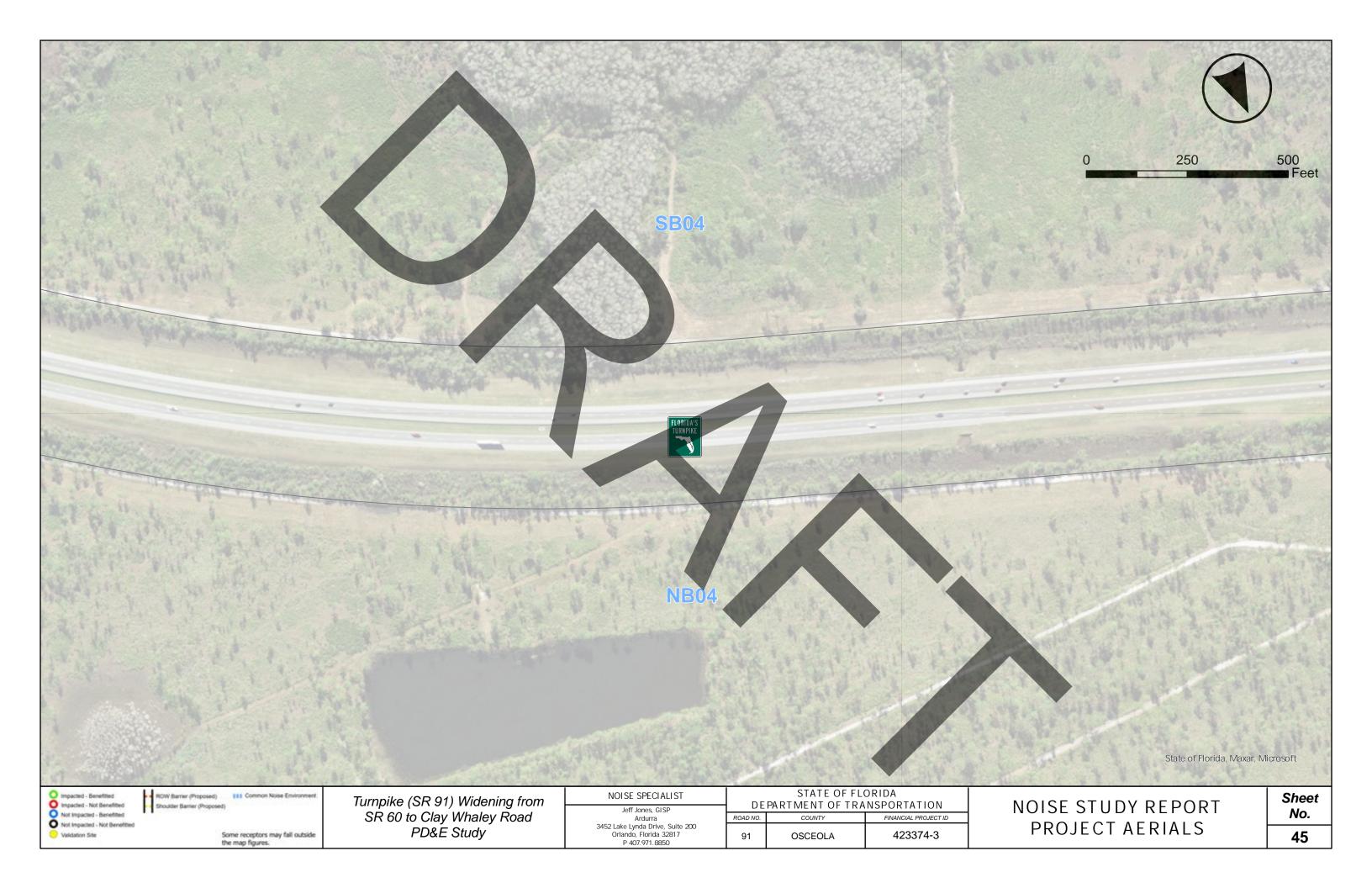


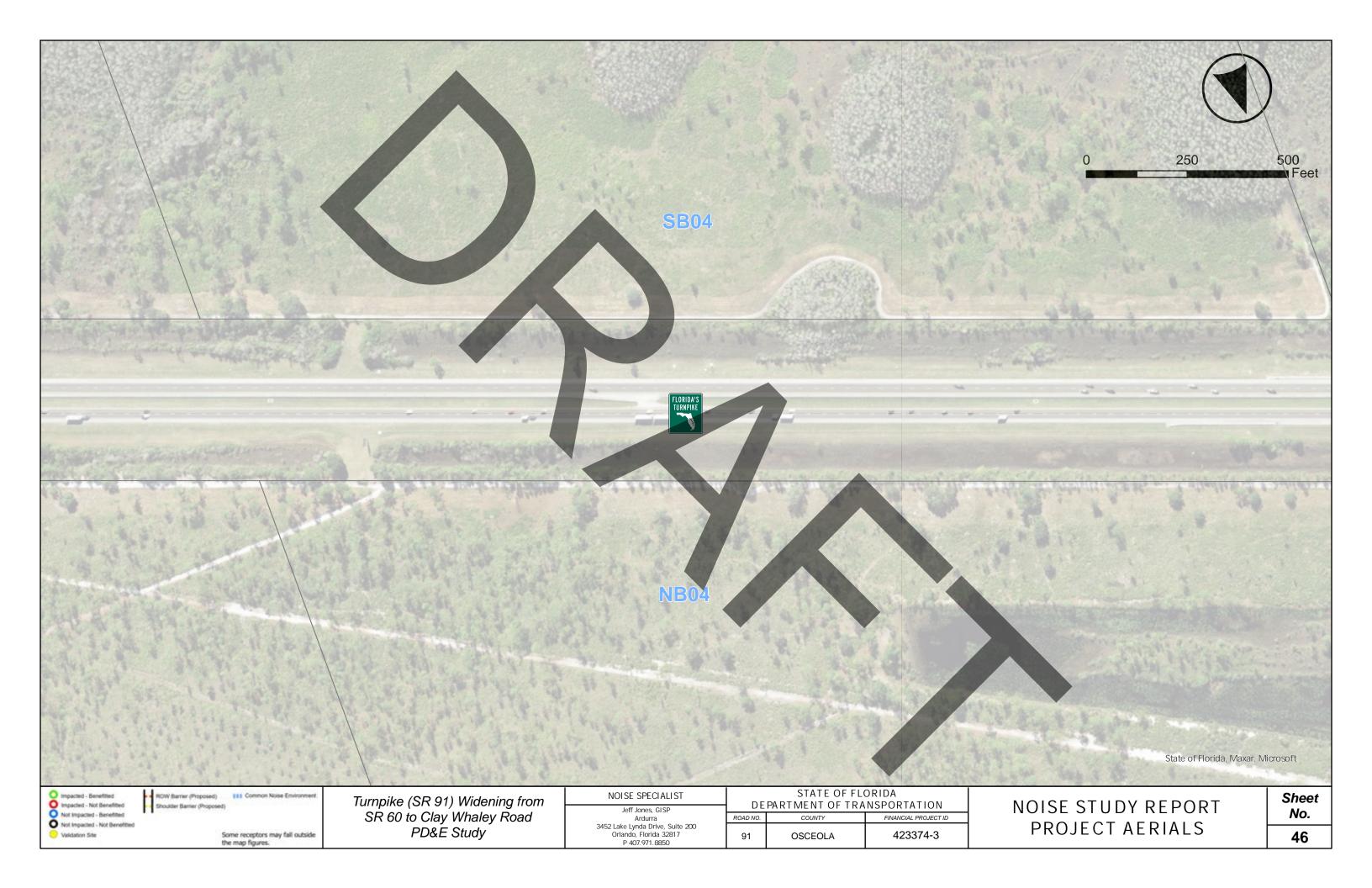


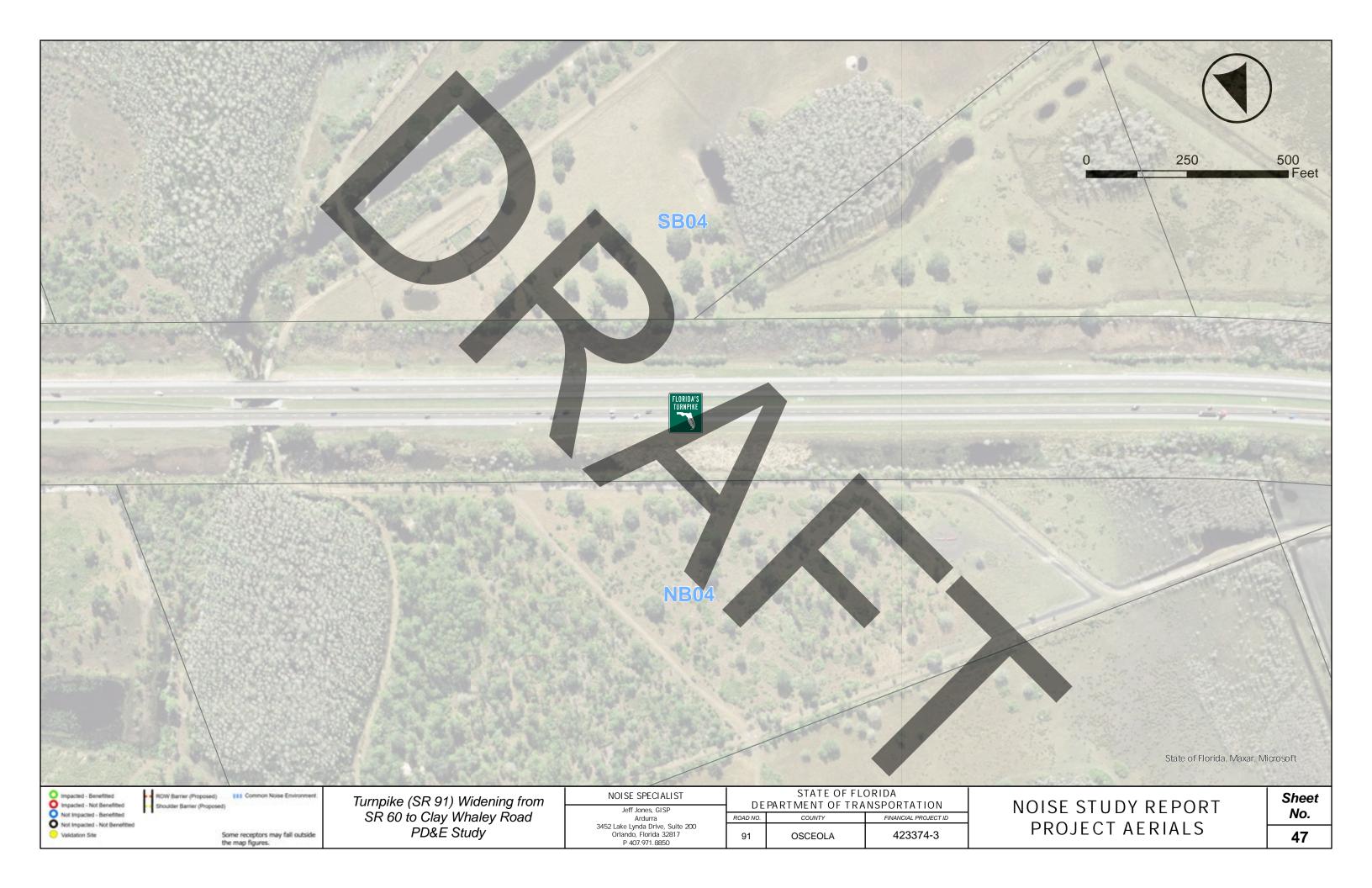


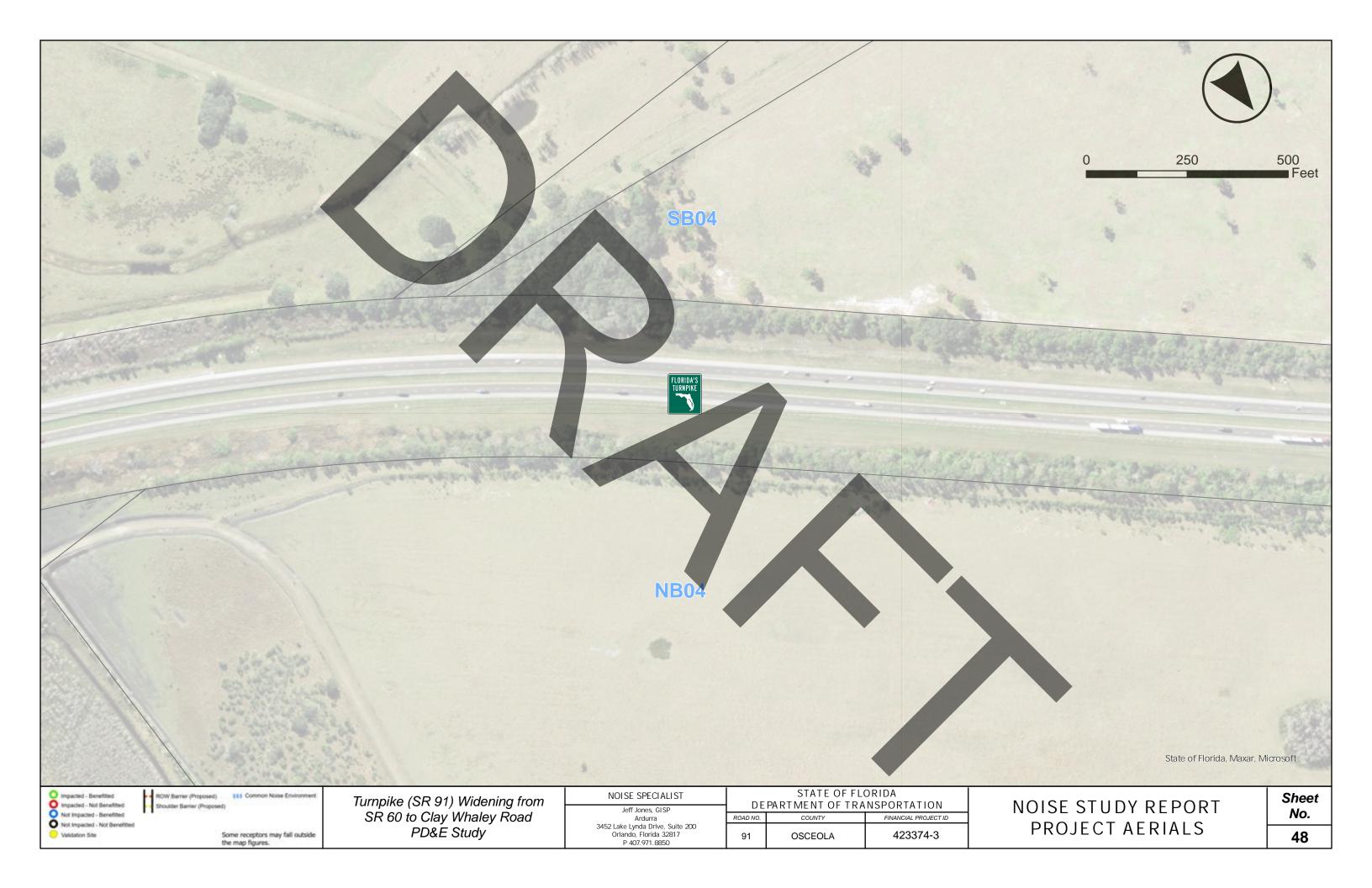


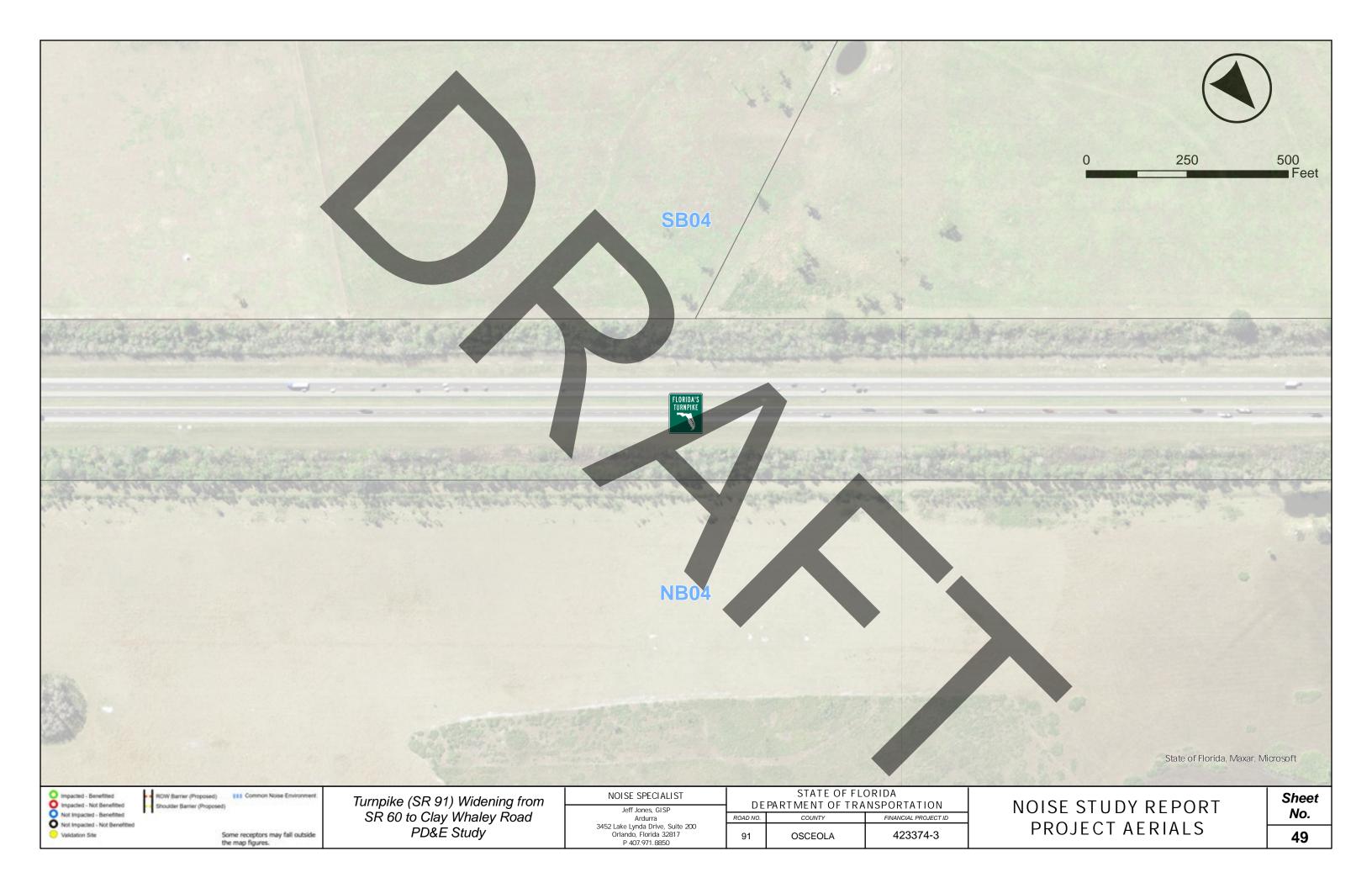


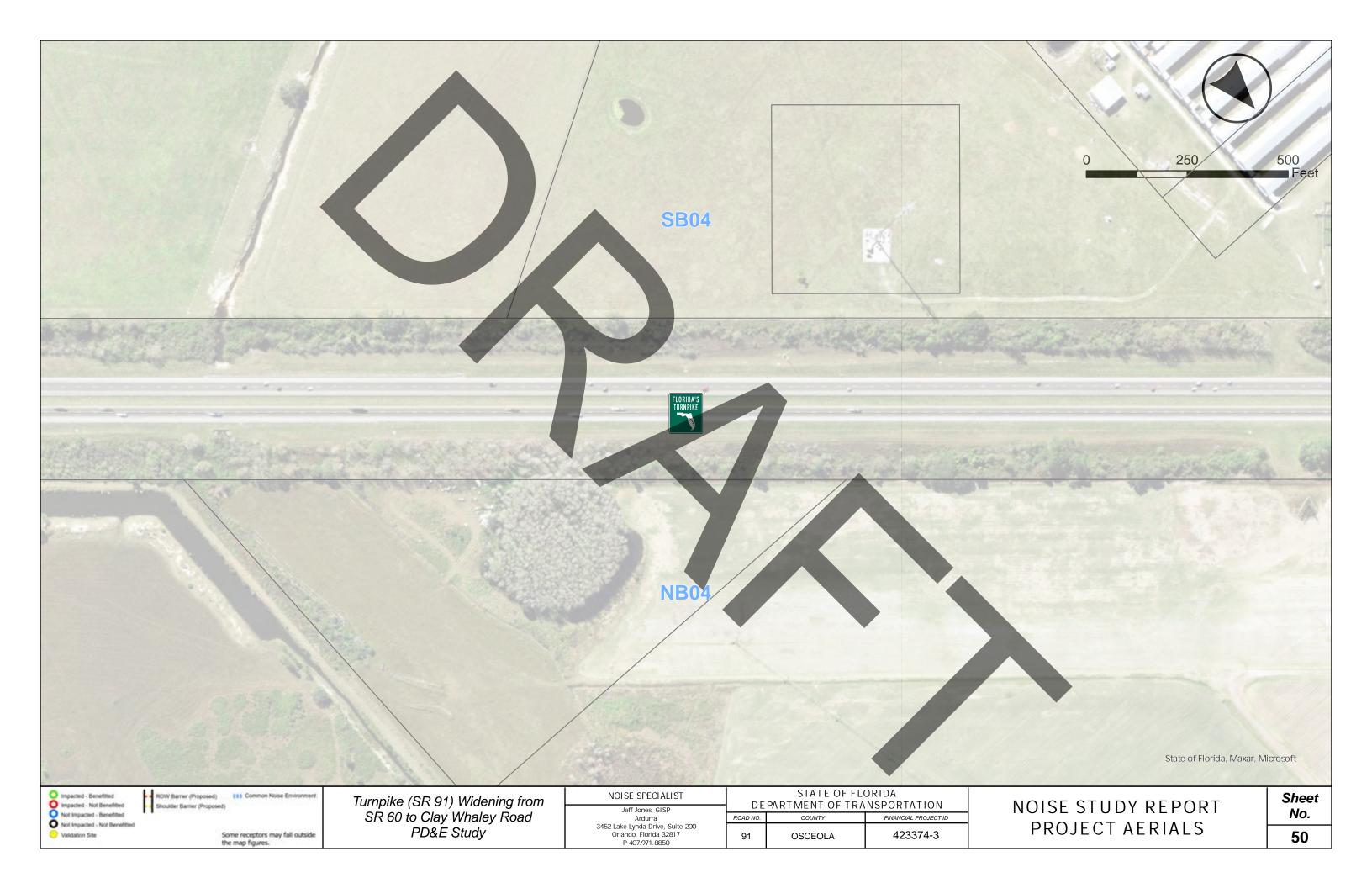


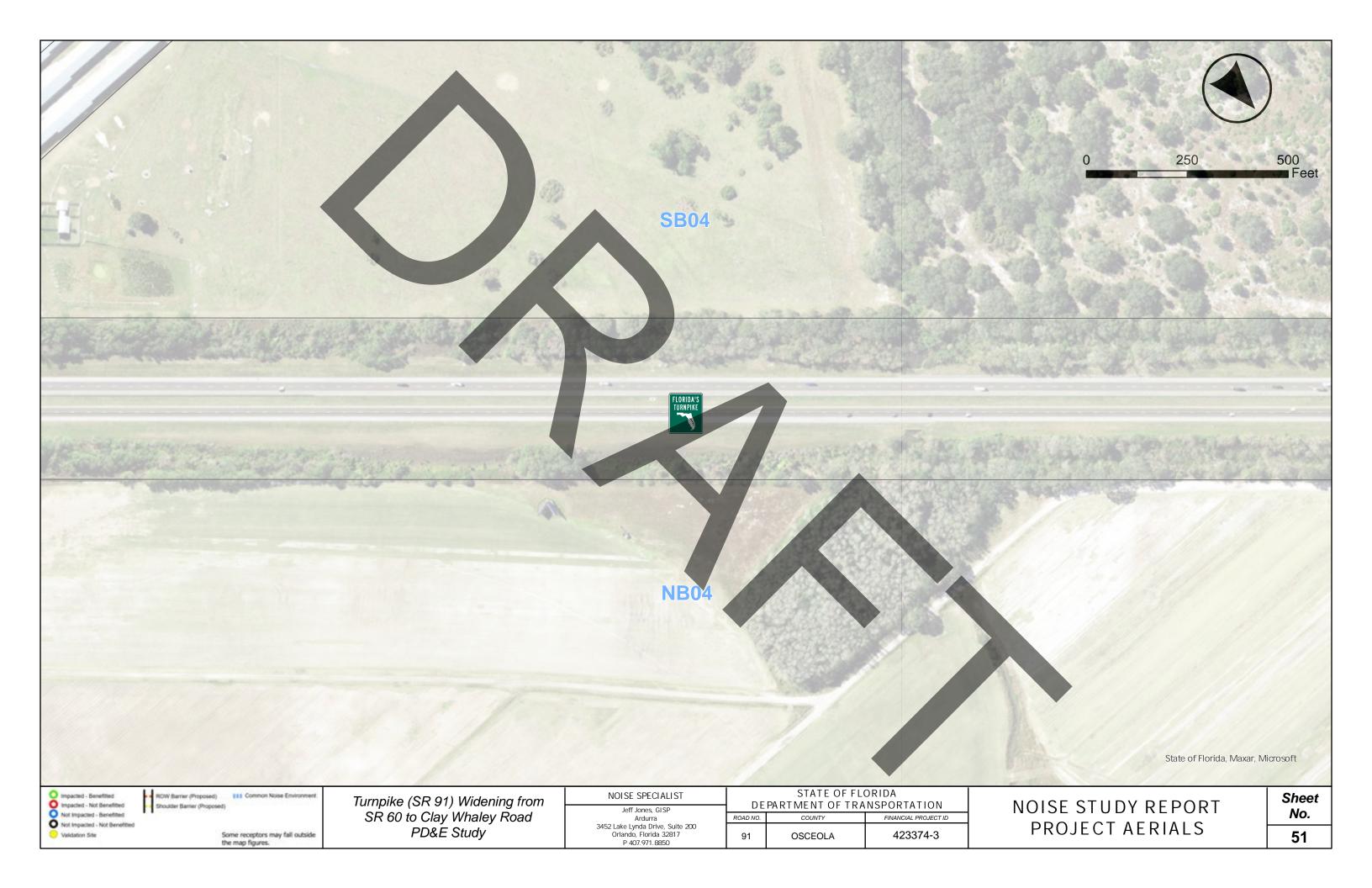


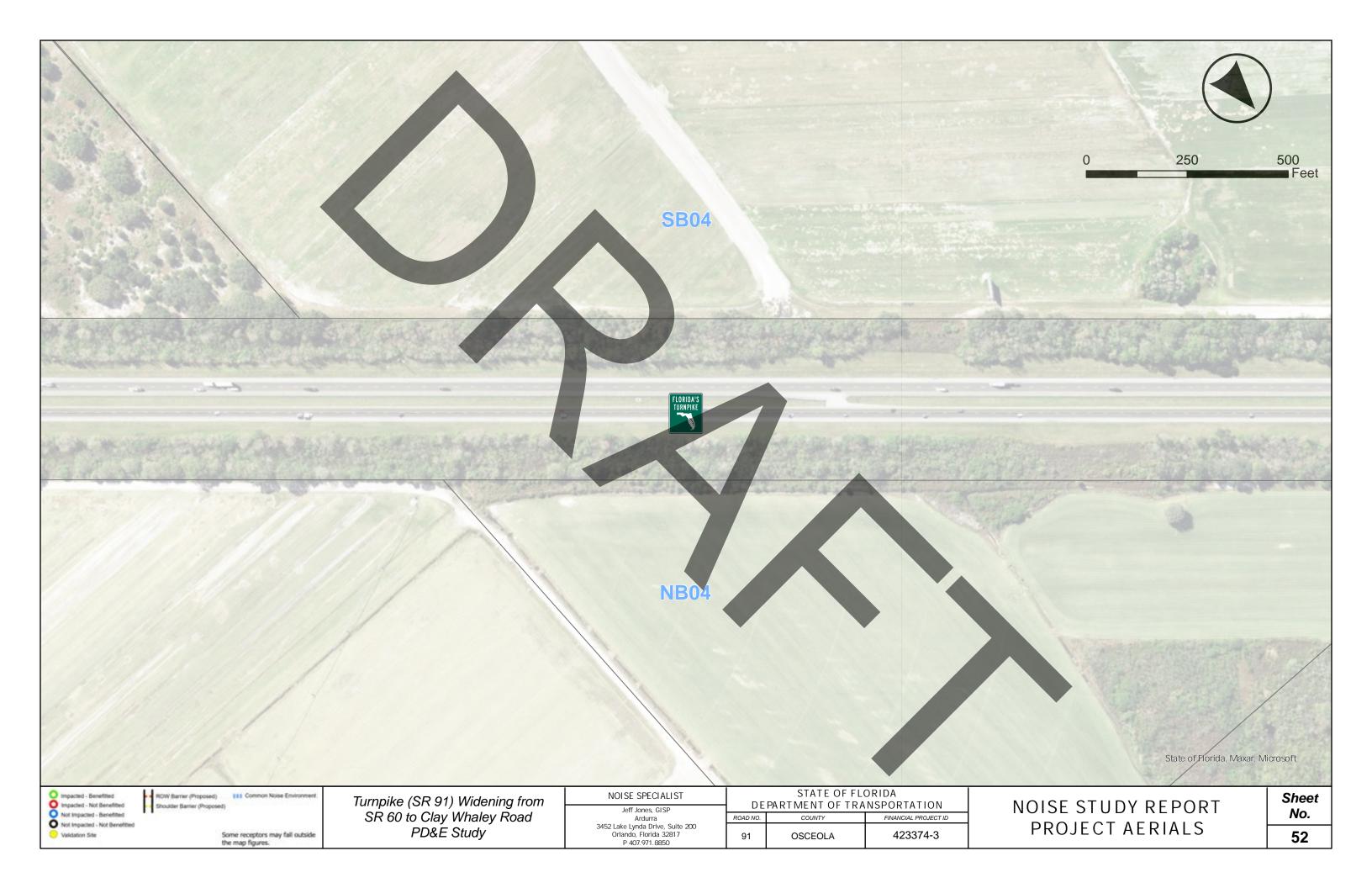


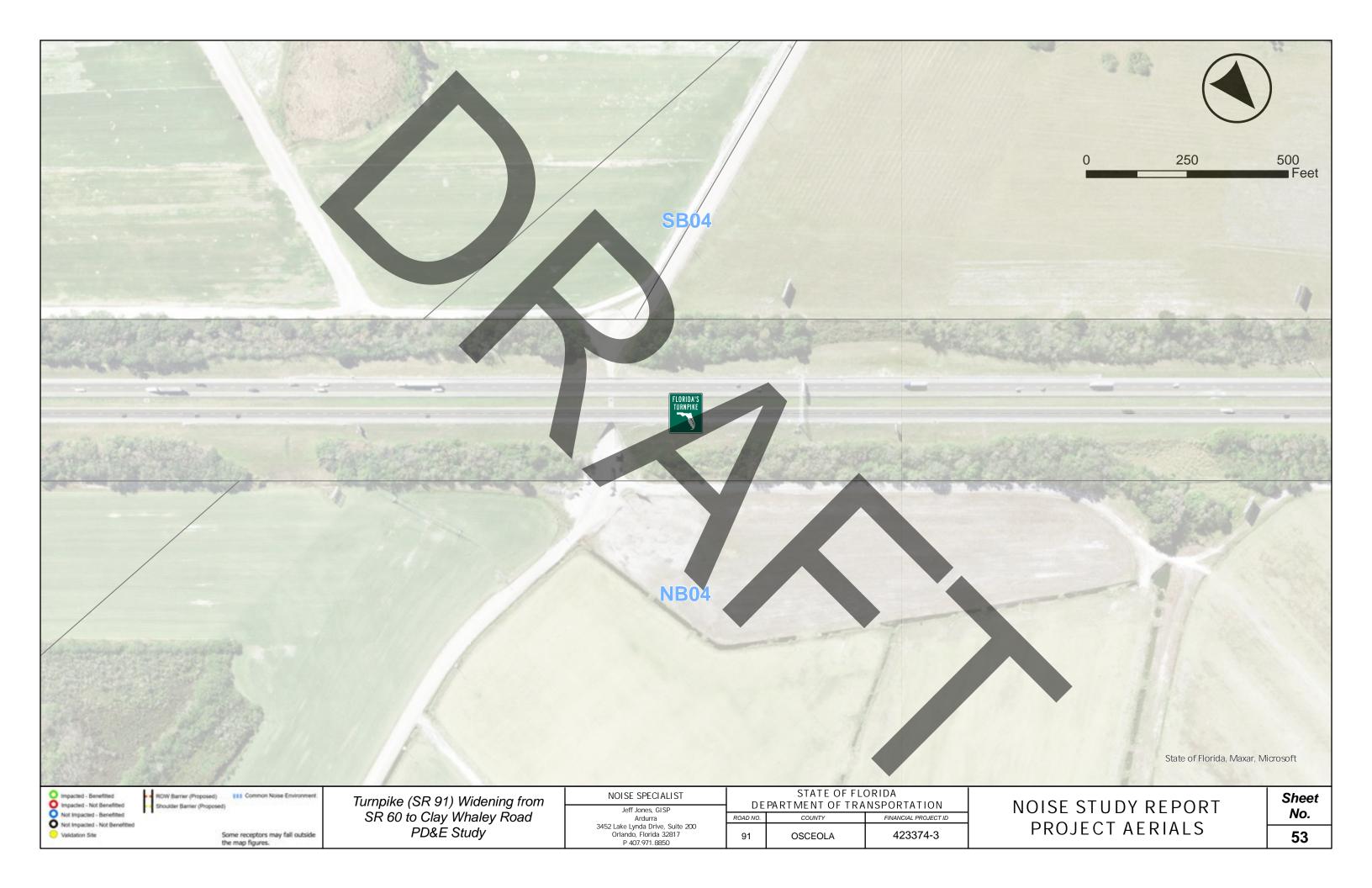


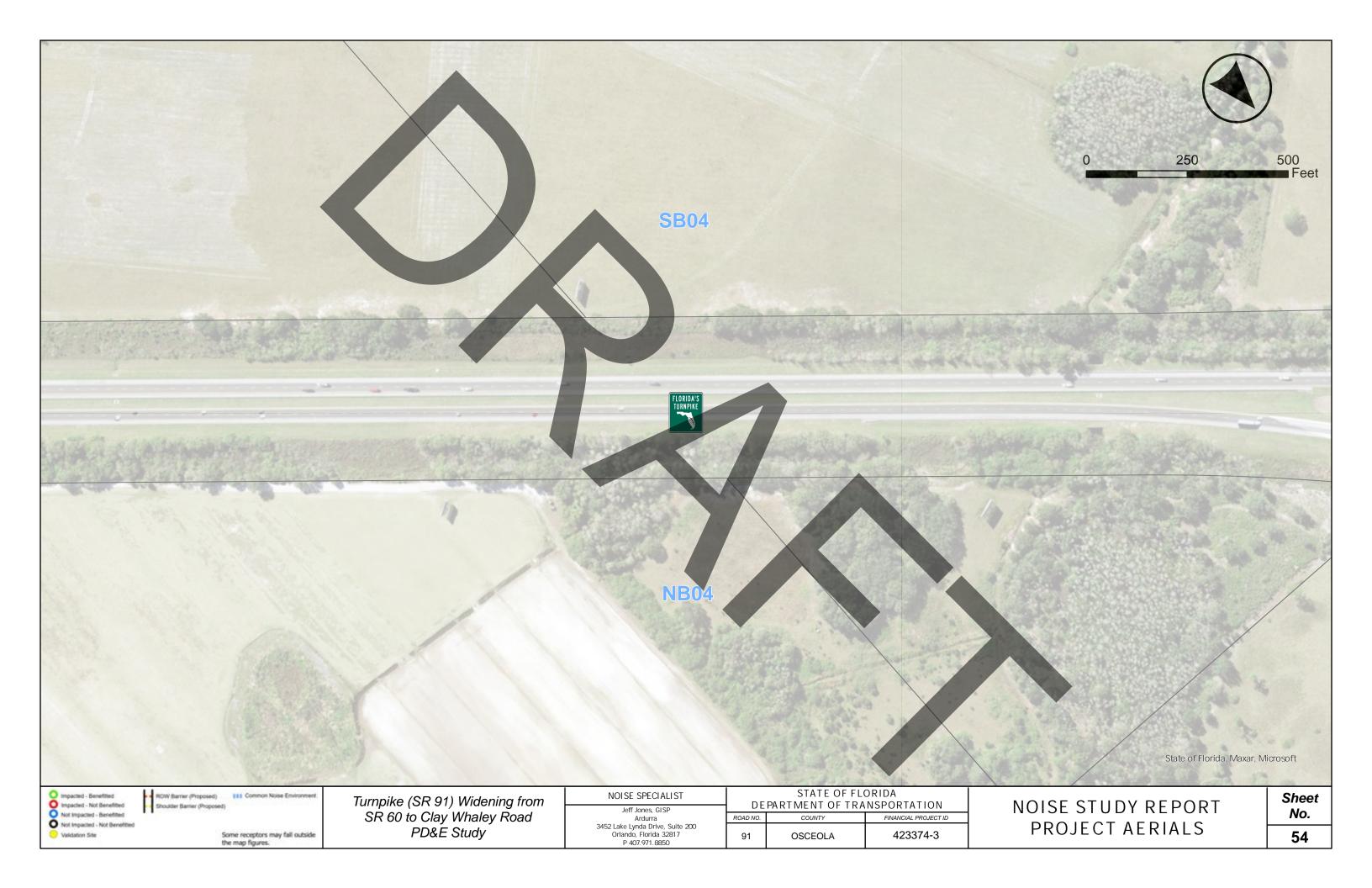


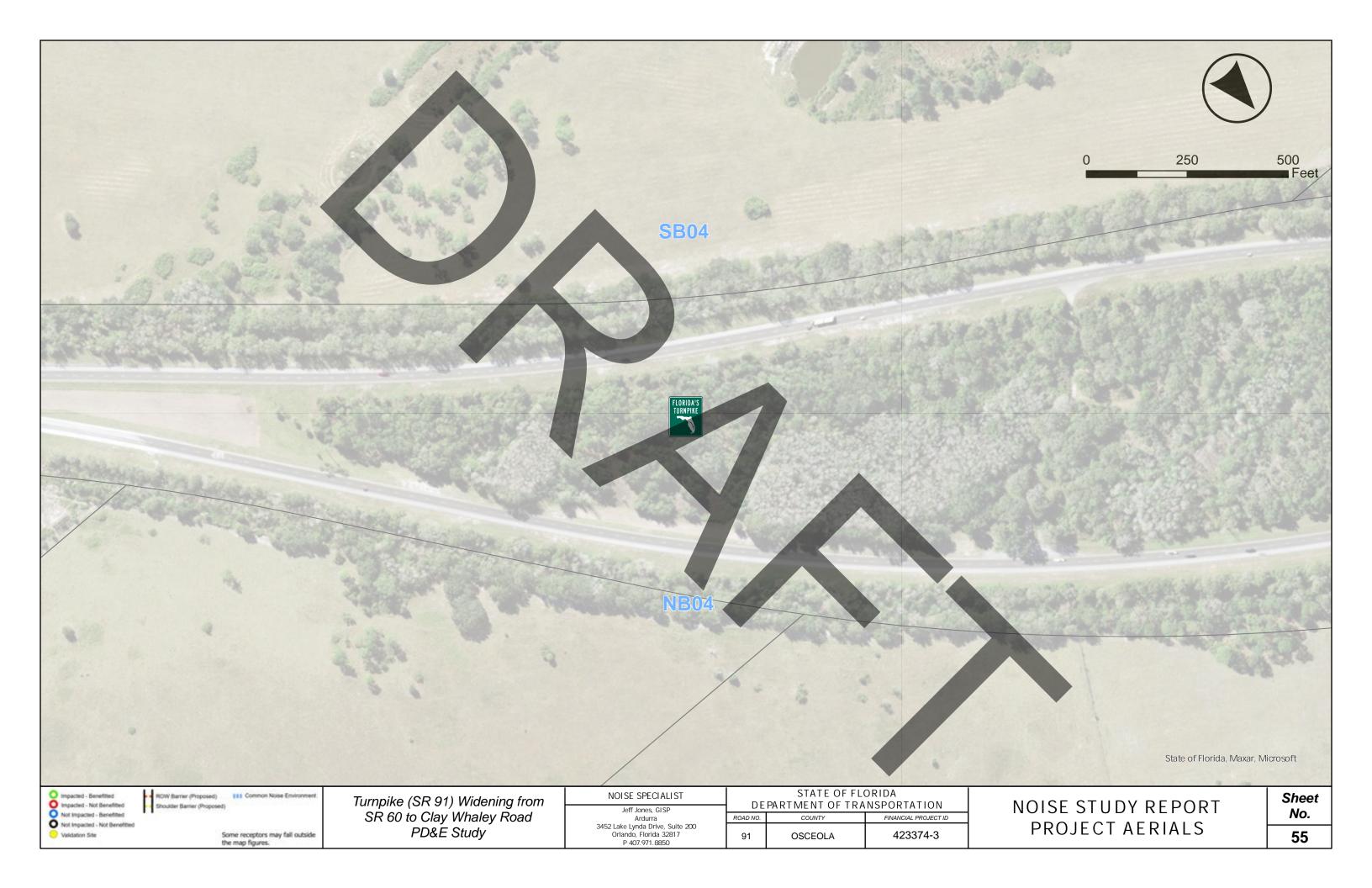


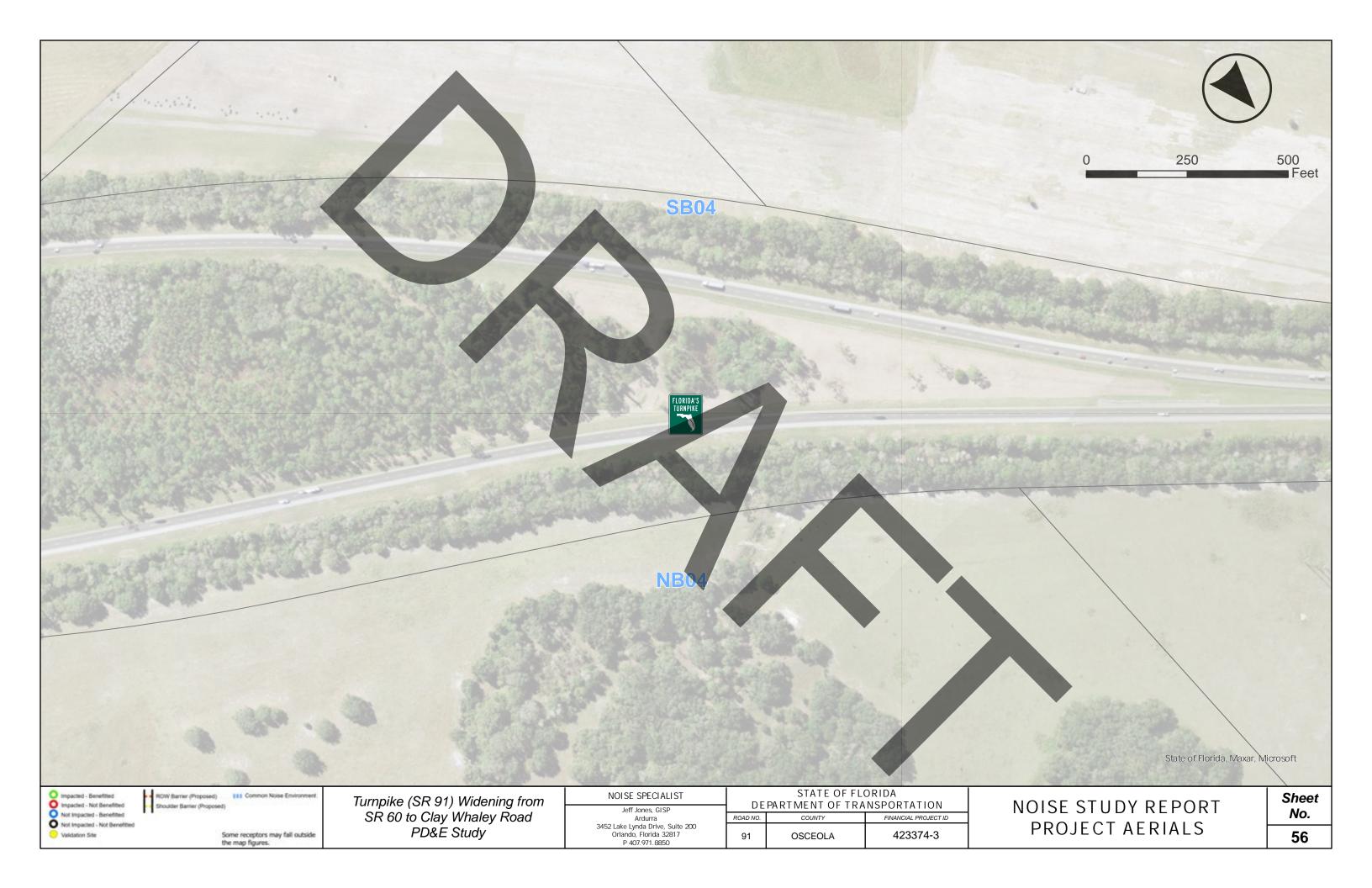


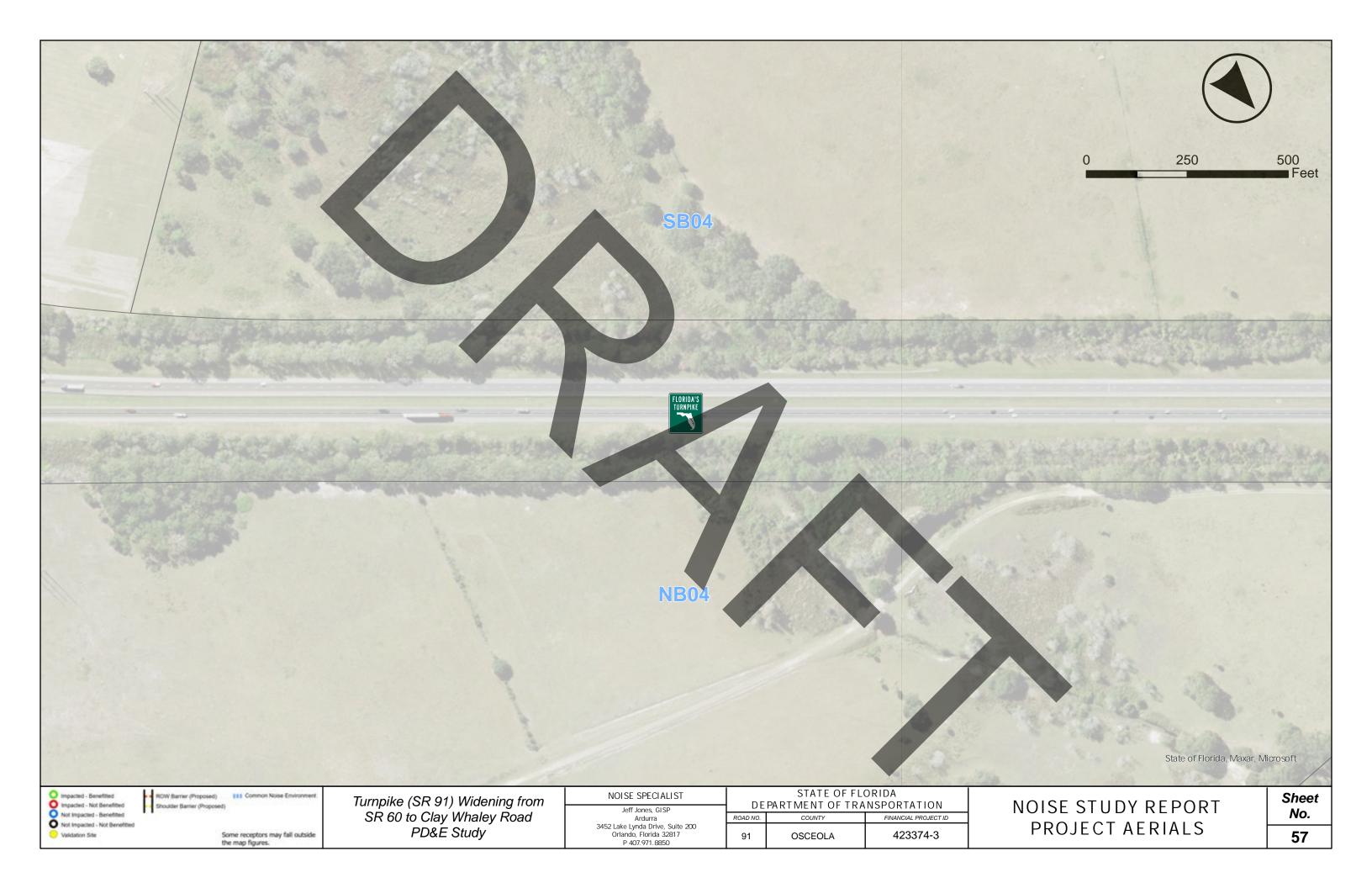


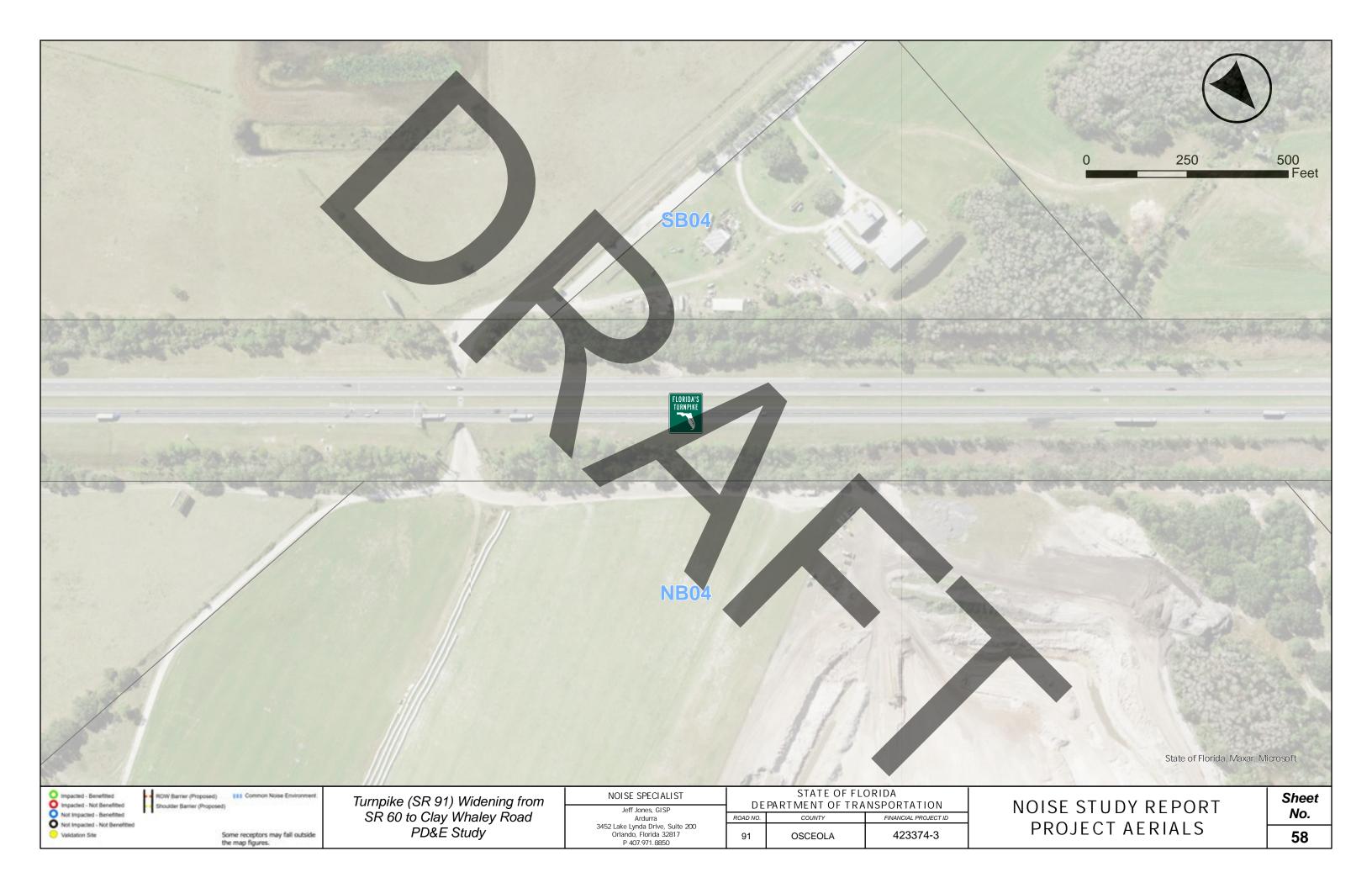


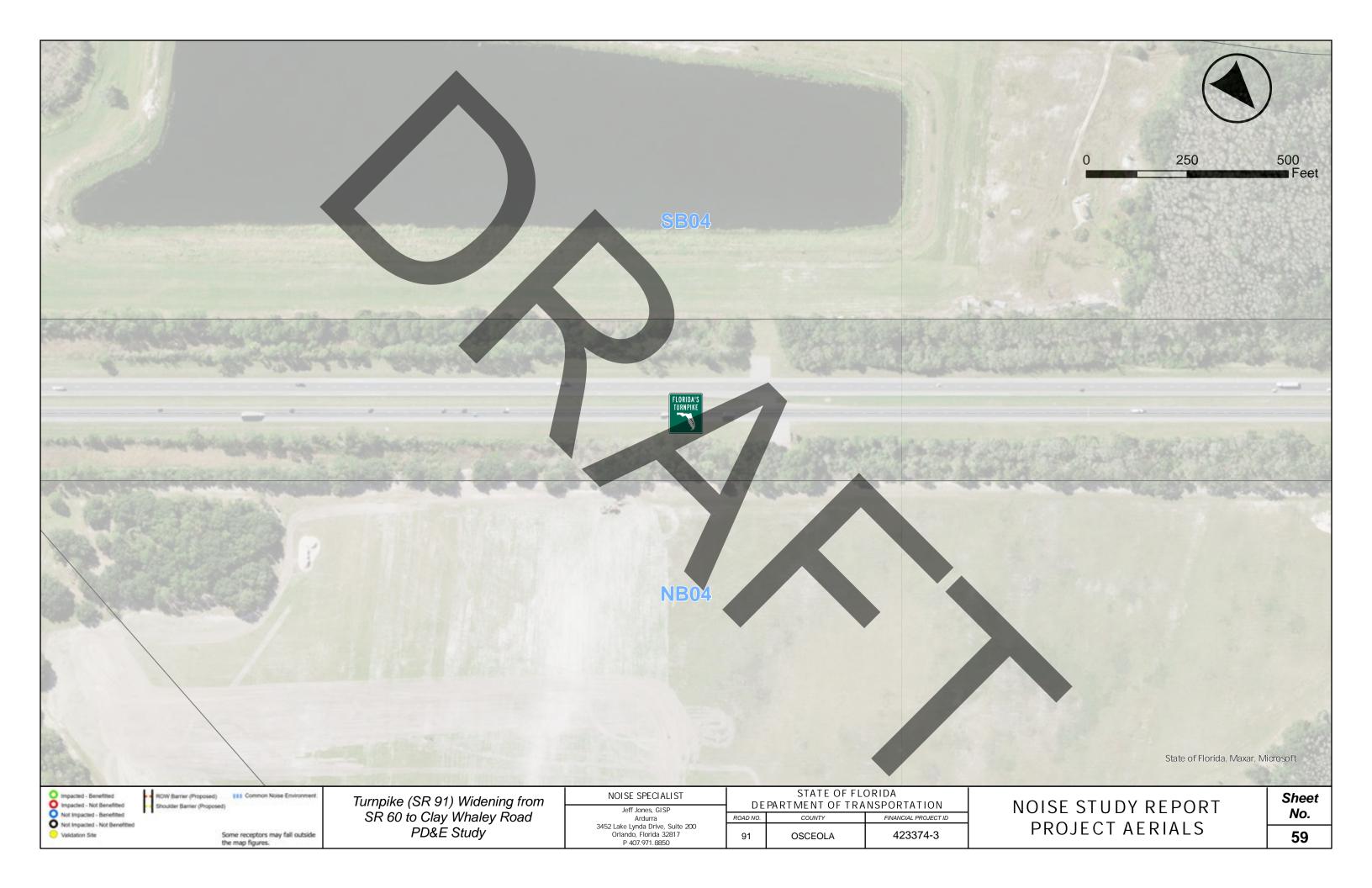


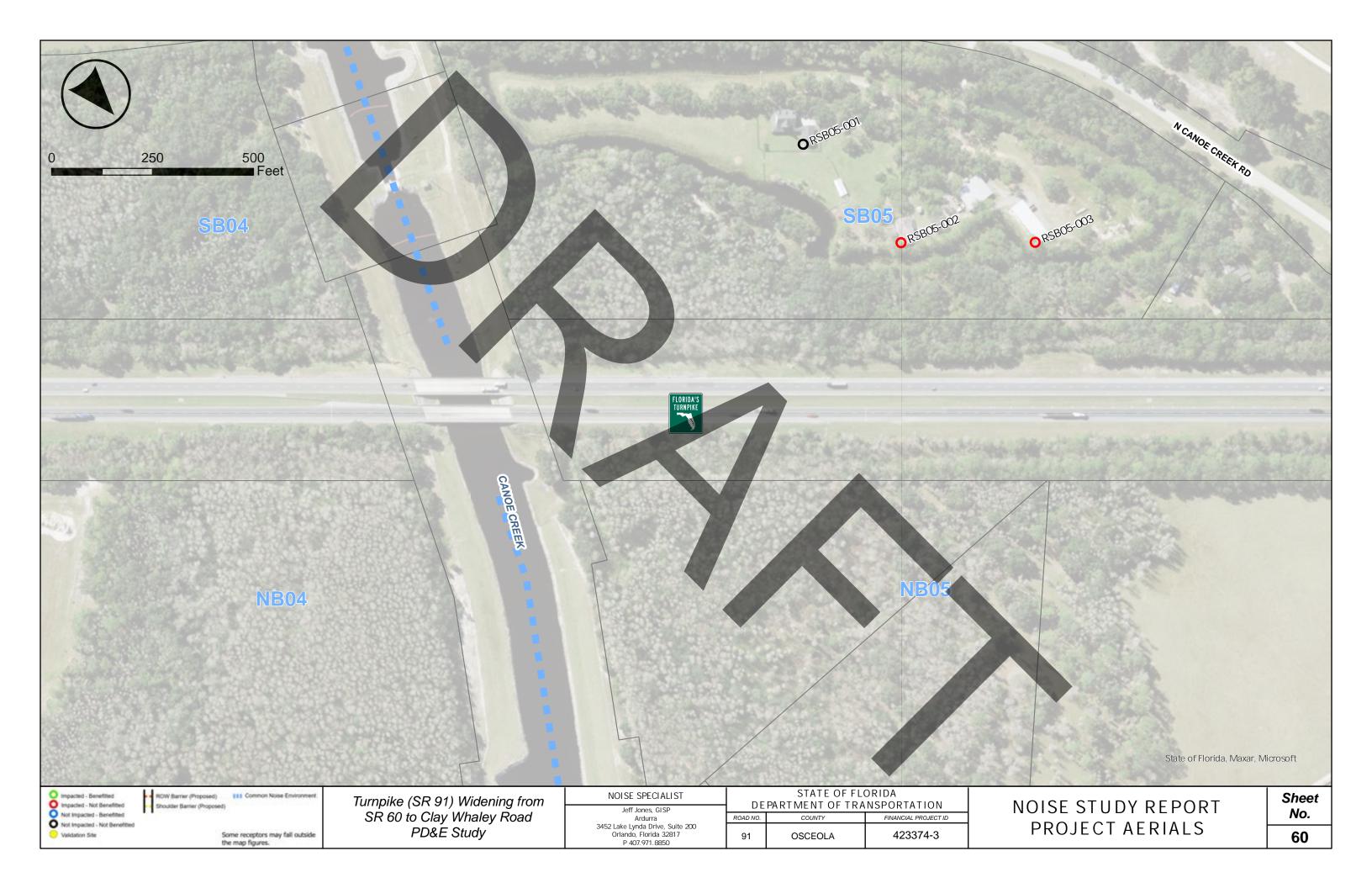


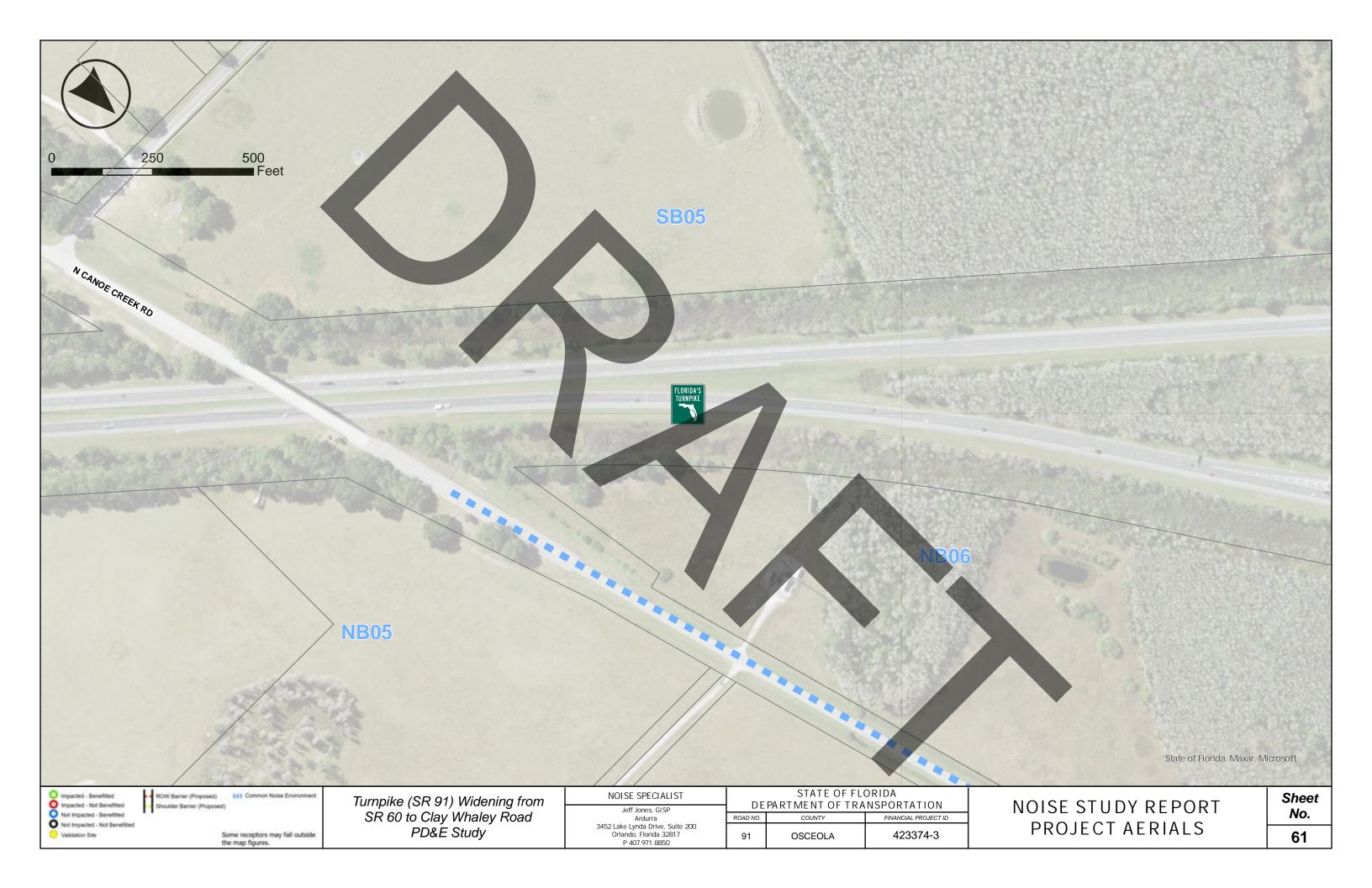


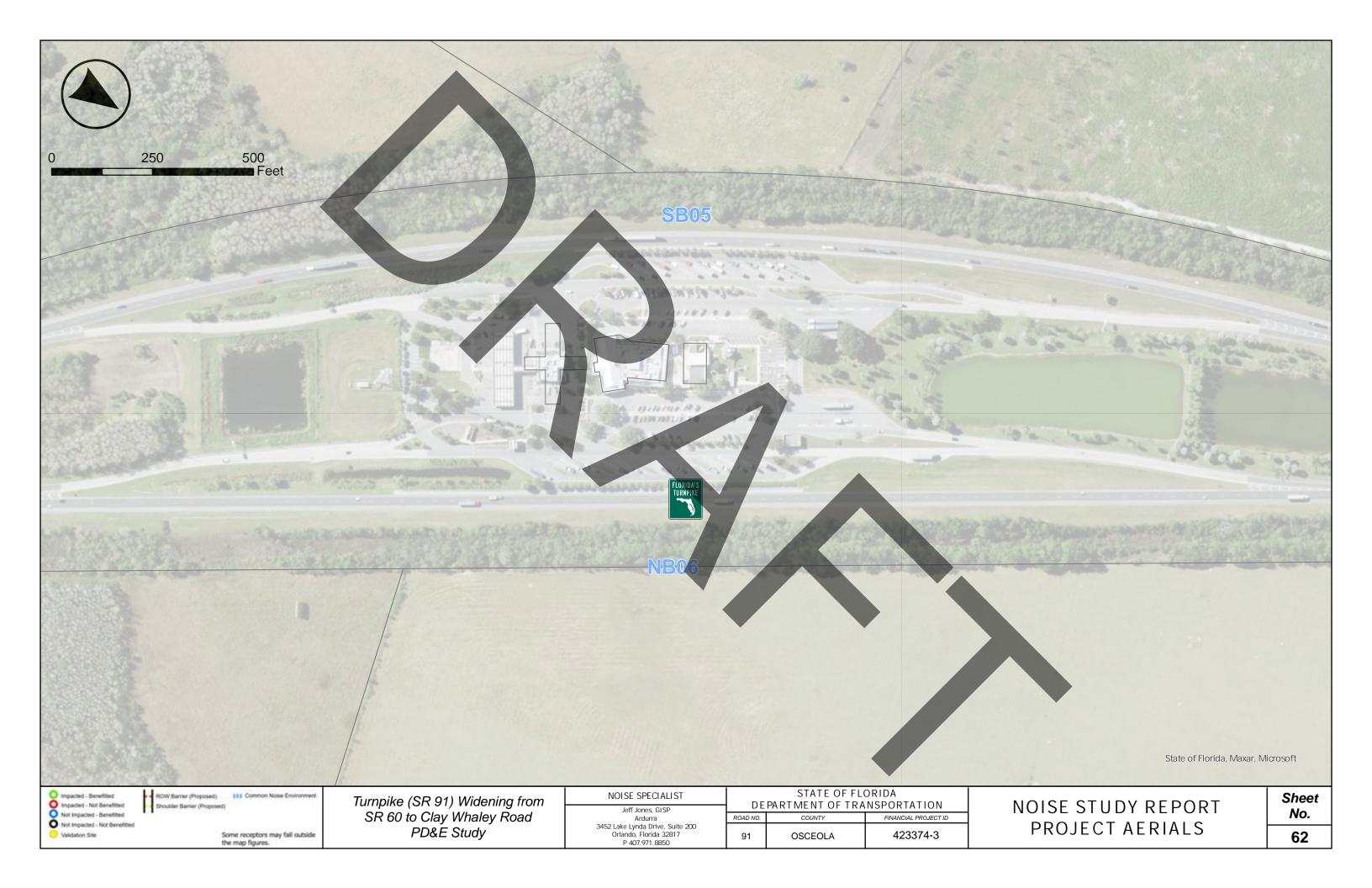


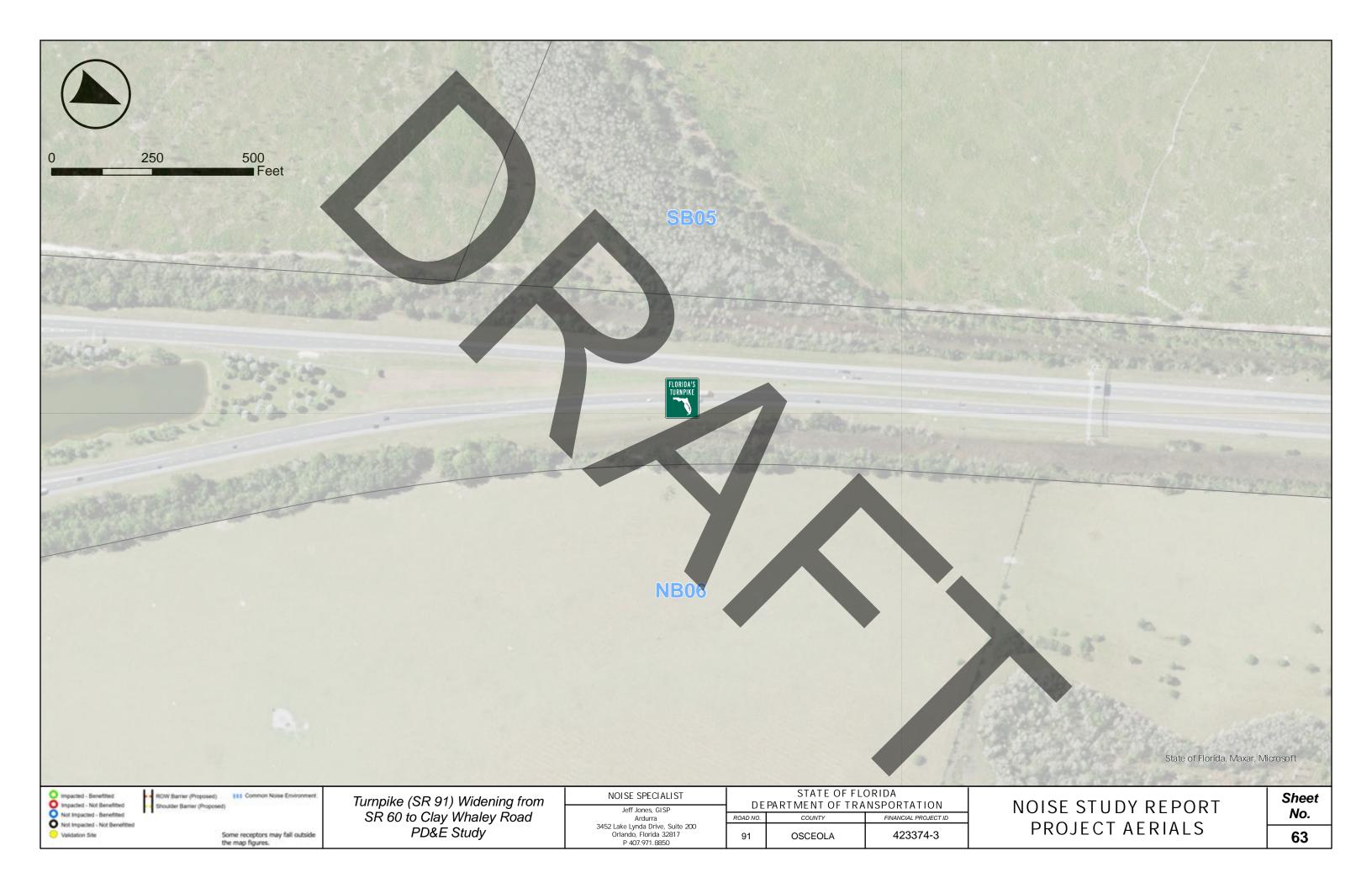


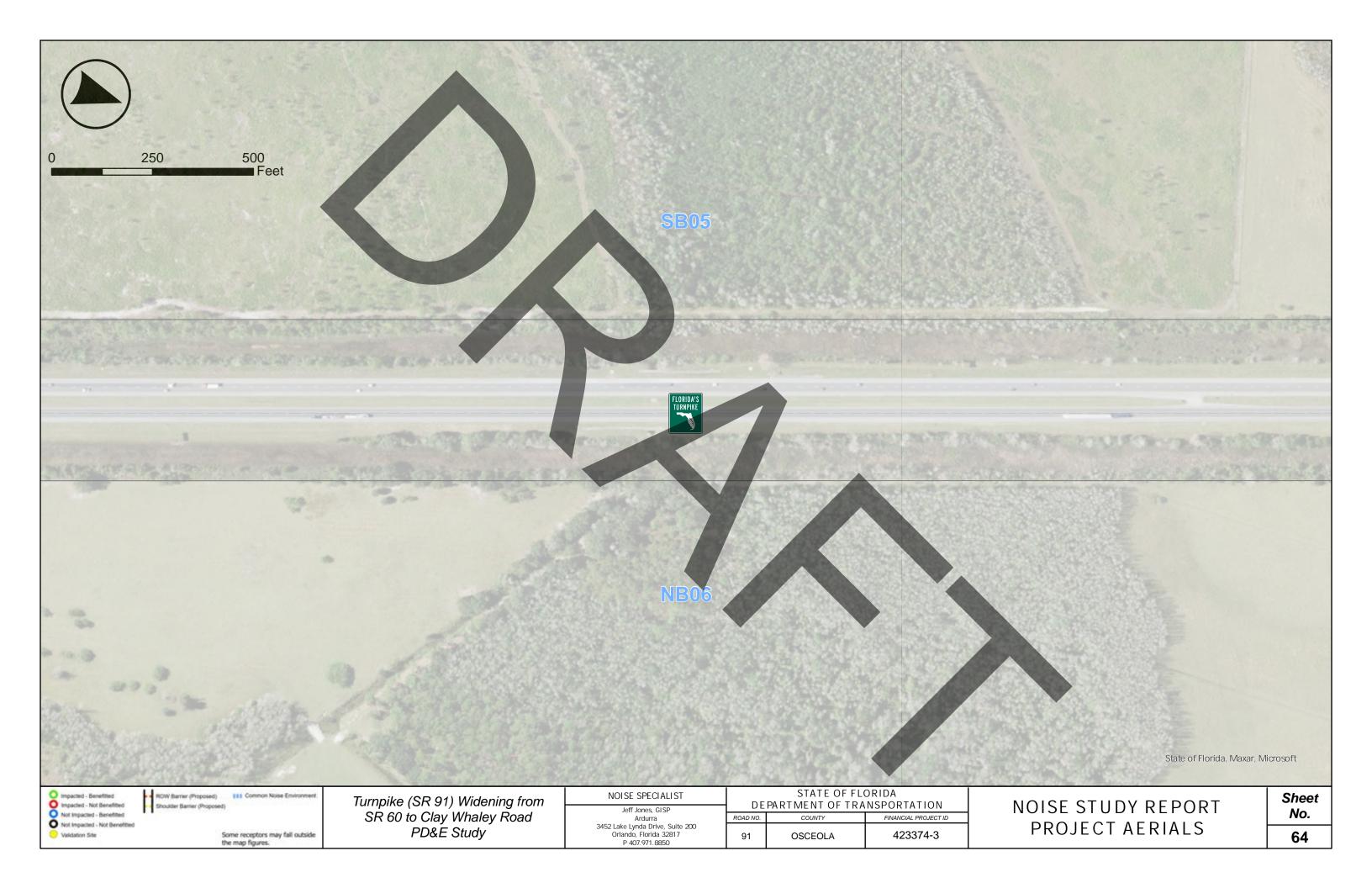


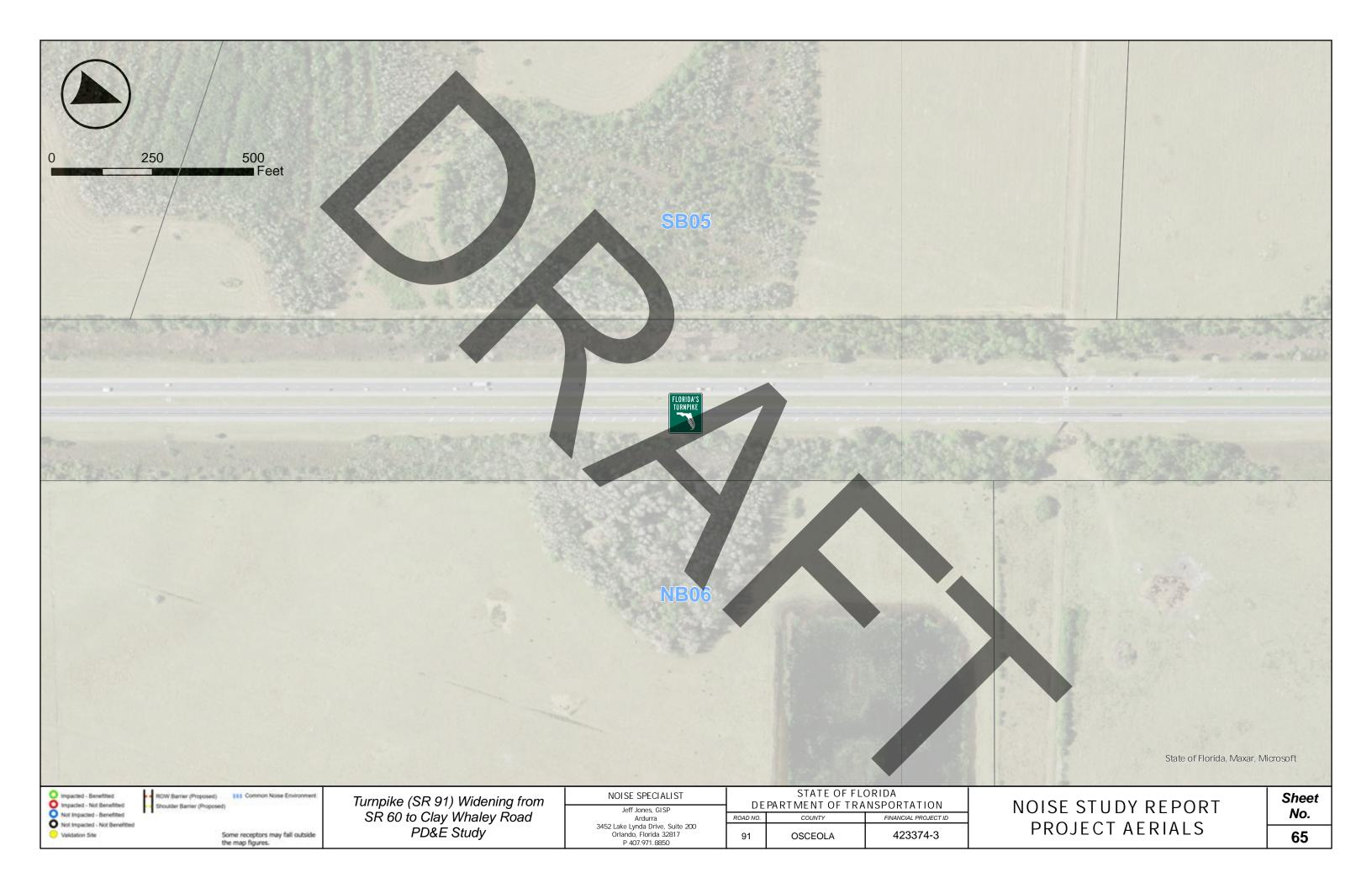


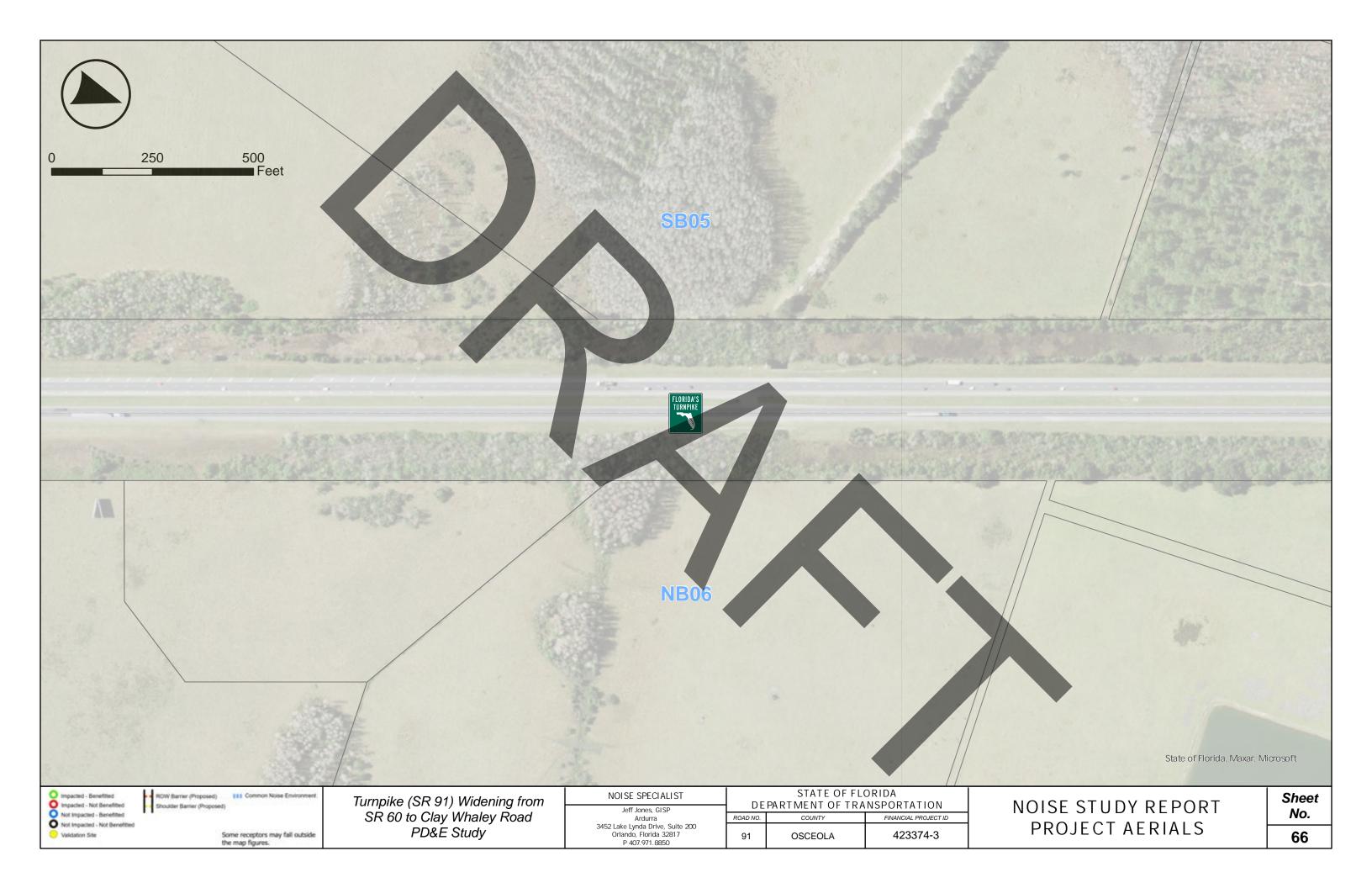


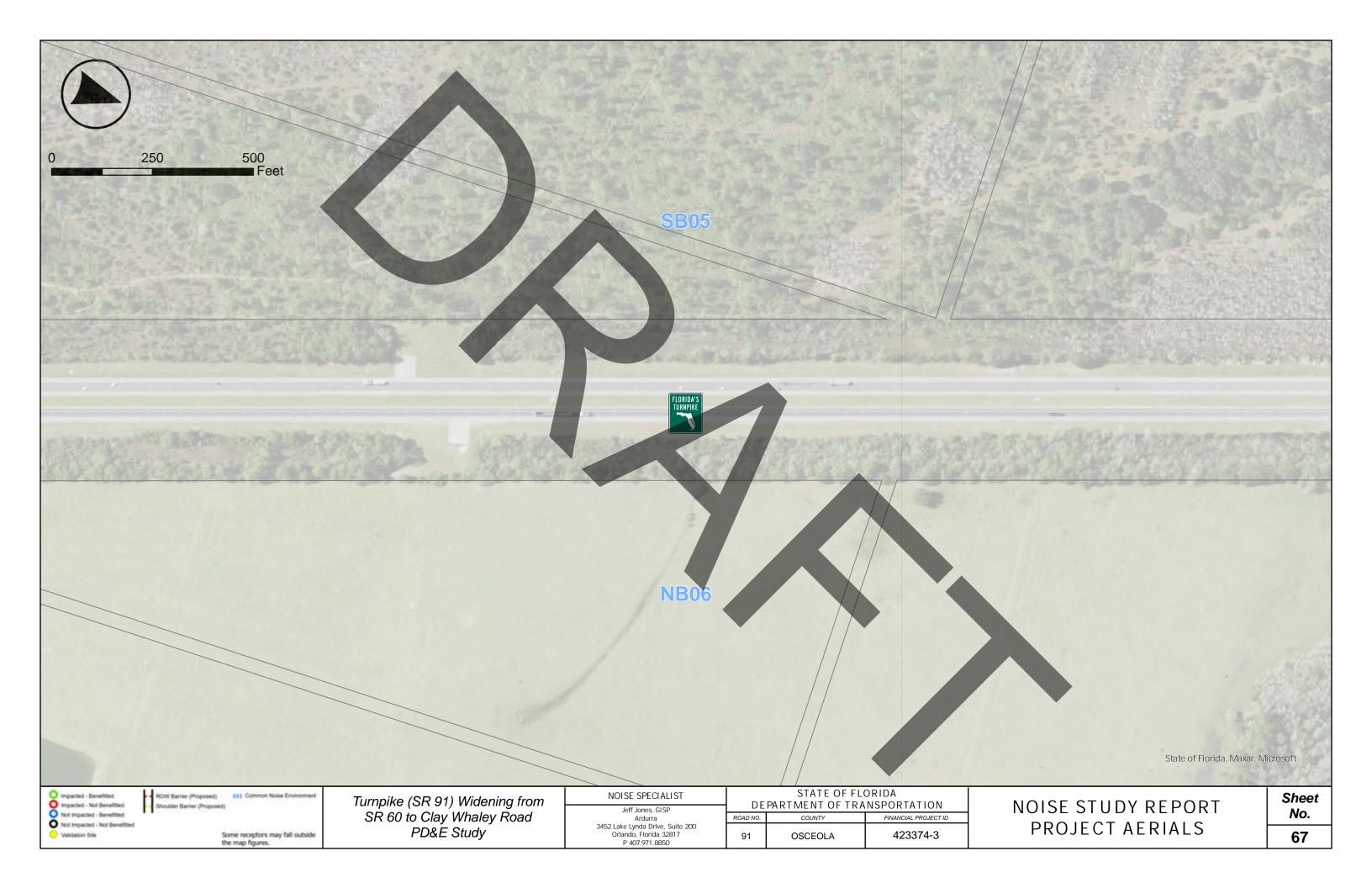


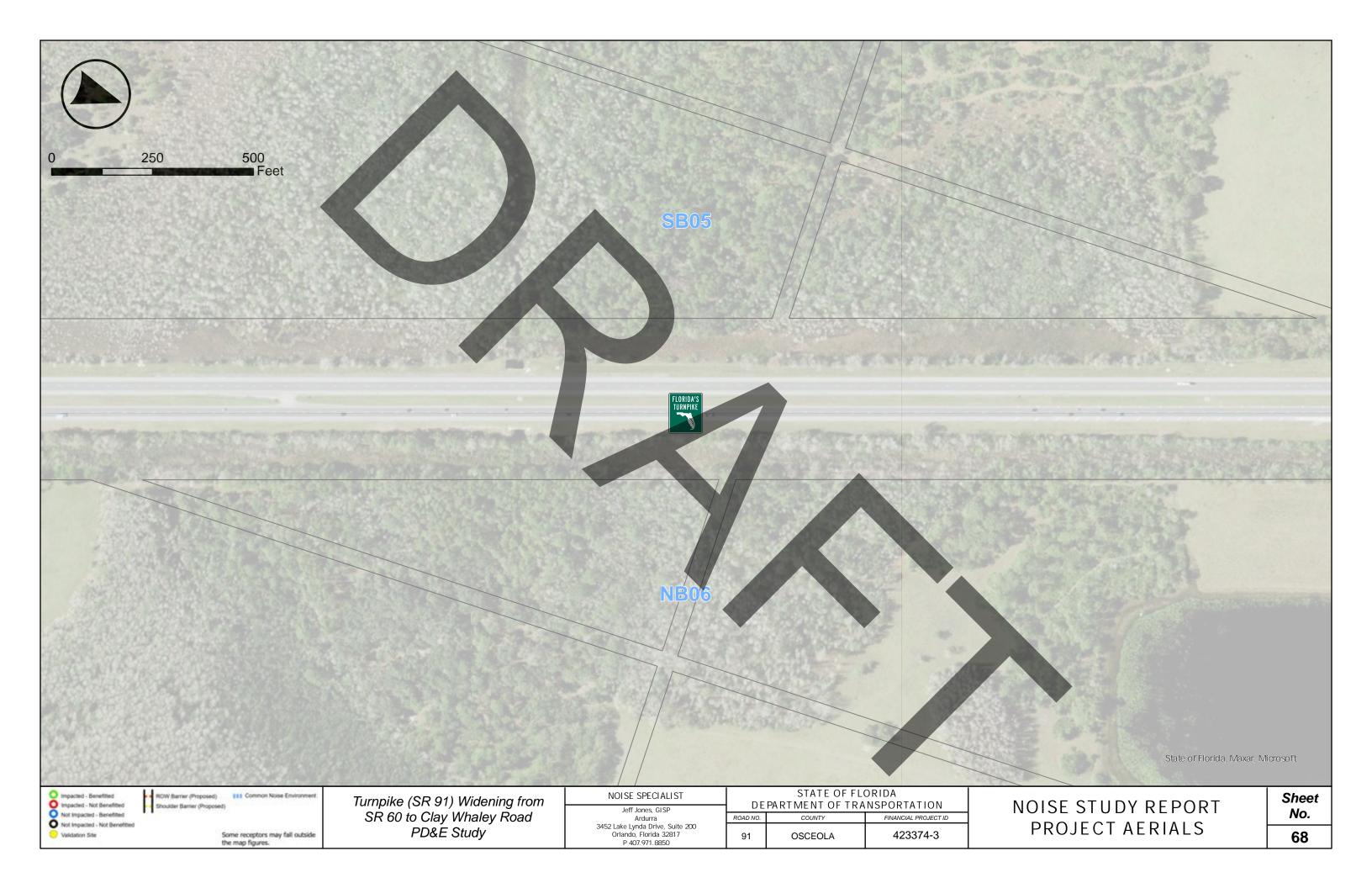


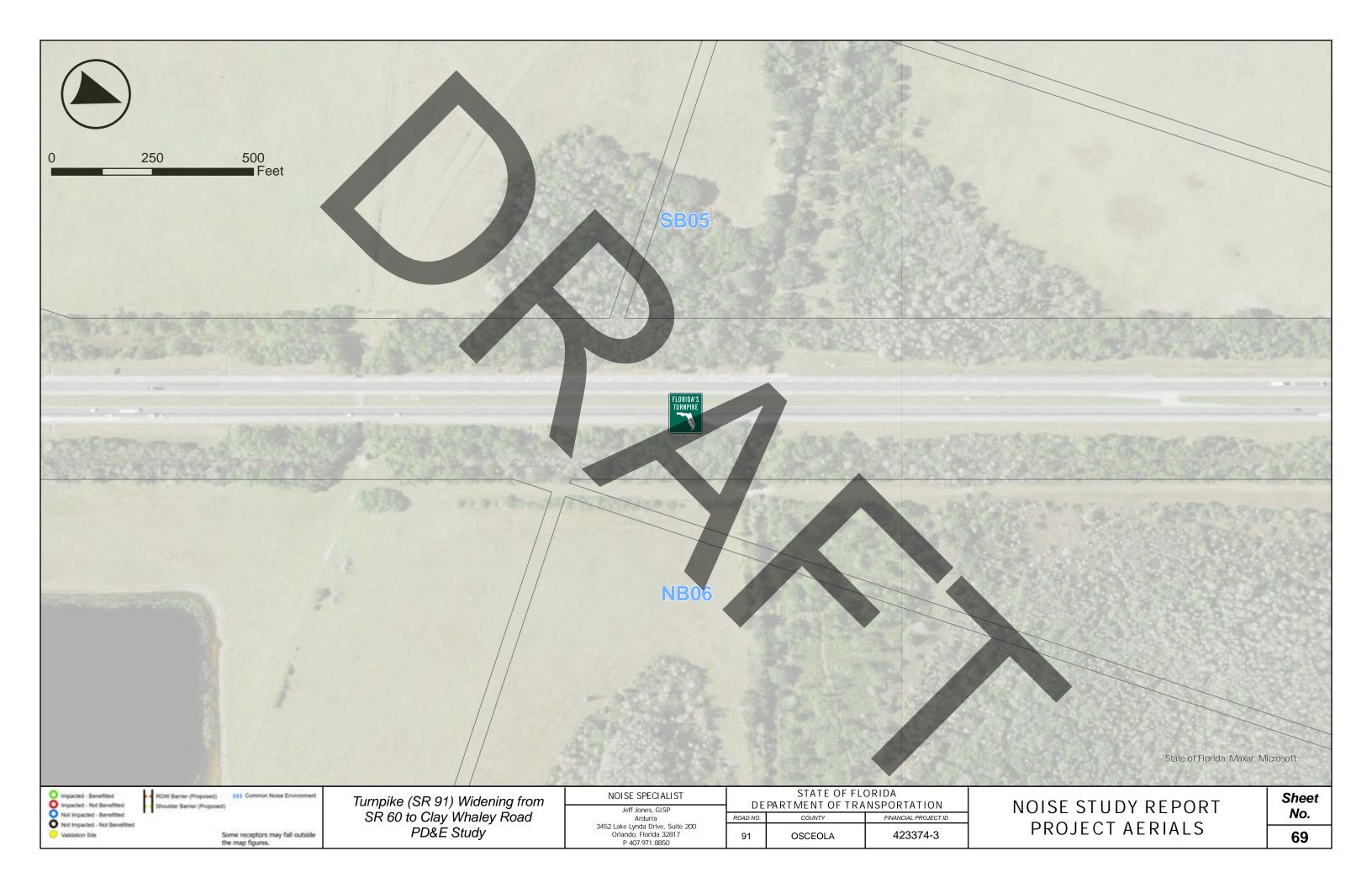


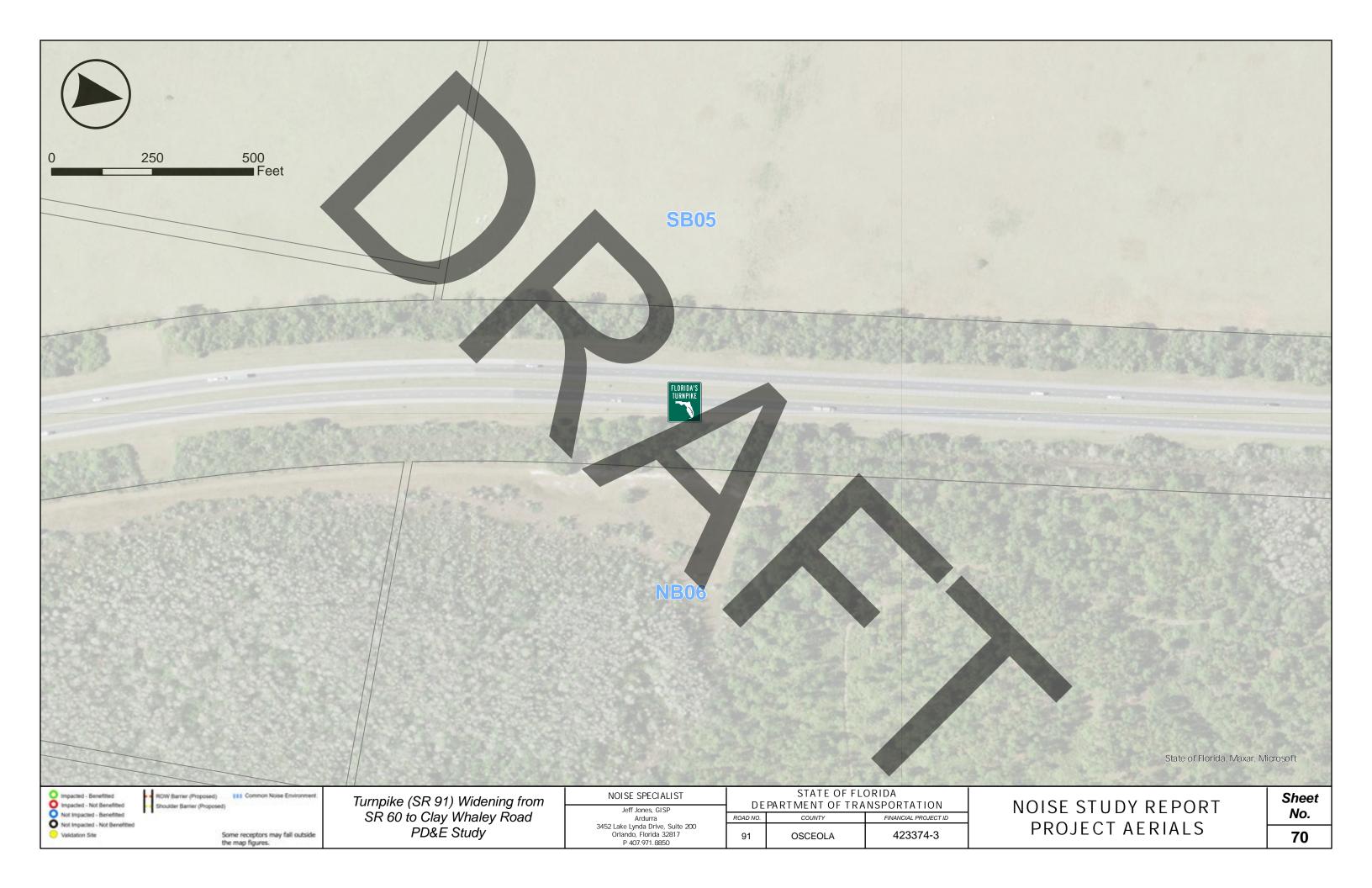


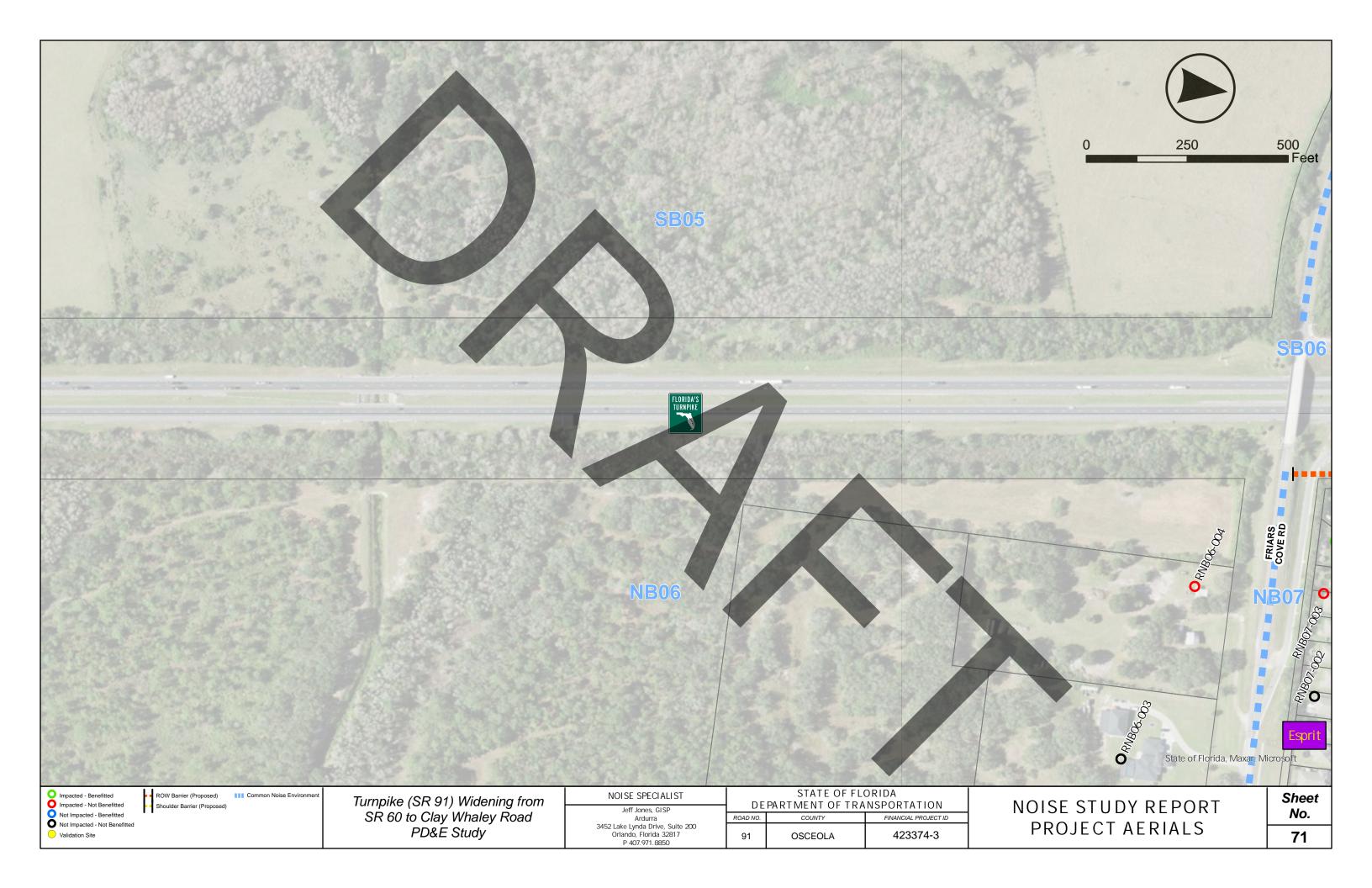


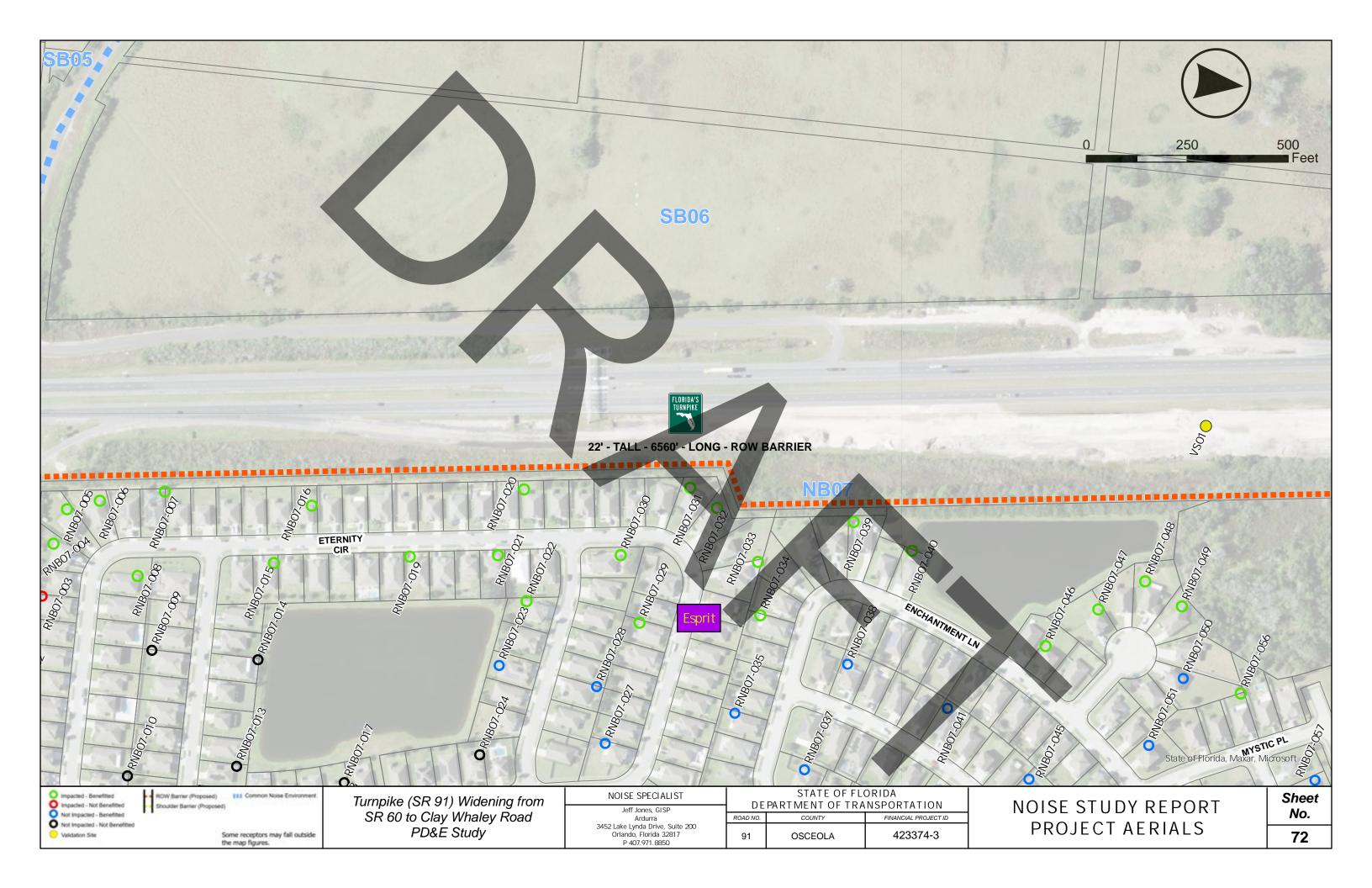


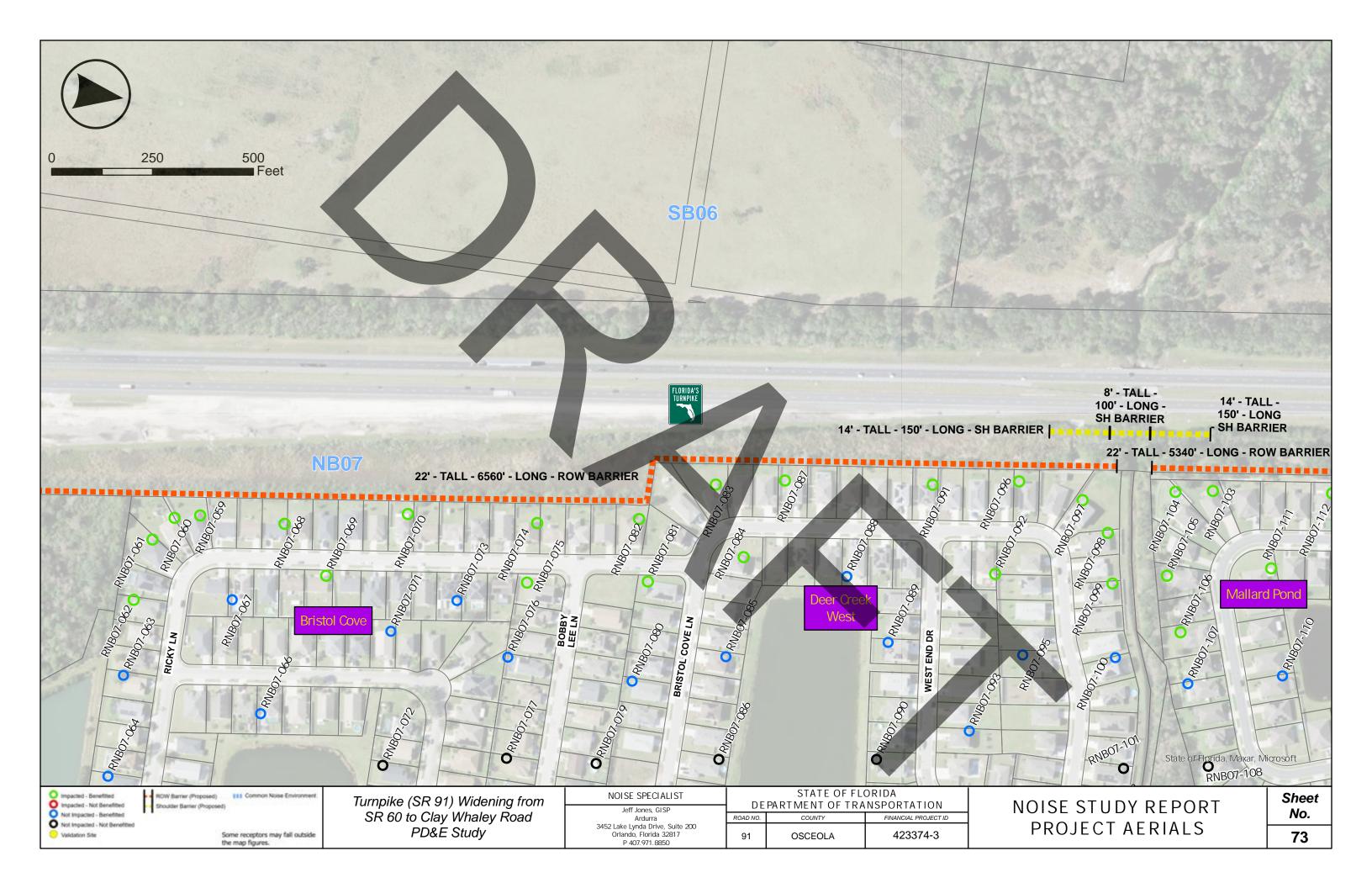


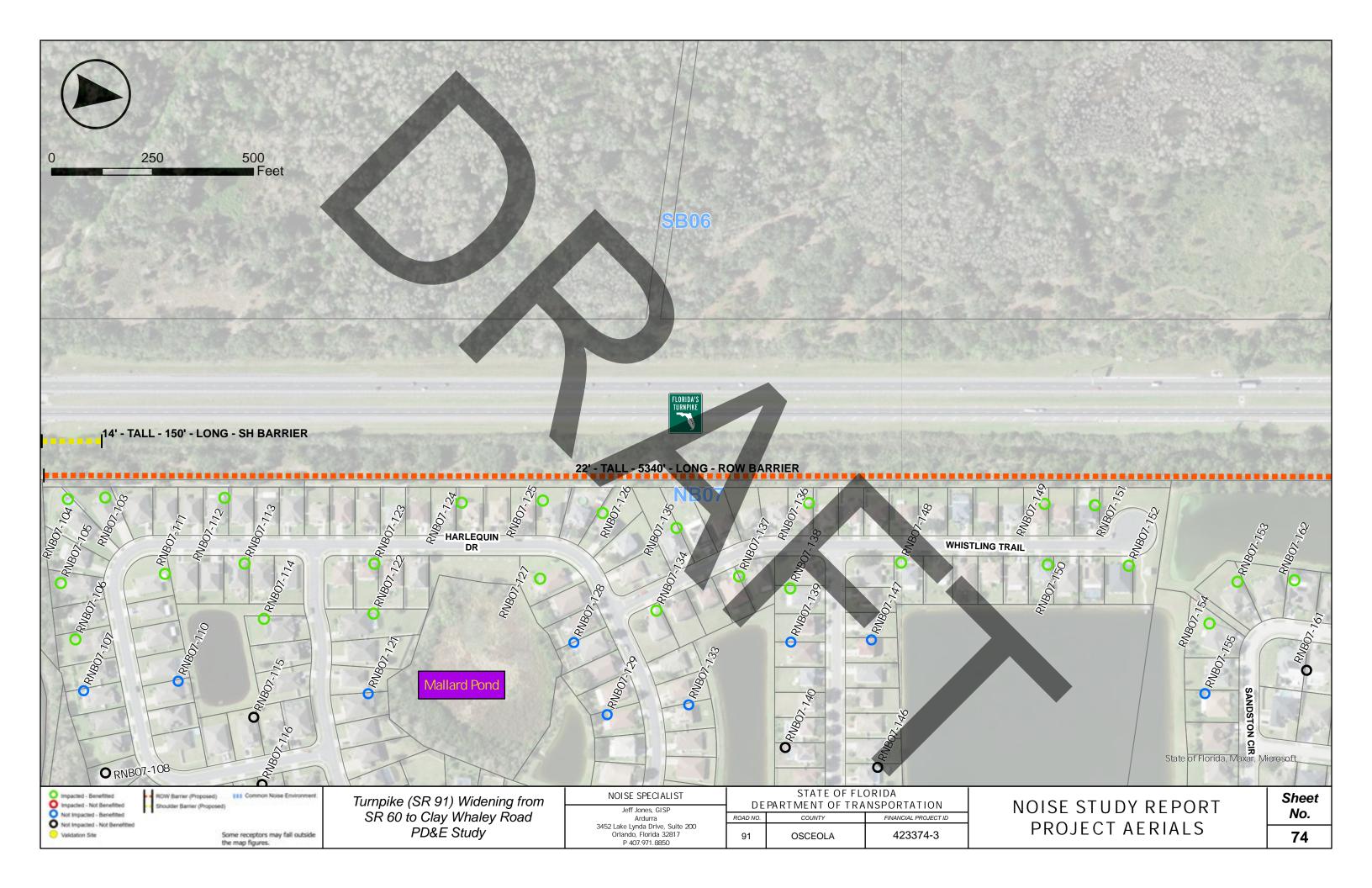


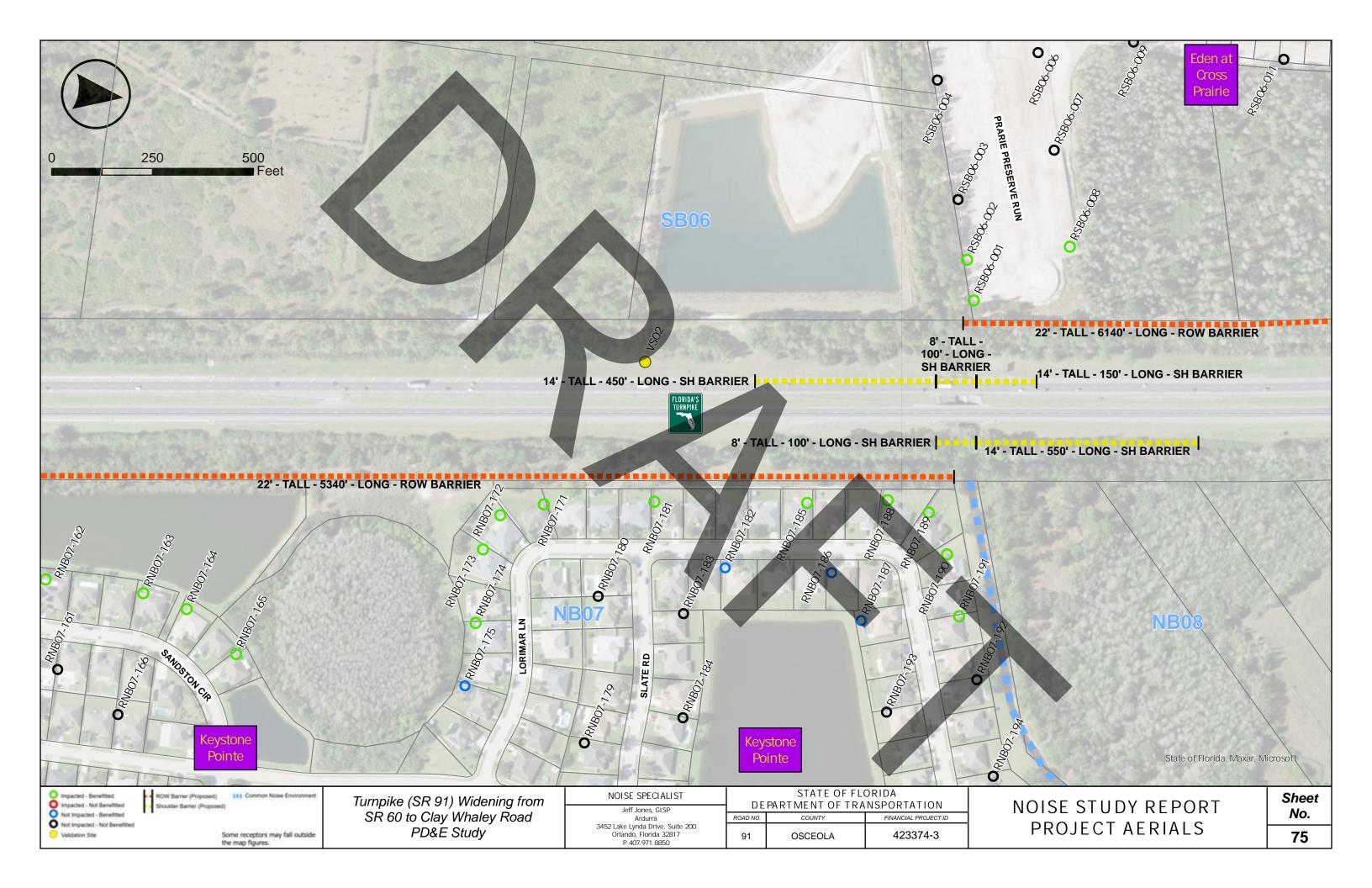


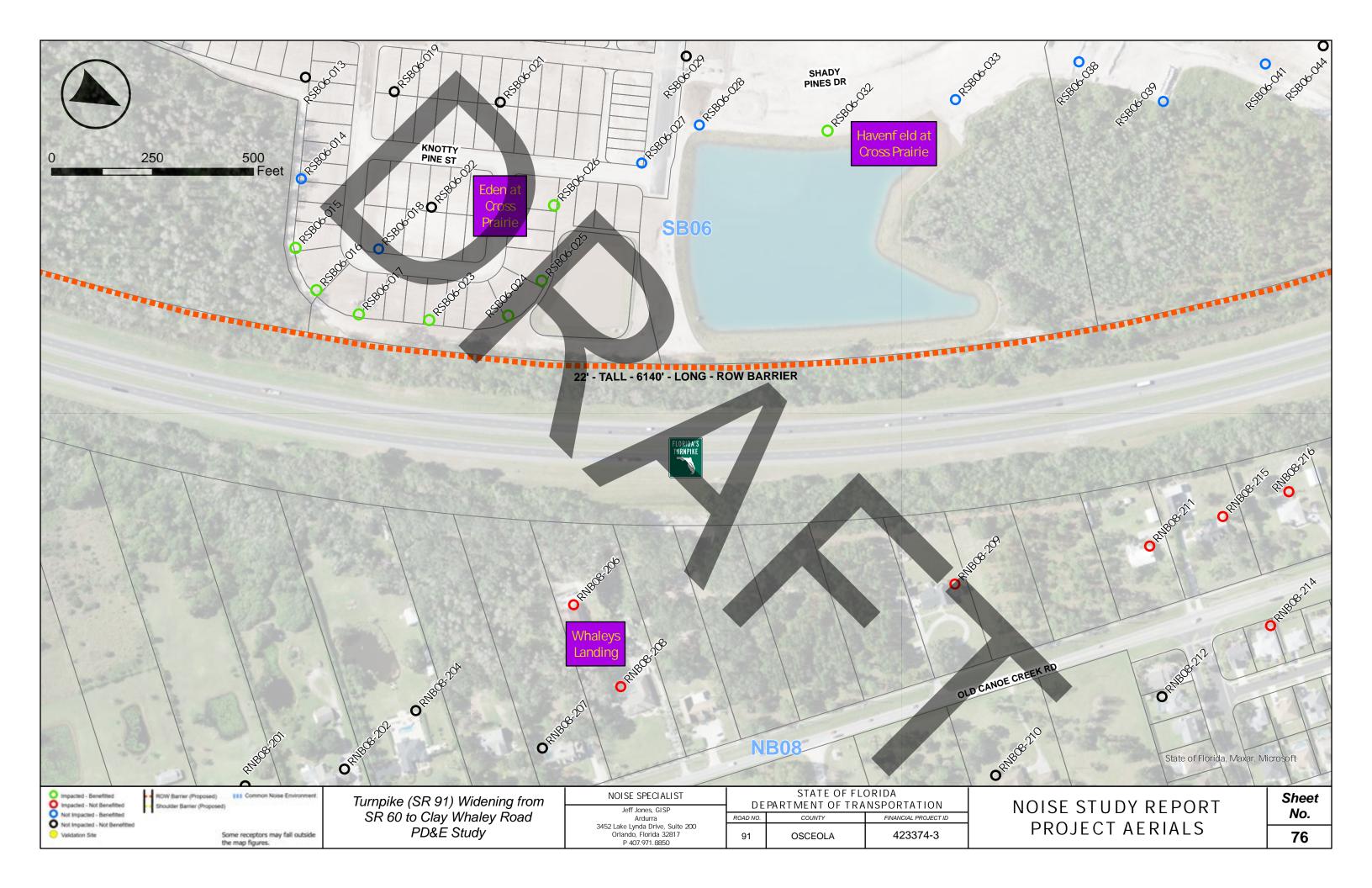


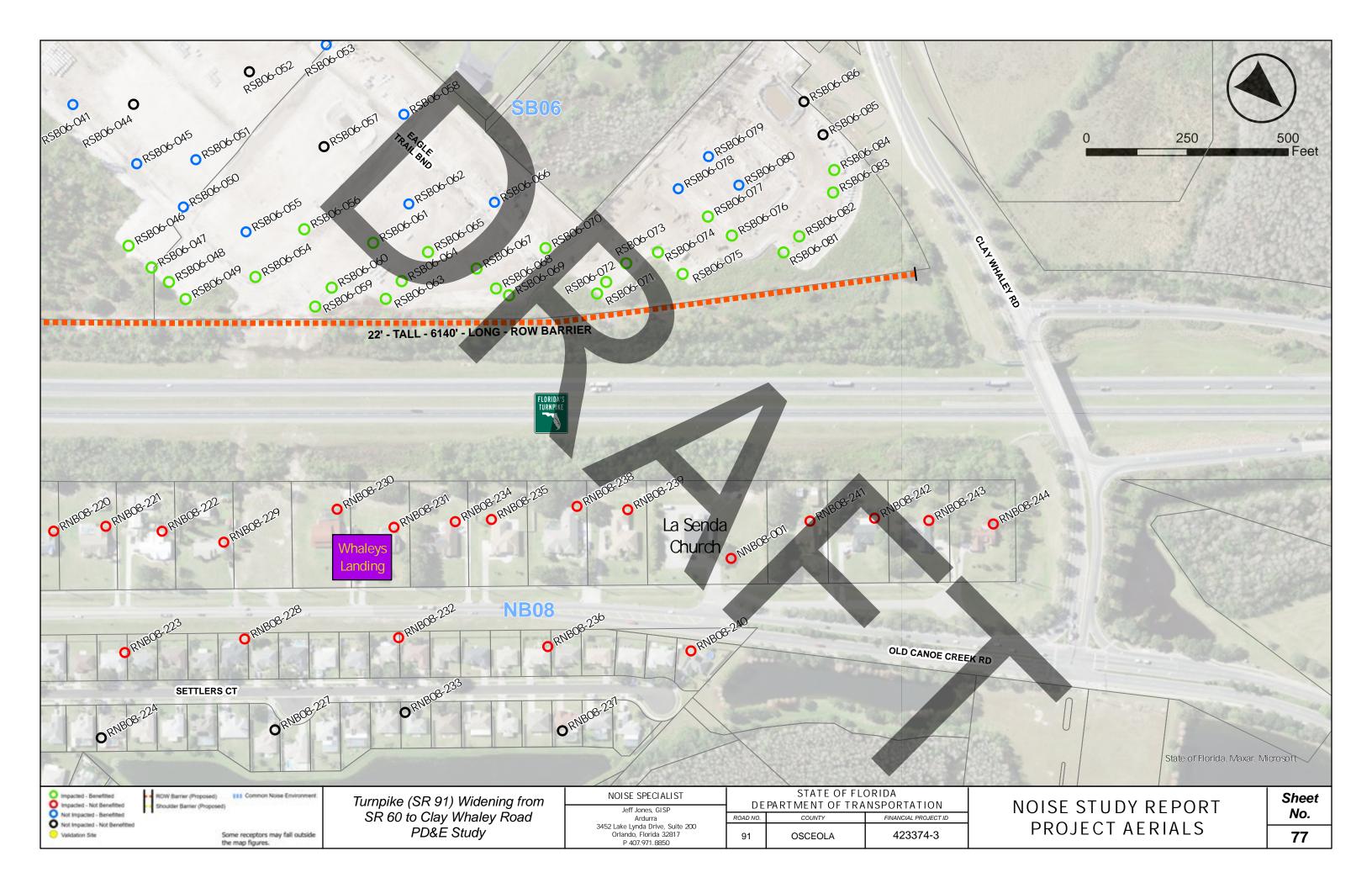












Appendix E SLU Worksheet

SLU NAME		NB08-01		
SLU DESCRIPTION		La Senda Church Playground		
NAC		C		
		SLU Equivalent Residence (ER) Identification		
Step	Sub-Step	Description	Value	
		Average Single-Family Residence in Florida - Person Hours per Year	•	
A1	a b c	Average number of people in a single-family residence in Florida (US CENSUS, 2017-2021 data) Hours a single-family residence is available for use (24 hours x 365 days) Residential Person-Hours per Year Available for Use	2.57 8,760 22,513	
		SLU Person Hours per Year	•	
A2	a b c d	Average number of users per day in the area evaluated at the SLU Approximate daily hourly usage by each person in the area evaluated at the SLU Number of days per week the SLU is operational Number of weeks per year the SLU is operational	30 1 7 52	
	e	Person-Hours per Year Available for Use at the SLU	10,920	
		SLU Area Evaluated Equivalent Residence (ER)		
А3	а	Equivalent Residence (ER)	0.49	
		SLU Receptor Equivalent Residence (ER)		
A4	a b	Identify the number of receptors evaluated at the SLU Individual Receptor Equivalent Residence (i.e., each receptor point evaluated is worth)	<u>1</u> 0.485	

Appendix F Noise Validation Field Data Sheets

Site/Run#:

Field Validation Data Sheet

Date: 10/7/2025	Measurement Taken By:	Jeff Jones				
Project: 423374-3 - Widen TPK SR 60 to Clay Whaley Road						
Site Id: VAL-001						
Weather Conditions: Clear:	Partly Cloudy: Cloudy:	Other:				
Temperature: Start:	79° End: 81°	(°F)				
Wind Direction: Start:	– End: –					
Wind Speed (Start): Min:	Max: Av	erage: (mph)				
Wind Speed (End): Min:	Max: Av	erage: — (mph)				
Humidity: Start:	90% End: 90%					
Equipment Data:						
Sound Level Meter: Larson Davis Sou	undTrax LXT Serial Number:	0003154				
Date of Last Traceable Calibration: ロルールーカップ						
Calibration: Start:	0.15 End: 0.08					
Battery: Start:	37% End: 23%					
Weighting Scale: Leg	A Response: 5	low.				
Calibrator: Larson Davis CAL200 Serial Number: 9542						
Notes:						
Major Noise Sources: Turmpike	traffic noise					
Background Noise Sources: Distant	airplane noise					
Other Notes/Observations:						
Location:		Site/Run Time Level (dB(A))				
\$ W.	VAI	-001-R1 9:25am 76.5 dbA)				
E NB TPK		L-000-A2 9:36an 75.8 1B(A)				
SB TPK ->		003-R3 9:47am 75.1 dB(A)				
15'						

Site/Run#:

Field Validation Data Sheet

Jeff Jones 10/7/2025 Measurement Taken By: Date: Project: 423374-3 - Widen TPK SR 60 to Clay Whaley Road VAL-002 Site Id: **Weather Conditions:** Partly Cloudy: Cloudy: Other: Clear: (°F) End: Start: Temperature: W End: Start: Wind Direction: Average: (mph) Wind Speed (Start): 6 Min: Max: (mph) 12 Wind Speed (End): Average: Min: Max: 80% 80 End: **Humidity**: Start: **Equipment Data:** 0003154 Serial Number: Sound Level Meter: Larson Davis SoundTrax LXT 09-15-5092 Date of Last Traceable Calibration: -0.03 0.01 End: Calibration: Start: 70% 75° End: Start: Battery: Response: 10w Weighting Scale: 9542 Serial Number: Larson Davis CAL200 Calibrator: Notes: Turnpike traffic hoise Major Noise Sources: **Background Noise Sources:** run # 3 wind picked up towards the end of Other Notes/Observations: Location: Tine 73.5 AMA) 73.4 dB(A) C 5B TPK VA2-002-R1 10:41 10:51 VAL-007-R2 VAL-003-R3 11:02 74.3 dB(A) NB +PK -7 + MP-236.5