# PRELIMINARY ENGINEERING NOISE ANALYSIS REPORT



# SR 0030 Section AIR – Coatesville-Downington Bypass Project

Chester County, Pennsylvania

# Prepared for:



# Prepared by:



Gannett Fleming, Inc. 207 Senate Avenue Camp Hill, PA 17011

# TABLE OF CONTENTS

D.

Everov	
	TIVE SUMMARY
	DUCTION4
	STUDY AREAS
	MEASUREMENTS AND MODEL VALIDATION6
	MODELING7
	ATION OF NOISE IMPACTS7
	ELOPED LAND NOISE CONTOUR ANALYSIS17
	PTIVE NOISE BARRIER ANALYSIS18
	RUCTION NOISE CONSIDERATIONS18
CONCL	LUSION19
TABLE	S (Following Text)
1.	FHWA Noise Abatement Criteria
2.	Sound Level Measurement Results
3.	Model Validation Results
4.	NSA 1 and 3 Noise Barrier Evaluation
<b>5.</b>	NSA 2 Noise Barrier Evaluation
6.	NSA 4A Noise Barrier Evaluation
7.	NSA 4B Noise Barrier Evaluation
8.	NSA 5 Noise Barrier Evaluation
9.	NSA 6A Noise Barrier Evaluation
10.	NSA 6B Noise Barrier Evaluation
11.	NSA 7 Noise Barrier Evaluation
12.	NSA 7A/7B Noise Barrier Evaluation
13.	NSA 8 Noise Barrier Evaluation
14.	NSA 9 Noise Barrier Evaluation
15.	NSA 10 Noise Barrier Evaluation
16.	NAC C ERU Worksheet
17.	NAC B ERU Worksheet
FIGURI	ES (Following Tables)
1.	Project Overview Map
	2.10 2045 Build Alternative Results and Proposed Barriers
	-2.12 Noise Contour Analyses
APPEN	DICES (Following Figures)
<b>A.</b>	Short-term Measurements – Field Data Sheets
В.	
<b>C.</b>	Noise Meters – Certification of Calibration

PennDOT Warranted, Feasible, and Reasonable Worksheets



# SR0030/Section AIR – Coatesville-Downingtown Bypass Project Pennsylvania Department of Transportation Chester County PELIMINARY ENGINEERING NOISE ANALYSIS September 2024

## **EXECUTIVE SUMMARY**

The SR0030/Section AIR segment of the Coatesville-Downingtown Bypass project consists of a 3.9-mile corridor of US 30 in Sadsbury, Valley, and West Caln Townships, extending from approximately 1,000 feet east of the Old Mill Road overpass to approximately 950 feet east of the Wagontown Road overpass. The project will incorporate improvements to US 30 and construction of a diverging diamond interchange at the existing Airport Road interchange as presented in Alternative D. Improvements to Airport Road that are proposed between US 30/Section and Business US 30 consist of merge lanes to blend the proposed interchange to existing Airport Road in addition to widening and the addition of turning lanes for improved access to the proposed Valley Suburban Center. The purpose of improvements is to reduce future congestion, accommodate planned growth, improve facility deficiencies, and improve system connectivity. This noise analysis report will be limited to the Section AIR corridor only.

For analysis purposes, the Airport Road project area was divided into eleven (11) Noise Study Areas (NSAs) as shown in **Figure 2.1-2.10**. Noise measurements and concurrent traffic counts were conducted in all NSAs, as located in **Figure 2.1-2.10**. and reported in **Table 2**. Based on the evaluation of existing and future noise levels and the noise abatement criteria (NAC) described in Table 1, project-related noise impacts were identified in all NSAs.

Based on the evaluation of the noise levels associated with the preliminary engineering plans for the project developed to date, noise abatement features were determined to be feasible and reasonable for NSAs 1, 2, 3, 6, and 7. Various noise barrier options were considered and evaluated in terms of abatement feature lengths, heights, and costs. This process resulted in the development of the following feasible and reasonable noise barrier packages along the proposed project alignment:

- NSA 1 and 3 A proposed noise barrier averaging 10 feet in height and 3,397 feet in total length, located along the westbound shoulder from Station 1116 to 1150.
- NSA 2 A proposed noise barrier averaging 12 feet in height and with a length of 2,303 feet, located along the eastbound shoulder from Station 1112 to 1135.



- NSA 6A A proposed noise barrier averaging 17 feet in height and 1,300 feet in total length, located along the eastbound shoulder from Station 1235 to 1248.
- NSA 7A A proposed noise barrier averaging 14 feet in height and 2,909 feet in total length, located along the westbound shoulder from Station 1235 to 1264.
- NSA 7B A proposed noise barrier averaging 13 feet in height and 2,000 feet in total length, located along the westbound shoulder from Station 1270 to 1288.

Both recommended and non-recommended noise barriers may change between the preliminary engineering and final design phases as a result of changes and/or refinements in the transportation improvement project design. Barrier recommendations will be reviewed during the Final Design phase of this project.

### **INTRODUCTION**

The SR0030/Section AIR project of the Coatesville-Downingtown Bypass project consists of a 3.9-mile corridor of US 30 in Sadsbury, Valley, and West Caln Townships, extending from approximately 1,000 feet east of the Old Mill Road overpass to approximately 950 feet east of the Wagontown Road overpass. The project corridor is within western Chester County and runs through gently rolling terrain throughout the project limits. Several streams, including Rock Run, and wetlands are scattered throughout the corridor. Residential developments and open fields make up most of the corridor. Industrial facilities and farmland are also present along the corridor. The project will incorporate improvements to US 30 and construction of a diverging diamond intersection at the existing PA Route 82/Airport Road interchange, as presented in the preferred Alternative D. The purpose of improvements is to reduce future congestion, accommodate planned growth, improve facility deficiencies, and improve system connectivity. This noise analysis report will be limited to the Section AIR corridor only.

Noise abatement has been evaluated for the noise study areas which meet the Pennsylvania Department of Transportation (PennDOT) and Federal Highway Administration (FHWA) criteria for a Type I project. Methodology employed for this traffic noise analysis will be conducted in accordance with the guidelines contained within PennDOT's *Publication 24: Project Level Highway Traffic Noise Handbook, May 2019.* This report focuses on the noise analysis and mitigation related to the 2050 design year Build Alternative.

PennDOT Noise Abatement Criteria (NAC), described in Table 1 for specific land use activities, were used in the evaluation of traffic noise impacts. These criteria are based on criteria established in Title 23 Code of Federal Regulations, Part 772, U.S. Department of Transportation, Federal Highway Administration (FHWA), *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, and guidelines for "increase over existing" noise levels as set forth in PennDOT Publication *Project Level Highway Traffic Noise Handbook Publication No.24*, dated May 2019. Predicted noise levels were determined using Version 2.5 of the FHWA Traffic Noise Model (FHWA TNM).



The noise level descriptor used for this project was the hourly equivalent noise level  $(L_{eq}(h))$ .  $L_{eq}(h)$  is the steady state, A-weighted sound level, which contains the same amount of acoustic energy as the actual time-varying A-weighted noise level over a one-hour period. The FHWA and PennDOT define noise impacts based upon seven activity categories as identified in **Table 1**. Individual sites located within a given activity category are designated as noise sensitive receptors.

Noise impacts were evaluated by comparing the predicted noise levels with existing noise levels. A noise impact was identified if the future (year 2050) noise level was predicted to approach (within 1 dB) or exceed 67 dB(A), or if future noise levels within the project were predicted to cause a substantial noise increase ( $\geq$ 10 dB(A)) as compared to existing noise levels (year 2019).

## **NOISE STUDY AREAS**

The project study area begins east of the Old Mill Road overpass to approximately 950 feet east of the Wagontown Road overpass. The project study area was divided into the following noise study areas (NSAs) as shown in **Figures 2.1 through 2.10**:

NSA 1: Noise sensitive Activity Category B land uses are located north of US 30 between Old Mill Road and Old Wilmington Road and is comprised of eighteen (18) single-family residences and a farmhouse.

NSA 2: Noise-sensitive Activity Category B and C land uses are located south of US 30 between Old Mill Road and Old Wilmington Road and is comprised of twelve (12) single-family residences, fifty-three (53) modular homes within the Lincoln Crest Mobile Home Park, an additional forty-three (43) planned modular home sites adjacent to Lincoln Crest Mobile Home Park, and outdoor recreation facilities at Cowan Park.

NSA 3: Noise sensitive Activity Category B land uses are located north of US 30, between Old Wilmington Road and South Bonsall Road as it runs parallel to the project mainline. This NSA is comprised of seventeen (17) single-family homes.

NSA 4: Noise-sensitive Activity Category B and C land uses are located south of US 30 between Old Wilmington Road and Airport Road. This NSA consists of thirty-four (34) single-family residences, a place of worship, a community walking path, and an industrial facility.

NSA 5: Noise-sensitive Activity Category B and D land uses are located north of US 30 between Airport Road and Country Club Road. This NSA consists of a medical facility outdoor use area and a single-family residence.

NSA 6: Noise-sensitive Activity Category B land uses are located south of US 30, west and in the area of Country Club Road, extending east to Wagontown Road. This NSA



contains eighty-two (82) noise sensitive receptors, consisting of fifteen (15) multi-family residential units and thirteen (13) single-family residences.

NSA 7: Noise-sensitive Activity Category B land uses are located north of US 30 between Country Club Road and Wagontown Road. This NSA consists of eighty-four (84) single-family residences.

NSA 8: Noise-sensitive Activity Category B land uses are located south of US 30 in the area of South Mount Airy Road. This NSA consists of two (2) single-family residences.

NSA 9: Noise sensitive Activity Category B and C land uses are located north of US 30 between Wagontown Road and the area of Mt Airy Road. This NSA is comprised of nineteen (19) single-family homes and a commercial event venue.

NSA 10: Noise-sensitive Activity Category C land uses are located south of US 30 and east of Airport Road. NSA 10A is located north of Prescott Road and NSA 10B is located south of Prescott Road. These NSAs are comprised of a shared-use path, a community center pool area and tennis courts within the proposed Valley Suburban Center.

#### NOISE MEASUREMENTS AND MODEL VALIDATION

Ambient noise measurements were conducted throughout the project study area as shown in **Figure 2.1-2.10**. Within each of the above NSAs, short-term (20-minute duration) noise measurements were taken along with concurrent traffic counts at 78 locations using American National Standards Institute (ANSI) Type I noise meters. See **Appendix A** for field data sheets. Traffic volume figures are located in **Appendix B**. Calibration certificates related to noise meters and calibrators are in **Appendix C**.

Short-term measurements were taken at various times of the day between April 25 and April 27, and additionally on May 10 and May 11 of 2022 and do not necessarily represent the noisiest condition at any measurement site. Long-term noise measurements were taken at L1-24H, L2-24H, and L3-24H to observe typical loudest-hour conditions. Measurement sites were positioned to enable validation of the noise prediction model and to assist in defining existing noise levels for second-row residences and for receptors located up to approximately 500 feet from the proposed edge of pavement. Therefore, in certain locations noise measurement sites do not exactly coincide with noise analysis sites. Measurements were used primarily for purposes of noise model validation, with year 2019 peak hour traffic volumes assumed in the prediction of worst-case existing noise levels. Measured existing L<sub>eq</sub> noise levels at short-term measurement sites (receptors) ranged from 53.5 dB(A) to 72.7 dB(A).

Using the traffic volume data obtained concurrently with the short-term noise measurements, noise levels were modeled and compared to measured noise levels using FHWA's TNM, Version 2.5 to predict worst case existing and future noise levels and to evaluate noise abatement options. Existing short-term measured noise levels and hourly



traffic data based on concurrent traffic counts are summarized in **Table 2**, with field measurement data sheets contained in **Appendix A**. Validation results are shown in **Table 3**, with FHWA TNM validation data files included with this report. Measured versus modeled noise levels were modeled within the acceptable 3 dB(A) range for all sites. Validation site M7.11 validated conservatively at the 3 dB(A) threshold due in part to the complex shielding present at the measurement site such as vinyl privacy fencing and storage sheds. The results of this validation process were used to "build" the FHWA TNM used for purposes of modeling existing and future year noise levels, determining future year impacts, and evaluating potential noise abatement options.

## **NOISE MODELING**

The FHWA TNM predicts noise levels at selected locations based on traffic data, roadway design, topographic features, and the relationship of the analysis site (receptor) to nearby roadways. Traffic data used for prediction of existing (year 2019) and future (year 2050) noise levels for both no-barrier and barrier conditions is contained in **Appendix C**. The percentages of automobiles, medium trucks, and heavy trucks used in the FHWA TNM modeling process were obtained from the Pennsylvania Department of Transportation. The loudest hour traffic condition (4:00 PM) was used throughout the project.

In addition, a noise contour analysis was conducted at three locations along the project. A noise contour analysis is used for planning purposes to predict the approximate distance from the project edge-of-pavement where Activity Category B/C and Activity Category E noise impacts could be expected under future build conditions (year 2050). Discussion and results from the noise contour analysis can be found in *Evaluation of Noise Impacts* p.12, and **Figures 2.11 and 2.12**.

#### **EVALUATION OF NOISE IMPACTS**

In Pennsylvania, consideration of noise abatement is required if a noise impact is located; where future-build noise levels approach or exceed the Noise Abatement Criteria (NAC) (approach is defined as 1 dB(A) below the NAC) or create a substantial noise "increase over existing" (IOE) of 10 dB(A). To establish noise impacts, the future-build noise levels were compared to the NAC "approach level" of 66 dB(A) for Noise Activity Categories B and C. Future-build noise levels that meet or exceed the approach level or cause a 10 dB(A) increase over existing-year noise levels (IOE) are considered noise-impacted. These comparisons are contained in the noise summary tables for each NSA, with the noise measurement sites and analysis sites (receptors) indicated within each NSA. Noise impacts were identified in all NSAs based on predicted exterior noise levels exceeding the 66 dB(A) approach criteria level for Activity Category land uses B and C. "Increase over existing" (IOE) noise levels are primarily the result of predicted traffic growth within the proposed project. No substantial noise level increases were identified and all IOE levels are predicted to be 0-6 dB(A).

In addition to their use in evaluating noise impacts, noise analysis sites were used in the



consideration of noise abatement for noise sensitive receptors within each NSA. Abatement measures such as traffic management devices and roadway realignment were determined not to be feasible. In addition, the topography and development in the area does not lend itself to the use of noise berms as an effective noise abatement technique. Therefore, noise abatement evaluations focused on the design of noise barrier walls.

Consideration of noise abatement was required in all NSAs due to noise levels approaching or exceeding the NAC. Under PennDOT noise criteria, feasible noise barriers are those that provide at least 5 dB(A) of noise reduction for at least 50% of impacted receptors, while posing no safety, engineering, maintenance, constructability, drainage, or utility impacts, or access restrictions. If determined to be feasible, a barrier was then evaluated for reasonableness. For a barrier to be reasonable based on PennDOT noise criteria, it must be cost-effective (square footage per benefited residential receptor (SF/BR) must be less than or equal to 2000), and the desires of the affected property owners and residents must be considered. Receptors are considered to be benefited if they receive 5 dB(A) or more noise reduction (insertion loss) from a barrier. To meet PennDOT's reasonableness criteria, a barrier must also achieve at least a 7 dB(A) noise reduction at one receptor.

A summary of abatement considerations within each NSA follows. See referenced tables for more details related to all barrier options considered.

[1] Due to the proximity of impacts between NSA 1 and NSA 3, it was determined that a common barrier system would be necessary to provide benefit to impacts in both NSAs. Therefore, the analyses of NSA 1 and NSA 3 are combined.

**NSA 1 (See Figure 2.1-2.2 and Table 4):** Eight of the nineteen receptors evaluated within this NSA were predicted to have noise levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted. Receptor site R1.01 is reported to be a potential property acquisition for the build alternative and therefore not considered in the reasonableness or feasibility evaluation [1].

**NSA 3 (See Figure 2.2-2.3 and Table 4):** Nine of the seventeen receptors evaluated within this NSA were predicted to have noise levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted [1].

The following five abatement options were analyzed for NSA 1 and NSA 3:

- Case 1 consisted of a 6 feet high wall, 4,498 feet in length and was determined to be not feasible (≥5 dB(A) insertion loss not provided for ≥50% of impacted receptors).
- Case 2 consisted of an 8 feet high wall, 4,498 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 88% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 2,399 > 2,000, which exceeds PennDOT requirements).



- Case 3 consisted of a 10 feet high wall, 4,498 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,874 < 2,000, which meets PennDOT requirements).
- Case 4 consisted of an optimized wall (Barrier 1-3) ranging between 8 and 12 feet in height, totaling 3,397 feet in length, and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,590 < 2,000, which meets PennDOT requirements). Segments of Barrier 1-3 are located on bridge structure and therefore limited to a maximum height of 10 feet from the top of traffic barrier where noise wall panels are structure mounted.

<sup>[2]</sup> Due to the proximity of impacts within the western boundary of NSA 4 to the NSA 2 abatement options, it was determined that impacted receptor sites R4.01 and R4.14 be included in the NSA 2 analysis.

NSA 2 (See Figure 2.1-2.2 and Table 5): Twenty two of the one hundred eleven receptors evaluated within this NSA were predicted to have noise levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted [2].

The following three abatement options were analyzed for NSA 2:

- Case 1 consisted of a 6 feet high wall, 2,303 feet in length and was determined to be not feasible (>5 dB(A) insertion loss not provided for >50% of impacted receptors).
- Case 2 consisted of an 8 feet high wall, 2,303 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 95% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 292 < 2,000, which meets PennDOT requirements).
- Case 3 consisted of an optimized wall (Barrier 2) ranging between 10 to 12 feet in height and 2,303 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 282 < 2,000, which meets PennDOT requirements). Segments of Barrier 2 are located on bridge structure and therefore limited to a maximum height of 10 feet from the top of traffic barrier where noise wall panels are structure mounted. Receptors R2.04, R2.14, R2.15, R2.16, and R2.17 have the lowest elevations in NSA 2 relative to US 30 and are therefore not impacted like adjacent receptors.



**NSA 4A (See Figure 2.3 and Table 6):** Two of the fifteen receptors evaluated within this NSA were predicted to have noise levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted <sup>[2]</sup>. The following four abatement options were analyzed for NSA 4:

- Case 1 consisted of a 10 feet high wall, totaling 1,200 feet in length and was determined to be feasible ( $\geq$ 5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was not achieved).
- Case 2 consisted of a 12 feet high wall, totaling 1,200 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 7,200 > 2,000, which exceeds PennDOT requirements).
- Case 3 consisted of a 14 feet high wall, totaling 1,200 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 2,800 > 2,000, which exceeds PennDOT requirements).
- Case 4 consisted of a 16 feet high wall, totaling 1,200 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 3,200 > 2,000, which exceeds PennDOT requirements).

NSA 4B (See Figure 2.4 and Table 7): Two of the twenty-two receptors evaluated within this NSA were predicted to have noise levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted [2].

The following six abatement options were analyzed for NSA 4:

- Case 1 consisted of a 10 feet high wall, 1,495 feet in length and was determined to be not feasible (≥5 dB(A) insertion loss not provided for ≥50% of impacted receptors).
- Case 2 consisted of a 12 feet high wall, 1,495 feet in length and was determined to be not feasible (≥5 dB(A) insertion loss not provided for ≥50% of impacted receptors).
- Case 3 consisted of a 14 feet high wall, 1,495 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 50% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was not



achieved).

- Case 4 consisted of a 16 feet high wall, 1,495 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 3,987 > 2,000, which exceeds PennDOT requirements).
- Case 5 consisted of an 18 feet high wall, 1,495 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 3,844 > 2,000, which exceeds PennDOT requirements).
- Case 5 consisted of a 20 feet high wall, 1,495 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 4,271 > 2,000, which exceeds PennDOT requirements).

NSA 5 (See Figure 2.5 and Table 8): one of the two receptors evaluated within this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted.

The following four abatement options were considered for NSA 5:

- Case 1 consisted of a 14 feet high wall, 810 feet long and was determined to be not feasible (≥5 dB(A) insertion loss not provided for ≥50% of impacted receptors).
- Case 2 consisted of a 16 feet high wall, 810 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was not achieved).
- Case 3 consisted of an 18 feet high wall, 810 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was not achieved).
- Case 4 consisted of a 20 feet high wall, 810 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was not achieved).

NSA 6A (See Figure 2.7 and Table 9): five of the sixty-two receptors evaluated within



this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted.

The following seven abatement options were considered for NSA 6A:

- Case 1 consisted of a 10 feet high wall, 1,800 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 80% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,125 < 2,000, which meets PennDOT requirements).
- Case 2 consisted of a 12 feet high wall, 1,800 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 80% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,200 < 2,000, which meets PennDOT requirements).
- Case 3 consisted of a 14 feet high wall, 1,800 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 80% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,200 < 2,000, which meets PennDOT requirements).
- Case 4 consisted of a 16 feet high wall, 1,800 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 80% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 960 < 2,000, which meets PennDOT requirements).
- Case 5 consisted of an 18 feet high wall, 1,800 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,013 < 2,000, which meets PennDOT requirements).
- Case 6 consisted of a 20 feet high wall, 1,800 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,125 < 2,000, which meets PennDOT requirements).
- Case 7 consisted of an optimized 14-18 feet high wall (Barrier 6A), 1,300 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR



1,048 < 2,000, which meets PennDOT requirements). Segments of Barrier 6A are located on bridge structure and therefore limited to a maximum height of 10 feet from the top of traffic barrier where noise wall panels are structure mounted.

NSA 6B (See Figure 2.8 and Table 10): five of the twelve receptors evaluated within this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted.

The following three abatement options were considered for NSA 6B:

- Case 1 consisted of a 10 feet high wall, 1,600 feet in length and was determined to be not feasible (≥5 dB(A) insertion loss not provided for ≥50% of impacted receptors).
- Case 2 consisted of a 12 feet high wall, 1,600 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 60% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 6,400 > 2,000, which exceeds PennDOT requirements).
- Case 3 consisted of a 14 feet high wall, 1,600 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 4,480 > 2,000, which exceeds PennDOT requirements).

NSA 7 (See Figure 2.7-2.8 and Table 11): thirty-five of the eighty-four receptors evaluated within this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted.

The following six abatement options were considered for NSA 7:

- Case 1 consisted of a 10 feet high NSA 7 noise wall, 5,409 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 74% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,545 < 2,000, which meets PennDOT requirements).
- Case 2 consisted of a 12 feet high NSA 7 noise wall, 5,409 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 85% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,298 < 2,000, which meets PennDOT requirements).



- Case 3 consisted of a 14 feet high wall, 5,409 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 91% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,067 < 2,000, which meets PennDOT requirements).
- Case 4 consisted of a 16 feet high wall, 5,409 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 97% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,154 < 2,000, which meets PennDOT requirements).
- Case 5 consisted of an 18 feet high wall, 5,409 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 97% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,264 < 2,000, which meets PennDOT requirements).
- Case 6 consisted of a 20 feet high wall, 5,409 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 97% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,369 < 2,000, which meets PennDOT requirements).

Due to the outcome of barrier optimization, the NSA 7 barrier was divided into two separate barriers (Barrier 7A and 7B) which are evaluated independently as the optimized Case 7 barrier configuration.

NSA 7A (See Figure 2.8 and Table 12): thirty-six of the sixty-two receptors evaluated within NSA 7A were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted. [3]

• Case 7A consisted of an optimized wall (Barrier 7A) totaling 2,909 feet in length and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,247 < 2,000, which meets PennDOT requirements). Segments of Barrier 7A are located on bridge structure and therefore limited to a maximum height of 10 feet from the top of traffic barrier where noise wall panels are structure mounted.

NSA 7B (See Figure 2.8 and Table 12): twelve of the twenty-two receptors evaluated within NSA 7B were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted.

• Case 7B consisted of an optimized noise wall (Barrier 7B) totaling 2,000 feet in



length and was determined to be feasible (≥5 dB(A) insertion loss provided for 92% of impacted receptors) and reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved and square footage per benefited receptor SF/BR 1,986 < 2,000, which meets PennDOT requirements).

NSA 8 (See Figure 2.9 and Table 13): one of the two receptors evaluated within this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted.

The following four abatement options were considered for NSA 8:

- Case 1 consisted of a 10 feet high wall, 917 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was not achieved).
- Case 2 consisted of a 12 feet high wall, 917 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 11,040 > 2,000, which exceeds PennDOT requirements).
- Case 3 consisted of a 14 feet high wall, 917 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 12,838 > 2,000, which exceeds PennDOT requirements).
- Case 4 consisted of a 16 feet high wall, 917 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 100% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 7,336 > 2,000, which exceeds PennDOT requirements).

NSA 9 (See Figure 3.2 and Table 11): six of the twenty-one receptors evaluated within this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted.

The following seven abatement options were considered for NSA 9:

- Case 1 consisted of a 10 feet high wall, 1,393 feet long and was determined to be not feasible (≥5 dB(A) insertion loss not provided for ≥50% of impacted receptors).
- Case 2 consisted of a 12 feet high wall, 1,393 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 60% of impacted receptors) but not



reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 5,572 > 2,000, which exceeds PennDOT requirements).

- Case 3 consisted of a 14 feet high wall, 1,393 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 60% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 6,501 > 2,000, which exceeds PennDOT requirements).
- Case 4 consisted of a 16 feet high wall, 1,393 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 60% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 7,429 > 2,000, which exceeds PennDOT requirements).
- Case 5 consisted of an 18 feet high wall, 1,393 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 60% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 6,269 > 2,000, which exceeds PennDOT requirements).
- Case 6 consisted of a 20 feet high wall, 1,393 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 60% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 5,572 > 2,000, which exceeds PennDOT requirements).
- Case 7 consisted of a shortened 20 feet high wall, 893 feet long and was determined to be not feasible (≥5 dB(A) insertion loss not provided for ≥50% of impacted receptors).

NSA 10A (See Figure 2.12 and Table 12): nine of the twelve receptors evaluated within this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted. Receptors in this NSA were placed to represent the proposed and permitted features of Valley Suburban Center which include a shared-use path, a community center pool and tennis courts. At the time of this report, the multi-family dwellings within Valley Suburban Center are planned but not permitted and therefore were not included in the noise analysis. Equivalent Receptor Units (ERU) were used within this NSA and the ERU calculations can be found in Table 13 and Table 14. Additionally, a contour analysis was performed within this NSA and the details of this analysis can be found on page 15.

The following two abatement options were considered for NSA 10A:



- Case 1 consisted of an 8 feet high wall, 1,198 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 90% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 36,862 > 2,000, which exceeds PennDOT requirements).
- Case 2 consisted of a 10 feet high wall, 1,198 feet long and was determined to be feasible (≥5 dB(A) insertion loss provided for 90% of impacted receptors) but not reasonable (goal of 7 dB(A) insertion loss for at least one receptor was achieved but square footage per benefited receptor SF/BR 46,077 > 2,000, which exceeds PennDOT requirements).

NSA 10B (See Figure 2.12 and Table 12): three of the four receptors placed to evaluate a walking path within this NSA were predicted to have levels at or above 66 dB(A) with the Build Alternative. As such, consideration of noise abatement within this NSA was warranted, however noise barriers were determined to be not feasible due to limited right-of-way along Airport Road.

#### UNDEVELOPED LAND NOISE CONTOUR ANALYSIS

Three analyses were conducted within undeveloped lands along the Section AIR project for the determination of noise level contours for use by planning officials. The western contour analysis was performed between NSA 1 and 3, north of US 30 Sta. 1105+00. The eastern contour analysis was performed within NSA 5, north of US 30 Sta. 1125+00. The AIR contour analysis was performed east of Airport Road in the area of the proposed Valley Suburban Center. Receptors were placed at setbacks of 50' increments and the results were used to determine an approximate distance from edge-of-pavement where impacts could be expected for Activity Category B/C (66 dB) and Activity Category E (72 dB) land uses. The noise contour matrices can be seen on **Figure 2.11 and 2.12**.

The western contour analysis indicates that Activity Category E land uses will be impacted within approximately 60 feet from edge of pavement, and Activity Category B/C land uses will be impacted within approximately 110 feet from edge of pavement.

The eastern contour analysis indicates that Activity Category E land uses will be impacted within approximately 65 feet from the edge of pavement, and Activity Category B/C land uses will be impacted within approximately 160 feet from edge of pavement.

The AIR contour analysis indicates that Activity Category E land uses will be impacted within approximately 25 feet from the edge of pavement, and Activity Category B/C land uses will be impacted within approximately 80 feet from edge of pavement.

# ABSORPTIVE NOISE BARRIER ANALYSIS



Consideration for the use of absorptive noise barrier surfaces is recommended where proposed noise barriers are arranged in a such a way that has potential to cause barrier performance degradation. A parallel barrier configuration, when a roadway is flanked on both sides by noise barriers and where the ratio of distance between the barriers to barrier height is less than 10:1, has the potential to degrade barrier performance. Due to the barrier configurations located between NSA 1 and 2, and between NSA 6 and 7, consideration for the use of absorptive treatments is warranted. To determine barrier performance degradation, the Parallel Barrier Analysis Module contained within TNM 2.5 was used. The results found in the following table indicate that in areas where parallel barriers exist, performance degradation is predicted to reduce barrier effectiveness, however the application of an absorptive treatment is predicted to reduce barrier degradation. It is recommended that absorptive barrier treatments be considered as a component of the noise abatement measures outlined in this report.

	Build R	esults			Para	allel Barı	rier Analysi	S			
				No Absor	ptive Trea	tment	With Abso	rptive Tre	atment		
Site ID:	No- Barrier Level:	Build Barrier Level:	Barrier Insertion Loss:	Barrier Degradation:	Barrier Insertic		Barrier Degradation:	Build Barrier Level:	Barrier Insertion Loss:		
			NS	A 1 - 3 (Sta. 11	A 1 - 3 (Sta. 1116 to Sta. 1135)						
R1.15	66.3	61.4	5	1.6	63	3	0.0	61	5		
R1.09	70.4	62.4	8	1.6	64	6	0.0	62	8		
R2.19	65.7	60.5	5	1.6	62	4	0.0	61	5		
R2.64	70.3	62.2	8	2.2	64	6	0.0	62	8		
R3.10	67.6	60.4	7	2.8	63	4	0.0	60	7		
R4.01	70.4	62.8	8	2.9	66	5	0.2	63	7		
			N:	SA 6 - 7 (Sta. 12	234 to Sta.	1428)					
R6.11	71.6	64.0	8	5.8	70	70 2 2.8		67	5		
R6.13	66.1	56.1	10	0.0	56	10	0.0	56	10		
R6.16	67.7	57.2	11	0.0	57	11	0.0	57	11		
R6.28	65.1	57.9	7	2.5	60	5	0.0	58	7		
R6.82	70.5	65.5	5	5.8	71	-1	1.7	67	3		
R7.01	72.8	65.6	7	5.0	71	2	0.8	66	6		
R7.05	73.0	66.4	7	3.6	70	3	0.9	67	6		
R7.16	75.0	64.1	11	5.4	70	6	1.0	65	10		
R7.19	69.1	63.8	5	3.9	68	1	0.9	65	4		
R7.20	73.0	65.3	8	5.3	71	2	0.7	66	7		
R7.21	74.1	65.3	9	3.2	69	6	0.2	66	9		
R7.23	73.4	66.1	7	3.8	70	4	0.5	67	7		
R7.27	70.9	62.8	8	5.0	68	3	1.4	64	7		
	- impacted	/> CE E 4D)									

= impacted (≥65.5 dB)

= benefited (≥5 dB insertion loss)

### **CONSTRUCTION NOISE CONSIDERATIONS**

It is recognized that construction, while temporary in nature, will result in increased noise levels during certain periods and at certain locations. If required during the final design noise analysis, a more detailed consideration of construction noise and associated abatement/mitigation will be undertaken, consistent with the availability and detail of



anticipated construction scheduling and operations. Construction of temporary noise barriers and the early construction of permanent noise barriers will be considered as will the possibility of developing construction noise specifications and/or special provisions related to construction time periods, duration of construction activities, types of construction equipment, and/or equipment noise levels.

#### **CONCLUSION**

Based on the analysis of noise reported herein, noise impacts exist within all NSAs. Based on the evaluation of the noise levels associated with the engineering plans developed to date, feasible and reasonable noise barriers were determined to benefit noise sensitive receptors in NSA 1, 2, 3, 4, 6, and 7. Additionally, results from the parallel barrier analysis on page 16 suggest that the use of absorptive barrier treatments is warranted and recommended where parallel barriers are configured between NSA 1 and 2, and NSA 6 and 7.

During the final design phase, a detailed optimization of barrier length, height, cost, location, and surface treatments will be coordinated with the final design engineering process to ensure compatibility and the most cost-effective and efficient barrier design. This process may result in barrier height, length, location, and surface condition changing from those discussed in this document.

Pennsylvania Department of Transportation is committed to construction of the warranted, feasible and reasonable noise abatement measures discussed above contingent upon the following conditions:

- Detailed noise analyses during the final design process;
- Analysis and determination of the feasibility and reasonableness of noise abatement measures, methodology, and criteria;
- Community input regarding whether they want a noise barrier, types, height, and location, as well as aesthetic considerations on the community side of the noise barrier (following FHWA approval of the Draft Final Design Noise Report);
- Preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses;
- Safety, utilities, drainage and engineering aspects as related to the roadway user and the adjacent property owner.

It is likely that the noise abatement measures for the identified noise impacted areas will be constructed if found to be feasible and reasonable based on the contingencies listed above.

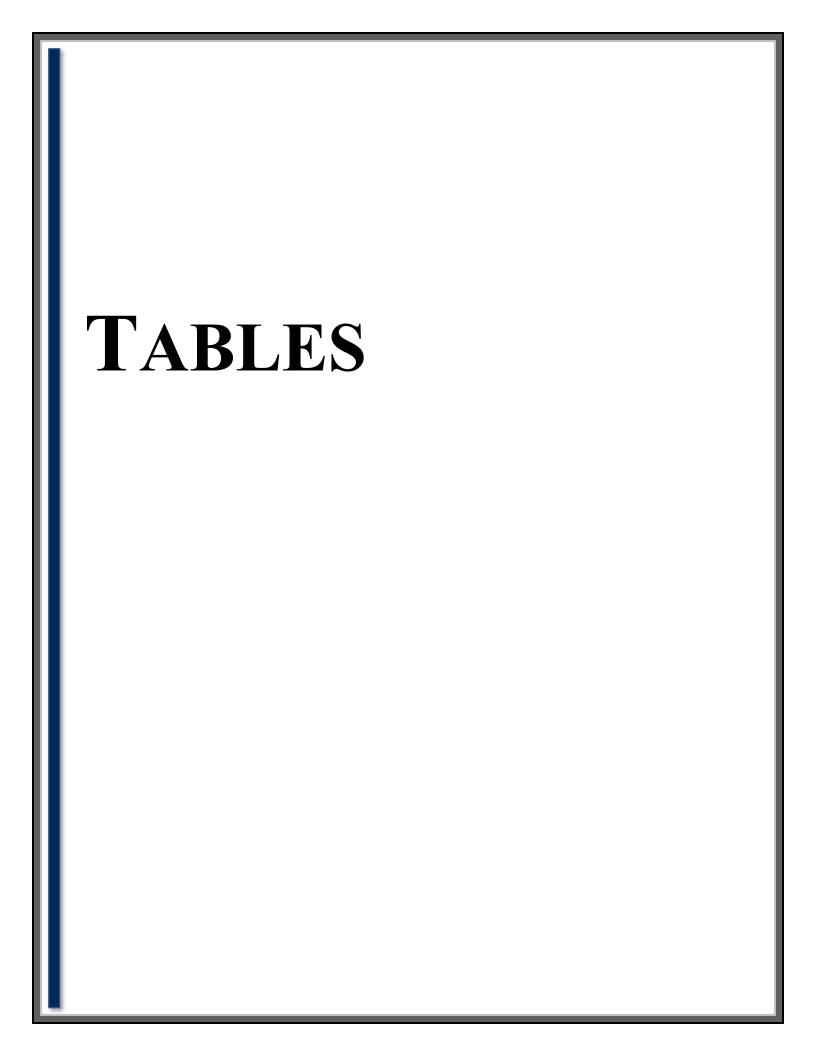


		Table 1
Hou	ırly Weighted Sou	and Levels dB(A) For Various Land Use Activity Categories*
Land Use Activity Category	Leq(h)	Description of Land Use Activity Category
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
В	67 (exterior)	Residential
С	67 (exterior)	Active sport 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, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (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.
Е	72 (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.

<sup>\*</sup> PennDOT has chosen to use Leq(h) [not L10(h)] on all of its transportation improvement projects.

# Table 02: Measurement Table Coatesville-Downington Bypass - Section AIR Coatesville, PA

Site ID	Address of Measurement Site	Date	Time Period	Roadway	Hou	rly Traffic Tra	Based o		urrent	TNM Model Validation Noise Levels in dB(A)
Number			2 2000	,	Autos	Medium Trucks	Heavy Trucks	Buses	Motor- cycles	Measured Leq
M1.01	220 Old Mill Rd Coatesville, PA 19320		08:15:00 - 08:35:00	30 EB	651	33	78	0	0	68.0
	218 Old Mill Rd			30 WB 30 EB	495 414	33 27	102 75	0	0	
M1.02	Coatesville, PA 19320	4/25/2022	09:04:00 - 09:24:00	30 WB	435	51	96	3	0	57.1
M1 02	146 Old Mill Rd		00.46.00 10.06.00	30 EB	519	9	57	0	0	50.1
M1.03	Coatesville, PA 19320		09:46:00 - 10:06:00	30 WB	495	33	102	0	0	58.1
M1.04	64 Fredrick Rd			30 EB	576	18	30	0	0	60.9
	Coatesville, PA 19320		17:49:00 - 18:09:00	30 WB 30 EB	699 576	21 18	30	0	3	
M1.05	52 Fredrick Rd Coatesville, PA 19320			30 WB	699	21	30	0	3	64.7
M1.06	34 Fredrick Rd	4/26/2022		30 EB	882	78	66	0	0	(2.7
M1.06	Coatesville, PA 19320		07:12:00 - 07:32:00	30 WB	507	30	63	0	0	63.7
M1.07	31 Fredrick Rd		07.12.00 07.32.00	30 EB	882	78	66	0	0	59.1
	Coatesville, PA 19320			30 WB	507	30	63	0	0	
M1.08	20 Fredrick Rd Coatesville, PA 19320	4/25/2022	17:15:00 - 17:35:00	30 EB 30 WB	630 921	12 63	33	6	6	62.9
	·			30 EB	672	45	81	0	0	
M1.09	785 Wilmington Rd Coatesville, PA 19320	4/26/2022	07:47:00 - 08:07:00	30 WB	561	51	75	3	0	68.8
M2.07	400 Lauren Ln Parkeburg, PA 19365	4/25/2022	17:15:00 - 17:35:00	30 EB	630	12	33	6	0	56.2
1112.07	100 Eduled Edi Larkeburg, 174 17505	4/23/2022	17.13.00 17.33.00	30 WB	921	63	33	0	6	30.2
M1.10	775 Wilmington Rd Coatesville, PA 19320	4/26/2022	07:47:00 - 08:07:00	30 EB	672	45	81	0	0	60.0
				30 WB 30 EB	561 519	51 9	75 57	0	0	
M2.01	35 S. Cowan Rd Parkeburg, PA 19365		09:46:00 - 10:06:00	30 WB	495	33	102	0	0	60.2
742.02	C1 W/1 : T 11 D 1 1 D 102/5	4/25/2022	10:34:00 - 10:54:00	30 EB	546	18	81	3	0	(0.1
M2.02	51 White Tail Ln Parkeburg, PA 19365	4/25/2022		30 WB	444	30	72	0	3	62.4
M2.03	47 White Tail Ln Parkeburg, PA 19365		10.34.00 - 10.34.00	30 EB	546	18	81	3	0	58.8
	.,			30 WB	444	30	72	0	3	
M2.04	5XX Lissie Ln Parkeburg, PA 19365		16:39:00 - 16:59:00	30 EB 30 WB	669 1194	12 63	45 54	0	3	59.4
				30 KB	669	12	45	3	0	
M2.05	510 Lissie Ln Parkeburg, PA 19365			30 WB	1194	63	54	0	3	63.2
				30 EB	420	33	57	0	3	
M2.06	803 Wilmington Rd Parkeburg, PA 19365		11:41:00 - 12:01:00	30 WB	522	21	81	0	0	67.0
	, , , , , , , , , , , , , , , , , , ,			Old Wilmington NB	99	0	9	3	0	2.00
				Old Wilmington SB 30 EB	96 630	3 12	6 33	6	0	
M2.07	400 Lauren Ln Parkeburg, PA 19365		17:15:00 - 17:35:00	30 WB	921	63	33	0	6	56.2
				30 EB	420	33	57	0	3	
M2.08	819 Old Wilmington Rd Parkeburg, PA 19365		11:41:00 - 12:01:00	30 WB	522	21	81	0	0	64.2
1412.00	617 Old Willington Rd Larkeburg, LA 17505		11.41.00 - 12.01.00	Old Wilmington NB	99	0	9	3	0	04.2
	500 Ott.			Old Wilmington SB	96	3	6	0	0	
M3.01	790 Old Wilmington Rd Coatesville, PA 19320	4/25/2022		30 EB 30 WB	513 624	21 36	69 45	0	0	63.0
	784 Old Wilmington Rd		13:53:00 - 14:13:00	30 KB	513	21	69	3	0	
M3.02	Coatesville, PA 19320			30 WB	624	36	45	0	0	57.3
	455 S. Bonsall Rd			30 EB	579	21	24	0	3	
M3.03	Coatesville, PA 19320			30 WB	891	51	69	0	0	68.4
			15:52:00 - 16:12:00	S Bosall (both)	138	9	0	12	3	
M3.04	211 Valley Green Dr			30 EB 30 WB	579 891	21 51	24 69	0	0	57.8
	Coatesville, PA 19320			S Bosall (both)	138	9	0	12	3	57.0
	411.0 0 11.0 1			30 EB	516	21	36	0	3	
M3.05	411 S. Bonsall Rd Coatesville, PA 19320			30 WB	852	30	69	0	0	64.1
	,		15:18:00 - 15:38:00	S Bosall (both)	36	3	0	3	0	
M3.06	205 Valley Green Dr			30 EB	516	21	36	0	3	EE 2
1413.00	Coatesville, PA 19320			30 WB S Bosall (both)	852 36	30	69	3	0	55.3
	405 S. Bonsall Rd			30 EB	510	21	36	6	0	
M3.07	Coatesville, PA 19320	4/25/2022		30 WB	792	33	90	3	0	63.8
M3.08	403 S. Bonsall Rd	<b>4/25/2022</b> 1	2022 14:41:00 - 15:01:00	30 EB	510	21	36	6	0	61.5
	Coatesville, PA 19320			30 WB	792	33	90	3	0	

# Table 02: Measurement Table Coatesville-Downington Bypass - Section AIR Coatesville, PA

Site ID	Address of Measurement Site	Date	Time Period			Hourly 'Concurre	Traffic B nt Traffi			TNM Model Validation Noise Levels in dB(A)
Number				Roadway	Autos	Medium Trucks	Heavy Trucks	Buses	Motor- cycles	Measured Leq
M4.01	808 Old Wilmington Rd Coatesville, PA 19320			30 EB 30 WB	474 552	21 39	69 138	0	3	70.0
344.02	5 Meetinghouse Rd	4/25/2022	12:17:00 - 12:37:00	30 EB	474	21	69	0	3	50.4
M4.02	Coatesville, PA 19320			30 WB	552	39	138	3	0	58.4
M4.03	37 Meetinghouse Rd Coatesville, PA 19320			30 EB 30 WB	657 459	45 42	72 87	3	0	57.3
M4.04	61 Meetinghouse Rd Coatesville, PA 19320		08:20:00 - 08:40:00	30 EB	657	45	72	0	0	56.7
	Kings Way Independence Church			30 WB	459 492	42 51	87 90	0	0	
M4.05	55 Morris Ln Coatesville, PA 19320	4/26/2022	9:00:00 - 9:20:00	30 EB 30 WB	462	39	93	3	0	62.7
M4.06	50 Morris Ln Coatesville, PA 19320	1	09:33:00 - 09:53:00	30 EB 30 WB	600 471	12 33	75 126	0	0	59.4
M4.07	56 Morris Ln Coatesville, PA 19320		9:00:00 - 9:20:00	30 EB	492	51	90	0	0	69.1
	Walking Path at Roundhill Apts,			30 WB	462	39	93	3	0	
M4.08	382 Larose Dr Coatesville, PA 19320		07:51:00 - 08:11:00	30 EB 30 WB	498 573	66 42	48 87	9	3	57.3
M4.09	215 Buckthorn Dr		08:23:00 - 08:43:00	30 EB	585	51	63	0	0	63.8
	Coatesville, PA 19320		00.25.00	30 WB	498	42 45	72 102	0	3	00.0
M4.10	105 Robinson Ave Coatesville, PA 19320	5/11/2022	08:53:00 - 9:13:00	30 EB 30 WB	627 651	33	81	3	3	56.9
M4.11	75 Robinson Ave		09:59:00 -10:19:00	30 EB	447	12	63	0	0	56.0
	Coatesville, PA 19320			30 WB 30 EB	498 504	24 21	81 78	6	6	
M4.12	320 Airport Rd Coatesville, PA 19320		10:43:00 - 11:03:00	30 WB	561	33	102	3	0	58.5
M4.13				30 EB	774	60	87	0	0	
	317 Airport Rd Coatesville, PA 19320			30 WB	606	66 21	102	0	0	58.2
	Coatesvine, 1 A 17320			On Ramp EB Airport (both)	285 471	39	39	0	0	
			10:23:00 - 10:43:00	30 EB	774	60	87	0	0	
M5.01	CHOP Primary Care,			30 WB	606	66	102	0	0	69.4
	495 W Highlands Blvd Coatesville, PA 19320	4/26/2022		On Ramp EB Airport (both)	285 471	21 39	39	0	0	
	222.5			30 EB	738	39	78	0	0	
M5.02	330 Country Club Rd Coatesville, PA 19320			30 WB	555	54	84	3	0	58.2
			11:11:00 - 11:31:00	Country Club Rd 30 EB	69 738	39	0 78	0	0	
M6.01	302/310 Country Club Rd Coatesville, PA 19320			30 WB	555	54	84	3	0	55.3
	Coatesvine, FA 19320			Country Club Rd	69	0	0	0	0	
M6.02	Between 1-3 & 4-6 Putter Ln Coatesville, PA 19320		13:23:00 - 13:43:00	30 EB 30 WB	825 873	36 39	102 108	3	6	65.3
M( 02	In Front of 85-86 Merion Ct		12,40,00 14,00,00	30 WB	792	36	63	18	6	543
M6.03	Coatesville, PA 19320		13:49:00 - 14:09:00	30 WB	858	78	87	0	0	54.2
M6.04	Btw. 11-14 & 15-18 Saddle Brook Ln Coatesville, PA 19320	5/10/2022	14:17:00 - 14:37:00	30 EB 30 WB	789 1020	57 57	51 90	9	9	59.8
M6.05	In Front of 85-86 Merion Ct Coatesville, PA 19320		14:48:00 - 15:08:00	30 EB 30 WB	804 1347	48 96	66 105	6	6	55.7
M6.06	Btw. 19-22 & 23-26 Turnberry Ct		15:26:00 - 15:46:00	30 EB	1158	27	54	9	9	62.5
	Coatesville, PA 19320 End of 37-41 Innisbrook Ln			30 WB 30 EB	1704 864	63 57	66 75	6	18	
M6.08	Coatesville, PA 19320	4/27/2022	14:06:00 - 14:26:00	30 WB	957	66	93	3	0	53.5
M6.09	Btw. 504&506 Augusta Dr Coatesville, PA 19320	5/10/2022	15:58:00 - 16:18:00	30 EB 30 WB	1047 1485	18 90	39 66	12 6	12 18	62.3
M6.10	Btw. 124&128 Burgundy Ln Coatesville, PA 19320		11:26:00 - 11:46:00	30 EB 30 WB	705 879	57 48	84 117	0	0	60.5
M6.11	136 Charlotte Ln Coatesville, PA 19320	4/27/2022	30 EB	615	63	75	9	0	71.3	
M6.12	700 Wagontown Rd		13:15:00 - 13:35:00	30 WB 30 EB	822 615	36 63	132 75	9	0	68.6
	Coatesville, PA 19320			30 WB	822	36	132	6	0	00.0

# Table 02: Measurement Table Coatesville-Downington Bypass - Section AIR Coatesville, PA

Site ID	Address of Measurement Site	Date	Time Period		Hourly Traffic Based on Concurrent Traffic Counts				TNM Model Validation Noise Levels in dB(A)	
Number					Autos	Medium		Buses	Motor-	Measured
				Roadway		Trucks	Trucks		cycles	Leq
3.55.04	15 Kimberly Cir		12 40 00 14 00 00	30 EB	669	90	69	12	0	<b>60.0</b>
M7.01	Coatesville, PA 19320		13:48:00 - 14:08:00	30 WB	813	39	90	3	0	68.0
		4		Country Club Rd	30	0	0	0	0	
M7.03	16 Kimberly Cir Coatesville, PA 19320			30 EB 30 WB	945 1110	51 60	63 114	3 12	0	61.6
		-	14:24:00 - 14:44:00	30 WB	945	51	63	3	0	
M7.04	1 Donna Dr Coatesville, PA 19320			30 WB	1110	60	114	12	3	57.6
	27 Kimberly Cir	4/26/2022	-	30 KB	954	60	45	12	0	
M7.05	Coatesville, PA 19320	4/20/2022		30 WB	1338	57	78	3	0	69.7
	11 Donna Dr	-	14:59:00 - 15:19:00	30 EB	954	60	45	12	0	
M7.06	Coatesville, PA 19320			30 WB	1338	57	78	3	0	56.3
	41 Kimbelry Cir	1		30 EB	633	51	51	3	0	
M7.07	Coatesville, PA 19320			30 WB	738	36	75	9	0	67.8
	21 Donna Dr	1	12:07:00 - 12:27:00	30 EB	633	51	51	3	0	
M7.08	Coatesville, PA 19320			30 WB	738	36	75	9	0	56.6
	49 Kimberly Cir			30 EB	1011	84	84	9	0	
M7.09	Coatesville, PA 19320			30 WB	978	36	78	12	3	67.4
377.40	48 Kimberly Cir		07:34:00 - 07:54:00	30 EB	1011	84	84	9	0	0
M7.10	Coatesville, PA 19320			30 WB	978	36	78	12	3	57.0
N7.11	54 Lambert Ln			30 EB	900	99	69	3	0	"
M7.11	Coatesville, PA 19320		08:08:00 - 08:28:00	30 WB	774	57	75	15	0	66.6
M7.12	55 Lambert Ln			30 EB	900	99	69	3	0	58.2
N17.12	Coatesville, PA 19320			30 WB	774	57	75	15	0	58.2
M7.13	120 Mineral Spring Rd	4/27/2022	11:26:00 - 11:46:00	30 EB	705	57	84	0	0	65.2
1417.13	Coatesville, PA 19320	4/2//2022	11:26:00 - 11:46:00	30 WB	879	48	117	3	3	03.2
M7.14	128 Mineral Spring Rd			30 EB	558	45	81	0	0	67.5
	Coatesville, PA 19320		10:48:00 - 11:08:00	30 WB	696	42	87	3	0	0710
M7.15	131 Mineral Spring Rd			30 EB	558	45	81	0	0	63.4
	Coatesville, PA 19320	4		30 WB	696	42	87	3	0	
M7.16	136 Mineral Spring Rd			30 EB	696	69	87	3	0	72.7
	Coatesville, PA 19320	4	10:12:00 - 12:32:00	30 WB	687	42	123	9	0	
M7.17	143 Mineral Spring Rd Coatesville, PA 19320			30 EB	696	69	87	3	0	64.9
	· · · · · · · · · · · · · · · · · · ·			30 WB	687	42	123	9	0	
M8.01	210 Mount Airy Rd Coatesville, PA 19320	5/11/2022	07:12:00 - 07:32:00	30 EB 30 WB	1524 666	60 48	78 57	3 12	6	66.3
		1		30 WB 30 EB	792	48 84	105	3	0	
M9.02	525 Enfield Dr Coatesville, PA 19320	4/27/2022	08:50:00 - 09:10:00	30 EB 30 WB	693	51	96	3	0	72.4
	516 Enfield Dr			30 KB	1161	21	33	6	6	
M9.03	Coatesville, PA 19320		16:55:00 - 17:15:00	30 WB	1578	75	60	3	3	66.7
	253 Coleridge Ln	5/10/2022		30 EB	1161	21	33	6	6	
M9.05	Coatesville, PA 19320		16:55:00 - 17:15:00	30 WB	1578	75	60	3	3	54.5
	141 Mount Airy Rd	4/27/2022 09		30 EB	870	81	93	3	0	
M9.06	Coatesville, PA 19320			30 WB	717	66	87	21	0	60.3
250.05	140 Mount Airy Rd		09:25:00 - 09:45:00	30 EB	870	81	93	3	0	
M9.07	Coatesville, PA 19320		-	30 WB	717	66	87	21	0	56.2

Site ID	Address of Measurement Site	Date	Time Period	TNM Model Validation Noise Levels in dB(A)					
Number				Modeled Leq(h)	Measured Leq	Difference			
M1.01	220 Old Mill Rd Coatesville, PA 19320		08:15:00 - 08:35:00	66.6	68.0	-1.4			
M1.02	218 Old Mill Rd Coatesville, PA 19320	4/25/2022	09:04:00 - 09:24:00	58.2	57.1	1.1			
M1.03	146 Old Mill Rd Coatesville, PA 19320		09:46:00 - 10:06:00	58.2	58.1	0.1			
M1.04	64 Fredrick Rd Coatesville, PA 19320		17.40.00 18.00.00	58.7	60.9	-2.2			
M1.05	52 Fredrick Rd Coatesville, PA 19320		17:49:00 - 18:09:00	65.1	64.7	0.4			
M1.06	34 Fredrick Rd Coatesville, PA 19320	4/26/2022		63.6	63.7	-0.1			
M1.07	31 Fredrick Rd Coatesville, PA 19320		07:12:00 - 07:32:00	60.1	59.1	1.0			
M1.08	20 Fredrick Rd Coatesville, PA 19320	4/25/2022	17:15:00 - 17:35:00	60.4	62.9	-2.5			
M1.09	785 Wilmington Rd Coatesville, PA 19320	4/26/2022	07:47:00 - 08:07:00	68.6	68.8	-0.2			
M2.07	400 Lauren Ln Parkeburg, PA 19365	4/25/2022	17:15:00 - 17:35:00	58.4	56.2	2.2			
M1.10	775 Wilmington Rd Coatesville, PA 19320	4/26/2022	07:47:00 - 08:07:00	60.9	60.0	0.9			
M2.01	35 S. Cowan Rd Parkeburg, PA 19365		09:46:00 - 10:06:00	59.9	60.2	-0.3			
M2.02	51 White Tail Ln Parkeburg, PA 19365		10:34:00 - 10:54:00	60.5	62.4	-1.9			
M2.03	47 White Tail Ln Parkeburg, PA 19365		10.34.00 - 10.34.00	56.1	58.8	-2.7			
M2.04	5XX Lissie Ln Parkeburg, PA 19365		16:39:00 - 16:59:00	60.9	59.4	1.5			
M2.05	510 Lissie Ln Parkeburg, PA 19365		10.39.00 - 10.39.00	64.4	63.2	1.2			
M2.06	803 Wilmington Rd Parkeburg, PA 19365	4/25/2022	11:41:00 - 12:01:00	67.8	67.0	0.8			
M2.07	400 Lauren Ln Parkeburg, PA 19365		17:15:00 - 17:35:00	58.4	56.2	2.2			
M2.08	819 Old Wilmington Rd Parkeburg, PA 19365		11:41:00 - 12:01:00	63.8	64.2	-0.4			
M3.01	790 Old Wilmington Rd Coatesville, PA 19320		13:53:00 - 14:13:00	64.7	63.0	1.7			
M3.02	784 Old Wilmington Rd Coatesville, PA 19320		15.55.00 - 14.15.00	59.5	57.3	2.2			

Site ID	Address of Measurement Site	Date	Time Period	TNM Model Validation Noise Levels in dB(A)					
Number				Modeled Leq(h)	Measured Leq	Difference			
M3.03	455 S. Bonsall Rd Coatesville, PA 19320		15:52:00 - 16:12:00	67.2	68.4	-1.2			
M3.04	211 Valley Green Dr Coatesville, PA 19320		13.32.00 - 10.12.00	57.6	57.8	-0.2			
M3.05	411 S. Bonsall Rd Coatesville, PA 19320		15:18:00 - 15:38:00	66.0	64.1	1.9			
M3.06	205 Valley Green Dr Coatesville, PA 19320	4/25/2022	13.18.00 - 13.38.00	57.4	55.3	2.1			
M3.07	405 S. Bonsall Rd Coatesville, PA 19320		14:41:00 - 15:01:00	63.5	63.8	-0.3			
M3.08	403 S. Bonsall Rd Coatesville, PA 19320	403 S. Bonsall Rd		59.3	61.5	-2.2			
M4.01	808 Old Wilmington Rd Coatesville, PA 19320		12:17:00 - 12:37:00	70.6	70.0	0.6			
M4.02	5 Meetinghouse Rd Coatesville, PA 19320		12:17:00 - 12:37:00	60.4	58.4	2.0			
M4.03	37 Meetinghouse Rd Coatesville, PA 19320		08:20:00 - 08:40:00	58.9	57.3	1.6			
M4.04	61 Meetinghouse Rd Coatesville, PA 19320			58.3	56.7	1.6			
M4.05	Kings Way Independence Church 55 Morris Ln Coatesville, PA 19320	4/26/2022	9:00:00 - 9:20:00	62.5	62.7	-0.2			
M4.06	50 Morris Ln Coatesville, PA 19320		9:33:00 - 9:53:00	59.0	59.4	-0.4			
M4.07	56 Morris Ln Coatesville, PA 19320		9:00:00 - 9:20:00	71.3	69.1	2.2			
M4.08	Walking Path at Roundhill Apts, 382 Larose Dr Coatesville, PA 19320		07:51:00 - 08:11:00	57.5	57.3	0.2			
M4.09	215 Buckthorn Dr Coatesville, PA 19320		08:23:00 - 08:43:00	62.9	63.8	-0.9			
M4.10	105 Robinson Ave Coatesville, PA 19320	5/11/2022	08:53:00 - 9:13:00	57.7	56.9	0.8			
M4.11	75 Robinson Ave Coatesville, PA 19320		09:59:00 -10:19:00	55.3	56.0	-0.7			
M4.12	320 Airport Rd Coatesville, PA 19320		10:43:00 - 11:03:00	57.9	58.5	-0.6			
M4.13	317 Airport Rd Coatesville, PA 19320	4/26/2022	10:23:00 - 10:43:00	57.4	58.2	-0.8			
M5.01	CHOP Primary Care, 495 W Highlands Blvd Coatesville, PA 19320	7/20/2022	10.23.00 - 10.43.00	68.8	69.4	-0.6			

Site ID	Address of Measurement Site	Date	Time Period	TNM Model Calibration Noise Levels in dB(A)					
Number				Modeled Leq(h)	Measured Leq	Difference			
M5.02	330 Country Club Rd Coatesville, PA 19320	4/26/2022	11:11:00 - 11:31:00	59.1	58.2	0.9			
M6.01	302/310 Country Club Rd Coatesville, PA 19320	4/20/2022	11.11.00 - 11.51.00	56.0	55.3	0.7			
M6.02	Between 1-3 & 4-6 Putter Ln Coatesville, PA 19320		13:23:00 - 13:43:00	66.3	65.3	1.0			
M6.03	In Front of 85-86 Merion Ct Coatesville, PA 19320	]	13:49:00 - 14:09:00	53.3	54.2	-0.9			
M6.04	Btw. 11-14 & 15-18 Saddle Brook Ln Coatesville, PA 19320	5/10/2022	14:17:00 - 14:37:00	61.6	59.8	1.8			
M6.05	In Front of 85-86 Merion Ct Coatesville, PA 19320		14:48:00 - 15:08:00	54.7	55.7	-1.0			
M6.06	Btw. 19-22 & 23-26 Turnberry Ct Coatesville, PA 19320		15:26:00 - 15:46:00	62.8	62.5	0.3			
M6.08	End of 37-41 Innisbrook Ln Coatesville, PA 19320	4/27/2022	14:06:00 - 14:26:00	53.9	53.5	0.4			
M6.09	Btw. 504&506 Augusta Dr Coatesville, PA 19320	5/10/2022	15:58:00 - 16:18:00	64.3	62.3	2.0			
M6.10	Btw. 124&128 Burgundy Ln Coatesville, PA 19320		11:26:00 - 11:46:00	61.9	60.5	1.4			
M6.11	136 Charlotte Ln Coatesville, PA 19320	4/27/2022	13:15:00 - 13:35:00	71.0	71.3	-0.3			
M6.12	700 Wagontown Rd Coatesville, PA 19320		13.13.00 - 13.33.00	70.0	68.6	1.4			
M7.01	15 Kimberly Cir Coatesville, PA 19320		13:48:00 - 14:08:00	69.1	68.0	1.1			
M7.03	16 Kimberly Cir Coatesville, PA 19320	4/26/2022	14-24-00 14-44-00	61.9	61.6	0.3			
M7.04	1 Donna Dr Coatesville, PA 19320		14:24:00 - 14:44:00	59.6	57.6	2.0			

Site ID	Address of Measurement Site	Date	Time Period	TNM Model Validation Noise Levels in dB(A)					
Number				Modeled Leq(h)	Measured Leq	Difference			
M7.05	27 Kimberly Cir Coatesville, PA 19320		14 50 00 15 10 00	70.1	69.7	0.4			
M7.06	11 Donna Dr Coatesville, PA 19320	]	14:59:00 - 15:19:00	55.4	56.3	-0.9			
M7.07	41 Kimbelry Cir Coatesville, PA 19320	4/26/2022	12.07.00 12.27.00	67.2	67.8	-0.6			
M7.08	21 Donna Dr Coatesville, PA 19320		12:07:00 - 12:27:00	57.3	56.6	0.7			
M7.09	49 Kimberly Cir Coatesville, PA 19320		07:34:00 - 07:54:00	68.1	67.4	0.7			
M7.10	48 Kimberly Cir Coatesville, PA 19320		07:34:00 - 07:34:00	55.5	57.0	-1.5			
M7.11	54 Lambert Ln Coatesville, PA 19320			69.6	66.6	3.0			
M7.12	55 Lambert Ln Coatesville, PA 19320		08:08:00 - 08:28:00	57.2	58.2	-1.0			
M7.13	120 Mineral Spring Rd Coatesville, PA 19320	4/27/2022	11:26:00 - 11:46:00	62.8	65.2	-2.4			
M7.14	128 Mineral Spring Rd Coatesville, PA 19320		10.40.00 11.00.00	66.1	67.5	-1.4			
M7.15	131 Mineral Spring Rd Coatesville, PA 19320		10:48:00 - 11:08:00	61.2	63.4	-2.2			
M7.16	136 Mineral Spring Rd Coatesville, PA 19320		10:12:00 - 12:32:00	72.6	72.7	-0.1			
M7.17	143 Mineral Spring Rd Coatesville, PA 19320		10:12:00 - 12:32:00	65.7	64.9	0.8			
M8.01	210 Mount Airy Rd Coatesville, PA 19320	5/11/2022	07:12:00 - 07:32:00	67.7	66.3	1.4			
M9.02	525 Enfield Dr Coatesville, PA 19320	4/27/2022	08:50:00 - 09:10:00	71.1	72.4	-1.3			
M9.03	516 Enfield Dr Coatesville, PA 19320	5/10/2022	16:55:00 - 17:15:00	68.0	66.7	1.3			
M9.05	253 Coleridge Ln Coatesville, PA 19320	3/10/2022	16:55:00 - 17:15:00	52.8	54.5	-1.7			
M9.06	141 Mount Airy Rd Coatesville, PA 19320	4/27/2022	09:25:00 - 09:45:00	59.6	60.3	-0.7			
M9.07	140 Mount Airy Rd Coatesville, PA 19320	4/2//2022	07.23.00 - 07.43.00	53.9	56.2	-2.3			

## Table 4: NSA 1 and NSA 3 Coatesville-Downington Bypass - Section AIR Summary of Noise Barrier Analysis

NSA Receptor ID Equivalent Receptor Units (ERU) Equivalent (ERU) Equivalent (ERU) Equivalent (ERU) Equivalent (2019) Equivalent (2019) Equivalent (2050) Future No-Build (2050) Future No-Build (2050) Noise Insertion Noise I					uild (2050)	Future B													
Receptor ID   Receptor Units   Level (2019)   (2059)	Case 4: Optimize Barrier 1-3		10' Barrier	Case 3: 1	8' Barrier	Case 2:	Barrier	1: 6' B	Case 1:			Future No-Build	Existing Noise						
RI.92 (M.10.2)		Nois Leve	Loss	Level	Loss	Level	Loss	4	Level	I.O.E	Noise Level			Receptor Units	Receptor ID	NSA			
RIJJ (M1.43)	68 0	68	0	68	0	68	0		68	2	68	67	66	1	R1.01 (M1.01) Potential Acquisition				
RI.94 (M.1.04)  RI.95 (M.1.05)  RI.95 (M.1.05)	61 0	61	0	61	0	61	0		61	2	61	60	59	1	· /				
RIJOS (MILOS)  RIJOS (MILOS)  RIJOS (MILOS)  1 1 61 62 63 2 59 4 69 4 59 6 6 7 6 6 7 6 7 6 7 7 7 7 7 7 7 7 7 7	61 0																		
RI.97 (MI.97)	60 1	_												1					
RIJOS (MILOS)  RIJOS (MILOS)  1	63 5																		
R1.99 (M1.99)	58 <b>5</b>							_							· /				
R1.10 (M1.10)	59 5																		
R1.11	61 9																		
R1.12	58 <b>5</b>							_											
R1.13 (M1.06)	58 2							_											
R1.14	61 7							_											
R1.15	60 7							_											
Nation   Part	60 8																		
No.	60 7															~			
R3.02 (M3.02)	61 1				0														
R3.02 (M3.02)	58 <b>6</b>		-		/											<u>S</u>			
R3.02 (M3.02)	59 4 57 12															2			
R3.02 (M3.02)	57 9	_							_							7			
R3.04 (M3.04)	57 6															⋖			
R3.04 (M3.04)	61 8															Š			
R3.05 (M3.05)	56 4															_			
R3.06 (M3.06)	63 7							-											
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	57 3														· /				
R3.08 (M3.08)	63 2																		
R3.09	61 1																		
R3.10	55 5																		
R3.11	60 8																		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	62 11																		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	63 9																		
R3.14	63 9		9		7	65	6												
R3.15	63 7																		
R3.16	56 4						3												
Number of Impacted Receptors   16   16   16   16   16   16   16	56 4		4	56		57				1	60				R3.16				
Feasibility Evaluation Impacted Receptors receiving ≥ 5 dB Insertion Loss (I.L.) 7 14 16 Percent of Impacted Receptors Receiving ≥ 5 dB I.L. 88% 100% 88% 100% Yes Yes    Reasonableness Evaluation   1 8   10   10   10   10   10   10   1	63 7	63	5	65	4	66	3		67	2	70	69	69	1	R3.17				
Feasibility Evaluation Impacted Receptors receiving ≥ 5 dB Insertion Loss (I.L.) 7 14 16 Percent of Impacted Receptors Receiving ≥ 5 dB I.L. 88% 100% 88% 100% Yes Yes    Reasonableness Evaluation   1 8   10   10   10   10   10   10   1							-					•		•					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	16	16		16		16			16		16				of Impacted Receptors	Number			
Percent of Impacted Receptors Receiving ≥ 5 dB LL.     44% No     88% Yes       Is this percentage ≥ 50%?; If yes, barrier is feasible.     Reasonableness Evaluation       Number of Non-impacted receptors receiving ≥ 5 dB LL. (Benefited Receptors)       Total Number of receptors receiving ≥ 7 dB LL. (Meeting NRDG)     1     8       Number of receptors receiving ≥ 7 dB LL. (Meeting NRDG)     6     14       Does at least one Benefited Receptor Receive ≥ 7 dB LL.?     Yes     Yes       Barrier Height (feet) [average]     8     10       Barrier Length (feet)     4498     4498				i															
Is this percentage $\geq$ 50%?; If yes, barrier is feasible.     No     Yes       Reasonableness Evaluation       Number of Non-impacted receptors receiving $\geq$ 5 dB l.L. (Benefited Receptors)     1     8       Total Number of receptors receiving $\geq$ 5 dB l.L. (Benefited Receptors)     15     24       Number of receptors receiving $\geq$ 7 dB l.L. (Meeting NRDG)     6     14       Does at least one Benefited Receptor Receive $\geq$ 7 dB l.L.?     Yes     Yes       Barrier Height (feet) [average]     8     10       Barrier Length (feet)     4498     4498	16			i										I.L.)					
Reasonableness Evaluation           Number of Non-impacted receptors receiving ≥ 5 dB LL. (Benefited Receptors)         1         8           Total Number of receptors receiving ≥ 5 dB LL. (Benefited Receptors)         15         24           Number of receptors receiving ≥ 7 dB LL. (Meeting NRDG)         6         14           Does at least one Benefited Receptor Receive ≥ 7 dB LL.?         Yes         Yes           Barrier Height (feet) [average]         8         10           Barrier Length (feet)         4498         4498	100% Yes			i															
Number of Non-impacted receptors receiving ≥ 5 dB I.L. (Benefited Receptors)       1       8         Total Number of receptors receiving ≥ 5 dB I.L. (Benefited Receptors)       15       24         Number of receptors receiving ≥ 7 dB I.L. (Meeting NRDG)       6       14         Does at least one Benefited Receptor Receive ≥ 7 dB I.L.?       Yes       Yes         Barrier Height (feet) [average]       8       10         Barrier Length (feet)       4498       4498	res	Щ_	162	1	162		NO		I		on	nahleness Evaluati							
Total Number of receptors receiving ≥ 5 dB LL. (Benefited Receptors)         15         24           Number of receptors receiving ≥ 7 dB LL. (Meeting NRDG)         6         14           Does at least one Benefited Receptor Receive ≥ 7 dB LL.?         Yes         Yes           Barrier Height (feet) [average]         8         10           Barrier Length (feet)         4498         4498	6		8	ſ	1		I				-								
Does at least one Benefited Receptor Receive ≥ 7 dB l.L.?         Yes         Yes           Barrier Height (feet) [average]         8         10           Barrier Length (feet)         4498         4498	22			i									,						
Barrier Height (feet) [average]         8         10           Barrier Length (feet)         4498         4498	15		14	i	6														
Barrier Length (feet) 4498 4498	Yes			ı					1										
	[10]		-	ı	-				1										
Datrier square 1001age (5Q11) 35984 44980	3397			i															
Demine was fast and harfield was (CF/DB)	3497			i											1 0 ( )				
Barrier square footage per benefited receptor (SF/BR) 2399 1874 Is SF/BR $\leq$ 2,000?; If yes, barrier is reasonable No Yes	1590 Yes			ı										1					
Is SF/RS ≥ 2,0007; it yes, barrier is reasonable         NO         Yes           Average I.L. per Benefited Receptor (dB)         7.2	7.3			1	140				1										

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)

Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

# Table 5: NSA 2 Coatesville-Downington Bypass - Section AIR Summary of Noise Barrier Analysis

					Future Build (2050)										
		No. of Equivalent	Existing Noise	Future No-Build	Future B	Build No-	Case 1:	6' Barrier	Case 2:	8' Barrier		ptimized ier 2			
NSA	Receptor ID	Receptor Units (ERU)	Level (2019)	(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB			
	R2.01 (M2.01)	1	61	62	63	2	63	0	63	0	63	0			
	R2.02 (M2.02)	1	62	63	64	2	64	0	64	0	64	0			
	R2.03 (M2.03)	1	57	58	59	2	58	1	58	1	58	1			
	R2.04 (M2.04)	1	63	64	64	2	61	3	59	6	57	7			
	R2.05 (M2.05)	1	64	65	66	2	62	5	61	6	58	8			
	R2.07 (M2.07)	1	60	61	62	2	59	3	57	5	55	8			
	R2.08 (M2.08)	1	58	59	60	2	57	3	57	3	54	6			
	R2.09	1	63	64	65	2	64	1	64	1	64	1			
	R2.10	1	55	56	57	2	56	1	56	1	56	2			
	R2.11	1	57	58	60	2	58	2	58	2	57	3			
	R2.12	1	55	56	57	2	55	2	55	2	55	3			
	R2.13	1	60	61	63	3	60	3	60	3	59	4			
	R2.14	1	63	64	65	2	61	3	59	6	57	7			
	R2.15	1	63	64	65	2	61	3	59	6	57	7			
	R2.16	1	63	64	65	2	61	4	59	6	57	7			
	R2.17	1	63	64	65	2	61	4	59	6	58	8			
	R2.18	1	63	64	66	2	61	4	60	6	58	8			
	R2.19	1	64	65	66	2	62	4	60	6	58	8			
	R2.20	1	64	65	66	2	62	5	60	6	58	8			
7	R2.21	1	65	66	67	2	62	4	61	6	58	8			
	R2.22	1	65	66	67	2	62	4	61	6	58	9			
NSA	R2.23	1	65	66	67	2	63	4	61	6	58	9			
_	R2.24	1	65	66	67	2	63	4	61	6	59	9			
	R2.25	1	62	63	64	2	60	4	59	6	56	8			
	R2.26	1	62	63	64	2	60	4	59	6	56	8			
	R2.27	1	62	63	64	2	60	4	59	6	56	8			
	R2.28	1	63	64	64	2	60	4	59	5	56	8			
	R2.29	1	62	63	64	2	60	4	59	5	56	8			
	R2.30	1	62	63	64	2	60	4	59	5	56	8			
	R2.31	1	63	64	65	2	60	4	59	5	56	8			
	R2.32	1	62	63	64	2	60	4	59	5	56	8			
	R2.33	1	63	64	65	2	60	4	59	5	56	8			
	R2.34	1	63	64	65	2	60	4	59	5	56	8			
	R2.35	1	63	64	65	2	61	4	59	5	56	8			
	R2.36	1	63	64	65	2	61	4	59	5	56	8			
	R2.37	1	62	63	64	2	61	3	59	5	56	8			
	R2.38	1	60	61	62	2	59	4	58	5	55	8			
	R2.39	1	60	61	62	2	59	3	58	5	55	8			
	R2.40	1	60	61	62	2	59	3	58	5	55	8			
	R2.41	1	61	62	62	2	59	3	58	5	55	8			
	R2.42	1	61	62	62	2	59	3	58	5	55	8			
	R2.43	1	61	61	62	2	59	3	58	5	55	8			

# Table 5: NSA 2 Coatesville-Downington Bypass - Section AIR Summary of Noise Barrier Analysis

		No. of Equivalent		Future No-Build	Future Build (2050)											
NSA	Passanton ID		Existing Noise		Future B	uild No- rier	Case 1:	6' Barrier	Case 2:	8' Barrier		ptimized ier 2				
NSA	Receptor ID	Receptor Units (ERU)	Level (2019)	(2050)	Noise Level	I.O.E	Noise Level	Insertion Loss	Noise Level	Insertion Loss	Noise Level	Insertion Loss				
					dB(A)	dB	dB(A)	dB	dB(A)	dB	dB(A)	dB				
	R2.44	1	60	61	62	2	59	3	58	5	55	8				
	R2.45	1	60	61	62	2	59	3	58	5	55	8				
	R2.46	1	60	61	62	2	59	3	58	5	55	8				
	R2.47	1	60	61	62	2	59	3	58	5	55	8				
	R2.48	1	60	61	62	2	59	3	57	5	55	8				
	R2.49	1	60	61	62	2	59	3	58	4	55	7				
	R2.50	1	60	61	62	2	59	3	58	4	54	7				
	R2.51	1	58	59	60	2	58	3	56	4	53	7				
	R2.52	1	58	59	60	2	58	3	56	4	53	7				
	R2.53	1	58	59	60	2	58	3	56	4	53	7				
	R2.54	1	58	59	60	2	58	3	56	4	53	7				
	R2.55	1	58	59	60	2	58	3	56	4	53	7				
	R2.56	1	58	59	60	2	57	2	56	4	53	7				
	R2.57	1	58	59	60	2	57	3	56	4	53	7				
	R2.58	1	58	59	60	2	57	2	56	4	53	7				
	R2.59	1	58	59	60	2	57	2	56	4	54	6				
	R2.60	1	58	59	60	2	57	2	56	4	53	7				
	R2.61	1	58	59	59	2	57	2	56	4	53	7				
7	R2.62	1	57	58	59	2	57	2	56	3	53	7				
	R2.63	1	57	58	59	2	57	2	56	3	53	7				
NSA	R2.64 (M2.06)	1	69	70	70	2	65	6	63	7	60	10				
_	R2.65	1	63	64	65	2	61	4	60	5	56	9				
	R2.66	1	61	62	63	2	59	4	58	4	55	8				
	R2.68	1	66	67	68	2	64	5	63	6	61	8				
	R2.69	1	66	67	68	2	64	4	62	6	60	8				
	R2.70	1	66	67	68	2	63	5	62	5	59	8				
	R2.71	1	66	67	68	2	63	5	61	6	59	8				
	R2.72	1	66	67	68	2	63	5	61	6	59	8				
	R2.73	1	65	66	67	2	63	5	61	7	59	9				
	R2.74	1	65	66	67	2	63	4	61	6	59	8				
	R2.75	1	64	65	67	2	63	4	60	6	59	8				
	R2.76	1	64	65	66	2	62	4	60	6	58	8				
	R2.77	1	63	64	66	2	62	4	60	6	58	8				
	R2.78	1	63	64	66	2	60	5	59	7	58	8				
	R2.79	1	62	63	64	2	61	3	60	4	58	6				
	R2.80 R2.81	1	62 62	63	64 64	2	61 61	3	60 60	4	57 57	6 7				
	R2.82	1	63	64	64	2	61	3	60	5	57	7				
	R2.83	1	63	64	65	2	61	4	60	5	57	7				
	R2.84	1	63	64	65	2	61	4	60	5	57	8				
	R2.85	1	63	64	65	2	61	4	60	5	57	8				

# Table 5: NSA 2 Coatesville-Downington Bypass - Section AIR Summary of Noise Barrier Analysis

								Future E	Build (2050	0)		
NSA	December ID	No. of Equivalent	Existing Noise	Future No-Build		Build No-	Case 1:	6' Barrier	Case 2:	8' Barrier		ptimized ier 2
NSA	Receptor ID	Receptor Units (ERU)	Level (2019)	(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB
	R2.86	1	63	64	65	2	60	4	60	5	57	8
	R2.87	1	62	63	64	2	60	4	59	5	56	8
	R2.88	1	62	63	64	2	60	4	59	5	56	8
	R2.89	1	56	57	57	2	56	1	56	1	54	3
	R2.90	1	56	57	58	2	57	1	57	2	55	3
	R2.91	1	57	58	59	2	58	1	57	2	56	4
	R2.92	1	59	60	60	2	59	1	59	2	57	4
	R2.93	1	59	60	61	2	60	2	59	3	57	4
	R2.94	1	60	61	61	2	60	2	58	3	56	5
	R2.95	1	60	61	62	2	60	2	58	4	56	6
	R2.96	1	60	61	62	2	59	3	58	4	56	6
1 2	R2.97	1	60	61	62	2	60	3	58	4	56	7
NSA	R2.98	1	61	62	63	2	60	3	59	4	56	7
Z	R2.99	1	61	62	63	2	60	3	59	4	56	7
	R2.100	1	61	62	63	2	60	3	58	5	56	7
	R2.101	1	61	62	63	2	60	4	58	5	56	8
	R2.102	1	61	62	63	2	59	4	58	5	55	8
	R2.103	1	61	62	63	2	59	4	58			8
	R2.104	1	57	58	59	2	58	2	56			5
	R2.105	1	57	58	59	2	58	2	56			6
	R2.106	1	58	59	60	2	58	2	56			6
	R2.107	1	58	59	60	2	58	2	56			6
	R2.108	1	59	60	60	2	58	2			_	6
	R2.109	1	58	59	60	2	57	3	56			7
	R2.110	1	58	59	60	2	57	2				7
NSA 4	R4.01 (M4.01)	1	71	72	70	-1	66	5		566     3     54       566     3     54       566     3     54       566     4     54       566     4     54       566     4     53       566     4     53       566     4     53       656     62     62       662     4     60	9	
	R4.14	1	65	66	66	1	63	3	62	4	60	6
Number	of Impacted Receptors				22		22		22		22	
Feasibili	ity Evaluation											
Impacted	l Receptors receiving ≥ 5	dB Insertion Loss	(I.L.)					10		21		22
Percent of	of Impacted Receptors Re	ceiving ≥ 5 dB I.L.						45%		95%		100%
Is this pe	ercentage ≥ 50%?; If yes,	barrier is feasible.						No		Yes		Yes
				Reasonablenes	s Evaluati	on						
	of Non-impacted receptor			ceptors)						42		74
Total Nu	mber of receptors receiving	$ng \ge 5 \text{ dB I.L. (Ber)}$	efited Receptors)							63		96
	of receptors receiving $\geq 7$									3		2
Does at 1	east one Benefited Recep	tor Receive ≥ 7 dB	I.L.?							Yes		Yes
	Height (feet) [average]									8		[12]
	ength (feet)									2303		2303
	quare footage (SQft)									18424		27036
	quare footage per benefite		)							292		282
Is SF/BR	$1 \le 2,000$ ?; If yes, barrier	is reasonable								Yes		Yes
Average	I.L. per Benefited Recept	or (dB)								5.4		7.4

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)
Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

# Table 6: NSA 4A Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

							Future B	uild (2050)						
NSA	Receptor ID	No. of Equivalent	Existing Noise Level (2019)	Future No-Build	Future B Bar	Build No- rier	Case 1: 1	0' Barrier	Case 2: 1	2' Barrier	Case 3: 1	.4' Barrier	Case 4: 1	L6' Barrier
NOA	Receptor ib	Receptor Units (ERU)		(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB
	R4.01 (M4.01)*	1	72	72	72	0	72	0	72	0	72	0	72	0
	R4.02 (M4.02)	1	60	60	61	1	61	0	61	0	61	0	61	0
	R4.03 (M4.03)	1	59	59	60	1	59	1	59	1	59	1	59	1
	R4.04 (M4.04)	1	60	60	61	1	58	3	57	4	57	4	57	4
	R4.05 (M4.05)	1	64	64	66	2	61	5	59	7	59	8	58	8
	R4.06 (M4.06)	1	60	60	61	1	58	4	57	4	56	5	55	6
₫	R4.07 (M4.07)	1	65	65	67	2	62	5	60	7	59	8	58	9
4A	R4.14*	1	66	66	68	2	67	0	67	0	67	0	67	0
	R4.15	1	62	62	63	1	63	0	63	0	63	0	63	0
NSA	R4.16	1	60	60	61	1	60	1	60	1	60	1	60	1
_	R4.17	1	61	61	62	1	61	1	61	1	61	1	61	1
	R4.18	1	60	60	61	1	61	1	61	1	61	1	61	1
	R4.19	1	59	59	60	1	59	1	59	1	59	1	59	1
	R4.20	1	59	59	60	1	59	2	58	2	58	2	58	2
	R4.21	1	60	60	61	1	57	3	57	4	56	5	55	5
	R4.22	1	59	59	60	1	57	3	57	4	55	5	55	5
	R4.26	1	60	60	61	1	58	3	57	4	56	5	56	5
				*R4.01 and R4.14	analysis inc	cluded in T	able 5: NS	A 2						
Number	of Impacted Receptors				2		2		2		2		2	
	ty Evaluation													
Impacted	l Receptors receiving ≥ 5 o	dB Insertion Loss (	(I.L.)					2		2		2		2
	of Impacted Receptors Rec							100%		100%		100%		100%
Is this pe	ercentage ≥ 50%?; If yes, t	parrier is feasible.						Yes		Yes		Yes		Yes
2.4	007		* * O		nableness	Evaluation	1			•				
	of Non-impacted receptor			eptors)				0		0		4		4
	mber of receptors receiving							2		2		6		6
	of receptors receiving ≥ 7							0 <b>No</b>		2		2		2
	east one Benefited Recept Height (feet)	tor Receive $\geq / dB$	1.L. (					NO		Yes 12		Yes 14		Yes 16
	ength (feet)									1200		14 1200		1200
	quare footage (SQft)									14400		16800		19200
	quare footage (SQII) quare footage per benefite	ad recentor (SE/DD	)							7200		2800		3200
	quare rootage per benefite $1 \le 2,000$ ?; If yes, barrier is		)							7200 <b>No</b>		2800 <b>No</b>		3200 <b>No</b>
	I.L. per Benefited Recept									NU		NU		NU
Average	1.L. per benefited kecept	or (ap)												

Impacted (66 dB(A) or 10 dB increase over existing)

Impacted Receivers receiving ≥ 5dB(A)

Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

# Table 7: NSA 4B Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

											Future B	uild (2050)						
NSA	Receptor ID	No. of Equivalent	Existing Noise Level (2019)	Future No-Build		Build No- rier	Case 1: 1	.0' Barrier	Case 2: 1	2' Barrier	Case 3: 1	4' Barrier	Case 4: 1	16' Barrier	Case 5: 1	.8' Barrier	Case 6: 2	20' Barrier
NOA	Receptor is	Receptor Units (ERU)		(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB										
	R4.08A (M4.08)	1	60	60	62	3	61	2	61	2	60	2	60	2	60	2	60	2
	R4.08B	1	60	60	62	3	61	2	60	2	60	2	60	3	60	3	60	3
	R4.08C	1	60	60	63	3	60	3	60	3	59	4	59	4	59	4	59	4
	R4.09 (M4.09)	1	64	64	68	4	65	3	64	4	63	5	61	7	61	8	60	8
	R4.10 (M4.10)	1	59	58	62	3	59	3	59	3	58	4	58	4	57	4	57	4
	R4.11 (M4.11)	1	58	57	61	3	58	3	58	3	57	4	56	5	56	5	55	6
	R4.12 (M4.12)	1	63	61	65	2	61	4	60	5	59	6	58	7	58	7	57	8
	R4.23	1	58	58	61	3	59	3	58	3	58	4	57	4	57	5	57	5
	R4.24	1	58	58	61	3	59	3	58	3	58	4	57	5	56	5	56	5
4B	R4.25	1	62	62	67	5	65	2	64	3	63	4	61	6	60	7	59	8
	R4.27	1	58	57	60	2	57	3	57	3	56	4	56	5	55	5	55	5
NSA	R4.28	1	58	56	60	2	57	3	57	3	56	3	56	4	55	4	55	4
Ž	R4.29	1	59	56	59	1	57	2	57	3	57	3	56	3	56	3	56	3
	R4.30	1	60	57	61	0	59	2	59	2	59	2	59	2	59	2	59	2
	R4.31	1	65	57	64	0	63	1	63	1	63	1	63	1	63	1	63	1
	R4.32	1	56	55	58	2	56	3	55	3	55	3	54	4	54	4	54	4
	R4.33	1	56	54	58	1	56	2	55	2	55	3	55	3	54	3	54	3
	R4.34	1	58	54	59	1	58	1	58	1	57	1	57	2	57	2	57	2
	R4.35	1	62	53	64	1	63	1	63	1	63	1	63	1	63	1	63	1
	R4.36	1	55	52	56	1	55	1	54	2	54	2	54	2	54	2	54	2
	R4.37	1	56	53	57	1	56	1	56	1	56	1	56	1	56	1	56	1
	R4.38	1	58	53	59	1	58	1	58	1	58	1	58	1	58	1	58	1
NY 1	CI ID				2		2		2		2		2		2		2	
	of Impacted Receptors ity Evaluation				2		2		2		2		2		2		2	
	1 Receptors receiving > 5 c	R Incertion Loss (I	1 )					0		0		1		2		2		2
	of Impacted Receptors Rec		.L.)					0%		0%		50%		100%		100%		100%
	ercentage > 50%?; If yes, b							No.		Yes								
is this pe	100 nage ≥ 3070:, 11 yes, 0	arrier is reasible.				Reaso	nableness	Evaluation	1	163		163		103		163		103
	of Non-impacted receptors			ptors)								1		4		5		5
	imber of receptors receiving											2		6		7		7
	of receptors receiving $\geq 7$											0		2		3		3
	least one Benefited Recept	or Receive $\geq 7 \text{ dB I}$	.L.?									No		Yes		Yes		Yes
	Height (feet)													16		18		20
	Length (feet)													1495		1495		1495
	quare footage (SQft)													23920		26910		29900
	quare footage per benefite													3987		3844		4271
	$R \le 2,000$ ?; If yes, barrier is													No		No		No
Average	I.L. per Benefited Recepto	or (dB)																

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)
Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

# Table 8: NSA 5 Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

									Future B	uild (2050)					
NSA	Receptor ID	No. of Equivalent	Existing Noise Level (2019)	Future No-Build	Future B Bar	uild No- rier	Case 1: 14' Barrier		Case 2: 1	.6' Barrier	Case 3: 18' Barrier		Case 4: 2	0' Barrier	
1134		Receptor Units (ERU)		(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	
NSA 5	R5.01 (M5.01)	1	69	70	69	0	64	4	64	5	64	5	63	5	
NSA 3	R5.02 (M5.02)	1 64		65	64	0	64	0	64	0	64	0	64	0	
	of Impacted Receptors		1		1		1		1		1				
	ty Evaluation														
	Receptors receiving ≥ 5						0			1	1			1	
	f Impacted Receptors Re							0%		100%		100%		100%	
Is this pe	rcentage ≥ 50%?; If yes,	barrier is feasible.		Danas	nableness	Evaluatio		No		Yes		No		No	
Number	of Non-impacted receptor	ra raggiving > 5 dD	II (Danafitad Dag		nabieness	Evaluatio	n			0		0		0	
	mber of receptors receiving			cptors)						1		1		1	
	of receptors receiving $\geq 7$								0		0			0	
	east one Benefited Recep				1					No		No		No	
Barrier I	leight (feet)	_													
Barrier L	ength (feet)				1										
Barrier s	quare footage (SQft)				1										
Barrier s	quare footage per benefite	ed receptor (SF/BR	.)												
Is SF/BR	$\leq$ 2,000?; If yes, barrier	is reasonable													
Average	I.L. per Benefited Recept	tor (dB)													

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)

Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

# Table 9: NSA 6A Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

												Future Bi	uild (2050)							
NSA	Receptor ID	No. of Equivalent Receptor Units	Existing Noise Level (2019)	Future No-Build (2050)	Future B Bar			0' Barrier	Case 2: 1			4' Barrier	Case 4: 1		Case 5: 1			20' Barrier	Barri	
		(ERU)			Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB
	R6.01 (M6.01)	1	65	66	67	2	65	3	64	4	63	4	63	4	63	5	62	5	63	5
	R6.03 (M6.03) R6.13 (M6.02)	1	53 64	54 65	55 66	2	51 58	4 8	49 58	9	49 57	9	48 56	10	48 55	11	48 55	11	48 56	11
	R6.14	1	63	64	64	2	57	8	56	8	55	9	54	10	54	11	53	11	54	11
	R6.15	1	61	62	63	2	56	7	55	8	54	9	53	10	53	10	52	11	53	10
	R6.16	1	66	67	68	2	59	9	58	10	57	10	57	11	56	12	55	12	57	11
	R6.17	1	65	66	67	2	58	8	57	9	56	10	55	11	55	12	54	13	56	11
	R6.18	1	64	65 57	66 58	2	58	8	57	9	56	10	55	11	54	12	53	13	55	11
	R6.19 R6.20	1	56 53	54	58 55	2	54 52	3	53 51	4	53 51	4	53 51	5	52 50	5	52 50	5	53 50	5
	R6.21	1	53	54	55	2	53	3	52	3	52	4	52	4	51	4	51	4	51	4
	R6.22	1	54	55	56	2	53	3	52	4	52	4	52	4	52	4	52	4	52	4
	R6.23	1	53	54	55	2	51	5	49	6	49	7	48	7	48	8	47	8	48	7
	R6.24	1	53	54	56	2	51	5	50	6	49	7	48	7	48	8	48	8	48	7
	R6.25 R6.26	1	54 63	55 64	56 65	2	51 58	5	50 57	8	49 56	7	48 55	7	48 55	10	48 54	8 11	49 56	7 9
	R6.27	1	63	64	65	2	59	6	58	7	57	8	56	9	56	9	55	10	57	8
	R6.28	1	64	64	65	2	59	6	58	7	58	8	57	8	56	9	56	9	57	8
	R6.29	1	62	63	63	2	59	4	58	5	58	6	57	6	56	7	56	7	57	6
	R6.30	1	59	60	61	2	54	7	52	8	52	9	51	10 9	50	11	50	11 9	50	10
	R6.31 R6.32	1	57 56	58 57	59 58	2	53 52	6 5	51 51	7	51 50	8	50 50	9	50 49	9	49 49	9	50 49	9
	R6.32 R6.33	1	56 55	56	58 57	2	52 52	5	51 51	6	50	7	50	7	49	8	49 49	8	49 49	8
	R6.34 (M6.04)	1	57	58	59	2	56	3	56	3	57	3	56	3	56	3	56	3	57	2
	R6.35	1	57	58	59	2	57	3	56	3	57	3	57	3	56	3	56	3	57	3
	R6.36	1	57	58	58	2	56	2	56	3	57	2	56	2	56	3	55	3	57	1
	R6.37	1	56	57	58	2	56	2	55	3	56	2	56	2	55	3	55	3	57	1
	R6.38 R6.39	1	53 54	54 55	55 56	2	53 54	2	53 53	3	54 55	1	53 54	2	53 54	3	52 53	3	55 56	0
<b>6A</b>	R6.40	1	55	56	57	2	55	3	54	4	56	2	55	2	55	3	54	3	57	1
	R6.41	1	58	59	59	2	57	3	56	3	57	2	57	2	57	3	56	3	59	1
	R6.42	1	53	54	55	2	52	3	51	4	50	4	50	5	50	5	49	5	51	3
Ž	R6.43	1	53	54	55	2	52	3	51	4	51	4	50	5	50	5	50	5	52	3
	R6.44 R6.45 (M6.05)	1	54 54	54 55	55 56	2	52 53	3	52 52	4	51 51	4	51 51	5	50 50	5	50 50	5	52 52	3
	R6.46 (M6.05)	1	52	53	54	2	51	3	50	4	50	4	50	5	49	5	50	5	52	3
	R6.47	1	52	53	54	2	51	3	50	4	50	4	49	5	49	5	49	5	51	3
	R6.48	1	51	52	53	2	50	3	49	4	48	4	48	5	48	5	48	5	50	3
	R6.49	1	50	51	52	2	49	3	49	4	48	4	48	5	48	5	47	5	49	3
	R6.50 (M6.06) R6.51	1	61	62	63	2	60	3	59	4	59	4	59	4	58	3	58	5	63	0
	R6.51	1	60 58	61 59	62 61	2	60 57	2	59 56	3	59 56	5	59 56	3	58 55	3	58 55	4	62 60	0
	R6.53	1	57	58	59	3	56	3	55	4	55	4	55	5	54	5	54	5	59	0
	R6.54	1	55	56	57	2	54	2	54	2	54	3	54	3	54	3	53	3	56	1
	R6.55	1	53	54	55	2	54	1	54	1	54	1	54	1	54	1	54	1	54	1
	R6.56	1	51	52	53	2	51	2	51	2	51	2	51	2	51	2	51	2	51	2
	R6.57 R6.58	1	49 48	50 49	51 50	2	49 48	2	49 47	3	49 47	2	49 47	2	49 46	2	49 46	2	49 47	2
	R6.59	1	48	49	50	2	48	3	47	3	47	4	47	4	47	4	46	4	48	3
	R6.60	1	49	50	50	2	48	3	47	3	47	3	47	4	47	4	47	4	49	1
	R6.61	1	48	49	50	2	48	3	47	3	47	3	47	3	47	4	47	4	49	1
	R6.62	1	48	49	50	2	48	3	47	3	47	3	47	3	47	3	47	4	49	1
	R6.63 R6.64	1	48 47	49 48	50 49	2	48 47	3	47 46	3	47 46	3	47 46	3	47 46	3	47 45	4	49 48	0
	R6.65	1	48	49	49	2	47	2	46	3	46	3	47	3	46	3	46	3	49	0
	R6.66	1	48	49	50	2	48	2	47	3	47	3	47	3	47	3	46	4	50	0
	R6.67	1	49	50	51	2	48	2	48	3	48	3	48	3	48	3	47	3	50	0
	R6.68 (M6.08)	1	53	54	55	2	54	1	53	1	53	1	53	1	53	1	53	1	54	0
	R6.69 R6.70	1	52 52	52 53	54 54	2	53 53	1	53 53	1	53 53	1	53 53	1	53 53	1	53 53	1	53 53	1
	R6.71	1	53	54	55	2	54	1	54	1	54	1	54	1	54	1	54	1	54	1
	R6.72	1	53	54	55	2	54	1	54	1	54	1	54	1	54	1	54	1	54	1
	R6./2 1 53 54																			
									5		5		5		5		5		5	
	of Impacted Receptors ty Evaluation				5		5												1	
Feasibili Impacted	of Impacted Receptors ty Evaluation I Receptors receiving ≥ 5	5 dB Insertion Loss (	I.L.)		5		5	4		4		4		4		5		5		5
Feasibili Impacted Percent o	of Impacted Receptors ty Evaluation Receptors receiving  of Impacted Receptors R	eceiving≥ 5 dB I.L.	I.L.)		5		5	80%		80%		80%		80%		100%	-	100%		100%
Feasibili Impacted Percent o	of Impacted Receptors ty Evaluation I Receptors receiving ≥ 5	eceiving≥ 5 dB I.L.	I.L.)		5			80% Yes		80% Yes							-			
Feasibili Impacted Percent o	of Impacted Receptors ty Evaluation I Receptors receiving ≥ 5 I Impacted Receptors R reentage ≥ 50%?; If yes,	eceiving≥ 5 dB I.L. , barrier is feasible.	I.L. (Benefited Rev	ceptors)	5			80% Yes onableness	Evaluation	80% Yes		80% Yes		80% Yes		100% Yes		100% Yes		100% Yes
Feasibili Impacted Percent of Is this pe Number Total Nu	of Impacted Receptors ty Evaluation I Receptors receiving ≥ 5 of Impacted Receptors R reentage ≥ 50%?; If yes, of Non-impacted receptor mber of receptors receiving	eceiving ≥ 5 dB I.L. barrier is feasible. ors receiving ≥ 5 dB ring ≥ 5 dB I.L. (Ben	I.L. (Benefited Receptors)	ceptors)	5			80% Yes onableness 12 16		80% Yes 1 14 18		80% Yes 17 21		80% Yes 26 30		100% Yes 27 32		100% Yes 27 32		100% Yes 16 21
Feasibili Impacted Percent of Is this pe Number of Total Nu	of Impacted Receptors ty Evaluation Receptors receiving≥5 of Impacted Receptors R recentage≥50%2; If yes, of Non-impacted receptors mber of receptors receiving≥5	eceiving ≥ 5 dB I.L., barrier is feasible. ors receiving ≥ 5 dB ring ≥ 5 dB I.L. (Ben 7 dB I.L. (Meeting)	I.L. (Benefited Receptors) NRDG)	ceptors)	5			80% Yes nableness 12 16 8		80% Yes 14 18 12		80% Yes 17 21 17		80% Yes 26 30 17		100% Yes 27 32 18		100% Yes 27 32 18		100% Yes 16 21 17
Feasibili Impacted Percent of Is this pe  Number Total Nu Number Does at I	of Impacted Receptors ty Evaluation I Receptors receiving ≥ 5 of Impacted Receptors R recentage ≥ 50%?; If yes, of Non-impacted recept imber of receptors receiving ≥ east one Benefited Rece	eceiving ≥ 5 dB I.L., barrier is feasible. ors receiving ≥ 5 dB ring ≥ 5 dB I.L. (Ben 7 dB I.L. (Meeting)	I.L. (Benefited Receptors) NRDG)	ceptors)	5			80% Yes mableness 12 16 8 Yes		80% Yes 1 14 18 12 Yes		80% Yes 17 21 17 Yes		80% Yes 26 30 17 Yes		100% Yes 27 32 18 Yes		100% Yes 27 32 18 Yes		100% Yes 16 21 17 Yes
Feasibili Impacted Percent of Is this pe Number Total Nu Number Does at le Barrier H	of Impacted Receptors ty Evaluation I Receptors receiving > 5 f Impacted Receptors Re- reentage > 50%?; If yes, of Non-impacted recept impered receptors receiving > east one Benefited Re- east one Benefited Re- eight (feet) [average]	eceiving ≥ 5 dB I.L., barrier is feasible. ors receiving ≥ 5 dB ring ≥ 5 dB I.L. (Ben 7 dB I.L. (Meeting)	I.L. (Benefited Receptors) NRDG)	ceptors)	5			80% Yes onableness 12 16 8 Yes 10		80% Yes 1 14 18 12 Yes 12		80% Yes 17 21 17 Yes 14		80% Yes 26 30 17		100% Yes 27 32 18 Yes 18		100% Yes 27 32 18		100% Yes 16 21 17 Yes [17]
Feasibili Impacted Percent of Is this pe Number of Total Nu Number of Does at le Barrier H Barrier L	of Impacted Receptors ty Evaluation Receptors receiving 2 for Impacted Receptors Receptors for Impacted Receptors Re freentage 2 50%7; If yes, of Non-impacted recept mber of receptors receiving 2 east one Benefited Rece leight (feet) [average] ength (feet)	eceiving ≥ 5 dB I.L., barrier is feasible. ors receiving ≥ 5 dB ring ≥ 5 dB I.L. (Ben 7 dB I.L. (Meeting)	I.L. (Benefited Receptors) NRDG)	ceptors)	5			80% Yes mableness 12 16 8 Yes		80% Yes 1 14 18 12 Yes		80% Yes 17 21 17 Yes		80% Yes 26 30 17 Yes 16		100% Yes 27 32 18 Yes		100% Yes 27 32 18 Yes 20		100% Yes 16 21 17 Yes
Feasibili Impacted Percent of Is this pe Number of Total Nu Number of Does at le Barrier H Barrier L Barrier so	of Impacted Receptors ty Evaluation Receptors receiving 2 6 If Impacted Receptors R freentage 2 50967; If yes, of Non-impacted recept mber of receptors receiving 2 east one Benefited Rece leight (feet) [average] eight (feet) [average] upuare footage (SQft) upuare footage per benefit	eceiving ≥ 5 dB I.L., barrier is feasible. bar receiving ≥ 5 dB ling ≥ 5 dB I.L. (Beeting 17 dB I.L. (Meeting 18 ptor Receive ≥ 7 dB ted receptor (SF/BR	I.L. (Benefited Receptors) NRDG) I.L.?	ceptors)	5			80% Yes mableness 12 16 8 Yes 10 1800 18000 1125		80% Yes 14 18 12 Yes 12 1800 21600 1200		80% Yes 17 21 17 Yes 14 1800 25200 1200		80% Yes 26 30 17 Yes 16 1800 28800 960		100% Yes 27 32 18 Yes 18 1800 32400 1013		100% Yes 27 32 18 Yes 20 1800 36000 1125		100% Yes 16 21 17 Yes [17] 1300 22000 1048
Feasibili Impacted Percent of Is this pe Number of Total Nu Number of Does at le Barrier H Barrier L Barrier so Barrier so Barrier so Barrier so Barrier so Barrier so	of Impacted Receptors ty Evaluation Receptors receiving ≥ 5 f Impacted Receptors Re- recentage ≥ 50%; If yes, of Non-impacted recept mber of receptors receiving ≥ 5 act one Benefited Rece leight (feet) [average] ength (feet) [querage] unare footage (SQft)	eceiving ≥ 5 dB I.L., barrier is feasible.  ors receiving ≥ 5 dB i.L. (Bering ≥ 5 dB I.L. (Meeting ? 7 dB I.L. (Meeting ? 9 ptor Receive ≥ 7 dB determined the second sec	I.L. (Benefited Receptors) NRDG) I.L.?		5			80% Yes nableness 12 16 8 Yes 10 1800 18000		80% Yes 14 18 12 Yes 12 1800 21600		80% Yes 17 21 17 Yes 14 1800 25200		80% Yes 26 30 17 Yes 16 1800 28800		100% Yes 27 32 18 Yes 18 1800 32400		100% Yes 27 32 18 Yes 20 1800 36000		100% Yes 16 21 17 Yes [17] 1300 22000

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving 2 5 dB(A)
Non-impacted Receivers receiving 2 5 dB(A)
All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)
With the exception of average insertion loss values, all noise levels to the tenth of a dB(A) and then rounded for presentation purposes.

#### Table 10: NSA 6B Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

								Future Bu	ild (2050)			
NSA	Receptor ID	No. of Equivalent	Existing Noise	Future No-Build		Build No- rier	Case 1: 1	.0' Barrier	Case 2: 1	2' Barrier	Case 3: 1	4' Barrier
ii SA	ineceptor is	Receptor Units (ERU)	Level (2019)	(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB
	R6.11	1	70	71	72	2	69	3	68	4	66	6
	R6.12 (M6.12)	1	71	72	73	2	66	7	66	7	65	7
	R6.73	1	60	61	63	2	63	0	63	0	63	0
	R6.74	1	62	63	64	2	64	0	64	0	64	0
6B	R6.75 (M6.09)	1	63	64	65	2	65	0	65	0	65	0
	R6.76	1	61	62	64	2	64	0	64	0	64	0
NSA	R6.77 (M6.10)	1	62	62	64	2	64	0	64	0	64	0
Ž	R6.78	1	62	63	64	2	64	0	64	0	64	0
	R6.79	1	66	67	68	2	64	4	63	5	63	5
	R6.80	1	64	65	66	2	63	4	62	4	62	5
	R6.81	1	60	61	62	2	60	3	59	3	59	3
	R6.82 (M6.11)	1	69	70	71	2	67	4	65	5	64	6
Number (	of Impacted Receptors				5		5		5		5	
	ty Evaluation											
	Receptors receiving ≥ 5 o		I.L.)					1		3		5
	f Impacted Receptors Rec							20%		60%		100%
Is this pe	rcentage $\geq$ 50%?; If yes, b	parrier is feasible.						No		Yes		Yes
				Reasonableness	Evaluation	n			1		1	
	of Non-impacted receptor			eptors)						0		0
	mber of receptors receiving	<u> </u>	• .							3		5
	of receptors receiving $\geq 7$									1		1
	east one Benefited Recept	for Receive $\geq 7 \text{ dB}$	I.L.?							Yes		Yes
	eight (feet)									12		14
	ength (feet)									1600		1600
	quare footage (SQft)									19200		22400
	quare footage per benefite	1 \	)							6400		4480
	≤ 2,000?; If yes, barrier i									No		No
Average	I.L. per Benefited Receptor	or (dB)								5.7		5.8

Imp

Impacted (66 dB(A) or 10 dB increase over existing)

Impacted Receivers receiving ≥ 5dB(A)

Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

### Table 11: NSA 7A/B Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

											Future B	uild (2050)						
NSA	Receptor ID	No. of Equivalent Receptor Units	Existing Noise Level (2019)	Future No-Build (2050)		Build No- rier	Unbrok	1: 10' ten NSA rrier	Unbrol	2: 12' cen NSA rrier	Case Unbro	3: 14' ken NSA rrier	Unbrol	4: 16' ken NSA rrier	Unbrok	5: 18' cen NSA rrier	Unbrol	e 6: 20' ken NSA rrier
		(ERU)	Level (LOIS)	(2030)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB										
	R7.01 (M7.01)	1	71	72	73	2	66	7	64	9	63	10	62	10	62	11	62	11
	R7.02 (M7.02)	1	59	60	61	2	59	2	59	2	58	3	58	3	58	3	58	3
	R7.03 (M7.03)	1	61	62	63	2	59	4	59	5	56	8	55	8	55	9	54	9
	R7.04 (M7.04) R7.05 (M7.05)	1 1	59 71	60 72	61 73	2	58 65	3 8	58 62	3 11	57 60	4 13	56 59	5 14	56 58	5 15	56 58	5 15
	R7.06 (M7.06)	1	55	56	57	2	54	3	54	3	52	5	59	7	50	7	50	7
	R7.07 (M7.07)	1	69	70	71	2	63	8	61	10	60	11	59	12	59	12	58	13
	R7.08	1	58	59	60	2	56	3	56	4	55	5	54	6	54	6	53	7
	R7.09 (M7.09)	1	65	66	66	2	64	2	63	3	62	4	61	5	60	6	59	7
	R7.10	1	59	60	61	2	58	4	57	4	56	5	55	6	54	7	54	8
	R7.11 (M7.11)	1	73	74	75	2	64	11	62	13	61	14	61	15	60	15	59	16
	R7.12 (M7.12)	1	59	60	61	2	56	5	54	8	53	9	52	9	51	10	51	10
	R7.13 (M7.13)	1	64	64	66	2	60	6	57	8	56	10	55	10	55	11	54	11
	R7.14 (M7.14) R7.15 (M7.15)	1 1	68 63	69 64	70 65	2	64 61	6	61 60	9	59 59	10	58 57	11	58 56	12	57 55	13
	R7.16 (M7.16)	1	73	74	75	2	67	4 8	64	5 11	62	6 13	62	8 14	61	9	60	10 15
	R7.17	1	58	59	61	2	59	2	59	2	58	2	58	2	58	3	58	3
	R7.18	1	62	63	64	2	61	3	61	3	60	4	60	4	60	4	60	5
	R7.19	1	67	68	69	2	64	5	63	6	62	7	62	7	62	7	62	7
	R7.20	1	71	72	73	2	65	8	62	12	60	13	60	13	59	14	59	14
	R7.21	1	72	73	74	2	63	11	61	13	60	14	59	15	59	15	58	16
	R7.22	1	70	71	71	1	62	10	61	11	60	12	59	13	58	13	58	14
	R7.23	1	72	73	73	2	64	10	61	12	60	14	59	14	58	15	58	16
	R7.24	1	71	72	73	2	65	9	61	12	60	13	59	14	58	15	58	16
	R7.25	1	71	72	73	2	65	8	62	11	61	12	60	13	59	14	59	14
7	R7.26 R7.27	1	70 69	71 70	72 71	2	64 63	8	61 61	11 10	60 60	12 11	59 59	13 12	58 58	14 13	57 57	15 14
	R7.28	1	68	69	70	2	63	7	62	8	60	10	59	11	58	12	58	12
NSA	R7.29	1	68	69	70	2	63	7	62	8	60	9	60	10	59	11	58	11
~	R7.30	1	67	68	69	2	62	7	61	8	60	9	59	9	59	10	58	11
	R7.31	1	68	69	70	2	62	8	61	9	60	10	59	11	59	11	58	12
	R7.32	1	65	66	67	2	65	3	63	4	62	5	61	6	60	7	59	8
	R7.33	1	68	69	70	2	70	0	69	1	66	4	64	6	62	8	61	9
	R7.34	1	65	66	67	2	63	4	62	5	61	7	60	8	59	9	58	9
	R7.35	1	61	62	63	2	59	4	59	5	56	8	55	8	54	9	54	9
	R7.36 R7.37	1	61 61	62 62	63 63	2	59 59	4	59 59	5	56 56	8	55 55	8	55 55	9	54 54	9
	R7.38	1	60	62	62	2	59	4	59	4	56	8 7	55	8 7	55	8	54	8
	R7.39	1	59	60	61	2	58	3	58	4	56	6	55	7	54	7	54	8
	R7.40	1	58	59	61	2	58	3	57	4	55	5	54	7	54	7	53	8
	R7.41	1	57	58	60	2	57	3	56	3	55	5	53	6	53	7	52	7
	R7.42	1	58	59	60	2	57	3	56	4	55	5	54	6	53	7	53	8
	R7.43	1	59	60	61	2	58	4	57	4	56	5	55	6	55	7	54	7
	R7.44	1	58	59	60	2	57	3	57	3	56	4	55	5	54	6	54	6
	R7.45	1	56	57	59	2	57	2	56	2	56	3	55	3	54	4	54	5
	R7.46	1	53	54	55	2	54	1	53	2	53	2	52	3	52	4	51	4
	R7.47	1	59	60	62	2	58	3	58	4	57	5	56	5	56	6	56	6
	R7.48 R7.49	1 1	59 57	60 58	61 59	2	57 56	4	57 56	4	56 54	6	55 53	7	55 52	7	55 52	7
	R7.50	1	50	51	59	2	56	1	55	1	49	6 3	49	4	48	4	48	4
	R7.51	1	55	56	57	2	54	3	54	3	52	5	51	6	51	6	50	7
	R7.52	1	55	56	57	2	54	3	54	4	52	5	51	6	51	7	51	7
	R7.53	1	57	58	60	2	56	4	55	5	54	6	53	6	53	7	52	7
	R7.54	1	56	57	58	2	56	2	55	3	54	3	53	4	53	5	52	5
	R7.55	1	55	56	57	2	55	2	54	3	53	4	53	4	52	5	52	5

### Table 11: NSA 7A/B Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

											Future B	uild (2050)						
		No. of			F. d	a. dalah	Case	1: 10'	Case	2: 12'	Case	3: 14'	Case	4: 16'	Case	5: 18'	Case	6: 20'
		Equivalent	Existing Noise	Future No-Build		Build No- rrier	Unbrol	en NSA	Unbrol	ken NSA	Unbro	ken NSA	Unbrol	ken NSA	Unbro	ken NSA	Unbrol	ken NSA
NSA	Receptor ID	Receptor Units	Level (2019)	(2050)		rrier		rier		rrier		rrier		rrier		rrier		rrier
		(ERU)	,	(,	Noise	I.O.E	Noise	Insertion	Noise	Insertion	Noise	Insertion	Noise	Insertion	Noise	Insertion	Noise	Insertion
					Level	dB	Level	Loss	Level	Loss	Level	Loss	Level	Loss	Level	Loss	Level	Loss
	D# #/	1		50	dB(A)	_	dB(A)	dB	dB(A)	dB	dB(A)	dB	dB(A)	dB	dB(A)	dB	dB(A)	dB
	R7.56 R7.57	1	57 63	58 64	59 65	2	56 59	3 6	55 57	4 8	55 57	5 8	53 56	6 9	53 55	6 10	52 55	10
	R7.58	1	66	67	67	2	59	9	57	10	56	11	56	12	55	12	54	13
	R7.59	1	52	53	54	2	51	3	50	4	49	5	48	6	48	6	47	6
	R7.60	1	52	53	54	2	52	3	51	3	50	5	49	5	49	6	48	6
	R7.61	1	54	55	56	2	53	3	52	4	51	5	50	6	50	6	49	7
	R7.62	1	55	56	57	2	54	4	52	5	52	6	51	6	51	7	50	7
	R7.63	1	57	58	59	2	55	4	53	6	52	7	52	7	51	8	51	8
	R7.64	1	58	59	60	2	55	5	53	7	53	7	52	8	51	9	51	9
	R7.65	1	55	56	57	2	53	3	51	5	51	6	50	7	49	7	49	8
	R7.66	1	56	57	58	2	54	4	52	6	51	7	51	8	50	8	50	9
	R7.67	1	62	62	63	2	57	7	54	9	53	10	53	11	52	11	52	12
	R7.68	1	59	60	60	2	56	5	53	7	52	9	51	9	51	10	50	10
	R7.69	1	59	60	61	2	57	5	54	8	52	9	52	10	51	10	51	11
	R7.70	1	60	61	62	2	57	6	54	8	53	9	52	10	52	11	51	11
	R7.71 R7.72	1	61 62	62 63	63 63	2	58 59	5 5	55 56	8	54 54	9	53 54	10 10	52 53	10 11	52 52	11 11
	R7.73	1	60	61	63	2	59	4	56	7	54	9	53	9	53	10	52	11
	R7.74	1	60	61	62	2	59	3	59	4	57	5	56	7	54	8	54	9
	R7.75	1	64	65	66	2	61	5	58	8	57	9	56	10	55	11	55	11
	R7.76	1	65	66	67	2	62	5	59	8	58	9	57	10	56	11	56	11
	R7.77	1	68	69	70	2	64	6	62	9	60	10	59	11	58	12	58	12
	R7.78	1	70	71	72	2	65	7	65	7	62	10	61	12	60	12	59	13
	R7.79	1	72	73	74	2	67	7	66	8	63	12	62	13	61	14	60	14
	R7.80	1	65	66	67	2	63	4	62	5	61	6	59	8	58	9	57	10
	R7.81	1	64	65	66	2	63	3	62	4	61	5	59	7	59	8	58	9
	R7.82	1	68	69	70	2	66	4	65	5	64	6	62	8	61	9	60	9
	R7.83	1	67	68	69	2	64	4	64	5	62	7	61	8	61	8	60	9
	R7.84	1	64	65	66	2	65	1	65	1	64	1	64	2	64	2	64	2
Number	of Impacted Receptors				35		35		35	1	35	1	35	1	34		34	
	ty Evaluation				33		33		- 33		- 33		- 33		34		34	
	Receptors receiving > 5	dB Insertion Loss	(I.I.,)					26		30		32		34		34		34
	of Impacted Receptors Re							74%		86%		91%		97%		100%		100%
Is this pe	rcentage ≥ 50%?; If yes,	barrier is feasible.						Yes		Yes		Yes		Yes		Yes		Yes
						Reaso	nableness	Evaluation	1									
	of Non-impacted receptor			ceptors)				9		20		39		41		43		45
	mber of receptors receiving							35		50		71		75 5.6		77		79
	of receptors receiving $\geq 7$ east one Benefited Recep							21		35 V		45 Van		56 Van		65 Van		70 Van
		our Receive $\geq 7$ dB	) I.L. /					Yes		Yes		Yes		Yes		Yes		Yes
	leight (feet) [average] ength (feet)							10 5409		12 5409		14 5409		16 5409		18 5409		20 5409
	quare footage (SQft)							54090		64908		75726		86544		97362		108180
	quare footage (SQII)	ed recentor (SF/DD	)					1545		1298		1067		1154		1264		1369
	< 2,000?; If yes, barrier		-)					Yes		Yes		Yes		Yes		Yes		Yes
	I.L. per Benefited Recept							7.0		8.0		8.1		8.8		9.3		9.7
	1	\-/			I		L								L			

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)

Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

## Table 12: NSA 7A/7B Optimized Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

R7.01 (M7.01)								Future B	uild (2050)		
R7.01 (M7.01)	NSA	Receptor ID	Equivalent	_					-		
No.   No.				2000 (2013)	(2030)	Level		Level	Loss	Level	Insertion Loss dB
R7.03 (N7.03)		R7.01 (M7.01)	1	71	72	73	2	64	9		
R7.04 (NT.04)		R7.02 (M7.02)	1	59	60	61	2	59	2		
NT.05 (NT.05)		R7.03 (M7.03)	1	61	62	63	2	59	5		
R7.06 (M7.06)		R7.04 (M7.04)	1	59	60	61	2	58	3		
R7.07 (M7.07)		R7.05 (M7.05)	1	71	72	73	2	62	12		
R7.08		R7.06 (M7.06)	1	55	56	57	2	54	4		
R7.09 (M7.09)		R7.07 (M7.07)	1	69	70	71	2	60	11		
R7.10			1	58	59	60	2	56	4		
R7.11 (M7.12)		R7.09 (M7.09)	1	65	66	66	2	62	5		
R7.11 (M7.12)		R7.10	1	59	60	61	2	59	3		
R7.12 (M7.12)											
R7.17											
R7.18											
R7.19											
R7.20											
R7.21											
R7.22											
R7.23											
R7.24											
R7.25       1       71       72       73       2       62       11         R7.26       1       70       71       72       2       60       12         R7.27       1       69       70       71       72       2       60       12         R7.28       1       68       69       70       2       61       9         R7.29       1       68       69       70       2       61       9         R7.30       1       67       68       69       70       2       60       8         R7.31       1       68       69       70       2       60       10         R7.32       1       65       66       67       2       62       5         R7.33       1       68       69       70       2       63       7         R7.34       1       65       66       67       2       62       5         R7.34       1       61       62       63       2       59       5         R7.35       1       61       62       63       2       59       5         R7.35 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
R7.26       1       70       71       72       2       60       12         R7.27       1       69       70       71       2       60       11         R7.28       1       68       69       70       2       61       9         R7.29       1       68       69       70       2       61       9         R7.30       1       67       68       69       2       60       8         R7.31       1       68       69       70       2       60       10         R7.32       1       65       66       67       2       62       5         R7.33       1       65       66       67       2       61       6         R7.34       1       65       66       67       2       61       6         R7.35       1       61       62       63       2       59       5         R7.36       1       61       62       63       2       59       5         R7.37       1       61       62       63       2       58       4         R7.39       1       59											
R7.27					·						
K7.28         1         68         69         70         2         61         9           R7.29         1         68         69         70         2         61         9           R7.30         1         67         68         69         70         2         60         8           R7.31         1         68         69         70         2         60         10           R7.32         1         65         66         67         2         62         5           R7.33         1         68         69         70         2         63         7           R7.34         1         65         66         67         2         61         6           R7.34         1         61         62         63         2         59         5           R7.36         1         61         62         63         2         59         5           R7.37         1         61         62         63         2         58         5           R7.38         1         60         61         62         2         58         4           R7.39         1											
R7.29       1       68       69       70       2       61       9         R7.30       1       67       68       69       2       60       8         R7.31       1       68       69       70       2       60       10         R7.32       1       65       66       67       2       62       5         R7.33       1       68       69       70       2       63       7         R7.34       1       65       66       67       2       61       6       62       63       2       59       5         R7.36       1       61       62       63       2       59       5       5         R7.36       1       61       62       63       2       59       5         R7.37       1       61       62       63       2       59       5         R7.38       1       50       60       61       62       2       58       4         R7.39       1       59       60       61       2       57       4         R7.41       1       58       59       60       2	✓										
R7.32									_		
R7.32	₹										
R7.32											
R7.33       1       68       69       70       2       63       7         R7.34       1       65       66       67       2       61       6         R7.35       1       61       62       63       2       59       5         R7.36       1       61       62       63       2       58       5         R7.37       1       61       62       63       2       58       5         R7.38       1       60       61       62       2       58       5         R7.39       1       59       60       61       2       57       4         R7.40       1       58       59       61       2       57       4         R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       58       59       60       2       56       4         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57<											
R7.34       1       65       66       67       2       61       6         R7.35       1       61       62       63       2       59       5         R7.36       1       61       62       63       2       59       5         R7.37       1       61       62       63       2       58       5         R7.37       1       61       62       63       2       58       5         R7.38       1       60       61       62       2       58       4         R7.39       1       59       60       61       2       57       4         R7.40       1       58       59       61       2       57       4         R7.41       1       58       59       60       2       56       4         R7.41       1       58       59       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.45       1       56       57<											
R7.35       1       61       62       63       2       59       5         R7.36       1       61       62       63       2       59       5         R7.37       1       61       62       63       2       58       5         R7.38       1       60       61       62       2       58       4         R7.39       1       59       60       61       2       57       4         R7.40       1       58       59       61       2       57       4         R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60<											
R7.36       1       61       62       63       2       59       5         R7.37       1       61       62       63       2       58       5         R7.38       1       60       61       62       2       58       4         R7.39       1       59       60       61       2       57       4         R7.40       1       58       59       61       2       57       4         R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.49       1       57       58<											
R7.37       1       61       62       63       2       58       5         R7.38       1       60       61       62       2       58       4         R7.39       1       59       60       61       2       57       4         R7.40       1       58       59       61       2       57       4         R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       57       58       59       2       56       4         R7.50       1       50       51<									5		
R7.38       1       60       61       62       2       58       4         R7.39       1       59       60       61       2       57       4         R7.40       1       58       59       61       2       57       4         R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56<			1	61		63	2	59	5		
R7.39       1       59       60       61       2       57       4         R7.40       1       58       59       61       2       57       4         R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56<								58	5		
R7.40       1       58       59       61       2       57       4         R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56<			1	60	61	62	2	58	4		
R7.41       1       57       58       60       2       56       4         R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56       57       2       54       3         R7.52       1       55       56<		R7.39	1	59		61	2	57	4		
R7.42       1       58       59       60       2       56       4         R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56       57       2       54       3         R7.52       1       55       56       57       2       54       4		R7.40	1	58		61	2	57	4		
R7.43       1       59       60       61       2       57       5         R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56       57       2       54       3         R7.52       1       55       56       57       2       54       4		R7.41	1	57	58	60	2	56	4		
R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56       57       2       54       3         R7.52       1       55       56       57       2       54       4		R7.42	1	58	59	60	2	56	4		
R7.44       1       58       59       60       2       56       4         R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56       57       2       54       3         R7.52       1       55       56       57       2       54       4		R7.43	1	59	60	61	2	57	5		
R7.45       1       56       57       59       2       57       2         R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56       57       2       54       3         R7.52       1       55       56       57       2       54       4			1	58	59	60	2	56	4		
R7.46       1       53       54       55       2       53       2         R7.47       1       59       60       62       2       58       4         R7.48       1       59       60       61       2       57       4         R7.49       1       57       58       59       2       56       4         R7.50       1       50       51       52       2       51       1         R7.51       1       55       56       57       2       54       3         R7.52       1       55       56       57       2       54       4											
R7.47     1     59     60     62     2     58     4       R7.48     1     59     60     61     2     57     4       R7.49     1     57     58     59     2     56     4       R7.50     1     50     51     52     2     51     1       R7.51     1     55     56     57     2     54     3       R7.52     1     55     56     57     2     54     4											
R7.48     1     59     60     61     2     57     4       R7.49     1     57     58     59     2     56     4       R7.50     1     50     51     52     2     51     1       R7.51     1     55     56     57     2     54     3       R7.52     1     55     56     57     2     54     4											
R7.49     1     57     58     59     2     56     4       R7.50     1     50     51     52     2     51     1       R7.51     1     55     56     57     2     54     3       R7.52     1     55     56     57     2     54     4											
R7.50     1     50     51     52     2     51     1       R7.51     1     55     56     57     2     54     3       R7.52     1     55     56     57     2     54     4											
R7.51         1         55         56         57         2         54         3           R7.52         1         55         56         57         2         54         4											
R7.52 1 55 56 57 2 54 4											
R7.53 1 57 58 60 2 55 5		R7.53		57	58		2		5		

## Table 12: NSA 7A/7B Optimized Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

							Future B	uild (2050)		
NSA	Receptor ID	No. of Equivalent Receptor Units	Existing Noise Level (2019)	Future No-Build (2050)		Build No- rier		Optimized ier 7A		Optimized ier 7B
		(ERU)	Level (2013)	(2030)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB
	R7.54	1	56	57	58	2	56	2		
	R7.55	1	55	56	57	2	55	2		
	R7.56	1	57	58	59	2	57	2		
	R7.57	1	63	64	65	2	57	8		
< <	R7.58	1	66	67	67	2	61	6		
NSA 7A	R7.59	1	52	53	54	2	52	2		
ΙX	R7.60 R7.61	1	52 54	53 55	54 56	2	52 54	2		
Ž	R7.62	1	55	56	57	2	55	3		
	R7.63	1	57	58	59	2	56	3		
	R7.64	1	58	59	60	2	58	2		
	R7.65	1	55	56	57	2	55	2		
	R7.66	1	56	57	58	2	56	2		
	R7.67	1	62	62	63	2			59	4
	R7.13 (M7.13)	1	64	64	66	2			60	6
	R7.14 (M7.14)	1	68	69	70	2			60	9
	R7.15 (M7.15)	1	63	64	65	2			60	5
	R7.16 (M7.16)	1	73	74	75	2			62	13
	R7.68	1	59	60	60	2			59	2
	R7.69	1	59	60	61	2			60	2
	R7.70	1	60	61	62	2			61	2
m	R7.71	1	61	62	63	2			61	1
NSA 7B	R7.72	1	62	63	63	2			62	1
⋖	R7.73 R7.74	1	60	61	63	2			61	2
S	R7.75	1	60 64	61 65	62 66	2			59 61	3 5
_	R7.76	1	65	66	67	2			59	8
	R7.77	1	68	69	70	2			61	9
	R7.78	1	70	71	72	2			62	10
	R7.79	1	72	73	74	2			63	12
	R7.80	1	65	66	67	2			61	6
	R7.81	1	64	65	66	2			61	5
	R7.82	1	68	69	70	2			63	6
	R7.83	1	67	68	69	2			63	6
	R7.84	1	64	65	66	2			65	1
	<del>-</del>						-			
	of Impacted Receptors				35		22		13	
	ity Evaluation	4D I	7.1					22		13
	d Receptors receiving ≥ 5 of Impacted Receptors Re							22 100%		12 92%
	of Impacted Receptors Recreating $\geq 50\%$ ?; If yes, 1							Yes		92% Yes
15 tills pc	2070:, 11 yes, 1	carrier is reastore.	Reason	ableness Evaluation	1			. 00		
Number	of Non-impacted receptor	rs receiving > 5 dB						7		1
	mber of receptors receiving							29		13
Number	of receptors receiving ≥ 7	dB I.L. (Meeting	NRDG)					18		6
	east one Benefited Recep	tor Receive≥ 7 dB	I.L.?					Yes		Yes
	Height (feet) [average]							[14]		[13]
	ength (feet)							2909		2000
	quare footage (SQft)							39912		25817
	quare footage per benefite		.)					1376		1986
	$1 \le 2,000$ ?; If yes, barrier							Yes		Yes
Average	I.L. per Benefited Recept	tor (dB)						8.4		7.6

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)
Non-Impacted Receivers receiving ≥ 5dB(A)

## Table 13: NSA 8 Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

									Future Bu	uild (2050)				
NSA	Receptor ID	No. of Equivalent	Existing Noise	Future No-Build	Future B Bar		Case 1: 1	LO' Barrier	Case 2: 1	.2' Barrier	Case 3: 1	4' Barrier	Case 4: 1	.6' Barrier
11071	neceptor 12	Receptor Units (ERU)	Level (2019)	(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB
NSA 8	R8.01 (M8.01)	1	64	65	67	2	61	6	59	8	59	8	58	9
NOA 6	R8.02	1	63	64	65	2	62	3	62	3	61	4	60	5
	of Impacted Receptors				1		1		1		1		1	
	ity Evaluation							_		_		_		
	d Receptors receiving≥ 5 of		I.L.)					1		1		1		1
	of Impacted Receptors Re							100%		100%		100%		100%
Is this pe	ercentage $\geq$ 50%?; If yes, b	barrier is feasible.		Dagge	nableness	Essalssation		Yes		Yes		Yes		Yes
Number	of Non-impacted receptor	re receiving > 5 dR	II (Benefited Rec		nabieness	Evaluatio	1	0		0		0		1
	mber of receptors receiving			eptors)				1		1		1		2
	of receptors receiving $\geq 7$							0		1		1		1
	east one Benefited Recep							No		Yes		Yes		Yes
	Height (feet)	<u> </u>						_		12		14		16
	Length (feet)									917		917		917
	quare footage (SQft)									11004		12838		14672
Barrier s	quare footage per benefite	ed receptor (SF/BR	.)							11004		12838		7336
	$2 \le 2,000$ ?; If yes, barrier									No		No		No
Average	I.L. per Benefited Recept	or (dB)												

Impacted (66 dB(A) or 10 dB increase over existing)

Impacted Receivers receiving ≥ 5dB(A)

Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

#### Table 14: NSA 9 Coatesville-Downington Bypass - Section AIR Summary of Barrier Noise Analysis

												Future Bu	ild (2050)							
NSA	Receptor ID	No. of Equivalent	Existing Noise	Future No-Build	Future B Bar		Case 1: 1	.0' Barrier		2' Barrier		4' Barrier		6' Barrier		8' Barrier		0' Barrier	(Shor	0' Barrier tened)
		Receptor Units (ERU)	Level (2019)	(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB												
	R9.01 (M9.01)	1	64	65	66	2	66	0	66	0	66	0	66	0	66	0	66	0	66	0
	R9.02 (M9.02)	1	69	70	71	2	67	3	66	5	64	6	63	8	62	9	61	10	67	4
	R9.03 (M9.03)	1	71	72	73	2	64	9	63	11	62	11	61	12	60	13	59	14	61	12
	R9.04 (M9.04)	1	57	58	59	2	58	1	57	2	57	2	56	3	56	3	55	4	58	1
	R9.05 (M9.05)	1	54	54	55	2	55	0	55	1	55	1	54	1	54	2	54	2	56	0
	R9.06 (M9.06)	1	56	57	58	2	58	0	58	0	58	0	58	0	58	0	58	0	58	0
	R9.07 (M9.07)	1	53	54	54	1	53	1	53	1	53	2	52	2	52	2	52	2	53	1
	R9.08	1	67	68	69	2	63	6	62	7	61	8	60	9	59	10	59	10	60	9
6	R9.09	1	66	67	68	2	67	1	65	3	63	5	62	6	61	7	60	8	60	8
	R9.10	1	57	58	58	2	58	1	57	1	57	2	56	2	56	2	56	2	56	2
NSA	R9.11	1	65	66	66	2	68	0	68	0	67	0	65	1	64	3	63	4	63	4
Ž	R9.12	1	61	62	63	2	60	2	60	3	59	4	58	4	58	5	57	5	62	1
	R9.13	1	58	59	60	2	58	2	57	2	57	3	56	3	56	4	56	4	59	1
	R9.14	1	57	58	59	2	57	2	56	2	56	2	56	3	55	3	55	4	58	1
	R9.15	1	55	56	57	2	56	1	56	2	56	2	55	3	55	3	54	3	57	1
	R9.16	1	55	55	57	2	56	1	55	1	55	1	55	2	54	2	54	3	56	0
	R9.17	1	52	53	54	2	53	1	53	1	53	2	52	2	52	2	52	2	54	1
	R9.18	1	53	54	55	2	53	1	53	1	53	2	53	2	53	2	53	2	54	1
	R9.19	1	54	55	56	2	55	1	55	2	54	2	54	2	54	2	54	2	55	1
	R9.20	1	61	62	61	0	62	0	62	0	62	0	62	0	62	0	62	0	62	0
	R9.21	1	57	58	59	2	57	2	57	3	56	3	56	4	55	4	55	5	58	2
Number	of Impacted Receptors				6		6		6		6		6		6		6		6	
	ty Evaluation																			l
	d Receptors receiving≥ 5		(I.L.)					2		3		3		3		3		3		2
	of Impacted Receptors Re							33%		50%		50%		50%		50%		50%		33%
Is this pe	ercentage $\geq$ 50%?; If yes, t	barrier is feasible.						No		Yes		No								
NY1	of Non-impacted receptor	us us salada e S. F. AD.	II (Danasta IDa				Reas	onableness	Evaluatio			4		1		2		2		
	imber of receptors receiving			eptors)						0 3		1 4		1 4		2 5		3 6		
	of receptors receiving $\geq 7$									2		2		3		3		3		
	east one Benefited Recep									Yes										
	leight (feet)	tor Receive / UB	I.L.;							12		14		16		18		20		
	ength (feet)									1393		1393		1393		1393		1393		
	quare footage (SQft)									16716		19502		22288		25074		27860		
	quare footage (SQII)	ed recentor (SF/RR	)							5572		4876		5572		5015		4643		
	2 < 2,000?; If yes, barrier	* `	7							No										
	I.L. per Benefited Recept									140		140		140		140		140		
Average	1.L. per Benefited Recept	ioi (ab)																		

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)
Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

## Table 15: NSA 10 Coatesville-Downington Bypass - Section AIR Summary of Noise Barrier Analysis

							Future B	uild (2050)		
NSA	Receptor ID	No. of Equivalent	Existing Noise	Future No-Build		uild No- rier	Case 1: 8	B' Barrier	Case 2: 1	LO' Barrier
NOA	neceptor 15	Receptor Units (ERU)	Level (2019)	(2050)	Noise Level dB(A)	I.O.E dB	Noise Level dB(A)	Insertion Loss dB	Noise Level dB(A)	Insertion Loss dB
	R10.01		65	68	69	4	64	5	62	7
	R10.02		67	70	71	3	62	9	60	11
	R10.03		65	68	68	4	62	7	59	10
	R10.04		65	68	68	3	61	8	58	10
😤	R10.05	0.2 (T:1)	66	69	69	3	61	8	58	11
1	R10.06	0.3 (Trail)	67	70	70	3	62	9	59	12
⋖	R10.07		68	70	71	3	62	9	60	12
NSA 10A	R10.08		66	69	69	3	62	7	10	
_	R10.09		67	70	71	4	62	9	60	11
	R10.10		67	69	71	4	70	1	70	1
	R10.15	0.17 (Court)	57	59	62	5	59	2	59	2
	R10.16	0.77 (Pool)	55	57	60	6	59	1	59	1
	R10.11		68	71	72	4				. 6 . 11
NSA 10B	R10.12	0.1 (Trail)	65	67	68	4		arrier in NS Iimited righ		
Z H	R10.13	0.1 (ITall)	62	65	66	3		ncluded in	•	
	R10.14		56	59	61	5		ilciuueu iii	tile allalys	15.
	f Impacted Receptors				0.3		0.3		0.3	
	y Evaluation									
	Receptors receiving ≥ 5 dl		L.)					0.26		0.26
	Impacted Receptors Rece							90% <b>Yes</b>		90% <b>Yes</b>
is this per	centage ≥ 50%?; If yes, ba	ilici is leasible.	Regeons	bleness Evaluation	1			162		163
Number o	f Non-impacted receptors	receiving > 5 dR I			1			0		0
	ber of receptors receiving							0.26		0.26
	f receptors receiving $\geq 7$ d							8		9
	ast one Benefited Recepto							Yes		Yes
	eight (feet)							8		10
	ngth (feet)							1198		1198
	uare footage (SQft)							9584		11980
	uare footage per benefited							36862		46077
	$\leq$ 2,000?; If yes, barrier is							No		No
Average I.	L. per Benefited Receptor	(dB)								

Impacted (66 dB(A) or 10 dB increase over existing)
Impacted Receivers receiving ≥ 5dB(A)

Non-Impacted Receivers receiving ≥ 5dB(A)

All noise levels are Leq(h) values and are A-weighted, expressed as dB(A)

## Table 16: Equivalent Receptor Unit Worksheet Coatesville-Downington Bypass - Section AIR Summary of Noise Barrier Analysis

	APPLICABLE CRITERIA ASSOCIATED	WITH ACTIVITY CATEGORY C
available	ues are estimations based on the information at the time of study such as community size, iical location, and feature properties.	R10.01-R10.14 (Valley Suburban Center Public Shared-use Path)
А	Average Event Attendance of Outside Use Area	
В	Average Time Used by Each person per Event (hours)	
С	Average Number of Events per Event Day	
D	Capacity of Site	
E	Average Use Factor	
F	Hours Avaliable Per Day	
G	Average Time Used by Each Person Per Day (hours)	0.33
Н	Person Using Per day	60
- 1	Person-Hours Per Day	19.8
J	Days Per Year Used	275
K	Person-Hours Used Per Year = I x J	5445
L	Equivalent Residential Units (ERU) = Row K Value divided by 13578	0.40
Descr	ription of Example Specific Activity and Use**	A public shared-use path sees on average sixty persons per day, taking appriximately 20 minutes to walk the length of the trail. The trail is used March through November.
	= Input Value = Calculated Value = Calculated ERU Value	ı

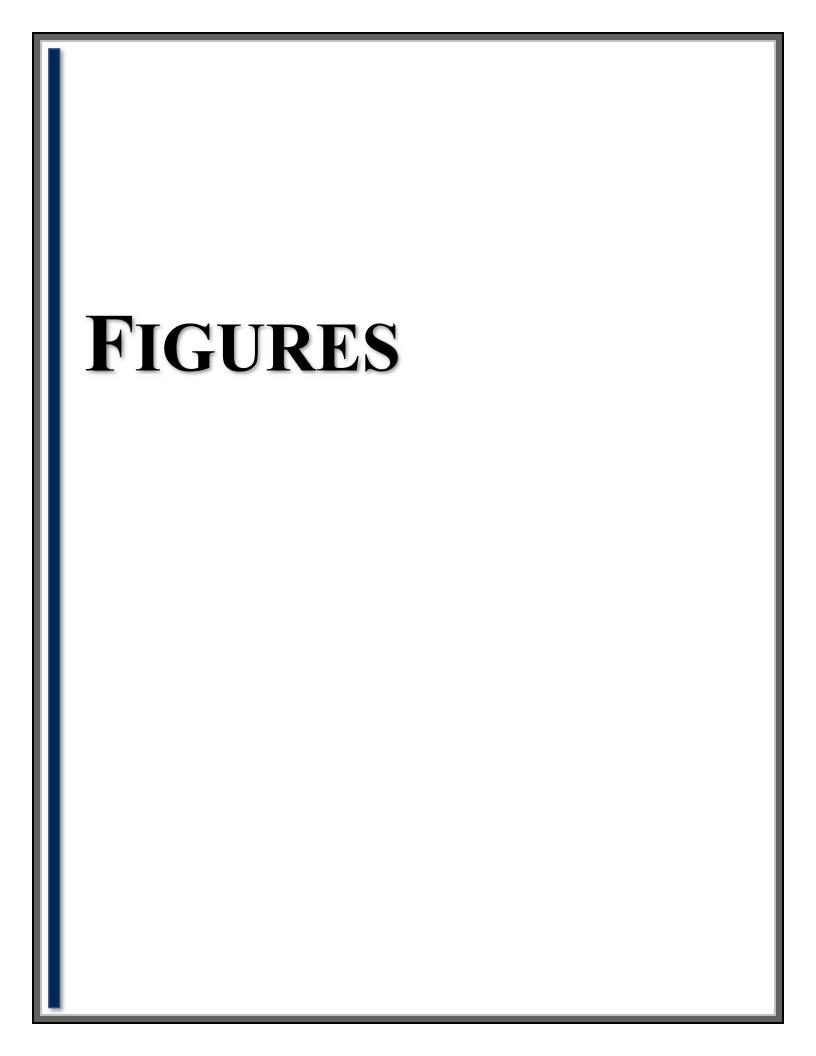
## Table 17: Equivalent Receptor Unit Worksheet Coatesville-Downington Bypass - Section AIR Summary of Noise Barrier Analysis

	APPLICABLE CRITERIA ASSOCIAT	ED WITH ACTIVITY CATE	GORY B
		R10.15 (Court)	R10.16 (Pool)
available at	s are estimations based on the information the time of study such as community size, al location, and feature properties.	A community tennis court area (2 courts) within the Valley Suburban Center.	A community pool with ~1780 ft² of swimming area and a spa with ~290 ft² of swimming area within the Valley Suburban Center.
Α	Number of units in a building		
В	Number of units exposed to project- related noise		
С	Capacity of Specific Use	10	175
D	Average Use Factor	0.2	0.1
E	Hours Available per Day	12	10
F	Average Time Used by Each Person		
G	Person-Hours per Day	24	105
Н	Days Per Year Used	99	100
l_	Person-Hours Used Per Year = G x H	2376	10500
J	Equivalent Residential Units (ERU) = Row I Value divided by 13,578	0.17	0.77
	= Input Value		

<sup>=</sup> Input Value

<sup>=</sup> Calculated Value

<sup>=</sup> Calculated ERU Value



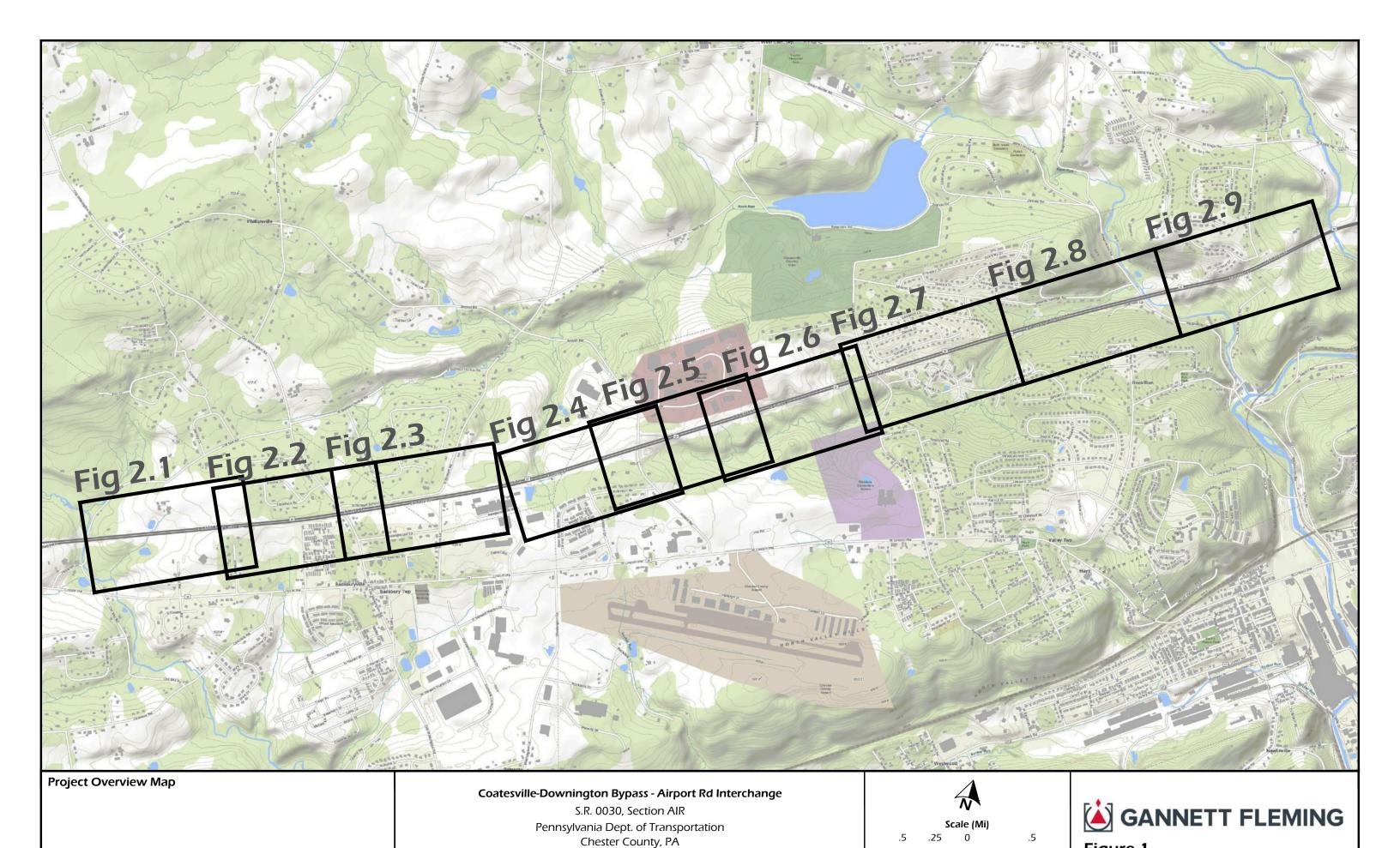
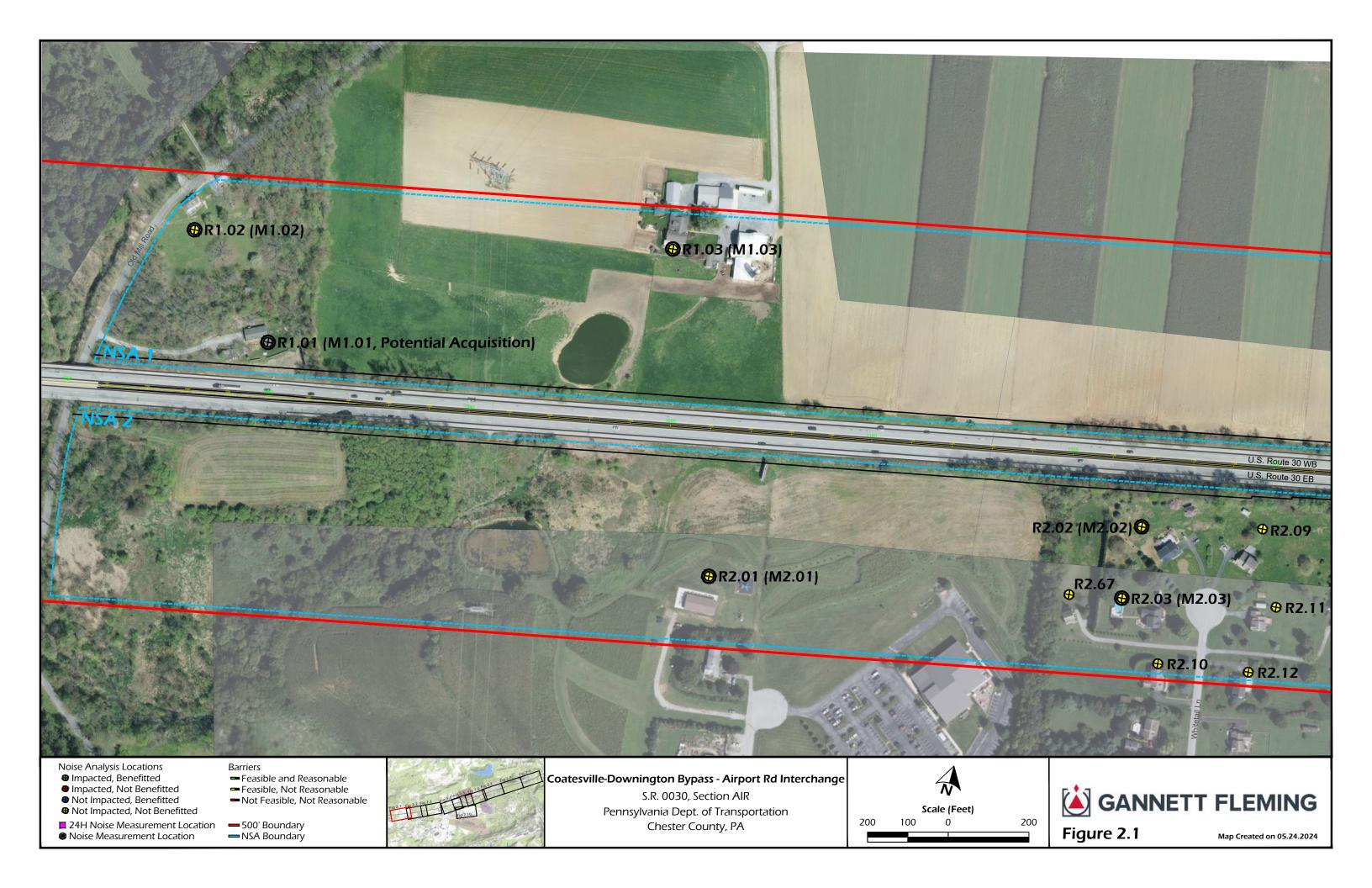
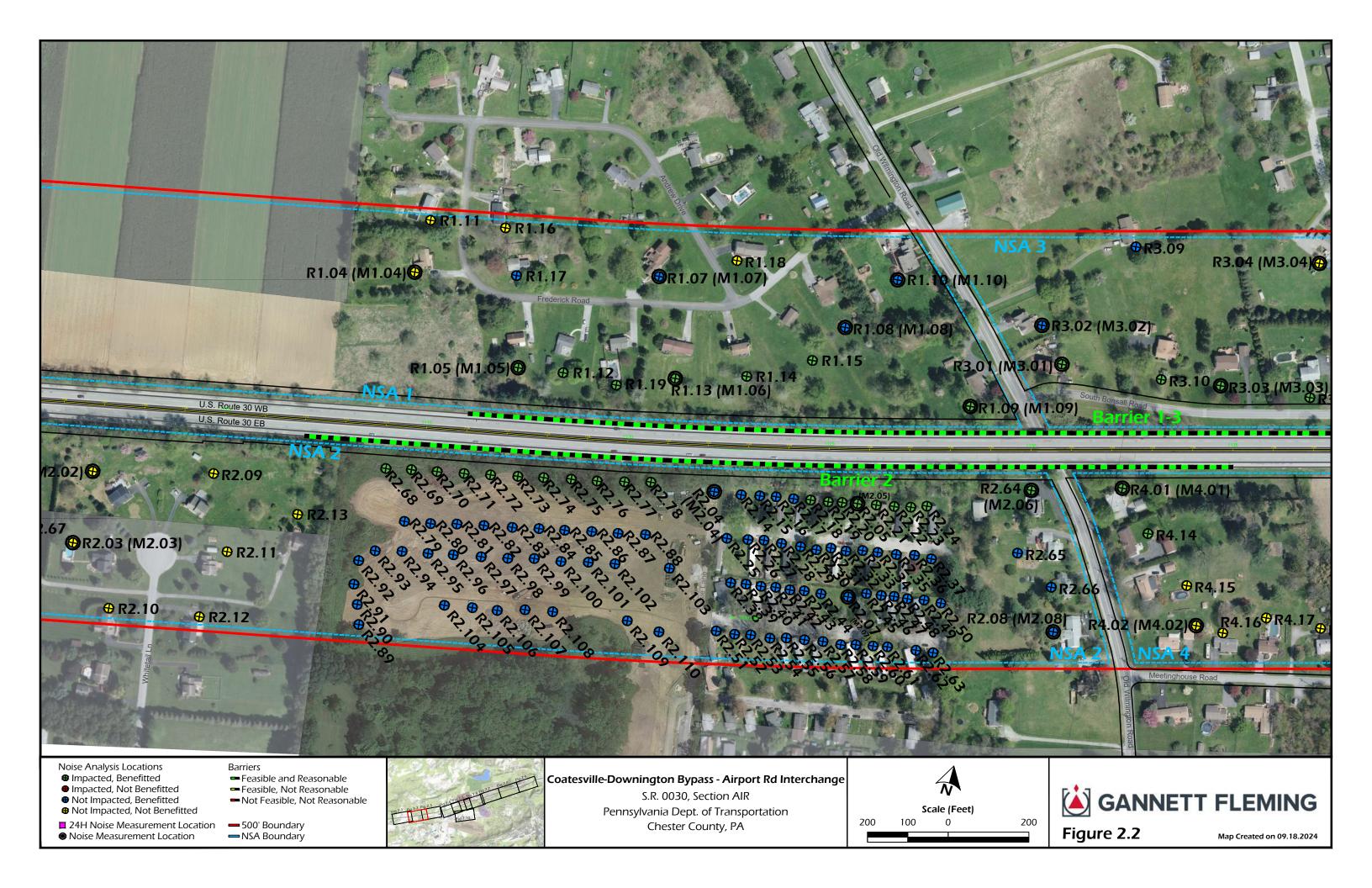
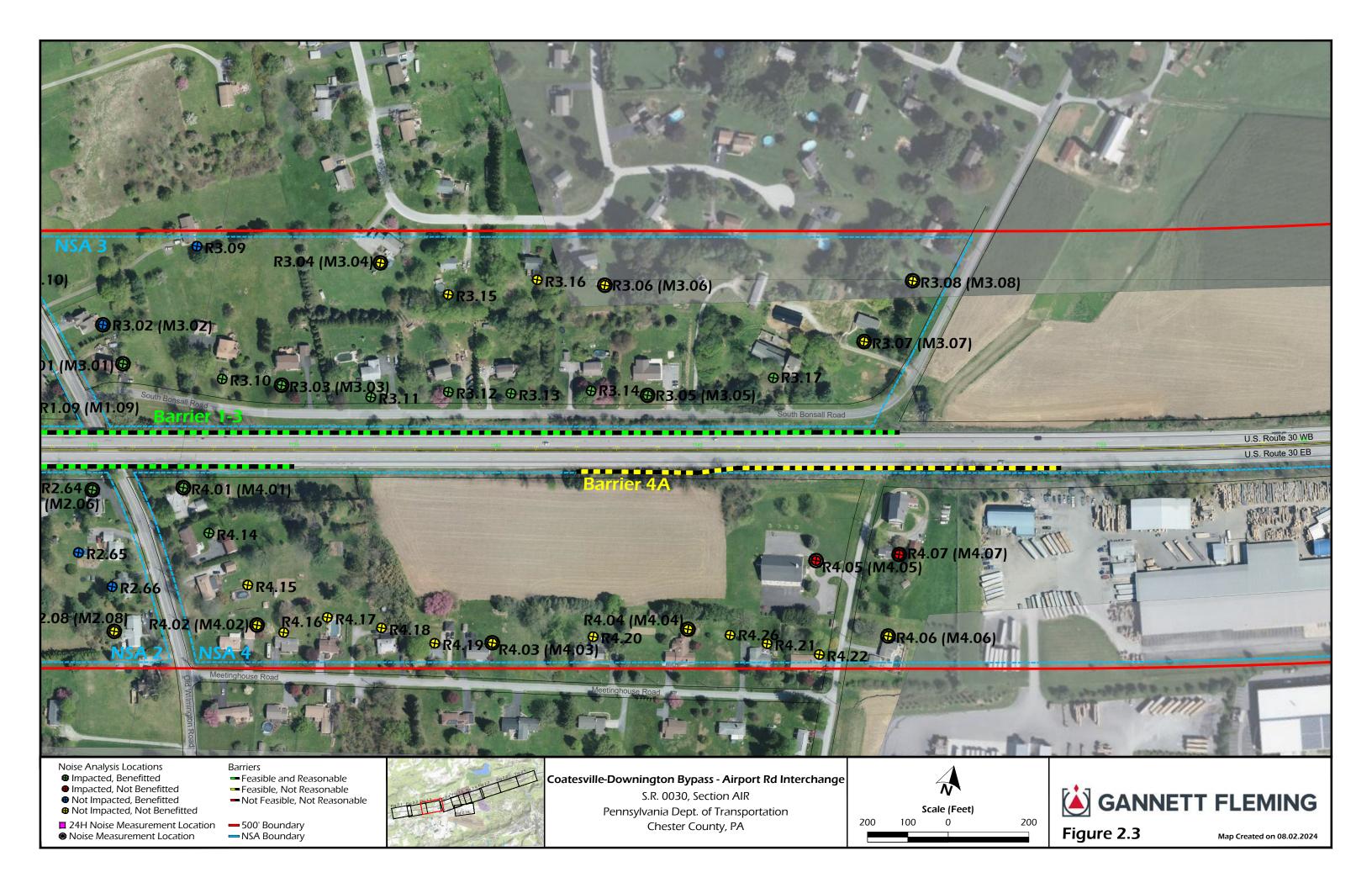


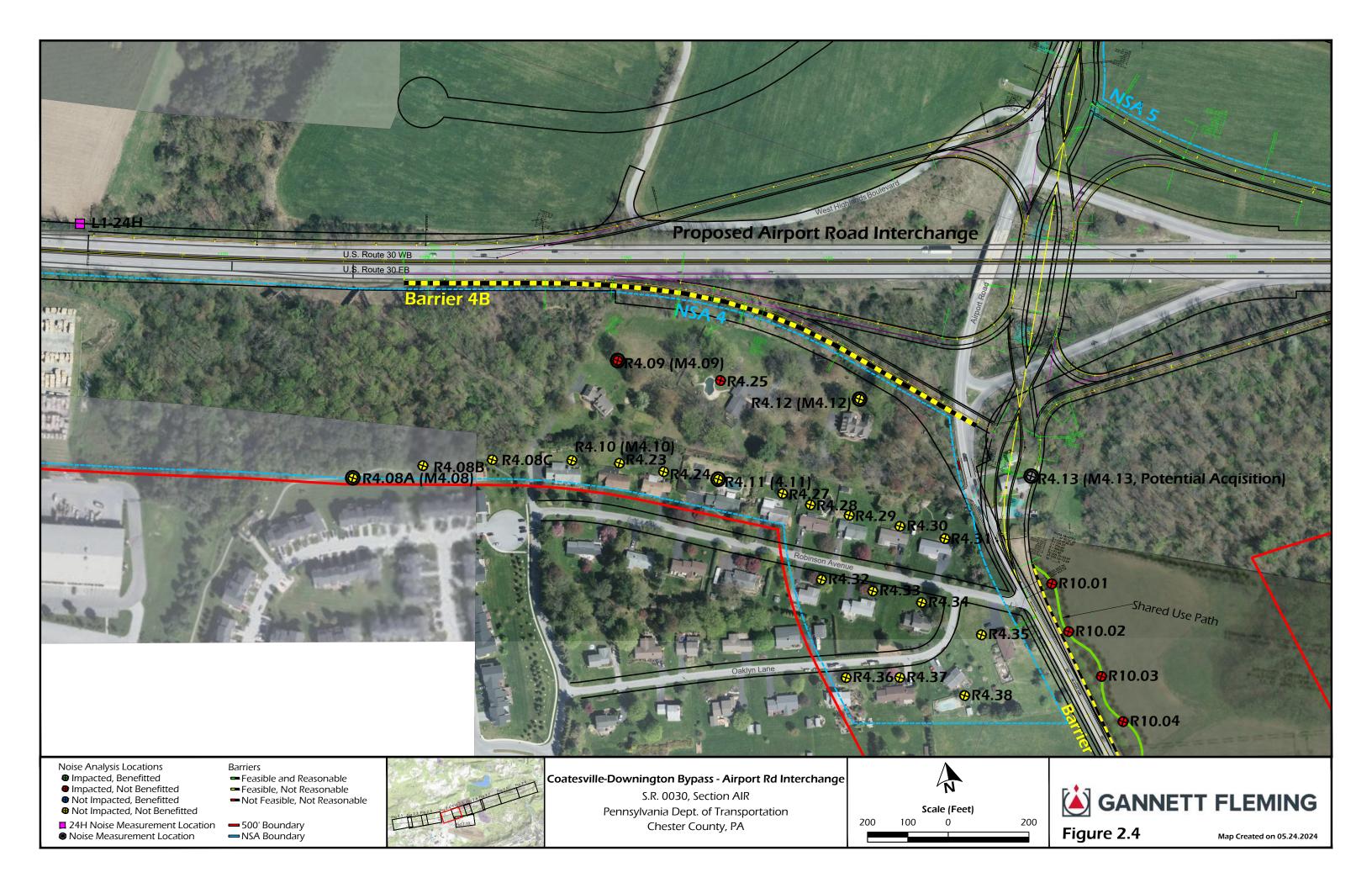
Figure 1

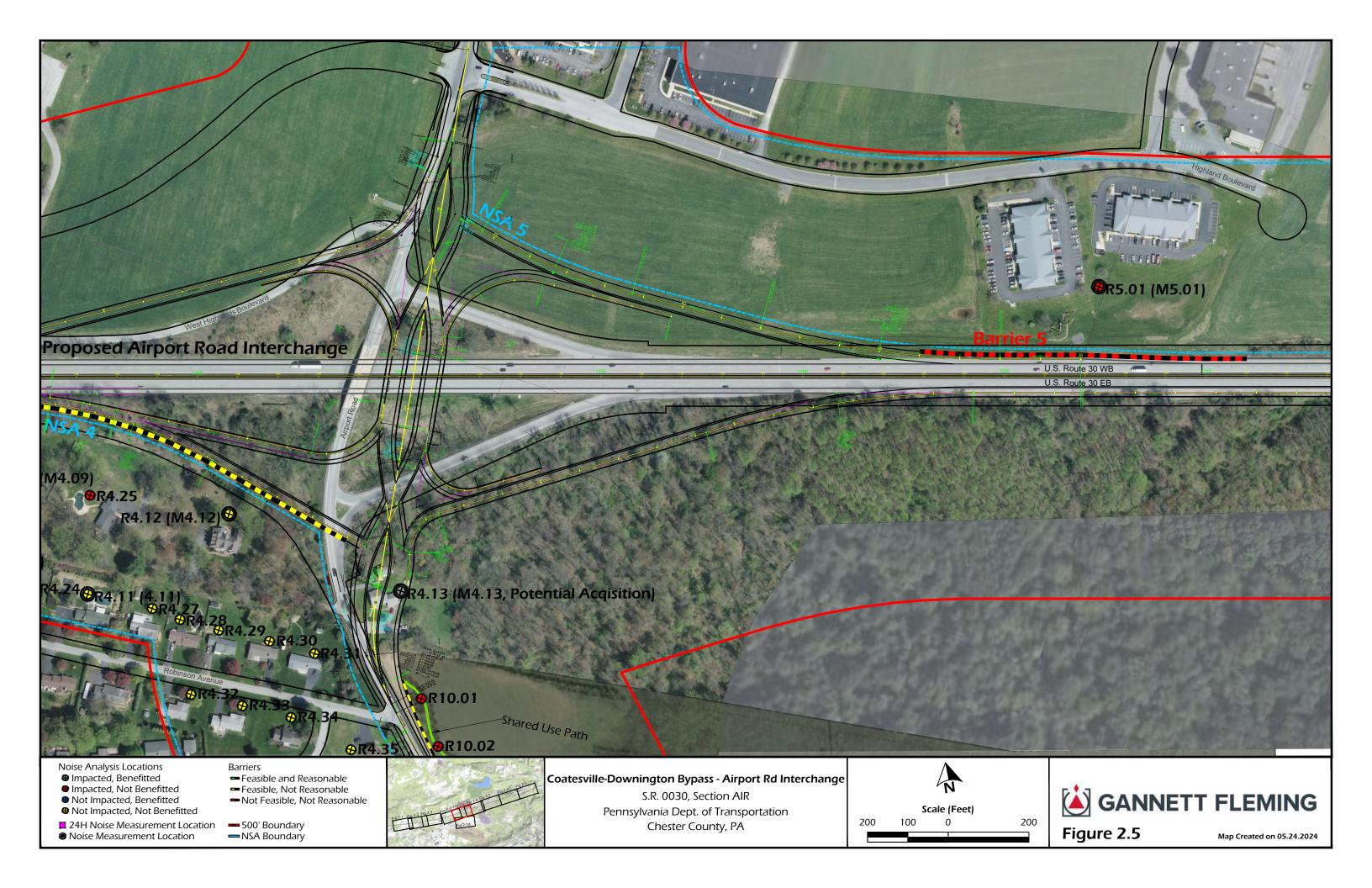
Map Created on 02.09.2023

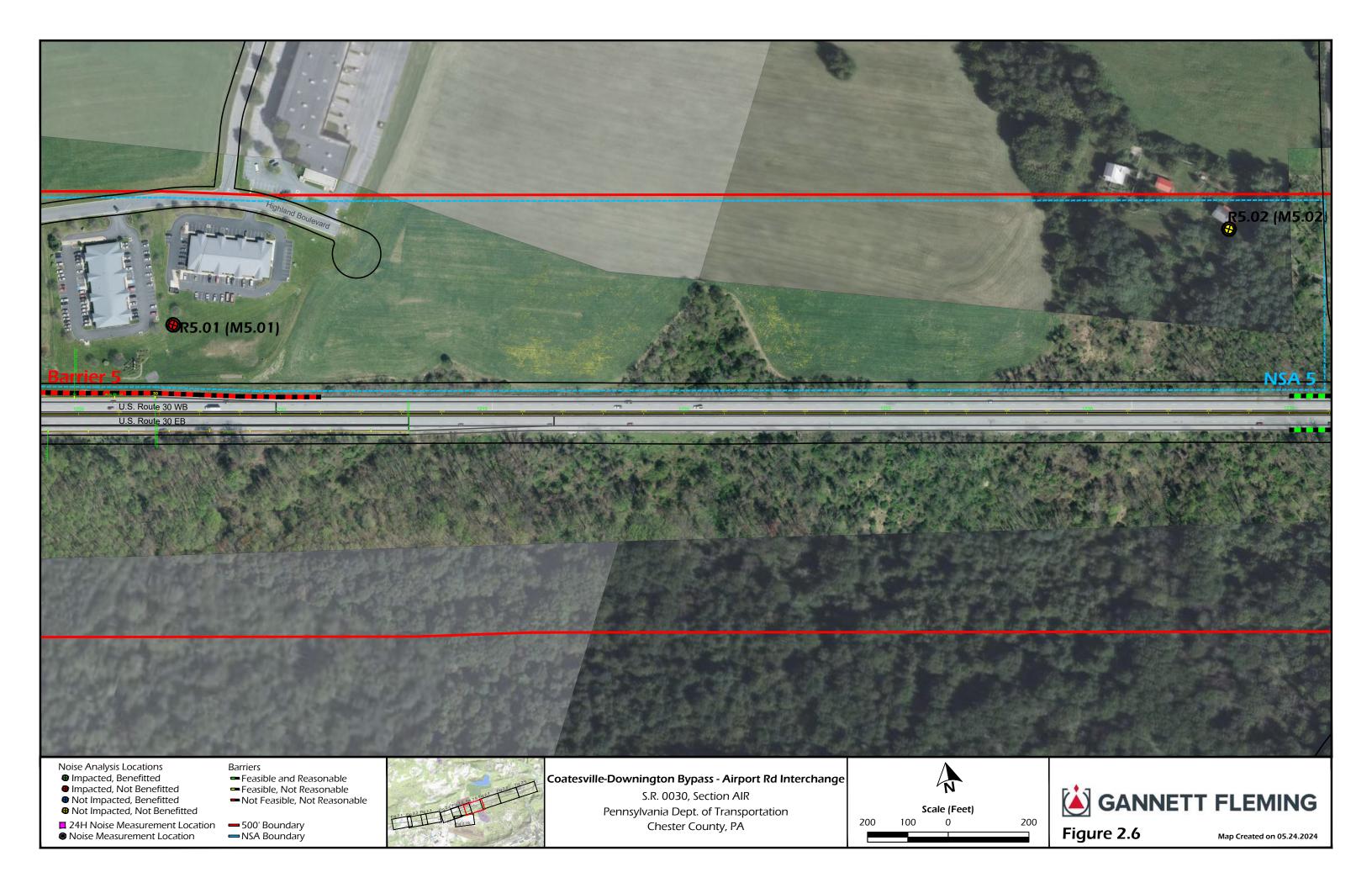


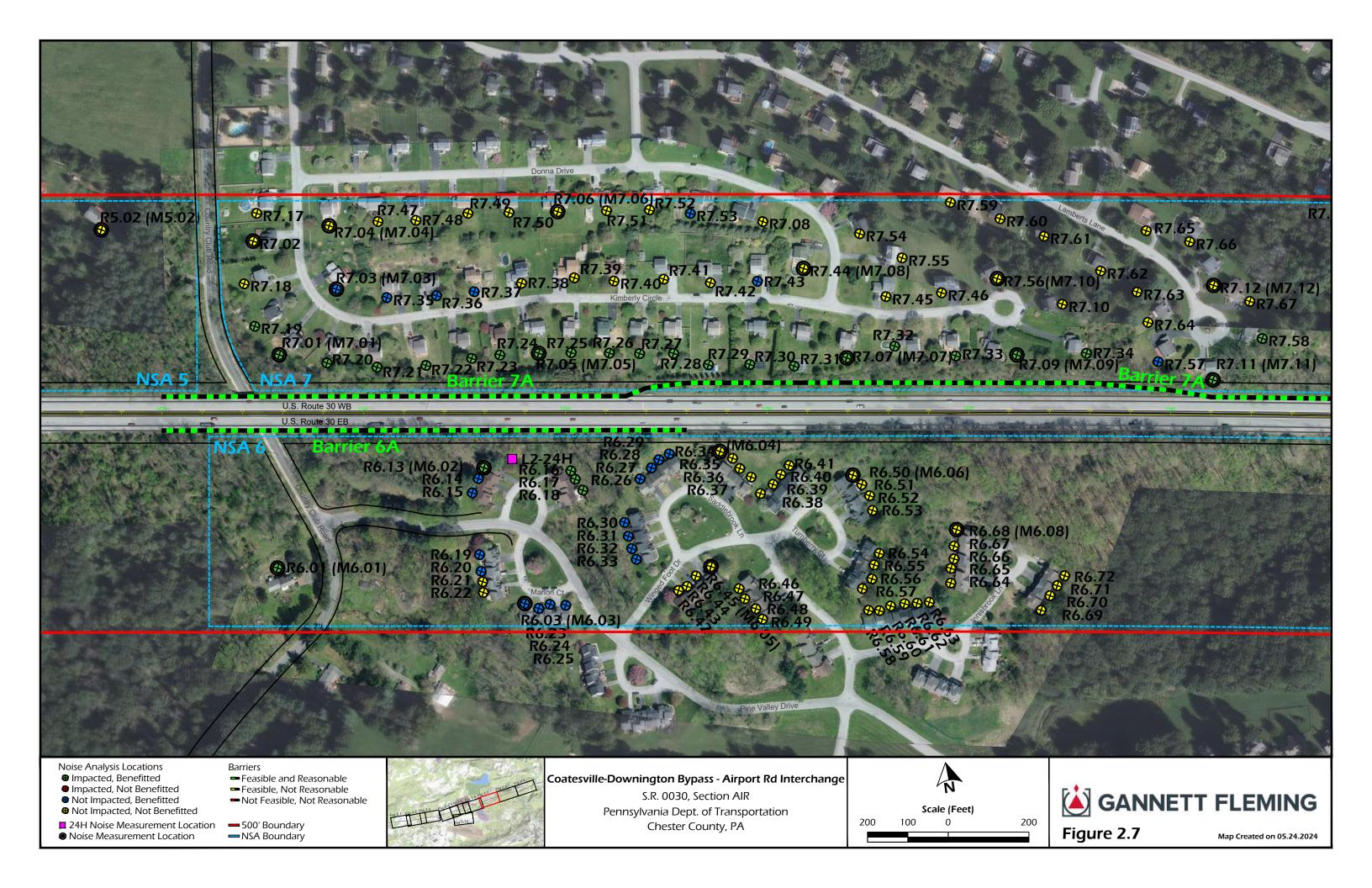


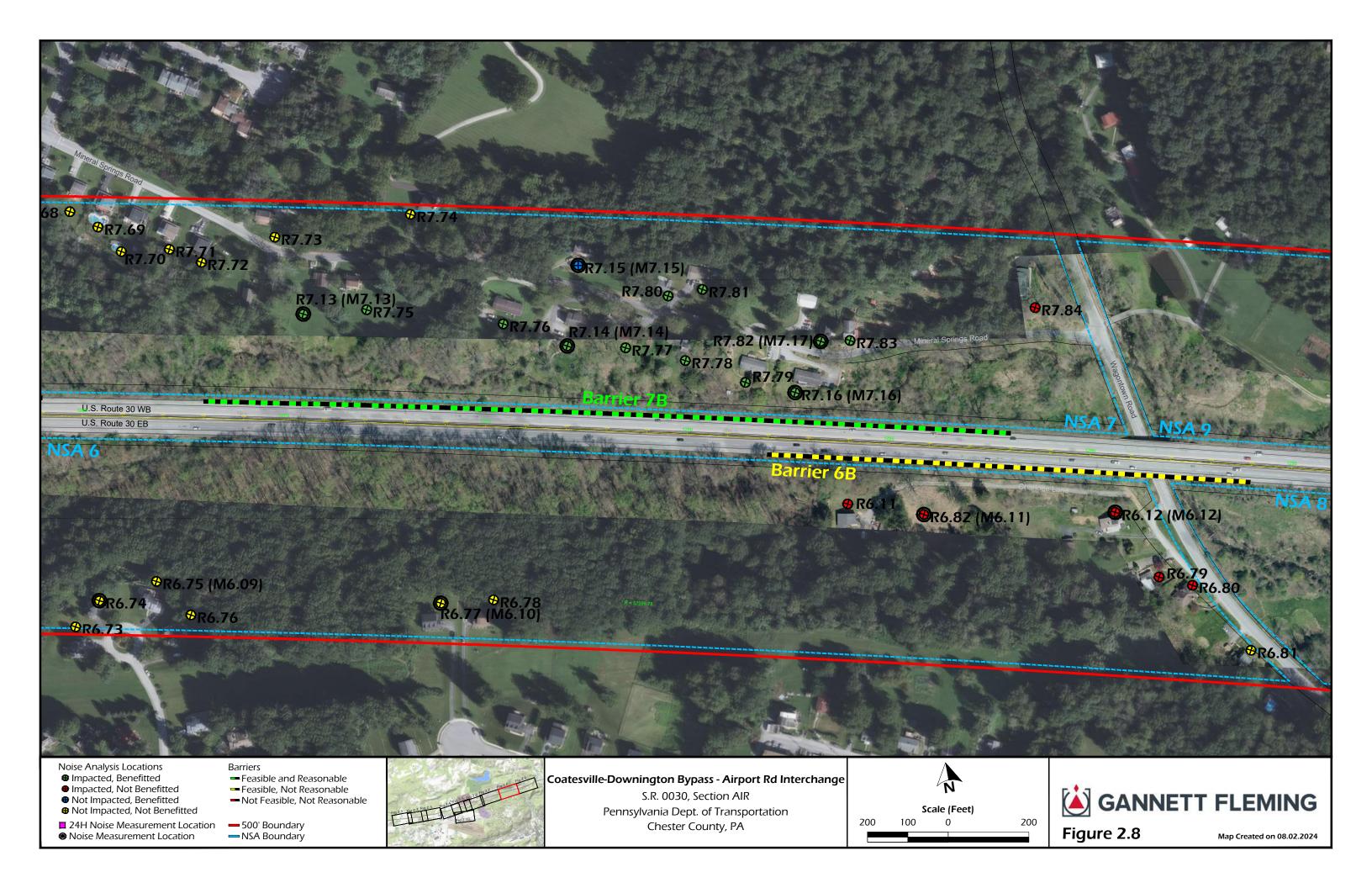


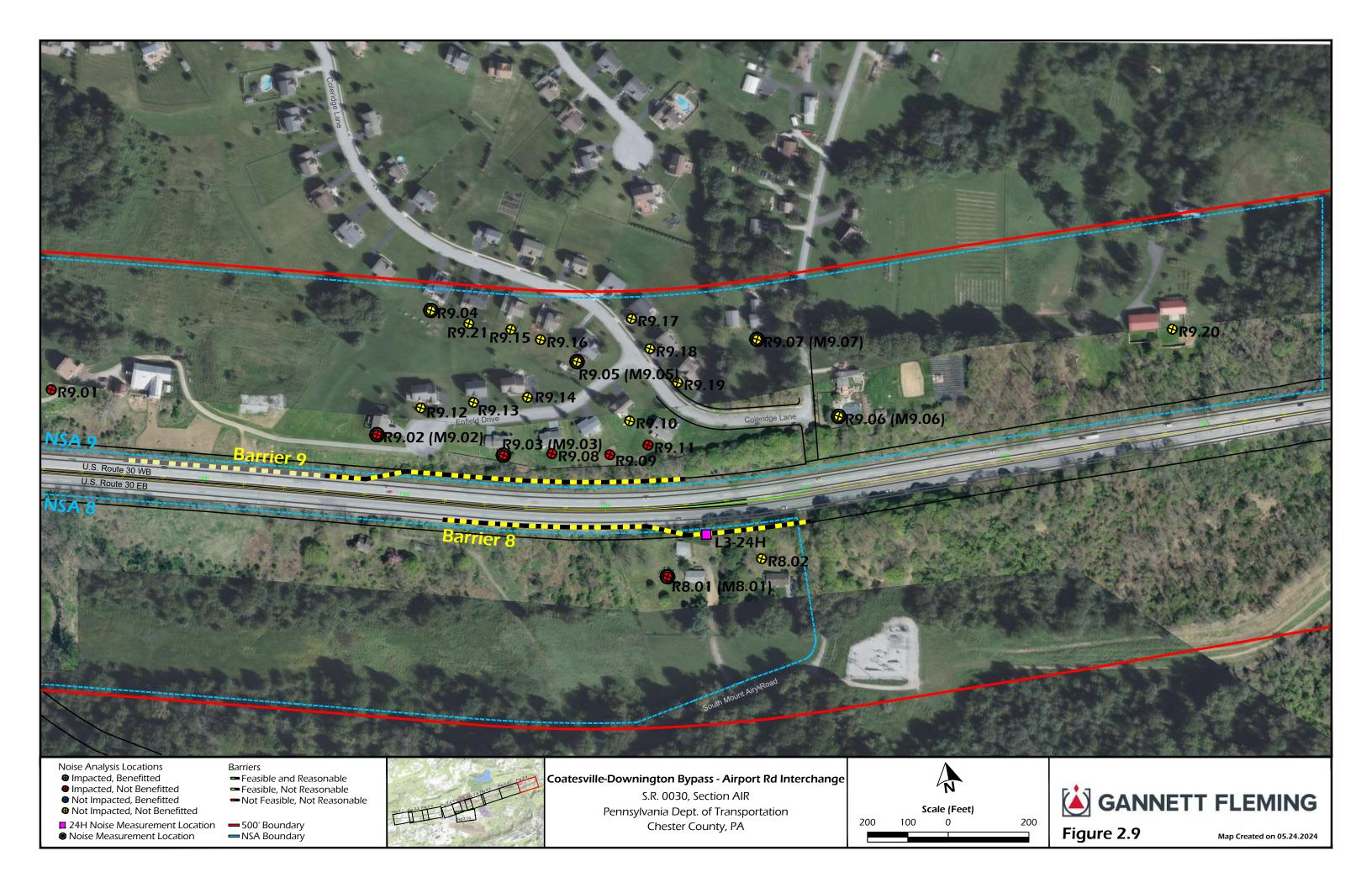


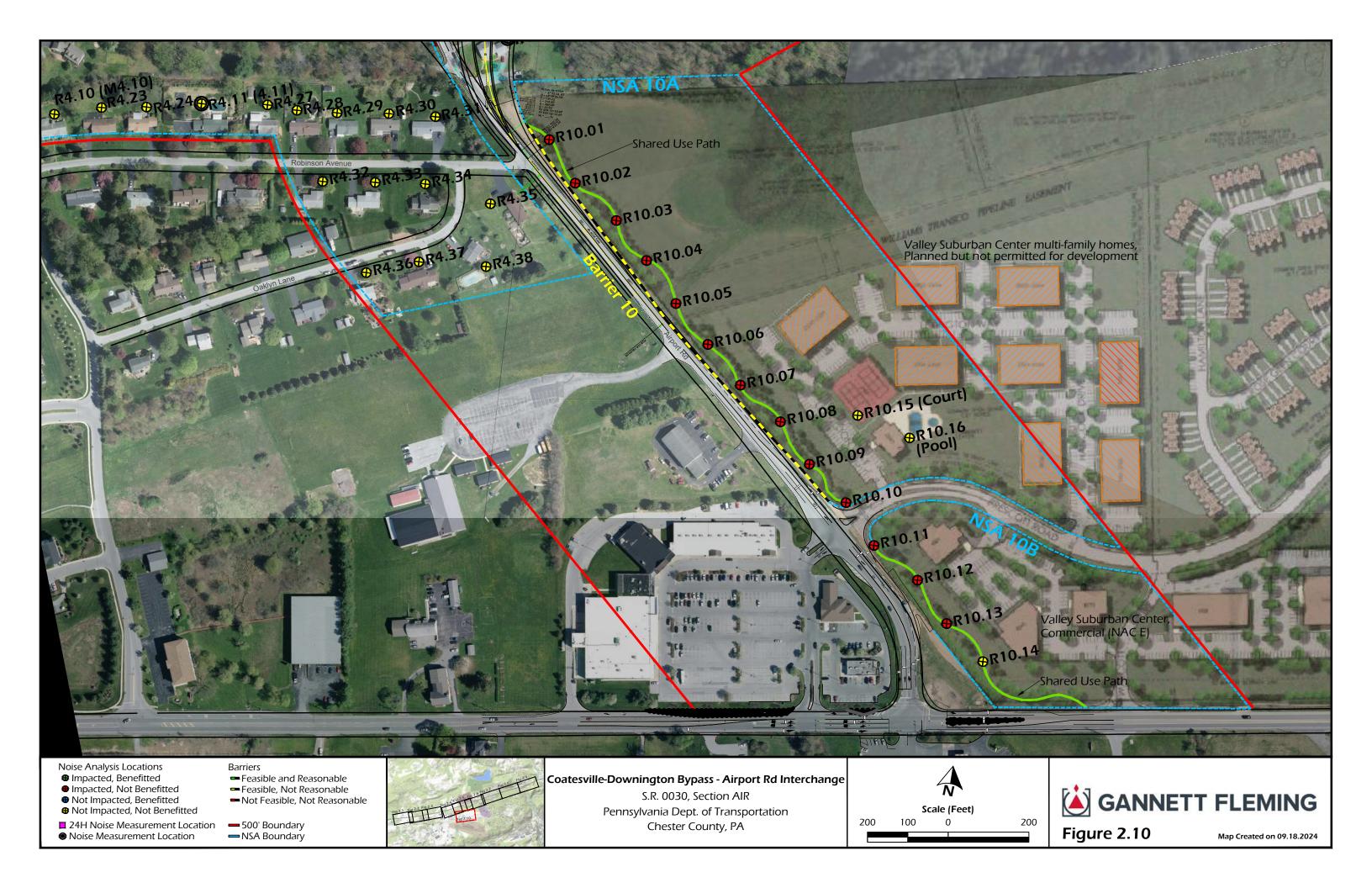


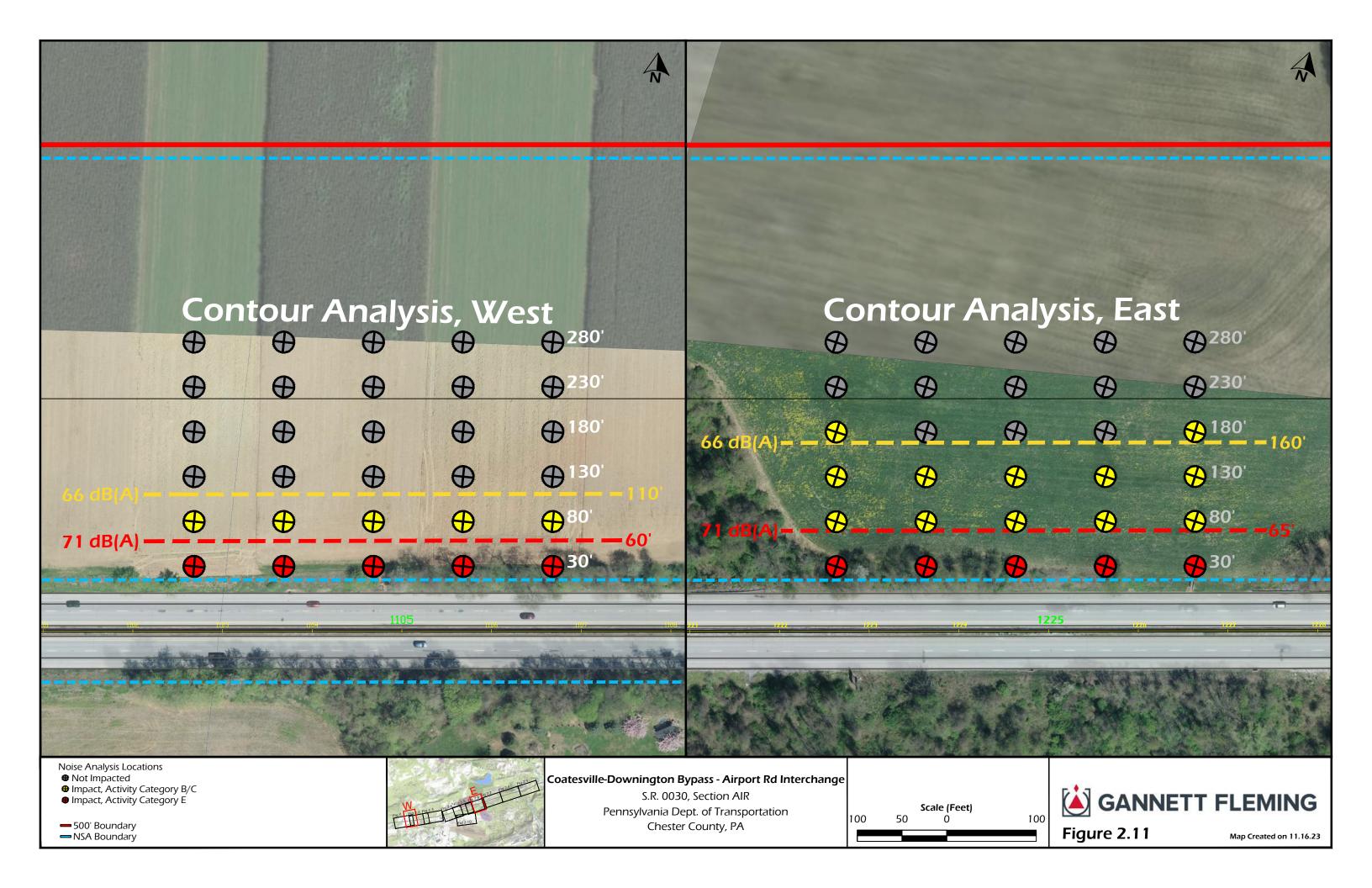


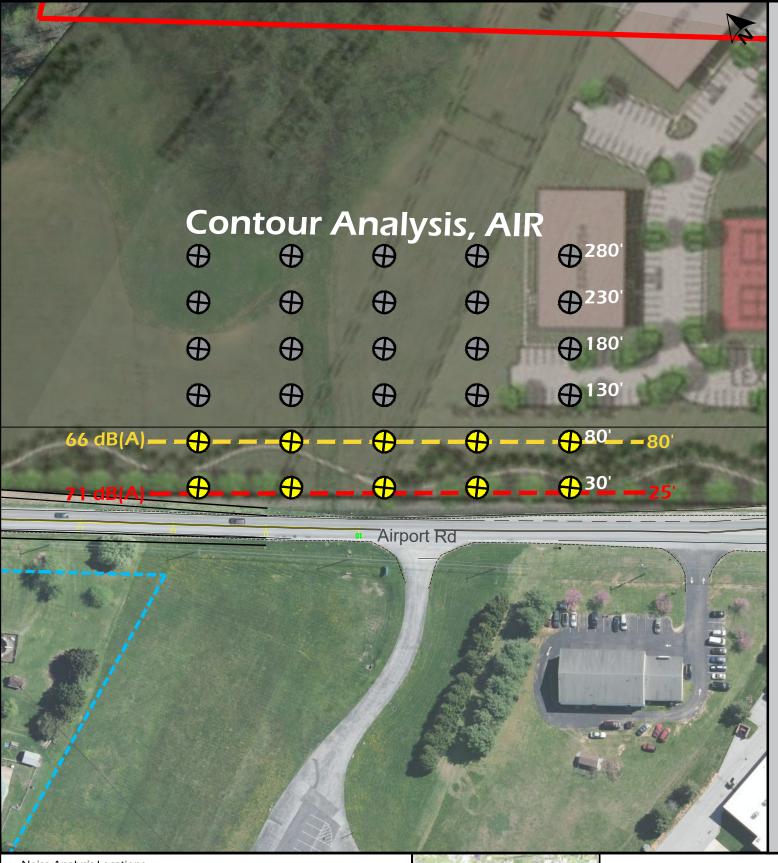












- Noise Analysis Locations

  Not Impacted
  Impact, Activity Category B/C
  Impact, Activity Category E

- 500' Boundary■ NSA Boundary



Coatesville-Downington Bypass - Airport Rd Interchange

S.R. 0030, Section AIR Pennsylvania Dept. of Transportation Chester County, PA

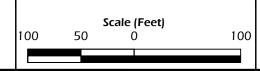




Figure 2.12

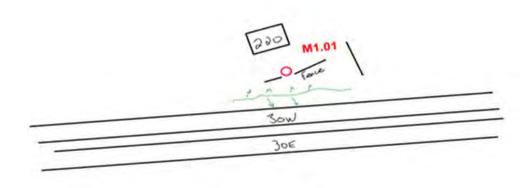
Map Created on 11.16.23

# APPENDIX A

Short-term Measurement Field Data Sheets

Project: SR-	0030 / Se atesville, F	2 7:15 AM ction AIR - PA			inne emir	Part agreed	Temperat Cloud c Wind speed (i Wind dire	vr: □ Non mph): 2	e □ Partly ☑	Cloudy	- - -
Measurement Da	<u>1ta</u> 08:15	Stop:	<sup>08:35</sup> ☑ 20 min	SLM	4228	L <sub>eq</sub> (dB):	68	$L_{min}(dB)$ :	51 L	max(dB):	83.4
GPS (°N,°W):		_ 205000001, 481666666	□ 30 min	#: Stor #:	145	Calib(dB):	93.83 /	93.83	Meas.	Ht(ft):	5
Location:	220 Old N PA 19320	1ill Rd Coate	Relocated syille, Yes 🗸				Pre-	Post-			
Type(use, NAC):	Residentia		Site Photogra  ✓ Yes □					Weighting:	☑ A □ B	□ C □	Z
raffic Data											
Roadway #1:	;	30	Roadway #2:			Roadway #3:			Roadway #4:		
Width(ft): Direction:	EB	WB	Width(ft): Direction:	1		Width(ft): Direction:			Width(ft): Direction:		I
			<u> </u>								
Speed Limit:	55	55	Speed Limit:			Speed Limit:			peed Limit:		
Observed Spd:			Observed Spd:			Observed Spd:	·		Observed Spd:		
Auto:	217	149	Auto:			Auto:			Auto:		
Med Tk:	11	12	Med Tk:			Med Tk:	:		Med Tk:		
Hvy Tk:	26	16	Hvy Tk:			Hvy Tk:	:		Hvy Tk:		
Bus:	0	3	Bus:			Bus:	:		Bus:		
MCycle:	0	0	MCycle:			MCycle:	:		MCycle:		
Notes:		1	. <u> </u>	I				1			1

Site Sketch:





M1.01 Site Photos: North:







South:

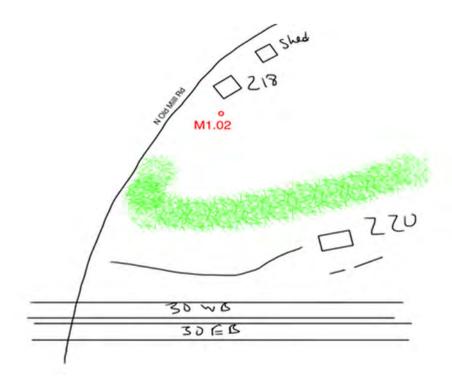


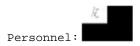
West:



Setup#: 2	natesville, F	PA				nne emin		Cloud o Wind speed ( Wind dire	mph): 2	ne □ Partly ☑ Clo	udy	-
easurement D M1.02 Start:	<u>ata</u> 09:04	Stop:	09:24	☑ 20 min	SLM	4229	L <sub>eq</sub> (dB):	57.	Lmin(dB):	46 L <sub>max</sub> (c	dB):	66.
		-		_ □ 30 min	#:		_	1	_			
GPS (°N,°W):		827293474 068706659	4, -	□ 24 hr	Stor #:	161	Calib(dB):	93.86 /	93.86	Meas. Ht(	Et):	5
				Relocated			_	Pre-	Post-	_		
Location:	218 Old N PA 19320	1ill Rd Coat	esville,	□ Yes ☑	No							
Location: Type(use, NAC):			esville,	☐ Yes ☑ Site Photograp ☑ Yes ☐	ohed				Weighting:	: ☑A□B□(		Z
	PA 19320		esville,	Site Photograp	ohed				Weighting:	• ☑ A □ B □ (		Z
Type(use, NAC):	PA 19320 Residentia			Site Photograp	ohed		Roadway #3	:	Weighting:	: ☑ A □ B □ (  Roadway #4:		Z
Type(use, NAC):  ffic Data  Roadway #1:  Width(ft):	PA 19320 Residenti	al (B)	Roa - W:	Site Photograp  ✓ Yes □  adway #2: idth(ft):	ohed		Width(ft)	:	Weighting:	Roadway #4: Width(ft):		Z
Type(use, NAC):  ffic Data  Roadway #1:	PA 19320 Residenti	al (B)	Roa - W:	Site Photograp  ☑ Yes □  adway #2:	ohed		_	:	Weighting:	Roadway #4:		z
Type(use, NAC):  ffic Data  Roadway #1:  Width(ft):	PA 19320 Residenti	al (B)		Site Photograp  ✓ Yes □  adway #2: idth(ft):	ohed		Width(ft)	:		Roadway #4: Width(ft):		Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction:	PA 19320 Residenti	al (B) 30 WB	Roa W: D: Spec	Site Photograp  Yes   adway #2:  idth(ft):  irection:	ohed		Width(ft) Direction	:		Roadway #4: Width(ft): Direction:		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:  Speed Limit:	PA 19320 Residenti	al (B) 30 WB	Roa W: D: Spec	Site Photogram  Yes   adway #2: idth(ft): irection: ed Limit:	ohed	<u> </u>	Width(ft) Direction Speed Limit	:		Roadway #4: Width(ft): Direction: Speed Limit: Observed		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit: Observed Spd:	PA 19320 Residenti	30 WB 55	Roa W: D: Spec	Site Photogram  Yes   adway #2: idth(ft): irection: ed Limit: rved Spd:	ohed		Width(ft) Direction Speed Limit Observed Spd	:		Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd:		z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit: Observed Spd:  Auto:	PA 19320 Residenti	30 WB 55 145	Roa W: D: Spec	Site Photogram  Yes   adway #2: idth(ft): irection: ed Limit: rved Spd:  Auto:	ohed		Width(ft) Direction Speed Limit Observed Spd	:		Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:   Auto:   Med Tk:	PA 19320 Residenti  EB  55  138  9	30 WB 55 145 17	Roa W: D: Spec	Site Photogram  Yes   adway #2: idth(ft): irection: ed Limit: rved Spd:  Auto: Med Tk:	ohed		Width(ft) Direction Speed Limit Observed Spd Auto Med Tk			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		Z

Site Sketch:





M1.02 Site Photos: North:







South:

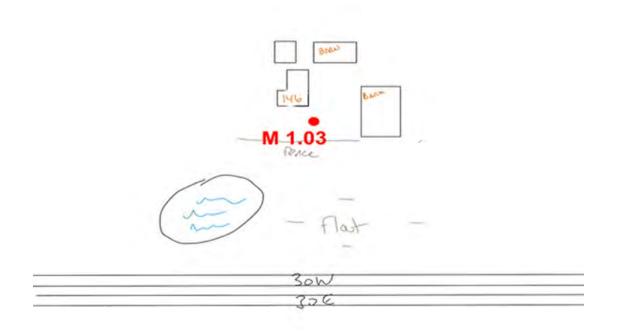


West:



Project: SR- Coa Setup#: 3	ril 25, 2022 0030 / Sec atesville, P.	tion AIR -		Gannett Fleming				Temperature (F): 48  Cloud cvr: □ None □ Partly ☑ Cloudy  Wind speed (mph): 4  Wind direction: Northeast					-
Measurement Da	1 <b>ta</b> 09:46	Stone	10:06		SLM	4228	L <sub>eq</sub> (dB):	58.	L <sub>min</sub> (dB):	50		L <sub>max</sub> (dB):	66
		Stop:	10.00	☑ 20 min	#:	4220	meq(db).	1			_	Bmax (QB).	
GPS (°N,°W):	39.985889	7, -75.9054	1922	☐ 30 min ☐ 24 hr	Stor #:	146	Calib(dB):	93.83 /	93.83		Meas.	Ht(ft):	5
Location: 146 Old Mill Rd Coatesville,			sville,	Relocated  ☐ Yes ☑ No			_	Pre-	Post-	<del></del>			
Location:				Site Photographed  ☑ Yes □ No			Weighting: ☑ A ☐ B ☐ C ☐						
Location: - Type(use, NAC): -	PA 19320 Residentia	I (B)							Weighting:	☑ A	□В	□ C □	Z
Type(use, NAC):	PA 19320	I (B)							weighting:	☑ A	□В	□ C □	Z
Type(use, NAC): - raffic Data Roadway #1:	PA 19320 Residentia	I (B)	-	☑ Yes □ I			Roadway #3			M A	y #4:		Z
Type(use, NAC): _ raffic Data	PA 19320 Residentia	.,	Wio	☑ Yes □ I			Roadway #3 Width(ft) Direction	:		V A	<b>y #4:</b> (ft):		Z
Type(use, NAC): - raffic Data  Roadway #1: Width(ft):	PA 19320 Residentia	0	Wio Di	<pre></pre>			Width(ft)			Roadwa;	<b>y #4:</b> (ft): tion:		Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:	PA 19320 Residentia	0 WB	Wic Di: Speed	<pre></pre>			Width(ft) Direction			Roadwa; Width Direc	<b>y #4:</b> (ft): tion:		Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction: Speed Limit:	PA 19320 Residentia	0 WB	Wic Di: Speed	dway #2: dth(ft): rection: d Limit:			Width(ft) Direction Speed Limit			Roadwa; Width Direc Speed L	y #4: (ft): tion: imit: erved		Z
Type(use, NAC):  raffic Data  Roadway #1:     Width(ft):     Direction:     Speed Limit:     Observed Spd:	PA 19320 Residentia  3 EB 55	0 WB 55	Wic Di: Speed	dway #2: dth(ft): rection: d Limit: ved Spd:			Width(ft) Direction Speed Limit Observed Spd			Roadwa Width Direc Speed L	y #4: (ft): tion: imit: erved Spd:		Z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	PA 19320 Residentia  3 EB 55	0 WB 55	Wic Di: Speed	dway #2: dth(ft): rection: d Limit: ved Spd:			Width(ft) Direction Speed Limit Observed Spd			Roadwa: Width Direc Speed L Obs	y #4: (ft): tion: imit: erved: Spd: Auto:		Z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:   Med Tk:	PA 19320 Residentia 3	0 WB 55	Wic Di: Speed	dway #2: dth(ft): rection: d Limit: ved Spd:  Auto: Med Tk:			Width(ft) Direction Speed Limit Observed Spd Auto Med Tk			Roadwa: Width Direc Speed L Obs	y #4: (ft): tion: imit: erved: Spd: Auto:		Z

Site Sketch:





M1.03 Site Photos: North:



East:



South:



West:



	Date: Ap	oril 25, 202	2 4:49 PM						Tempera	ture (F): 61			_
Pro		R-0030 / Se patesville, F	ction AIR -						Cloud	ovr: □ Nor	ne □ Partly 🛭	2 Cloudy	
Setup#: 1:		3				6a	nne	ett	Wind speed (mph): 2				
		1.04				Fle	emil						_
									Willia all	ection: North			=
Measuren	nent D	<u>ata</u>											
ID: <b>M1.04</b>	Start:	17:49	Stop:	18:09	☑ 20 min ☐ 30 min	SLM #:	4229	Leq(dB):	60. 9	Lmin(dB):	49.8	$L_{\text{max}}(dB)$ :	72.8
GPS	(°N,°W):		267537323, 464039577		□ 24 hr	Stor #:	173	Calib(dB):	93.86 /	93.86	Meas	. Ht(ft):	5
	Location:	on: 64 Frederick Rd Coatesville,			Relocate ☐ Yes ☑				Pre-	Post-			
Type(u	ise, NAC):	Residentia	al (B)		Site Photogra  ☑ Yes □					Weighting:	· VA 🗆 E	3 □ C □	Z
Traffic Data	<u>a</u>												
	ay #1:		30		adway #2:			Roadway #3			Roadway #4		
	h(ft): ection:		WB		ldth(ft): lrection:			Width(ft): Direction:			Width(ft) Direction		
Speed	Limit:		55	Spee	ed Limit:			Speed Limit	:	<u> </u>	Speed Limit		
Observe	ed Spd:			Obser	eved Spd:			Observed Spd	:		Observe Spd		
	Auto:	192	233		Auto:	ĺ		Auto	:		Auto	:	
M	Med Tk:	6	7		Med Tk:			Med Tk	:		Med Tk	:	
H	Ivy Tk:	10	10		Hvy Tk:			Hvy Tk	:		Hvy Tk	:	
	Bus:		0		Bus:			Bus	:		Bus	:	
M	MCycle:	0	1		MCycle:			MCycle	:		MCycle	:	
Notes:													
Site Ske	etch:												
DICE DIC	eccii.						11						
							11						
							//						
					/	641							
					1	M1.0	4	Ga Wash	- F	rederick Rd			
				4	A STATE OF								
				OP.					1				
			1	200				All	1				
					15								
				0)	10								
			1	0				46	Sandy.	99 march	CHANNE		
					(Helphine)	SERVICE SERVIC	SHEME	State of the last	代表是是	是是是是			
					- de la Maria		30	WB					
		-						, ,,,					

30 EB

M1.04 Site Photos: North:



East:



South:



West:



Date:	April 25, 20	22 4:49 PM			1		Tempera	ture (F): 59			
Project:	SR-0030 / Se	ection AIR -					Cloud	Vr. 🗆 N		_	
	Coatesville,	PA		100			Cloud	···· ⊔ Non	e □ Partly ☑ Cloudy		
	13			Бa	nne	ett	Wind speed (mph): 5				
Site ID(s):	M1.05				mir		Willia Specu			_	
				,,,		<i>'</i> 9	Wind dire	ection: Southe	east	_	
Measurement	Data										
ID: <b>M1.05</b> Start		Stop:	<sup>18:09</sup> ☑ 20 min	SLM	4228	L <sub>eq</sub> (dB):	64.	Lmin(dB):	51.4 Lmax(dB):	78.6	
		_	□ 30 min	#:		<u> </u>	7	<u> </u>			
GPS (°N,°W)	): 39.98584	4855	☐ 24 hr	Stor	156	Calib(dB):	93.83 /	93.83	Meas. Ht(ft):	5	
, , ,		4748333334		#:		<u> </u>					
Location	r 52 Frede	erick Rd. Coat	Relocate				Pre-	Post-			
Education	PA 1932		esville,   Yes	I NO							
T / NAC		: . I (D)	Site Photogr					Weighting:	☑ A □ B □ C □	] Z	
Type(use, NAC)	: Resident	tiai (B)	✓ Yes □	] No							
Traffic Data											
Roadway #1		30	Roadway #2:			Roadway #3			Roadway #4:		
Width(ft) Direction		WB	_ Width(ft): _ Direction:			Width(ft) Direction			Width(ft):	<del></del>	
			_								
Speed Limit		55	Speed Limit:			Speed Limit		5	peed Limit:		
Observed Spo	1:		Observed Spd:			Observed Spd	:		Observed Spd:		
		1	<del>-</del>	<u> </u>			-	1			
Auto	192	233	Auto:			Auto	: 		Auto:		
Med Tk	: 6	7	Med Tk:			Med Tk	:		Med Tk:		
Hvy Tk	: 10	10	Hvy Tk:			Hvy Tk	:		Hvy Tk:		
Bus	3: 0	0	Bus:			Bus	:		Bus:		
MCycle	e: 0	1	MCycle:			MCycle	:		MCycle:	_	
	-		- <u> </u>				-				
Notes:											
Site Sketch	:										
			//								
			//								
				1 1	_	-	- 1				
				1 1		1		1			
				1	\	1		1			
				1	1						
				<u> </u>	1						
			T	52	1	1 1		1			
			L		_	LI					
				1							
						_					
				Ī	<b>V1</b> .	05					
			4								
			1 11								
			GRADUZ	NE							
	1	-	1 1	1	7	7		/ /			
	1	1	/ /	/		/ /	-	/	1		
					301	v .					
					35	E					



M1.05 Site Photos: North:



East:



South:



West:



Project:         SR           Co         Setup#:         14	2-0030 / Separates ville, 1.06  ata  07:13  39.98617	22 6:12 AM ection AIR - PA Stop: - 7781666667, 3901666666	07:33	SLM #: Stor #:			Temperat Cloud of Vind speed ( Wind dire	mph): _ 2	e □ Partly ☑  52.7  Meas.	76.8		
Location: Type(use, NAC):	PA 19320			☐ Yes ☑ No  Site Photographed ☑ Yes ☐ No						□В□С□Ζ		
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk: Bus: MCycle:	EB 55 294 26 22 0 0	30 WB 55 169 10 21 0 0	Roadway #2:  Width(ft): Direction:  Speed Limit: Observed Spd:  Auto:  Med Tk:  Hvy Tk:  Bus:  MCycle:			Roadway #3: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk: Bus: MCycle:			Roadway #4: Width(ft): Direction: peed Limit: Observed Spd: Auto: Med Tk: Hvy Tk: Bus: MCycle:			
Site Sketch:			J. Lime			34 11.06	Ro_					

30W

#### Personnel:

M1.06 Site Photos: North:



East:



South:



West:



	07:12 Stop:	<sup>07:32</sup> ☑ 20 min	SLM 4229 #:	$L_{eq}(dB)$ :	59. 1	$L_{min}(dB)$ :	50.8 L <sub>max</sub> (dB):	71.1
	9.9864879, -	□ 30 min □ 24 hr	Stor 174 #:	Calib(dB):	93.98 /	94.03	Meas. Ht(ft):	5
Location: 31	5.8965940999999 1 Frederick Rd. Co A 19320	Relocated atesville,	d No		Pre-	Post-		
Type(use, NAC): Re	esidential (B)	Site Photogra ☑ Yes 🗆				Weighting:	☑ A □ B □ C □	ΙZ
raffic Data								
Roadway #1:	30 EB			Roadway #3: Width(ft):			Roadway #4: Width(ft):	
Direction:	EB WB	Direction:		Direction:			Direction:	
Speed Limit:	55 55	Speed Limit:		Speed Limit:		S	peed Limit:	
Observed Spd:		Observed Spd:		Observed Spd:			Observed Spd:	
Auto:	294 169	Auto:		Auto:			Auto:	
Med Tk:	26 10	Med Tk:		Med Tk:			Med Tk:	
Hvy Tk:	22 21	Hvy Tk:		Hvy Tk:			Hvy Tk:	
Bus:	0 0	Bus:		Bus:			Bus:	
MCycle:	0 0	MCycle:		MCycle:			MCycle:	
Notes:								

Frederick Rd

30 WB

30 EB

M1.07 Site Photos: North:







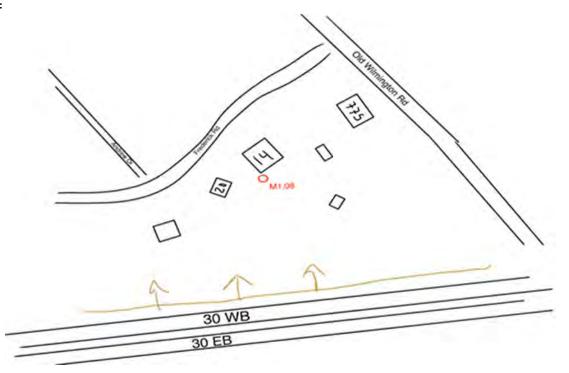
South:

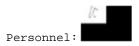


West:



-	atesville, P	ction AIR - A									
Setup#: 12		PA						Cloud c	vr. 🗆 Nass	D	
	00				100			0.044.0	⊔ INON	ne □ Partly ☑ Clou	lay
Site ID(s):					Ga.	nne	ett v	Wind speed (	mph): 2		
	.08				Fle	mi			· ·		
						11011	-	Wind dire	ction: North		
Measurement Da	<u>ita</u>										
ID: <b>M1.08</b> Start:	17:15	Stop:		20 min	SLM #:	4229	Leq(dB):	62. 9	$L_{min}(dB)$ :	52.1 L <sub>max</sub> ( d	B): 70.3
		_		30 min					_		
GPS ( <sup>o</sup> N, <sup>o</sup> W):	39.986552315116406, - 75.8950636269055			☐ 24 hr	Stor #:	172	Calib(dB):	93.86 /	93.86	Meas. Ht(f	t): 5
-				Relocated			<del></del>	Pre-	Post-	_	-
Location:	14 Frederi PA 19320		esville,	□ Yes 🗹 1	No						
-	17 15520			Site Photograph	ned				Weighting:	: ☑ A □ B □ C	$\Box$ 7
Type(use, NAC):	Residentia	al (B)		☑ Yes □ N	lo						
raffic Data											
Tarrie Bata											
Roadway #1:		30	_	ay #2:			Roadway #3:			Roadway #4:	
Width(ft): Direction:	EB	WB	_	h(ft):			Width(ft): Direction:		<del></del>	Width(ft): Direction:	
			_						<del>                                     </del>		
Speed Limit:	55	55	Speed				Speed Limit:			Speed Limit:	
Observed Spd:			Observe -	d Spd:			Observed Spd:			Observed Spd:	
Auto:	210	307		Auto:			Auto:			Auto:	
Med Tk:	4	21	_ M	ed Tk:			Med Tk:			Med Tk:	
Hvy Tk:	11	11	- н	vy Tk:			Hvy Tk:	:		Hvy Tk:	
Bus:	2	0	_	Bus:			Bus:	-	<u> </u>	Bus:	
MCycle:	0	2	- M	Cycle:			MCycle:		<del>                                     </del>	MCycle:	
- 2		1	-	<u> </u>			- 1 - 1		<u> </u>		
NT											
Notes: Side add	dress u	pdates	irom 20 t	.0 14							





M1.08 Site Photos: North:



East:



South:



West:



: <b>M1.09</b> Start:	07:47 39.985963 75.893598	Stop: 	08:07	<ul><li> 20 min</li><li> 30 min</li><li> 24 hr</li></ul>	#	: r 175	Leq(dB):  Calib(dB):	93.98 /	L <sub>min</sub> (dB)	: 51.6 L <sub>max</sub> (	_	82.°
Location: - Type(use, NAC):	785 Wilmin Coatesville Residentia	e, PA 19320		Reloca  Yes  Site Photo  Yes	☑ No graphed			Pre-	Post- Weightir	<sup>ng:</sup> ☑A□B□	C □ Z	
affic Data												
Roadway #1:	3	80	Road	lway #2:	Old Wilm Rd		Roadway #3:			Roadway #4:		
Width(ft): Direction:	EB	WB		dth(ft): rection:	NB	SB	Width(ft): Direction:			Width(ft):		
Speed Limit:	55	55	Speed	d Limit:			Speed Limit:			Speed Limit:		
Observed Spd:			Observ	ved Spd:			Observed Spd:			Observed Spd:		
Auto:	224	187		Auto:	17	35	Auto:			Auto:		
Med Tk:	15	17		Med Tk:	2	1	Med Tk:			Med Tk:		
Hvy Tk:	27	25		Hvy Tk:	0	0	Hvy Tk:			Hvy Tk:		
Bus:	0	1		Bus:	0	0	Bus:			Bus:		
MCycle:	0	0		MCycle:	0	0	MCycle:			MCycle:		
otes: Expansio	on joint	t bangir	ng									
ite Sketch:												

30 WB

30 EB



M1.09 Site Photos: North:



East:



South:



West:



	Dat	t <b>e:</b> Ap	ril 26, 2022	2 6:52 AM					1		Tempera	ture (F): 52			
	Projec		-0030 / Sed						$\triangle$		Cloud	.vr: □ No	one □ Part	ly ☑ Cloudy	_
	Setup		atesville, P	'A									опе <u>—</u> тап	ly E cloudy	
	Site ID(s		1.10						nne		Vind speed (	mph): 2			-
								FIE	mi	iiy	Wind dire	ection: Nor	theast		_
Me	easureme	ent Da	<u>ata</u>												
ID:	M1.10	Start:	07:47	Stop:	08:07	<ul><li>✓ 20 mir</li><li>☐ 30 mir</li></ul>		SLM #:	4228	L <sub>eq</sub> (dB):	60	L <sub>min</sub> (dB)	: 48.4	$L_{max}(dB)$ :	70.9
	GPS (°	N,ºW):		306666667, 1483333333	-	□ 24 hr		Stor #:	158	Calib(dB):	93.96 /	93.90		eas. Ht(ft):	5
	Loc	cation:	775 Wilmi Coatesville	ington Rd e, PA 19320		Reloc Yes					Pre-	Post-			
	Type(use,	, NAC):	Residentia	al (B)		Site Photo  ✓ Yes		l				Weightin	a: 🛚 A [	□ B □ C □	Z
<u>Traf</u>	fic Data														
	Roadway	y #1:	3	30	Roa	ndway #2:	Old W	/ilmin	gton	Roadway #3:			Roadway	#4:	
	Width Direct		EB	WB		dth(ft): rection:	NB		SB	Width(ft): Direction:			Width(: Direct:		1
	Speed L:		55	55		ed Limit:	40		40	Speed Limit:		<u> </u>	Speed Lin		
(	Observed			33		rved Spd:	45		45	Observed Spd:			Obset		
`					ODSEI	veu spu:		<u> </u>		Observed spd.		<u> </u>		Spd:	
	Ī	Auto:	224	187		Auto:	17		35	Auto:			Αι	uto:	
		d Tk:	15	17		Med Tk:	2		0	Med Tk:			Med		
	Hvy	y Tk:	27	25		Hvy Tk:	0		0	Hvy Tk:			Hvy		
		Bus:	0	1		Bus:	0		0	Bus:				Bus:	
	MC	ycle:	0	0		MCycle:	0		0	MCycle:			МСу	cle:	
No	tes: Ex	pansi	on join	t on RT	30 br:	ldge over	Old W	ilmi	ngton	, occasional s	pikes p	ossible.			
Si	te Sket	ch:													
										115	7				
										11-					
										- //					
									1						
							1			1	\				
							1				//				
						/	1			WIT	11	1	-		
											11	. 1	7		
											1	/ ~			
											` '	//			
											1	11			
											11	11			

#### Personnel:

M1.10 Site Photos: North:



East:



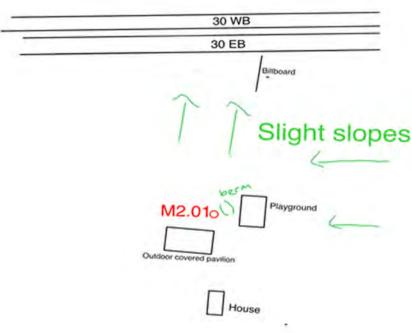
South:



West:



Project: SR-		2 8:46 AM ection AIR - PA					Temperat Cloud c		ne □ Partly ☑	Cloudy	-
Setup#: 3 Site ID(s): M2	2.01				nne		Wind speed (	mph): 3			_
				Fle	emil	ng	Wind dire	ction: North			_
leasurement Da	ata										
<b>M2.01</b> Start:	09:46	Stop:	10:06	SLM #:	4229	L <sub>eq</sub> (dB):	60. 2	Lmin(dB):	49.8 L	max(dB):	68.5
GPS (°N,°W):		383333333, 236666667		Stor #:	162	Calib(dB):	93.86 /	93.86	Meas. 1	Ht(ft):	5
Location:	35 S. Cow PA 19365	an Rd Parkel	Relocate				Pre-	Post-	_		
Type(use, NAC):	Park (C)		Site Photogra  ☑ Yes □	-				Weighting:	<sup>2</sup>	□ C □	Z
ffic Data											
Roadway #1:		30	Roadway #2:			Roadway #3:	:		Roadway #4:		
Width(ft): Direction:		WB	Width(ft):	1		Width(ft): Direction:		<u> </u>	Width(ft): Direction:		1
	EB	55	<u> </u>								1
Speed Limit:	55 	33	Speed Limit:			Speed Limit:			Speed Limit:		1
Observed Spd:			Observed Spd:			Observed Spd:	· 		Observed Spd:		
Auto:	165	173	Auto:			Auto:			Auto:		ĺ
Med Tk:	11	3	Med Tk:			Med Tk:	:		Med Tk:		1
Hvy Tk:	34	19	Hvy Tk:			Hvy Tk:	:		Hvy Tk:		<del>                                     </del>
Bus:	0	0	Bus:			Bus:	:		Bus:	-	1
MCycle:	0	0	MCycle:			MCycle:			MCycle:		
otes:											
ite Sketch:											
		_				20 WB					



M2.01 Site Photos: North:



East:



South:

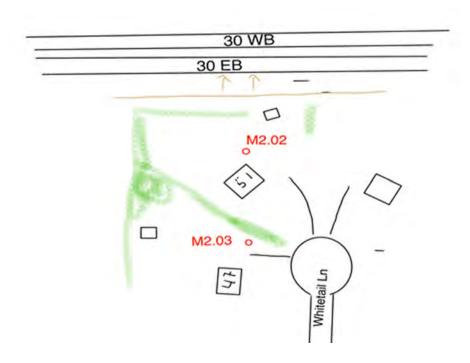


West:



<u></u> -	ril 25, 2022				i i	Temperature	<b>(F):</b> 52		
=	-0030 / Sed atesville, P				1	Cloud cvr:	□ None	e □ Partly ☑ Clo	udy
Setup#: 4	accovine, i	, , , , , , , , , , , , , , , , , , ,		Gann	ott			•	-
Site ID(s): M2	2.02				and the same of	Vind speed (mp	h): 3		
				Flemi	ny	Wind direction	on: East		
Measurement Da	ata_								
ID: <b>M2.02</b> Start:	10:34	Stop:	10:54	#:	L <sub>eq</sub> (dB):	62. 4	$L_{min}(dB)$ :	51.2 L <sub>max</sub> (c	dB): 71.9
GPS (°N,°W):	39.984675 75.901033	518333334, 395		Stor 147 #:	Calib(dB):	93.83 /	93.83	Meas. Ht(	ft): 5
Location:	51 White 7	Tail Ln Parke		cated No	<del></del>	Pre-	Post-		
Type(use, NAC):	Residentia	al (B)		tographed S  No		W	eighting:	☑ A □ B □ (	C □ Z
Traffic Data									
Roadway #1:	3	30	Roadway #2:		Roadway #3:			Roadway #4:	
Width(ft):			Width(ft):		Width(ft):			Width(ft):	
Direction:	EB	WB	Direction:		Direction:			Direction:	
Speed Limit:	55	55	Speed Limit:		Speed Limit:		S	peed Limit:	
Observed Spd:			Observed Spd:		Observed Spd:			Observed Spd:	
Auto:	182	148	Auto:	1	Auto:			Auto:	
Med Tk:	6	10	Med Tk:		Med Tk:			Med Tk:	
Hvy Tk:	27	24	Hvy Tk:		Hvy Tk:			Hvy Tk:	
Bus:	1	0	Bus:		Bus:			Bus:	
MCycle:	0	1	MCycle:		MCycle:			MCycle:	

Notes: Moderate bird noise. Either a lot of flanking noise coming from the east, or some industry noise near trailer park? Sounds like big blower or pump. Highway is deep in cut. No traffic line of sight even for HT's. Banging at minute 12 of measurement.







M2.02 Site Photos: North:



East:



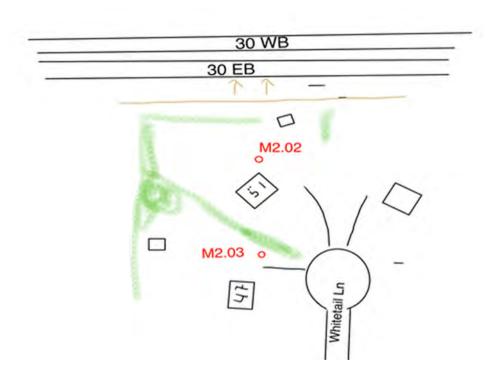
South:



West:



Project: SR-Cox	ril 25, 2022 -0030 / Sec atesville, PA	tion AIR -			C. C. C. C. C.	inne: emin		Tempera Cloud o Wind speed Wind dire	cvr:	ne □ Partly I	☑ Cloudy	- - -
Measurement Da	10:34	Stop:	10:54	20 :	SLM	4229	L <sub>eq</sub> (dB):	58.	$L_{\min}(dB)$ :	51.2	L <sub>max</sub> (dB):	67.4
		Stop.	<u>V</u> 2	20 min 30 min	#:		_	8			Dinax ( GD )	
GPS (°N,°W):	75.90096353333334				Stor #:	163	Calib(dB):	93.86 /	93.86	Meas	s. Ht(ft):	5
Location:	47 White T PA 19365	ail Ln Parke	eburg,	Relocated  Yes 🗹 N	No		_	Pre-	Post-	_		
Type(use, NAC):	Residential	(B)		te Photograph ☑ Yes □ N					Weighting:	☑ A □	В□С□	Z
		(B)							Weighting:	<b>□</b> A □	В□С□	Z
				☑ Yes □ N			Roadway #3	:	Weighting:	☑ A □		Z
affic Data  Roadway #1: Width(ft):	Residential	0	Roadway Width(i	7 Yes □ N #2: ft):			Width(ft)	:	Weighting:	Roadway #4 Width(ft)	<b>4:</b> ):	Z
affic Data  Roadway #1:	Residential		Roadway	7 Yes □ N #2: ft):				:	Weighting:	Roadway #4	<b>4:</b> ):	Z
affic Data  Roadway #1: Width(ft):	Residential	0	Roadway Width(i	#2:		<u> </u>	Width(ft)	:		Roadway #4 Width(ft)	<b>4:</b> ):	Z
Roadway #1: Width(ft): Direction:	Residential 3	0 WB	Roadway Width(i	#2:			Width(ft) Direction	:		Roadway #4 Width(ft;	4: ): n: t:	Z
Roadway #1: Width(ft): Direction: Speed Limit:	Residential 3	0 WB	Roadway Width() Direct: Speed Lin	#2:			Width(ft) Direction Speed Limit	:		Roadway #4 Width(ft, Direction Speed Limit	4: ): : : : : : : : :	Z
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	Residential 31 EB 55	0 WB 55	Roadway Width() Direct: Speed Lin Observed S	#2:			Width(ft) Direction Speed Limit Observed Spd	:		Roadway #4 Width(ft; Direction Speed Limit Observe	4: ): n: t: ed d:	Z
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	Residential  31  EB  55	0 WB 55	Roadway Width(source) Direct: Speed Lin Observed S	#2:			Width(ft) Direction Speed Limit Observed Spd Auto	:		Roadway #4 Width(ft, Direction Speed Limit Observe Spo	4: ): n: t: ed d: o: k:	Z
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	88 55 182 6	0 WB 55 148 10	Roadway Width( Direct: Speed Lir Observed S At Med Hvy	#2:			Width(ft) Direction Speed Limit Observed Spd Auto Med Tk			Roadway #4 Width(ft; Direction Speed Limit Observe Spo Auto	4: ): :: :: :: :: :: :: :: :: :: :: :: ::	Z



M2.03 Site Photos: North:







South:

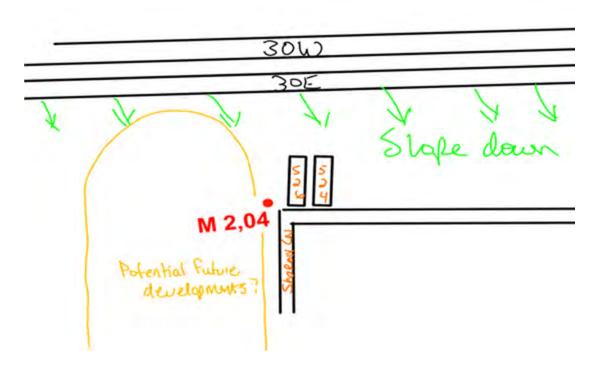


West:



	Date:	Ар	ril 25, 202	2 3:39 PM				1		Tempera	ture (F): 61			_
	Project:	SR-	-0030 / Se	ction AIR -						Cloud			ClI	
		Со	atesville, F	PA						Cloud	w. ⊔ Nor	ne □ Partly ☑	Cloudy	
	Setup#:	_11					Ga	nne	off .	Wind speed (	(mph). 4			
	Site ID(s):	M2	2.04							wina speea i	(mph): 4			-
							FIE	mii	iy	Wind dire	ection: South			
Me	easuremen	t Da	ata											
ID:	<b>M2.04</b> Sta	art:	16:39	Stop:	16:59	☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	59. 4	Lmin(dB):	49.7 I	max(dB):	74.6
	GPS (°N,°	W):	39.984943 75.895912	324999999, 245	-	- □ 30 min □ 24 hr	Stor #:	154	Calib(dB):	93.83 /	93.86	Meas.	Ht(ft):	5
	Locati	ion:	455 S. Bor		ı	Relocated  ☐ Yes ☑				Pre-	Post-	_		
	Type(use, NA	AC):	Residentia			Site Photograp  ☑ Yes □					Weighting	: ☑ A □ B	□ C □	Z
Γraf	fic Data													
	Roadway	#1:	3	30	Roa	adway #2:			Roadway #3:	:		Roadway #4:		
	Width(f	,			_	idth(ft):			Width(ft):			Width(ft):		
	Directi	on:	EB	WB	D:	irection:			Direction:	:		Direction:		
	Speed Lim	it:	55	55	Spe	ed Limit:			Speed Limit:	:		Speed Limit:		
•	Observed S	pd:			Obse	rved Spd:			Observed Spd:	:		Observed Spd:		
	Au	to:	223	398		Auto:			Auto:	:		Auto:		
	Med '	Tk:	4	21	_	Med Tk:			Med Tk:	:		Med Tk:		
	Hvy '	Tk:	15	18	-	Hvy Tk:			Hvy Tk:	:		Hvy Tk:		
	В	us:	1	0	=	Bus:			Bus:	:		Bus:		
	MCyc	le:	0	1	-	MCycle:			MCycle:	:		MCycle:		

Notes: Moved back toward Sharon Ln because of dogs in residence. Address is 526. 524 east of 526. Blank lot to east of 524. Check on land use west of Sharon, water mains getting installed for future development.





M2.04 Site Photos: North:



East:



South:



West:



	Dat	te: Ap	ril 25, 202	2 3:36 PM				1		Temperat	ture (F): 61			_
	Proje			ction AIR -						Cloud c	ovr: □ Non	e □ Partly l	☑ Cloudy	
	Catur		atesville, I	PA								e 🗆 Faitiy i	<b>v</b> Cloudy	
	Setup Site ID(		2.05					INNE		Wind speed (	mph): 2			
	0.00 .0(	1012	2.03				Fle	2mi	ng	Wind dire	ection: North			_
										Willia all c	1001111			_
NΛc	easurem	ont D	nt a											
				Chara	16.50		CT M	4220	L <sub>eq</sub> (dB):	63.	L <sub>min</sub> (dB):	50.3	L <sub>max</sub> (dB):	77.1
ID:	M2.05	Start:	16:39	Stop:	16:59	☑ 20 min	SLM #:	4229	Leq(GB):	2	Lmin(QB).	50.5	Lmax (QB).	77.1
	GPS (°	N,ºW):	39.98513	195727507,	-	- □ 30 min □ 24 hr	Stor	171	Calib(dB):	93.86 /	93.86	Meas	s. Ht(ft):	5
	`			482611076		_	#:		<u></u> .			-		
	Lo	cation:	510 Lissie	Ln. Parkebu	ırg, PA	Relocate  ☑ Yes □				Pre-	Post-			
		•	19365			Site Photogra					Weighting:	<b>.</b>		_
	Type(use	·				✓ Yes □	-				werdicing.	☑ A ⊔	В□С□	Z
·£	fia Data	-												
rat	fic Data													
	Roadwa			30		adway #2:			Roadway #3:			Roadway #4		
	Width			1		idth(ft):			Width(ft):			Width(ft)		_
	Direc		EB			irection:			Direction:		<u> </u>	Direction		
	Speed L		55 			ed Limit:			Speed Limit:		S	Speed Limit		
•	Observed	Spd:			Obse	rved Spd:			Observed Spd:	•		Observe Spo		
		7	222	i i	•	7	i		7		<u> </u>			1
		Auto:	223			Auto:			Auto			Auto		
		d Tk:	4			Med Tk:			Med Tk:			Med Th		
	Hv	y Tk:	15			Hvy Tk:			Hvy Tk:			Hvy T		
		Bus:	1			Bus:			Bus			Bus		
	MC	ycle:	0			MCycle:			MCycle:	<u></u>		MCycle	e: 	
No	tes: si	de sl	ightly	relocat	ed									
Si	te Sket	ch:												
												_		
							30 W	IB		_				
												2		
			_				3	O E	В	_				
							_	1	N A					
			_				1		1					
											7			
						ПГ	1 -		0-	$\square$				
						111	10	1	M2.05	111				
						111	510		1 11	$\sqcup$				
								L						

M2.05 Site Photos: North:







South:



West:



M2.06 Start:	<u>ata</u> 11:41	Stop:	12:01 ☑ 20 mir ☐ 30 mir	ı	LM 4229 #:	L <sub>eq</sub> (dB):	67	L <sub>min</sub> (dB):	46.1 Lma	<sub>x</sub> (dB):	81.
GPS (°N,°W):		903333333, 90983333334		St	or 165 #:	Calib(dB):	93.86 /	93.86	Meas. H	t(ft):	5
Location:	803 Wilm	nington Rd. g, PA 19365	Reloc	ated ☑ No			Pre-	Post-	-		
Type(use, NAC):	Resident	ial (B)	Site Photo  Ves					Weighting:	☑ A □ B □	] C 🗆	Z
fic Data											
Roadway #1:		30	Roadway #2:		mington Id	Roadway #3:			Roadway #4:		
Width(ft): Direction:	EB	WB	Width(ft): Direction:	SB	NB	Width(ft): Direction:			Width(ft): Direction:		ı
Speed Limit:	55	55	Speed Limit:			Speed Limit:			peed Limit:		
Observed Spd:			Observed Spd:			Observed Spd:			Observed Spd:		
Auto:	140	174	Auto:	32	33	Auto:			Auto:		1
Med Tk:	11	7	Med Tk:	1	0	Med Tk:			Med Tk:		
Hvy Tk:	19	27	Hvy Tk:	2	3	Hvy Tk:			Hvy Tk:		
Bus:	0	0	Bus:	0	1	Bus:			Bus:		
MCycle:	1	0	MCycle:	0	0	MCycle:			MCycle:		
<b></b>	at 11:4	13 and 1	1:44								

M2.06 Site Photos: North:



East:



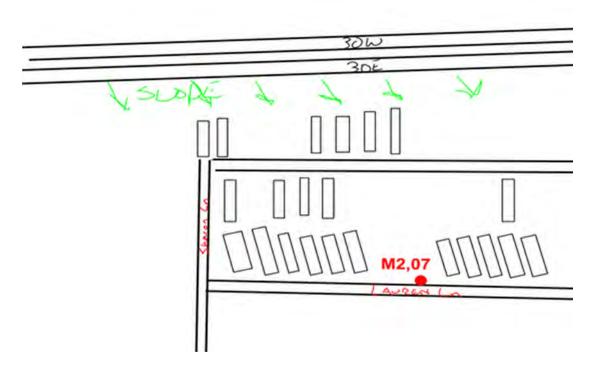
South:



West:



	Date:							nne emir	Chicago and Chicag	Tempera Cloud o Wind speed ( Wind dire	evr: 🗆 No	ne □ Partly ☑	Cloudy	<del>-</del> -
⁄leas	uremei	nt Da	ata_											
: <b>N</b>	<b>VI2.07</b> S	Start:	17:15	Stop:	17:35	☑ 20 min	SLM #:	4228	Leq(dB):	56. 2	L <sub>min</sub> (dB):	47.5	L <sub>max</sub> (dB):	67.2
	GPS (°N,	I,ºW):		,		□ 30 min □ 24 hr	Stor #:	155	Calib(dB):	93.83 /	93.86	Meas.	Ht(ft):	5
	Loca	ation:	39.98439935, - 75.89456928333334 400 Lauren Lane Parkeburg, PA 19365			Relocate  ☐ Yes ☑				Pre-	Post-	_		
		<u>-</u>				Site Photogra  ☑ Yes □	-				Weighting	· VA DB	□c□	Z
	Type(use, N	NAC):	Residentia	מ) וג		₩ 162 □	INO							
	Type(use, N	NAC):	Residentia			M fes L	NO							
affic R		, #1:		30	-	dway #2:	NO		Roadway #3: Width(ft):			Roadway #4: Width(ft):		
iffic R	Data Roadway	<b>, #1:</b> ft):			Wi	dway #2:			_	:		_		<u> </u>
affic R	Data Roadway Width(f	#1: ft): ion:		30	Wi Di	.dway #2:dth(ft):	NO		Width(ft)		<u> </u>	Width(ft):		
nffic R Sp	Data  Roadway  Width(f	ft): ion: mit:	EB	30 WB	Wi Di Spee	dway #2:dth(ft):rection:	NO		Width(ft)			Width(ft): Direction:		
ffic R	Roadway Width(f Directs peed Lin	ft): ion: mit:	EB	30 WB	Wi Di Spee	dway #2:dth(ft):rection:			Width(ft): Direction: Speed Limit:			Width(ft): Direction: Speed Limit: Observed		
r R Sp	Roadway Width(f Directions peed Linguistry served S	ft): ft): ion: mit: Spd:	EB 55	30 WB 55	Wi Di Spee	dway #2: dth(ft): rection: d Limit: ved Spd:			Width(ft) Direction Speed Limit Observed Spd			Width(ft): Direction: Speed Limit: Observed Spd:		
affic R Sp	Roadway Width(f Directs peed Lir served S	ft): ion: mit: Spd:	EB 55	30 WB 55 307	Wi Di Spee	dway #2:dth(ft):rection:dLimit:rved Spd:Auto:			Width(ft) Direction Speed Limit Observed Spd			Width(ft): Direction: Speed Limit: Observed Spd: Auto:		
nffic R Sp	Roadway Width(f Direction	ft): ft): ion: mit: Spd: auto:	EB 55 210 4	300 WB 55 307 21	Wi Di Spee	ddway #2: dth(ft): rection: d Limit: ved Spd: Auto: Med Tk:			Width(ft) Direction Speed Limit Observed Spd Auto Med Tk			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		





M2.07 Site Photos: North:







South:



West:



Date: Ag	oril 25, 2022	2 10:43 AN	<u>M</u>		1	1		Temperature	( <b>F)</b> : 55			_
<b>Project:</b> SF	t-0030 / Sed	ction AIR -				$\triangle$		Cloud cvr:	□ Nass	- D41	7 (	
	atesville, P	'A						Cloud CVI.	□ None	e 🗆 Partly 🛭	Z Cloudy	
Setup#: 5				1	Sai	nne	off	Vind speed (mph	۱. ۵			
Site ID(s):	2.08			100				vina speea (mpn	): 3			-
				•	-IE	mii	iy	Wind direction	n: South			_
Measurement D	ata_											
ID: <b>M2.08</b> Start:	11:41	Stop:	<sup>00:01</sup> ☑ 20 mi	n	SLM #:	4228	L <sub>eq</sub> (dB):	64. I	umin(dB):	46.2	$L_{\text{max}}(dB)$ :	84.5
		_	□ 30 mi	n	# .			2				
GPS (°N,°W):	39.984624 75.892223	153333334 <i>,</i> 336666667	- □ 24 hr	S	Stor #:	148	Calib(dB):	93.83 /	93.83	Meas	. Ht(ft):	5
				cated	•			Pre- P	ost-			
Location:		/ilmington f g, PA 19365	Rd ☑ Yes	□ No								
		,,	Site Phot	ographed				We	eighting:	√ A □ F	в 🗆 с 🗆	7
Type(use, NAC):	Residentia	al (B)	✓ Yes	□ No								_
Traffic Data												
Roadway #1:	3	30	Roadway #2:	Old W	ilming	ton	Roadway #3:		]	Roadway #4	:	
Width(ft):			Width(ft):				Width(ft):			Width(ft)		
Direction:	EB	WB	Direction:	SB	N	IB	Direction:			Direction		
Speed Limit:	55	55	Speed Limit:				Speed Limit:		S <sub>]</sub>	peed Limit	:	
Observed Spd:			Observed Spd:				Observed Spd:			Observe	d	
			_							Spd	:	
Auto:	140	174	Auto:	32	3	33	Auto:	1		Auto	:	Ī
Med Tk:	11	7	Med Tk:	1	'	0	Med Tk:			Med Tk	:	
Hvy Tk:	19	27	Hvy Tk:	2		3	Hvy Tk:			Hvy Tk	:	
Bus:	0	0	Bus:	0		1	Bus:			Bus	:	
MCycle:	1	0	MCycle:			0	MCycle:	-		MCycle	:	
	-	•	_									•

Notes: 1143 flyover.1144 flyover. Occasional barking. Relocated to front of property due to dogs. Low flying aircrafts. Some construction noise from south. 1152 flyover. Bird noises. 1159 prop plane quiet flyover. Confirmed construction activity from southeast of site.



M2.08 Site Photos: North:



East:



South:



West:



Date: Ap   Project: SR   Co				inne emir		Cloud c		ne □ Partly ☑	l Cloudy	-		
Measurement Da	<u>ata</u>											
D: <b>M3.01</b> Start:	13:53	Stop:		20 min	#:	4228	Leq(dB):	63	$L_{min}(dB)$ :	49.8	$L_{max}(dB)$ :	72
GPS (°N,°W):		- 948333334, 576666667	- [	30 min 24 hr	Stor #:	150	Calib(dB):	93.83 /	93.86	Meas.	Ht(ft):	5
Location: 790 Old Wilmington Rd. Coatesville, PA 19320		24	Reloca			<del></del>	Pre-	Post-	_			
Location:				☐ Yes	M INO							
Location: Type(use, NAC):		e, PA 19320		<ul><li>Yes</li><li>Site Photo</li><li>✓ Yes</li></ul>	graphed				Weighting:	· 🗹 A 🗆 B	□ c □	Z
Type(use, NAC):	Coatesvill	e, PA 19320		Site Photo	graphed				Weighting	: ☑а□в	□ c □	Z
Type(use, NAC):	Coatesvill Residentia	e, PA 19320		Site Photo	graphed	gton	Roadway #3:	S Bor	Weighting:	E ☑ A □ B		Z
Type(use, NAC): raffic Data  Roadway #1: Width(ft):	Coatesvill  Residentia	e, PA 19320 al (B)	Roadw Widt	Site Photo  Yes  Yay #2: h(ft):	graphed  No Old Wilmin	gton	Width(ft):			Roadway #4:	: :	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:	Residentia	e, PA 19320 al (B) 30	Roadw. Widtl	Site Photo  Yes  Yes  Yes  Augusta 42:  A(ft):  Ction:	graphed	gton	Width(ft): Direction:	Both	isall Rd	Roadway #4: Width(ft): Direction:	: :	Z
Type(use, NAC): raffic Data Roadway #1: Width(ft):	Coatesvill  Residentia	e, PA 19320 al (B)	Roadw Widt	Site Photo  Yes  Yes  Yes  Augusta 42:  A(ft):  Ction:	graphed  No Old Wilmin	gton	Width(ft):		isall Rd	Roadway #4:	: :	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:	Residentia	e, PA 19320 al (B) 30	Roadw. Widtl	Site Photo  Yes  Yes  Ay #2: h(ft): ction: Limit:	graphed  No Old Wilmin	gton	Width(ft): Direction:	Both	isall Rd	Roadway #4: Width(ft): Direction:	: : :	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction: Speed Limit:	Residentia	e, PA 19320 al (B) 30	Roadw Widt Dire Speed	Site Photo  Yes  Yes  Ay #2: h(ft): ction: Limit:	graphed  No Old Wilmin	gton	Width(ft): Direction: Speed Limit:	Both	isall Rd	Roadway #4: Width(ft): Direction: Speed Limit: Observed	:	Z
Type(use, NAC):  raffic Data  Roadway #1:     Width(ft):     Direction:     Speed Limit:     Observed Spd:	Residentia  EB  55	al (B)  30  WB 55	Roadw Widt Dire Speed:	Site Photo  Yes  Yay #2: h(ft): ction: Limit: d Spd:	graphed  No  Old Wilmin	gton	Width(ft): Direction: Speed Limit: Observed Spd:	Both 35	isall Rd	Roadway #4: Width(ft): Direction: Speed Limit: Observed	: : : : :	Z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	Coatesvill Residentia EB 55	BO WB 55 208	Roadwa Widt Dire Speed: Observed	Site Photo  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye	graphed  No  Old Wilmin  Both  59	gton	Width(ft): Direction: Speed Limit: Observed Spd: Auto:	8oth 35 25	isall Rd	Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	:	Z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:   Med Tk:	EB 55	30 WB 55 208 12	Roadwa Widt Dire Speed: Observed	Site Photo  Yes  Yay #2: h(ft): ction: Limit: d Spd:  Auto:	graphed  ☐ No  Old Wilmin  Both  59  0	gton	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	Both 35 25	isall Rd	Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	: : : : : : : : : : : : : : : : : : :	Z



M3.01 Site Photos: North:







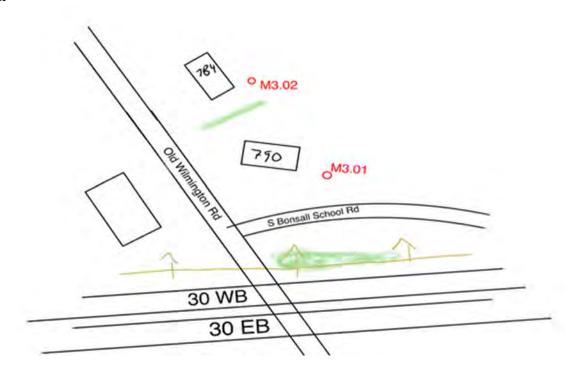
South:



West:



Project Setup# Site ID(s)		2 12:50 PN ction AIR - PA		<b>Eannett Fleming</b>					Temperature (F): 57  Cloud cvr: □ None □ Partly ☑ Cloudy  Wind speed (mph): 2  Wind direction: North				
M3.02	ent Da	13:53	Stop:		1 20 min	#:	4229	L <sub>eq</sub> (dB):	57. 3	L <sub>min</sub> (dB):	45.8	L <sub>max</sub> (dB):	64.
GPS (°N	۷, <sup>0</sup> W):		276666667, 586666667		30 min 24 hr	Stor #:	167	Calib(dB):	93.86 /	93.86	Mea	s. Ht(ft):	5
Loca	ation:	784 Old W	/ilmington	320	Reloca	ated		<u> </u>	Pre-	Post-	-		
	Rd.Coatesville, PA 19320  Type(use, NAC): Residential (B)			Site Photographed  ☑ Yes □ No				Weighting		g: ☑A□B□C□Z			
Type(use, I	NAC):	Residentia	an (D)		<u>™</u> 162	_ NO							
	NAC):	Residentia			w res	_ NO							
	_		30	Roadwa		Old Wilmin	gton	Roadway #3:	S Bor	isall Rd	Roadway #	4:	
fic Data	<b>r #1:</b> (ft):			Widtl		Old Wilmin	gton	Roadway #3: Width(ft): Direction:		isall Rd	Roadway # Width(ft	):	
ffic Data  Roadway  Width(	/ #1: (ft): tion:		30	Widtl	ay #2: h(ft): ction:	Old Wilmin Rd	gton	Width(ft):	Both		Width(ft	): 	
Roadway Width(	#1: (ft): :ion: imit:	EB	30 WB	Width Direc	ay #2: h(ft): ction: Limit:	Old Wilmin Rd	gton	Width(ft): Direction:	Both		Width(ft Direction	): n: t:	
Roadway Width( Direct Speed Li	#1: (ft): :ion: imit:	EB	30 WB	Width Direc Speed I	ay #2: h(ft): ction: Limit:	Old Wilmin Rd	gton	Width(ft): Direction: Speed Limit:	Both		Width(ft Direction Speed Limi Observ	): n: t: ed	
ffic Data  Roadway  Width( Direct  Speed Lin  Observed	ft): ion: mit: Spd:	EB 55	30 WB 55	Width Direc Speed I Observed	ay #2: h(ft): ction: Limit: d Spd:	Old Wilmin Rd Both	gton	Width(ft): Direction: Speed Limit: Observed Spd:	Both		Width(ft Direction Speed Limi Observ Sp	):	
ffic Data  Roadway  Width( Direct  Speed Lin  Observed  A  Med	ft): cion: imit: Spd:	EB 55	30 WB 55 208	Width Direc Speed I Observed	ay #2: n(ft): ction: Limit: d Spd: Auto:	Old Wilmin Rd  Both  59	gton	Width(ft): Direction: Speed Limit: Observed Spd: Auto:	Both 25 1		Width(ft Direction Speed Limi Observ Spe Aut	):	
Fic Data  Roadway  Width( Direct  Speed Lin  Observed  A  Med  Hvy	/ #1:  (ft): cion: lmit: Spd: Auto:	EB 55 171 7	30 WB 55 208 12	Width Direc Speed I Observed	ay #2: n(ft): ction: Limit: d Spd: Auto:	Old Wilmin Rd  Both  59	gton	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	25 1		Width(ft Direction Speed Limi Observ Spe Aut Med T	):	



M3.02 Site Photos: North:







South:



West:



Project:         SR           Co         Setup#:         10	ril 25, 202: -0030 / Sec atesville, P	ction AIR -				<b>E</b> Gannett  Fleming			Temperature (F): 63  Cloud cvr: □ None □ Partly ☑ Cloudy  Wind speed (mph): 3  Wind direction: Southeast			
Measurement Da	<u>ata</u>											
ID: M3.03 Start:	15:52	Stop:	16:12	☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	68. 4	$L_{\text{min}}(dB)$ :	52.6	$L_{max}(dB)$ :	79.3
GPS (°N,°W):	39.986396 75.891486	•		☐ 30 min ☐ 24 hr	Stor #:	153	Calib(dB):	93.83 /	93.86	Meas.	Ht(ft):	5
	75.89148698333334  Location: 455 S. Bonsall Rd Coatesville, PA 19320			Reloca	ted			Pre-	Post-	_		
Location:				□ Yes 🛭								
Location: Type(use, NAC):		e, PA 19320		☐ Yes ☐ Site Photog ☑ Yes ☐	graphed				Weighting:	☑ A □ B	□ c □	Z
	Coatesville	e, PA 19320		Site Photog	graphed				Weighting:	☑ A □ B	□ c □	Z
Type(use, NAC):	Coatesville Residentia	e, PA 19320		Site Photog	graphed	I	Roadway #3:		Weighting:	☑ A □ B		Z
Type(use, NAC):  Traffic Data  Roadway #1:  Width(ft):	Coatesville Residentia	e, PA 19320 al (B)	Road Wid	Site Photog  Yes [  dway #2:  dth(ft):	graphed No	<u> </u>	Width(ft):		Weighting:	Roadway #4: Width(ft):	:	Z
Type(use, NAC): raffic Data Roadway #1:	Coatesville Residentia	e, PA 19320	Road Wid	Site Photog  Ves [	graphed No	<u> </u>	_		Weighting:	Roadway #4:	:	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft):	Coatesville Residentia	e, PA 19320 al (B)	Road Wid Dir	Site Photog  Yes [  dway #2:  dth(ft):	graphed No S Bonse	<u> </u>	Width(ft):			Roadway #4: Width(ft):	:	Z
Type(use, NAC):  Traffic Data  Roadway #1:  Width(ft): Direction:	Residentia  BEB	e, PA 19320	Road Wid Dir Speed	Site Photog  Yes [  dway #2: dth(ft): ecction:	sraphed No  S Bonsel	<u> </u>	Width(ft): Direction:			Roadway #4: Width(ft): Direction:		Z
Type(use, NAC):  Traffic Data  Roadway #1:  Width(ft): Direction: Speed Limit:	Residentia  BEB	e, PA 19320	Road Wid Dir Speed	Site Photog  Yes [  dway #2: dth(ft): rection: d Limit:	S Bonsel	<u> </u>	Width(ft): Direction: Speed Limit:			Roadway #4: Width(ft): Direction: Speed Limit: Observed		Z
Type(use, NAC):  Traffic Data  Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	Residentia  EB  55	BO WB 55	Road Wid Dir Speed Observ	Site Photog  Yes [  dway #2: chth(ft): cection: d Limit: red Spd:	sraphed No  S Bonsel  Both 40  35	<u> </u>	Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4: Width(ft): Direction: Speed Limit: Observed		Z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	Residentia  EB  55	BO WB 55	Road Wid Dir Speed Observ	Site Photog  Yes [  dway #2: dth(ft): cection: d Limit: red Spd: Auto:	S Bonsel  Both 40 35	<u> </u>	Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:		Z
Type(use, NAC):  Traffic Data  Roadway #1:     Width(ft):     Direction:     Speed Limit:     Observed Spd:  Auto:     Med Tk:	EB 55 193 7	BO WB 55 297 17	Road Wid Dir Speed Observ	Site Photog  Yes [  dway #2: chth(ft): cection: d Limit: ved Spd: Auto:  Med Tk:	S Bonsel  Both 40 35 46 3	<u> </u>	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:		z



M3.03 Site Photos: North:



East:



South:



West:



		22 2:51 PM			1		Tempera	:ure (F): 63			_
=	•	ection AIR -					Cloud	vr: □ Non	ne □ Partly ☑	Cloudy	
	oatesville, I	PA							ie 🗀 Tartiy 🗷	Cloudy	
Setup#: 10	13.04			6a	INNE	ett v	Wind speed (mph): 3				
1010 15 (0)1	15.04		FIE	2mil	ng					=	
							Wind dire	ection: North			=
Measurement D	<u>ata</u>										
ID: <b>M3.04</b> Start:	15:52	Stop:	<sup>15:12</sup> <b>☑</b> 20 min	SLM #:	4229	L <sub>eq</sub> (dB):	57 <b>.</b> 8	$L_{min}(dB)$ :	50.9 I	umax(dB):	65.5
		_	□ 30 min	#•		<del></del> -	0	_			-
GPS (°N,°W):		7983333334	,- 🗆 24 hr	Stor #:		Calib(dB):	93.86 /	93.86	Meas.	Ht(ft):	5
	/5.890/0	953333334	Reloca			<del></del> -	Pre-	Post-	_		
Location:		y Green Dr.	☐ Yes	☑ No							
	Coatesvii	le, PA 19320	Site Photo	graphed				Weighting:	☑ A □ B	ПСП	7
Type(use, NAC):	Residenti	ial (B)	✓ Yes	□ No							_
roffic Data			<u></u>								
raffic Data											
Roadway #1:		30	Roadway #2:	S Bonsa	all	Roadway #3:			Roadway #4:		
Width(ft):			Width(ft):			Width(ft):		1	Width(ft):		
Direction:	EB	WB	Direction:	Both		Direction:			Direction:		
Speed Limit:	55	55	Speed Limit:			Speed Limit:	·	S	Speed Limit:		
Observed Spd:			Observed Spd:			Observed Spd:			Observed		
								<u> </u>	Spd:		
Auto:	193	297	Auto:	46		Auto:			Auto:		
Med Tk:	7	17	Med Tk:	3		Med Tk:			Med Tk:		
Hvy Tk:	8	23	Hvy Tk:	0		Hvy Tk:			Hvy Tk:		
Bus:	0	0	Bus:	1		Bus:			Bus:	-	
MCycle:	1	0	MCycle:	1		MCycle:		<del>                                     </del>	MCycle:		
								<u> </u>			
Notes:											
Site Sketch:						- \ \					





M3.04 Site Photos: North:



East:



South:



West:



Project: SR-	ril 25, 2022 -0030 / Sec atesville, P.	tion AIR -			inne emil		Temperature (F): 63  Cloud cvr: □ None □ Partly ☑ Cloudy  Wind speed (mph): 4  Wind direction: Southeast				
							willa alle		east		
Measurement Da	<u>ata</u>										
ID: M3.05 Start:	15:18	Stop:	<sup>15:38</sup> ☑ 20 m	in SLM	4228	L <sub>eq</sub> (dB):	64. 1	$L_{min}(dB)$ :	55.3 L <sub>max</sub>	(dB):	71.9
		•	□ 30 m	in			<u> </u>	_		-	
GPS (°N,°W):	39.986791 75.888365	88333333, 46666667	- □ 24 hr	Stor:	152	Calib(dB):	93.83 /	93.86	Meas. Ht	(ft):	5
-	73.000303	40000007	Relo	ocated		<u> </u>	Pre-	Post-	_	_	
Location:	411 S. Bon Coatesville		☐ Yes	s ☑ No							
					Weighting: ☑ A ☐ B ☐ C ☐						
Type(use, NAC):	Residentia	-		tographed S 🔲 NO				Weighting:	☑ A □ B □	C 🗆 Z	<u>Z</u>
Type(use, NAC): _  Traffic Data		-		• .				Weighting:		C 🗆 Z	<u>7</u>
-	Residentia	-		s □ No	all	Roadway #3:			☑ A □ B □  Roadway #4:	C 🗆 Z	Z
<pre>Fraffic Data Roadway #1: Width(ft):</pre>	Residentia	O	Roadway #2: Width(ft):	S D No	all	Width(ft):			Roadway #4: _Width(ft): _	C 🗆 Z	
raffic Data  Roadway #1:	Residentia	l (B)	☑ Ye	S D No	all	_			Roadway #4:	C 🗆 z	
<pre>Fraffic Data Roadway #1: Width(ft):</pre>	Residentia	O	Roadway #2: Width(ft):	S No  S Bons	all	Width(ft):			Roadway #4: _Width(ft): _	C 🗆 Z	
<pre>Roadway #1:     Width(ft):     Direction:</pre>	Residentia 3	0 WB	Roadway #2: Width(ft): Direction:	S NO  S Bons  Both  40	lle	Width(ft): Direction:			Roadway #4:	C 🗆 Z	
<pre>Roadway #1:     Width(ft):     Direction:     Speed Limit:</pre>	Residentia 3	0 WB	Roadway #2: Width(ft): Direction: Speed Limit:	S D No  S Bons  Both  40  40	all	Width(ft): Direction: Speed Limit:			Roadway #4:	C 🗆 Z	
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	Residentia  3  EB  55	0 WB 55	Roadway #2: Width(ft): Direction: Speed Limit: Observed Spd:	S No  S Bons:  Both 40 40 21	lle	Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4: Width(ft): _ Direction: _ Speed Limit: _ Observed Spd: _	C 🗆 Z	
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	Residentia  3  EB  55	0 WB 55	Roadway #2: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	S No  S Bons  Both  40  21  2	all	Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway #4:Width(ft): _Direction:	C 🗆 Z	
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	8	0 WB 55	Roadway #2: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	S No  S Bons:  Both  40  40  21  2  0	all	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4: _ Width(ft): _ Direction: _ Speed Limit: _ Observed _ Spd: _ Auto: Med Tk: _	C 🗆 Z	



M3.05 Site Photos: North:



East:



South:



West:



Date			2 2:17 PM						Temperat	:ure (F): 63			_
Project			ction AIR -						Cloud o	vr: 🗆 Nor	ne 🗆 Partly 🛭	7 Cloudy	
Setup#		atesville, f	PA					4.2		L 1101	inc 🗀 Turtiy 🖪	1 Cloudy	
Site ID(s)		3.06					INNE		Wind speed (	<b>mph):</b> 3			_
						FIE	?mi	ng	Wind dire	ection: North	anast.		
									willa alle	- NOITI	least		-
	D	_ 4 _											
<u>Measureme</u>													
D: <b>M3.06</b>	Start:	15:18	Stop:		<b>☑</b> 20 min	SLM #:	4229	L <sub>eq</sub> (dB):	55. 3	$L_{\min}(dB)$ :	50.2	$L_{max}(dB)$ :	60.4
			_		☐ 30 min		-			_		(5. )	
GPS ( <sup>o</sup> N	l, <sup>o</sup> W):		356666667 <i>,</i> 696666666	- [	□ 24 hr	Stor #:	169	Calib(dB):	93.86 /	93.86	Meas	. Ht(ft):	5
					Relocate	ed			Pre-	Post-	_		
Loca	ation:		y Green Dr. le, PA 19320		□ Yes ☑	l No							
					Site Photogr	aphed				Weighting	• ☑ A □ E	в 🗆 с 🗆	Z
Type(use,	NAC):	Residenti	al (B)		✓ Yes □	l No							
affic Data													
<b>Roadway</b> Width(			30	_	<b>way #2:</b> :h(ft):	S Bonsa	all	Roadway #3: Width(ft):			Roadway #4 Width(ft)		
Direct		EB	WB	-	ection:	Both		Direction		T	Direction		
Speed Li	mit:	55	55	Speed	Limit: -			Speed Limit:		+	Speed Limit		
Observed				Observe				Observed Spd			Observe		<u> </u>
02501704	opu			_	_			opported Spa			Spd		
A	uto:	172	284		Auto:	21		Auto	:	1	Auto	:	I
	Tk:	7	10	- N	Med Tk:	2		Med Tk		<del>                                     </del>	Med Tk		
	Tk:	12	23	_	Hvy Tk:	0		Hvy Tk		<u> </u>	Hvy Tk		
_	Bus:	0	0	-	Bus:	0		Bus		<u> </u>	Bus		
	cle:	1	0	_	_	0							
МСУ	cie.		0	- -	MCycle:	U		MCycle	·		MCycle	·	
<del>.</del>													
Notes:													
Site Sket	ch:					,	,						
						//	/						
			Valle	ey Green	Dr								
					/	Jan L		00					
					1	205 0	M3.0	J6					
								0.0					
								20					
					CONTRACTOR	Charmen	-						
					Course of the								
					23				8				
									92				
							Γ	411	25				
					26		L		£.	Want .			
					<b>*</b>	M	3.05		7.5.4	STATE OF			
						s	Bonsall	Rd I					
	-												
						30 WE	3						

M3.06 Site Photos: North:







South:



West:



Setup#: 8	R-0030 / Se patesville, F 3.07	ction AIR - PA				(A) nne	The same of the sa	Cloud c		e □ Partly 🛭	2 Cloudy	_
					rie	mir	iy	Wind dire	ection: East			_
Measurement D	<u>ata</u>											
D: <b>M3.07</b> Start:	14:41	Stop:		☑ 20 min □ 30 min	SLM #:	4228	L <sub>eq</sub> (dB):	63. 8	Lmin(dB):	51.5	$L_{max}(dB)$ :	73.
GPS (°N,°W):	GPS (°N,°W): 39.98732411666666, - 75.8865155			□ 24 hr	Stor #:	151	Calib(dB):	93.83 /	93.86	Meas	. Ht(ft):	5
	75.8865155  Location: 405 S. Bonsall RD.				d		·	Pre-	Post-	=		-
Location:	Location: 405 S. Bonsall RD. Coatesville, PA 19320				No							
Location: Type(use, NAC):		e, PA 19320		☐ Yes ☑ Site Photogra ☑ Yes ☐	phed				Weighting:	☑ A □ E	в 🗆 С 🗆	Z
	Coatesvill	e, PA 19320		Site Photogra	phed				Weighting:	☑ A □ E	в □ с □	Z
Type(use, NAC):	Coatesvill Residenti	e, PA 19320		Site Photogra	phed		Roadway #3:			☑ A □ E		Z
Type(use, NAC):	Coatesvill Residenti	e, PA 19320 al (B)	Roadv Widt	Site Photogra  Yes   way #2:  th(ft):	phed		Width(ft):			Roadway #4	: :	Z
Type(use, NAC): affic Data Roadway #1:	Coatesvill Residenti	e, PA 19320 al (B)	Roadv Widt	Site Photogra ☑ Yes □ way #2:	phed		_			Roadway #4	: :	z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft):	Residenti  EB	e, PA 19320 al (B)	Roadv Widt Dire	Site Photogra  Yes   way #2:  th(ft):	phed		Width(ft):			Roadway #4	:	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:	Residenti  EB 55	e, PA 19320 al (B) 30 WB	Roadv Widt Dire	Site Photogra  Yes   way #2: th(ft): ection: Limit:	phed		Width(ft): Direction:			Roadway #4 Width(ft) Direction	: : : :	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:  Speed Limit:	EB 55	e, PA 19320 al (B) 30 WB	Roadv Widt Dire Speed	Site Photogra  Yes   way #2: th(ft): ection: Limit:	phed		Width(ft): Direction: Speed Limit:			Roadway #4 Width(ft) Direction Speed Limit Observe	:d	Z
Type(use, NAC):  Taffic Data  Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	EB 55	al (B)  30  WB  55	Roadv Widt Dire Speed Observe	Site Photogra  Yes   way #2: th(ft): ection: Limit: ed Spd:	phed		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4 Width(ft) Direction Speed Limit Observe	:d	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction: Speed Limit: Observed Spd:  Auto:	EB 55	30 WB 55 264	Roadw Widt Dire Speed Observe	Site Photogra  Yes   way #2: th(ft): ection: Limit: ed Spd:  Auto:	phed		Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway #4 Width(ft) Direction Speed Limit Observe Spd Auto	:d :	Z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:   Med Tk:	EB 55 170 7 12	30 WB 55 264 11	Roadw Widt Dire Speed Observe	Site Photogra  Yes   way #2: th(ft): ection: Limit: ed Spd:  Auto:  Med Tk:	phed		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4 Width(ft) Direction Speed Limit Observe Spd Auto Med Tk	:d :	Z

Site Sketch: N/A



M3.07 Site Photos:







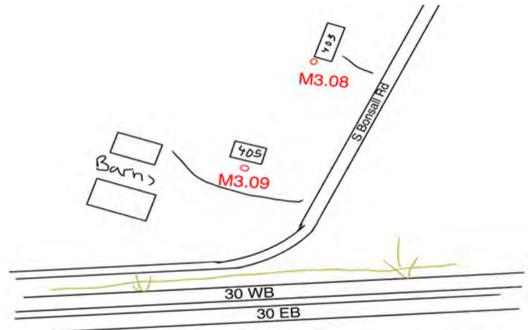
South:



West:



		22 1:39 PM				*		Temperat	:ure (F): 63			_
	oatesville,	ection AIR - PA						Cloud	vr: □ Nor	ne 🗆 Partly 🗹	Cloudy	
Setup#: 8 Site ID(s): M	3.08					nne	The Control of the Co	Wind speed (	<b>mph):</b> 6			
	3.00				Fle	mi	ng	Wind dire	ection: North	east		_
												_
Measurement D	<u>ata</u>											
D: <b>M3.08</b> Start:	14:41	Stop:		20 min	SLM #:	4229	L <sub>eq</sub> (dB):	61. 5	$L_{min}(dB)$ :	51.9	$L_{max}(dB)$ :	69.1
GPS (°N,°W):		<u> </u>		30 min 24 hr	Stor #:	168	Calib(dB):	93.86 /	93.86	Meas.	Ht(ft):	5
				Relocate			<del></del>	Pre-	Post-	_		-
Location:	403 S. Bo Coatesvil	nsall Rd. lle, PA 19320		□ Yes ☑	l No							
Type(use, NAC):	Resident	ial (B)		Site Photogr  Yes	-				Weighting	· ☑A□B	□ C □	Z
raffic Data												
Roadway #1:		30	Roadwa		S Bonsa	II	Roadway #3:			Roadway #4:		
Width(ft): Direction:	EB	WB	Width Direc	· · · —	Both		Width(ft): Direction:		<del></del>	Width(ft)		
Speed Limit:	55	55	Speed L		ВОШ		Speed Limit:		<del>                                     </del>	Speed Limit:		
Observed Spd:		- 33	Observed	_			Observed Spd:		,	Observed		
Observed Spa.			. Observed				observed spa-	· 		Spd		
Auto:	170	264		Auto:	12		Auto			Auto	1	
Med Tk:	7	11	Me	d Tk:	1		Med Tk	:		Med Tk	:	
Hvy Tk:	12	30	Hv	y Tk:	0		Hvy Tk	:		Hvy Tk		
Bus:	2	1	-	Bus:	1		Bus	:		Bus		
MCycle:	0	0	MC;	ycle:	0		MCycle:	:		MCycle	:	
Notes:												
Site Sketch:												
							~		//			
							/2/		//			



M3.08 Site Photos: North:







South:

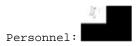


West:



	4.01					nne mir		Wind speed ( Wind dire				<u>-</u>
leasurement D : M4.01 Start:	12:17	Stop:		20 min 30 min	SLM #:	4229	L <sub>eq</sub> (dB):	70	L <sub>min</sub> (dB):	49.7	$L_{\text{max}}(dB)$ :	85
GPS (°N,°W):	GPS (°N,°W): 39.9855972, - 75.89215088333333			24 hr	Stor #:	166	Calib(dB):	93.86 /	93.86	Meas.	Ht(ft):	5
Location:				Relocate  ☐ Yes ☑	d			Pre-	Post-	-		
	Coatesvill	e, PA 19320	,									
Type(use, NAC):	Residentia			Site Photogra  ☑ Yes □	•				Weighting:	☑ A □ B	- C -	Z
Type(use, NAC):				_	•				Weighting:	☑ A □ B	С C	Z
Type(use, NAC):	Residentia			✓ Yes □	•		Roadway #3:	ı		☑ A □ B		Z
Type(use, NAC):  affic Data  Roadway #1:  Width(ft):	Residentia	al (B)	Roadway Width	▼ Yes □  y #2: (ft):	•		Width(ft):			Roadway #4 Width(ft)	: 	Z
Type(use, NAC): affic Data Roadway #1:	Residentia	al (B)	Roadway	▼ Yes □  y #2: (ft):	•					M A □ B	: 	Z
Type(use, NAC):  affic Data  Roadway #1:  Width(ft):	Residentia	al (B)	Roadway Width	▼ Yes □  y #2: (ft): tion:	•		Width(ft):			Roadway #4 Width(ft)	: : :	Z
Type(use, NAC):  affic Data  Roadway #1:  Width(ft): Direction:	Residentia	al (B) 30 WB	Roadway Width Direct	▼ Yes □  y #2:(ft): tion: imit:	•		Width(ft): Direction:			Roadway #4 Width(ft) Direction	:	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:  Speed Limit:	Residentia	al (B) 30 WB	Roadway Width Direct Speed L: Observed	▼ Yes □  y #2:(ft): tion: imit:	•		Width(ft): Direction: Speed Limit:			Roadway #4 Width(ft) Direction Speed Limit Observed	: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:	Residentia	30 WB 55	Roadway Width Direct Speed L: Observed	y #2:	•		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4 Width(ft) Direction Speed Limit Observed Spd	:	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	Residentia  EB  55	30 WB 55 184	Roadway Width Direct Speed L: Observed	y #2:(ft):tion:imit:Spd:Auto:	•		Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway #4 Width(ft) Direction Speed Limit Observed Spd Auto	: dd : : :	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:   Med Tk:	EB 55 158 7	30 WB 55 184 13	Roadway Width Direct Speed L: Observed	y #2:(ft):tion: imit: Spd: Auto:	•		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4 Width(ft) Direction Speed Limit Observed Spd Auto Med Tk	:	Z





M4.01 Site Photos: North:



East:



South:



West:



	Project: SR	ril 25, 202 -0030 / Sec atesville, P	ction AIR -	1					Tempera Cloud o		e □ Partly 🛭	Cloudy	-
	Setup#: 6	4.02	^				nne	CONTRACTOR OF THE PARTY OF THE	Wind speed (		,		-
						FIE	mii	iy	Wind dire	ection: South			-
Mea	asurement Da	ata_											
ID:	M4.02 Start:	12:17	Stop:	12:37	☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	58. 4	Lmin(dB):	47.5	$L_{\text{max}}(dB)$ :	72.5
	GPS (°N,°W):	39.984934 75.891404	135, - 1633333332		<ul><li>□ 30 min</li><li>□ 24 hr</li></ul>	Stor #:	149	Calib(dB):	93.83 /	93.83	Meas	. Ht(ft):	5
	Location:	5 Meeting	house Rd.		Relocated  ☑ Yes □				Pre-	Post-			
	Type(use, NAC):	Residentia	e, PA 19320 al (B)		Site Photograp  ✓ Yes   ✓					Weighting:	☑ A □ E	3 □ C □	Z
<u>Traffi</u>	ic Data												
	Roadway #1:		30	Roa	dway #2:			Roadway #3:	·		Roadway #4	:	
	Width(ft):		14/0	-	dth(ft):			Width(ft):			Width(ft)		1
	Direction:	EB	WB	_	rection:			Direction:			Direction		
	Speed Limit:	55	55		d Limit:			Speed Limit:		S	peed Limit		
O]	bserved Spd:			Obser	ved Spd:			Observed Spd:			Observe Spd		
	Auto:	158	184		Auto:			Auto:			Auto	:	I
	Med Tk:	7	13	-	Med Tk:			Med Tk:	:	<del>                                     </del>	Med Tk	:	
	Hvy Tk:	23	46	-	Hvy Tk:			Hvy Tk:	:	<del>                                     </del>	Hvy Tk	:	
	Bus:	0	1	<u>-</u>	Bus:			Bus:	. —	+	Bus	:	
	MCycle:	1	0	-	MCycle:			MCycle:			MCycle	:	
Plac Wilm	ed behind sh	ed to p	rovide	LOS shi	lelding from	chippe	r, hw	f measurement y is predomina Utilize setu	ant nois	se source.	Shielding	from Old	







M4.02 Site Photos: North:



East:



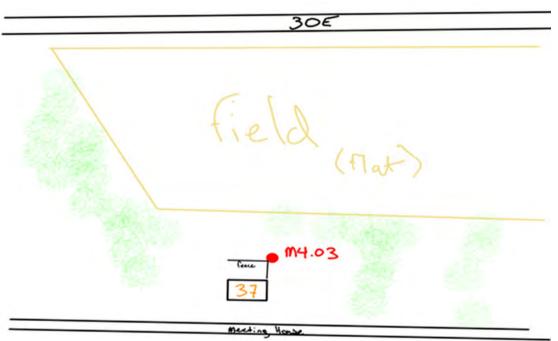
South:



West:



Setup#: <u>Co</u>	R-0030 / Se patesville, F 5 14.03				A nne emin		Cloud o Wind speed ( Wind dire	mph): 2	e □ Partly ☑ (	Cloudy	
leasurement D  : M4.03 Start:	08:20	Stop:	08:40 🖂 20 min	SLM	4228	L <sub>eq</sub> (dB):	57.	L <sub>min</sub> (dB):	47.3 L <sub>m</sub>	max(dB):	69.
			<sup>08:40</sup> ☑ 20 min □ 30 min	#:			3			iax ( ab )	0,7.
GPS (°N,°W):	39.985039 75.889290	931666667, - 09		Stor #:	159	Calib(dB):	93.96 /	93.90	Meas. H	Ht(ft):	5
Location:		nghouse Rd. e, PA 19320	Reloca				Pre-	Post-	-	•	
Type(use, NAC):	Residentia		Site Photo  ☑ Yes					Weighting:	☑ A □ B [	□ c □	Z
ffic Data											
ffic Data  Roadway #1:	:	30	Roadway #2:			Roadway #3:	ı		Roadway #4:		
Roadway #1: Width(ft):			Width(ft):			Width(ft):	:		Width(ft):		
Roadway #1:		30 WB				_	:				
Roadway #1: Width(ft):	EB		Width(ft):			Width(ft):			Width(ft):		
Roadway #1: Width(ft): Direction:	EB 55	WB	Width(ft): Direction:			Width(ft): Direction:			Width(ft): Direction:		
Roadway #1: Width(ft): Direction: Speed Limit:	EB 55	WB	<pre>Width(ft):    Direction: Speed Limit:</pre>			Width(ft): Direction: Speed Limit:			Width(ft): Direction: Speed Limit: Observed		
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	EB 55	WB 55	Width(ft): Direction: Speed Limit: Observed Spd:			Width(ft): Direction: Speed Limit: Observed Spd:			Width(ft): Direction: Speed Limit: Observed Spd:		
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	EB 55	WB 55	Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Width(ft): Direction: Speed Limit: Observed Spd: Auto:			<pre>Width(ft): Direction: Speed Limit: Observed Spd: Auto:</pre>		
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	219 15 24	WB 55 153 14	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		



M4.03 Site Photos: North:







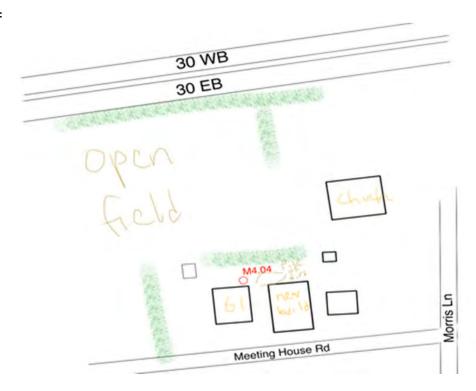
South:



West:



Project: SR-Coo	-0030 / Se atesville, F	2 7:18 AM ction AIR - PA		Gann Flem		Temperat Cloud c Wind speed ( Wind dire	vr:	e □ Partly ☑ Cloud	
Measurement Da	o8:20	Stone	08:40 ☑ 20 min	SLM <b>42</b> 2	29 L <sub>eq</sub> (dB):	56.	L <sub>min</sub> (dB):	48.1 Lmax(dB	: 66.4
ID: W14.04 Start:	08.20	Stop:	<sup>08:40</sup> ☑ 20 min □ 30 min	#:		7		Timax (CD)	
GPS (°N,°W):	39.98524 75.88756	435, - 743333333	☐ 24 hr	Stor 176 #:	Calib(dB):	93.98 /	94.03	Meas. Ht(ft	: 5
Location:		nghouse Rd. e, PA 19320	Relocated  Yes			Pre-	Post-	-	
Type(use, NAC):	Residenti	al (B)	Site Photogra ☑ Yes □				Weighting:	⊠А □ B □ C	□Z
raffic Data									
Roadway #1:	:	30	Roadway #2:		Roadway #3	:		Roadway #4:	
Width(ft):			Width(ft):		Width(ft)			Width(ft):	
Direction:	EB	WB	Direction:		Direction	:		Direction:	
Speed Limit:	55	55	Speed Limit:		Speed Limit	:	5	peed Limit:	
Observed Spd:			Observed Spd:		Observed Spd	:		Observed Spd:	
Auto:	219	153	Auto:		Auto	:	1	Auto:	1
Med Tk:	15	14	Med Tk:		- Med Tk	:		Med Tk:	
Hvy Tk:	24	29	Hvy Tk:		- Hvy Tk	:		Hvy Tk:	
Bus:	0	1	Bus:		Bus	:		Bus:	
MCycle:	0	0	MCycle:		_ MCycle	:		MCycle:	
Notes: Some cor	nstruct	ion ham	—— mering	l	_				



M4.04 Site Photos: North:







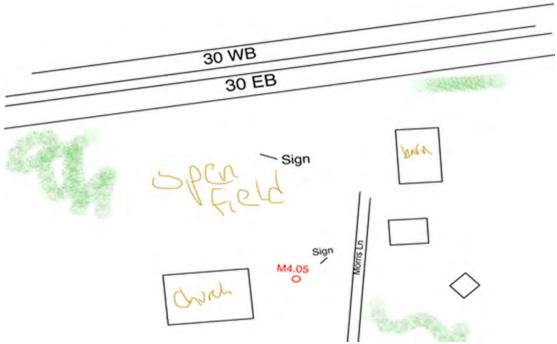
South:



West:



Project: SR-	ril 26, 2022 -0030 / Sec atesville, P							Temperat	ure (F): 54 vr:	ne □ Partly ☑	Cloudy	_
Setup#: 17 Site ID(s): M4	1.05					nne		Wind speed (	mph): 2			_
					FIE	mii	iy	Wind dire	ction: North			=
Measurement Da	o9:00	Stop:	09:20	☑ 20 min	SLM	4229	L <sub>eq</sub> (dB):	62.	Lmin(dB):	48.9	L <sub>max</sub> (dB):	72.4
GPS (°N,°W):	39.985773 75.886526	- 32, - 523333334		☐ 30 min ☐ 24 hr	#: Stor #:	177	Calib(dB):	93.98 /	94.03	Meas.	Ht(ft):	5
Location:		Ln Coatesvi	lle, PA	Relocated  Yes				Pre-	Post-	_		
Type(use, NAC):	Church D			Site Photogra  ☑ Yes □					Weighting:	<sup>E</sup> ☑A□B	□ C □	Z
affic Data												
<pre>Roadway #1: Width(ft):</pre>		30		dway #2: dth(ft):			Roadway #3: Width(ft):			Roadway #4 Width(ft)		
Direction:	EB	WB	Di	rection:			Direction:	:		Direction	:	
Speed Limit:	55	55	Spee	d Limit:			Speed Limit:	:	5	Speed Limit	:	
Observed Spd:			Obser	ved Spd:			Observed Spd:	:		Observe Spd		
Auto:	164	154		Auto:			Auto:	:		Auto	:	
Med Tk:	17	13	•	Med Tk:			Med Tk:	:		Med Tk	:	
Hvy Tk:	30	31	•	Hvy Tk:			Hvy Tk:	:		Hvy Tk	:	
Bus:	0	1	•	Bus:			Bus:	:		Bus	:	
MCycle:	0	0		MCycle:			MCycle:	:		MCycle	:	
Notes:												
Site Sketch:												



M4.05 Site Photos: North:







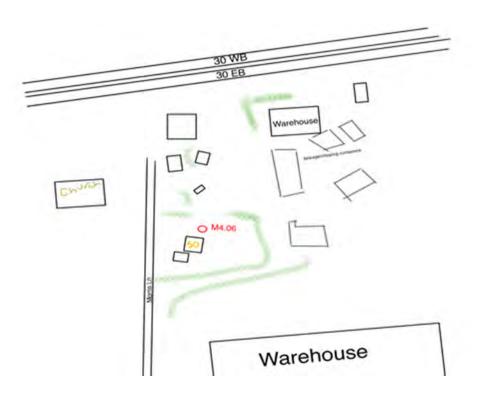
South:



West:



Project: Project: Setup#: Site ID(s):	SR-0	0030 / Seo tesville, P	2 8:32 AM ction AIR - PA				inne emir		Temperat Cloud c Vind speed ( Wind dire	vr: Nor	ne □ Partly ☑ east	1 Cloudy	-
Measurement D: M4.06 Star		<u>ta</u> 09:33	Stop:	09:53	☑ 20 min	SLM	4229	L <sub>eq</sub> (dB):	59.	L <sub>min</sub> (dB):	53.2	L <sub>max</sub> (dB):	66.4
GPS (°N,°W		39.985422 75.885782	_ 276666667 <i>,</i> 265	-	□ 30 min □ 24 hr	#: Stor #:	178	Calib(dB):	93.98 /	94.03	Meas.	. Ht(ft):	5
Locatio			Ln. Coatesv	ville, PA	Relocate  ☐ Yes ☑				Pre-	Post-	_		
	Location: 50 Morris Ln. Coatesville, PA 19320												
Type(use, NAC	_	Residentia	al (B)		Site Photogra  ✓ Yes   ☐	-				Weighting:	<sup>E</sup>	□ C □	Z
	_		al (B)		_	-				Weighting:	· ☑A□B	□ C □	Z
Type(use, NAC affic Data Roadway #	C):	Residentia	al (B)	Roa	_	-		Roadway #3:		Weighting:	· ☑ A □ B		Z
affic Data  Roadway #  Width(ft	1: ):	Residentia	30	Wi	✓ Yes □  adway #2:dth(ft):	-	<u> </u>	Width(ft):		Weighting:	Roadway #4 Width(ft)	: :	Z
affic Data Roadway #	1: ):	Residentia		Wi		-	<u> </u>	_		Weighting:	MA □ B	: :	Z
affic Data  Roadway # Width(ft	1: ):	Residentia	30	Wi Di	✓ Yes □  adway #2:dth(ft):	-		Width(ft):			Roadway #4 Width(ft)	: :	Z
Roadway # Width(ft Directio	1: ): ): n:	Residentia	30 WB	Wi Di Spee	Ves dadway #2:dth(ft):rection:	-		Width(ft): Direction:			Roadway #4 Width(ft) Direction	:	Z
Roadway # Width(ft Directio Speed Limi	1: ): n: t:	Residentia	30 WB	Wi Di Spee	Ves dway #2:dth(ft):rection:red Limit:	-		Width(ft): Direction: Speed Limit:			Roadway #4 Width(ft) Direction Speed Limit Observed	: : : : : : : : : : : : : : : : : : :	Z
Roadway # Width(ft Directio Speed Limi Observed Sp	1:	Residentia	30 WB 55	Wi Di Spee	Yes daway #2: _dth(ft):rection: _dt Limit: _vved Spd:	-		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4 Width(ft) Direction Speed Limit Observed	: : : : : : : : : : : : : : : : : : :	Z
Roadway # Width(ft Directio Speed Limi Observed Sp  Aut Med T	11: 11: 11: 11: 11: 12: 13: 14: 14: 14: 14: 14: 14: 14: 14: 14: 14	Residentia  EB  55	30 WB 55 157	Wi Di Spee	Ves	-		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4 Width(ft) Direction Speed Limit Observed Spd Auto Med Tk	: dd :	Z
Roadway # Width(ft Directio Speed Limi Observed Sp	11: 11: 11: 11: 11: 12: 13: 14: 14: 14: 14: 14: 14: 14: 14: 14: 14	Residentia  EB  55  200  4	30 WB 55 157 11	Wi Di Spee	Ves \( \begin{aligned}     \text{Adway #2: } & \\     \text{.dth(ft): } & \\     \text{.rection: } & \\     \text{.rection: } & \\     \text{.red Limit: } & \\     \text{.red Spd: } & \\     \text{.dth(ft): } &	-		Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway #4 Width(ft) Direction Speed Limit Observed Spd Auto	: : : : : : : : : : : : : : : : : : :	Z



M4.06 Site Photos: North:



East:



South:



West:



Project:         SR	ril 26, 202 -0030 / Sec atesville, P	ction AIR -	<u> </u>	Gani		Temperat Cloud c Vind speed (	□ 1 <b>10</b> 1	ne □ Partly 🛭	Z Cloudy	-
				Flen	ning	Wind dire	ection: North	east		-
Measurement Da	<b>ata</b> 09:00	Stop:	09:20 ☑ 20 min	SLM 4	228 L <sub>eq</sub> (dB):	69.	$L_{min}(dB)$ :	51.1	L <sub>max</sub> (dB):	81.6
GPS (°N,°W):		94, -75.8860	□ 30 min	#: Stor 10		93.96 /	93.90		. Ht(ft):	
Location:	56 Morris	Ln. Coatesv	Relocate	#:		Pre-	Post-	_		
Type(use, NAC):	19320 Residentia	al (B)	Site Photogra  ☑ Yes □	-			Weighting:	· ☑A□E	3 □ C □	Z
Traffic Data										
Roadway #1: Width(ft):		30	Roadway #2: Width(ft):		Roadway #3: Width(ft):			Roadway #4 Width(ft)	:	<u> </u>
Direction: Speed Limit:	EB	WB 55	Direction:		Direction: Speed Limit:			Direction Speed Limit		
Observed Spd:		33	Observed Spd:		Observed Spd:			Observe Spd	d	
Auto:	164	154	Auto:		Auto:			Auto	:	
Med Tk:	17	13	Med Tk:		Med Tk:			Med Tk	:	
Hvy Tk:	30	31	Hvy Tk:		Hvy Tk:			Hvy Tk	:	
Bus: MCycle:	0	0	Bus: MCycle:		Bus: MCycle:			Bus MCycle		
Notes:		•	<del>-</del>	-	_					
Site Sketch:										
-					30w					
					30E			_		
					11	Bro.	1.07			

#### Personnel:



M4.07 Site Photos:



East:



South:

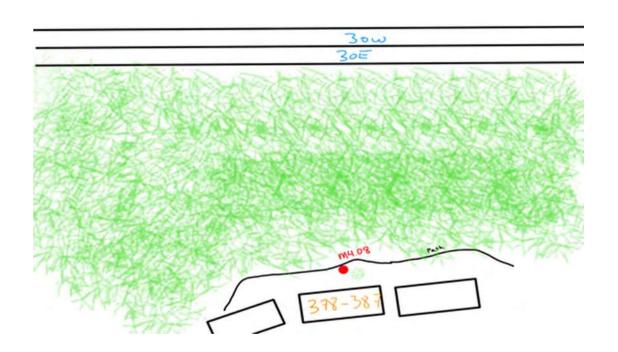


West:



	Project: SR. Co Setup#: 42 Site ID(s): M4	atesville, F	ction AIR -				nne Imil		Temperat Cloud c Wind speed ( Wind dire	mph): 0	e □ Partly □ (	Cloudy	
IVIE	easurement Da M4.08 Start:	9 <b>16</b> 07:51	Stop:	08:11 🗹 20	0 min	SLM #:	4228	L <sub>eq</sub> (dB):	57. 3	L <sub>min</sub> (dB):	46.4 Lma	<sub>ax</sub> (dB):	74.7
	GPS (°N,°W):	39.986503 75.877220	<del>-</del> 34, - 070000001	—— □ 30 □ 24	0 min 4 hr	Stor #:	196	Calib(dB):	93.88 /	93.94	Meas. H	t(ft):	5
	Location:	382 Laros PA 19320	e Dr. Coates	ville,	Relocated Yes 🗹 1	No			Pre-	Post-	_		
	Type(use, NAC):	Residentia	al (B)		Photograph Yes □ N					Weighting:	☑A □B □	□ C □	Z
·													
rat	fic Data												
rat	fic Data  Roadway #1:	:	30	Roadway	#2:			Roadway #3:			Roadway #4:		
<u>ran</u>	Roadway #1: Width(ft):			Width(f	t):			Width(ft):			Width(ft):		
<u>ran</u>	Roadway #1:	EB	30 WB	_	t):			_					
ran	Roadway #1: Width(ft):			Width(f	t):			Width(ft):			Width(ft):		
	Roadway #1: Width(ft): Direction:	EB	WB	Width(f Directi	t): on:			Width(ft): Direction:			Width(ft): Direction:		
	Roadway #1: Width(ft): Direction: Speed Limit:	EB	WB	Width(f Direction Speed Lim Observed S	t): on:			Width(ft): Direction: Speed Limit:			Width(ft): Direction: Speed Limit: Observed		
	Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	EB 55	WB 55	Width(f Direction Speed Lim Observed S	t):			Width(ft): Direction: Speed Limit: Observed Spd:		<u> </u>	Width(ft): Direction: Speed Limit: Observed Spd:		
	Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	EB 55	WB 55	Width(f Directi Speed Lim Observed S	t):			Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Width(ft): Direction: Speed Limit: Observed Spd: Auto:		
	Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	EB 55 166 22	WB 55 191 14	Width(f Direction Speed Lim Observed S Au Med Hvy	t):			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		

Site Sketch:



Notes: A lot of bird song throughout measurement. Dog bark end of min 9 to beginning of 10. Flyover 8:03.

#### Personnel:

M4.08 Site Photos: North:







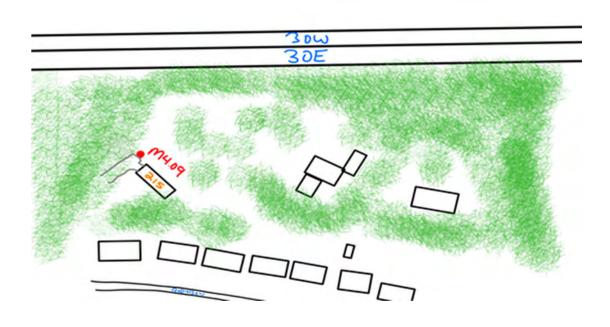
### South:



West:



Setup#: <u>Co</u>	-0030 / Sec atesville, P 1.09		<u></u>			(A) nne emin		Cloud c Wind speed ( Wind dire	mph):4		□ Cloudy	<u>-</u>
Measurement Da	<u>ata</u>											
D: <b>M4.09</b> Start:	08:23	Stop:		<b>Z</b> 20 min □ 30 min	SLM #:	4228	L <sub>eq</sub> (dB):	63. 8	Lmin(dB):	54.2	$L_{\text{max}}(dB)$ :	75.
GPS (°N,°W):	GPS (°N,°W): 39.9876773, - 75.87562510000001			□ 24 hr	Stor #:	197	Calib(dB):	93.88 /	93.94	Mea	s. Ht(ft):	5
	75.87562510000001  Location: 215 Buckthorn Dr.			Relocate				Pre-	Post-	_		
Location:	Location: 215 Buckthorn Dr. Coatesville, PA 19320				No							
Location: Type(use, NAC):		e, PA 19320		☐ Yes ☑  Site Photogra ☑ Yes ☐	phed				Weighting:	<b>☑</b> A □	в 🗆 С 🗆	Z
Type(use, NAC):	Coatesville	e, PA 19320		Site Photogra	phed				Weighting:	<sup>™</sup> ☑ A □	В□С□	Z
Type(use, NAC):	Coatesville Residentia	e, PA 19320	Roadw	Site Photogra	phed		Roadway #3:		Weighting:	☑ A □		Z
Type(use, NAC):	Coatesville Residentia	e, PA 19320 al (B)	Widt	Site Photogra  ✓ Yes □  vay #2: ch(ft):	phed		Roadway #3: Width(ft):		Weighting:	Roadway #	<b>:4:</b>	Z
Type(use, NAC):  affic Data  Roadway #1:	Coatesville Residentia	e, PA 19320	Widt	Site Photogra  ☑ Yes □  vay #2:	phed		_		Weighting:	Roadway #	<b>:4:</b>	Z
Type(use, NAC): raffic Data  Roadway #1: Width(ft):	Residentia 3	e, PA 19320 al (B)	Widt Dire	Site Photogra  ✓ Yes □  vay #2: ch(ft):	phed		Width(ft):			Roadway #	<b>:4:</b>	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:	Residentia  EB	e, PA 19320	Widt Dire	Site Photogra  Yes  Yes  th(ft): ection: Limit:	phed	<u> </u>	Width(ft): Direction:			Roadway # Width(ft Direction Speed Limit	#4: 	Z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction: Speed Limit:	Residentia  EB	e, PA 19320	Widt Dire Speed	Site Photogra  Yes  Yes  th(ft): ection: Limit:	phed	<u> </u>	Width(ft): Direction: Speed Limit:			Roadway # Width(ft Direction Speed Limit	#4: ): : : : : : : : :	Z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:	Residentia  EB  55	BO WB 55	Widt Dire Speed Observe	Site Photogra  Yes   And Yes   Ch(ft):  Ch(ft):	phed		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway # Width(ft Direction Speed Limit Observ Sp	#4: ): n: t: ed d:	z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	Residentia  EB  55  195	BO WB 55	Widt Dire Speed Observe	Site Photogra  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes	phed		Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway # Width(ft Directic Speed Limi Observ Sr Aut	#4: 	z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:   Med Tk:	EB 55 195 17	BO WB 55 166 14	Widt Dire Speed Observe	Site Photogra  Yes  Yes  Auto:  Med Tk:	phed		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway # Width(ft Direction Speed Limi Observ Sr Aut Med T	#4: 	Z







M4.09 Site Photos: North:







South:

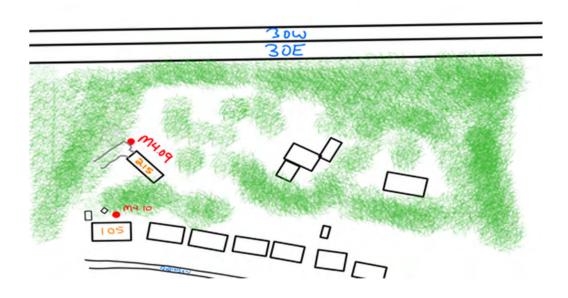


West:



	Date:	SR-0030 / Section AIR -						1		Tempera	ture (F): 56			_
	Project:		,					$\Delta$		Cloud	Wr: 🖂 Non	e □ Partly □	Claudy	
			atesville, P	'A							E NOI	е 🗆 Раппу 🗆	Cloudy	
	Setup#:	44	1.40				Gal	nne	ett v	Wind speed (	<b>mph):</b> 3			
	Site ID(s):	IVIZ	1.10				FIP	mi						-
									-9	Wind dire	ection: North	east		<u>-</u>
Me	easuremen	t Da	<u>ata</u>											
ID:	<b>M4.10</b> Sta	art:	08:53	Stop:	09:13	☑ 20 min	SLM	4228	L <sub>eq</sub> (dB):	56.	$L_{min}(dB)$ :	47.4	L <sub>max</sub> (dB):	66.1
				_		_ □ 30 min	#:		<del></del> -	9	_			
	GPS (°N,°\	W):	39.987139			□ 24 hr	Stor	198	Calib(dB):	93.88 /	93.94	Meas.	Ht(ft):	5
			75.875627	776666668			#:		<del></del> -	Pre-	Post-	-		
	Locati	on:	105 Robin	son Ave.		□ Yes ☑				rie-	F 031-			
		-	Coatesville	e, PA 19320							Weighting:			
	Type(use, NA	۱C):	Residentia	al (B)		Site Photogra <sub> </sub> ☑ Yes □					weighting:	☑ A □ B	□ C □	Z
		-				<b>⊡</b> 1€3 □	110							
<u> </u>	fic Data													
	Roadway :	#1 <b>:</b>	9	30	Ro	adway #2:			Roadway #3:			Roadway #4:		
	Width(ft			<del>,</del>	-	idth(ft):			Width(ft):			Width(ft):	-	
	Directio	on:	EB	WB	D	irection:			Direction:			Direction:	-	
	Speed Lim:	it:	55	55	Spe	ed Limit:			Speed Limit:	-	5	speed Limit:		
(	Observed Sp	od:	-		Obse	rved Spd:			Observed Spd:		-	Observed	-	
					_							Spd:		
	Aut	to:	209	217		Auto:	i		Auto:			Auto:		
	Med 7	Γk:	15	11	-	Med Tk:			Med Tk:			Med Tk:		
	Hvy 7	Γk:	34	27	-	Hvy Tk:			Hvy Tk:	-	+	Hvy Tk:		
	- Bı	ıs:	0	1	-	Bus:			Bus:	. ——	+	Bus:		
	MCyc.	le:	0	1	-	MCycle:			MCycle:			MCycle:		
		-	-	1 -		-1			110,010		1	,		1

Notes: ATTN: traffic is for 25 mins, scale accordingly! Loud car on airport rd during min1. Min3 A/C kicked on. Bang at min10 and occasional small noises from workers on adjacent property. Bird noise throughout. Min 13 ac off. Running 5 extra mins to compensate for A/C.





#### Personnel:

M4.10 Site Photos: North:







South:

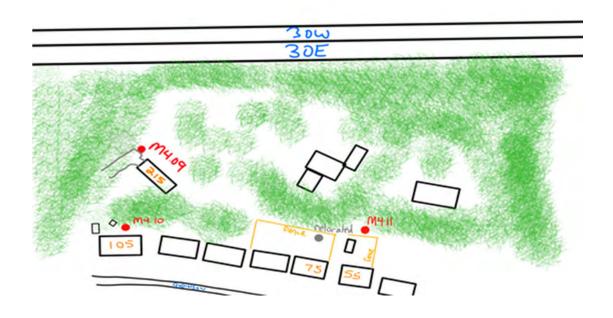


West:



Project: SR Co Setup#: 45 Site ID(s): MA	4.11	tion AIR -			<b>A</b> anne emi		Temperatu Cloud cv Wind speed (n Wind direc	r: ☑ Non	e □ Partly □ Cloudy	-
Measurement Da										
ID: <b>M4.11</b> Start:	09:59	Stop:	<sup>10:19</sup> <b>☑</b> 20 mir	#		L <sub>eq</sub> (dB):	56	$L_{\min}(dB)$ :	49 L <sub>max</sub> (dB):	67.1
GPS (°N,°W):	39.987463 75.873651		□ 30 mir - □ 24 hr	) Sto #		Calib(dB):	93.88 /	93.94	Meas. Ht(ft):	5
Location:	75 Robinso Coatesville		Reloc				Pre-	Post-	-	
Type(use, NAC):	Residentia	I (B)	Site Photo					Weighting:	☑ A □ B □ C □	Z
Traffic Data										
Roadway #1:	3	0	Roadway #2:	Airpo	ort	Roadway #3:			Roadway #4:	
Width(ft):			Width(ft):			Width(ft):			Width(ft):	_
Direction:	EB	WB	Direction:	Both		Direction:			Direction:	
Speed Limit:	55	55	Speed Limit:	45		Speed Limit:		S	Speed Limit:	
Observed Spd:			Observed Spd:	45		Observed Spd:			Observed Spd:	
Auto:	149	166	Auto:	78		Auto:			Auto:	1
Med Tk:	4	8	Med Tk:	3		Med Tk:			Med Tk:	
Hvy Tk:	21	27	Hvy Tk:	2		Hvy Tk:			Hvy Tk:	+
Bus:	0	2	Bus:	2		Bus:			Bus:	
MCycle:	0	0	MCycle:	0		MCycle:			MCycle:	

Notes: Dogs 10:08-10:13. Running meter longer for extra data. Airport count is for 10m. Weed wackier started at 10;25ish progressively louder until 10:29



M4.11 Site Photos: North:







South:

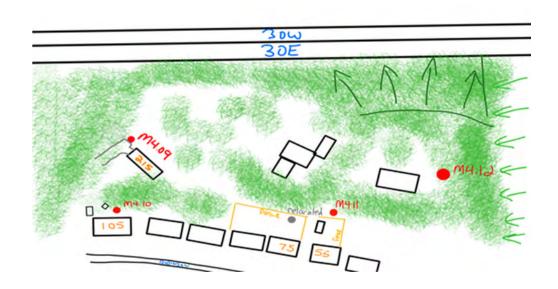


West:



	Date:		ay 11, 2022					1		Temperat	ture (F): <u>65</u>			_
	Project:		-0030 / Se		-					Cloud o	.vr: □ No	ne □ Partly □	Claudy	
			atesville, P	PΑ							<u>v</u> 140	ne 🗆 Partiy 🗆	Cloudy	
	Setup#:	46					Ga	nne	ett v	Wind speed (	<b>mph):</b> 5			
	Site ID(s):	IVI2	1.12					ımiı						-
									.9	Wind dire	ection: Nort	heast		_
Me	easuremen	t Da	ata											
ID:	<b>M4.12</b> Sta	art:	10:43	Stop:	11:03	☑ 20 min	SLM	4228	L <sub>eq</sub> (dB):	58.	Lmin(dB):	51.5 L	max(dB):	65.9
				-		- □ 30 min	#:			5	_			
	GPS (°N,°	W):	39.987978	373333333	5	□ 24 hr	Stor	200	Calib(dB):	93.88 /	93.94	Meas.	Ht(ft):	5
	,	<i>'</i>		528333334		_	#:		<u> </u>			<u> </u>		
	Locati	on:	220 Airno	rt Rd. Coat	osvillo	Relocated				Pre-	Post-			
	Locati	011.	PA 19320		csviiic,	☐ Yes ☑	No							
	T / N/A		Danisla asti	-1 (D)		Site Photogra					Weighting	· ☑A□B	□C□	Z
	Type(use, NA	AC): -	Residentia	ы (в)		✓ Yes	No							
Γraf	fic Data													
	Roadway			30	_	adway #2:			Roadway #3:			Roadway #4:		
	Width(f	,		14/0	_	idth(ft):	1		Width(ft):			Width(ft):		
	Directio		EB	WB	_	irection:			Direction:			Direction:		
	Speed Lim:	it:		55	Spe	ed Limit:			Speed Limit:	:		Speed Limit:		
	Observed Sp	pd:			Obse:	rved Spd:			Observed Spd:	:		Observed		
					_						<u> </u>	Spd:		
	Aut	to:	168	187		Auto:	1		Auto:	:		Auto:		
	Med 5	Tk:	7	11	_	Med Tk:			Med Tk:	-	<del> </del>	Med Tk:	-	
	Hvy '	Tk:	26	34	_	Hvy Tk:			Hvy Tk:	. ——		Hvy Tk:		
	-	us:	0	1	_	Bus:			Bus:			Bus:		
					_						<u> </u>			
	MCyc:	ıe:	2	0		MCycle:			MCycle:	:		MCycle:		1

Notes: 10:51 flyover. Relocated due to landscaping noise and dog. Traffic on airport , cars not audible but trucks more so. Airport rd elevated and providing shielding from mainline east of meter. Nearly all truck traffic gets on EB mainline. Plenty of cars turning down ramp as well. Adjust traffic for segments to represent this activity. Occasional noise from reverse alarms on construction site down on airport rd south of site. Occasional faint tree noise from small gusts.





M4.12 Site Photos: North:







South:



West:



				Highv	vay Nois	e Mo	onitoring Sh	eet				
Date:A	pril 26, 202	22 9:32 AM	1			1		Temperat	:ure (F):55			
	R-0030 / Se Coatesville, I							Cloud c	vr: □ No	one □ Partly ☑ Cl	loudy	
Setup#: 1	.9 //4.13					nne		Wind speed ( Wind dire	· · ·	th		
Measurement [	<u>Data</u>											
ID: <b>M4.13</b> Start:	10:23	Stop:	10:43	☑ 20 min ☐ 30 min	#:	4228	L <sub>eq</sub> (dB):	58. 2	Lmin(dB)	: 46.4 L <sub>max</sub>	(dB):	69.9
GPS (°N,°W):		52533333333 1816666668	5, -	□ 24 hr	Stor #:	161	Calib(dB):	93.96 /	93.90	Meas. Ht	(ft):	5
Location:		ort Rd. Coate	esville,	Reloca	☑ No			Pre-	Post-	_		
Type(use, NAC):	Residenti	ial (B)		Site Photo					Weighting	a: 🔼 Y 🗆 B 🗆	C 🗆	Z
Traffic Data												
Roadway #1	:	30	Road	oadway #2: Airport			Roadway #3:	3: On-ramp from Roadway #4: Airport				
Width(ft)	:		- Wio	dth(ft):			Width(ft):		<u> </u>	Width(ft):		
Direction	: EB	WB	Di	rection:	Both	,	Direction:	EB		Direction:		
Speed Limit	: 55	55	Speed	d Limit:	35		Speed Limit:	45		Speed Limit:		
Observed Spd	:		Obser	ved Spd:	35		Observed Spd:			Observed Spd:		
Auto	: 258	202		Auto:	157		Auto:	95	ĺ	Auto:		
Med Tk	: 20	22	_	Med Tk:	13		Med Tk:	: 7	†	Med Tk:		
Hvy Tk	: 29	34	_	Hvy Tk:	13		Hvy Tk:	: 7	†	Hvy Tk:		
Bus	: 0	0	_	Bus:	0		Bus	: 0	<del>                                     </del>	Bus:		
MCvcle	:	0	_	MCvcle:	0		MCvcle:	:	+	MCvcle:		

Notes: Most traffic to on ramp is from NB airport rd vehicles. Approx 5 percent from sb airport vehicles. Collected gps location for this meas is inaccurate- see photos. Over counted airport and on ramp for about 3 mins. Airport and ramp are elevated with respects to this site. See northb

Site Sketch: N/A

M4.13 Site Photos: North:



East:



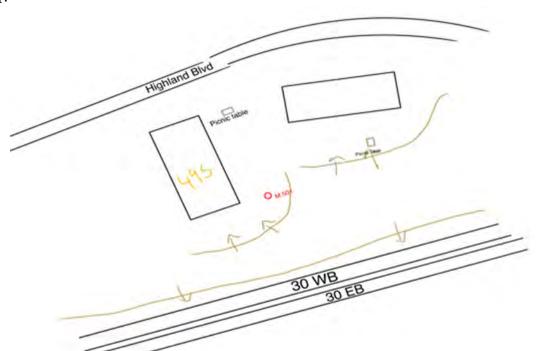
South:



West:



			22 9:18 AM			1	1		Temperat	:ure (F):55			_
			ection AIR -						Cloud c	vr: □ Non	e □ Partly ☑	Cloudy	
	Setup#: 19	oatesville, I	PA			_				_ 11011	с <u>—</u> . а. а. у <u>—</u>	Cloudy	
	· —	5.01					nne		Wind speed (	<b>mph):</b> 3			_
						He	ımiı	ng	Wind dire	ection: North	east		_
Me	asurement D	<u>ata</u>											
ID:	<b>M5.01</b> Start:	10:23	Stop:	10:43	☑ 20 min ☐ 30 min	SLM #:	4229	L <sub>eq</sub> (dB):	69. 4	Lmin(dB):	55.3	L <sub>max</sub> (dB):	82.1
	GPS (°N,°W):	39.99121 75.86670	.51, - .716666667		□ 24 hr	Stor #:	179	Calib(dB):	93.98 /	94.03	Meas.	Ht(ft):	5
					Reloca		-		Pre-	Post-	-		
	Location:		ghlands BLvo le, PA 19320		☐ Yes 🛭	Z No							
	Type(use, NAC):		outdoor seat	,	Site Photog	-				Weighting:	☑ A □ B	□ C □	Z
<u> </u>	ic Data												
	Roadway #1:		30	Road	iway #2:	On Ram E	В	Roadway #3:	:		Roadway #4:		
	Width(ft):			_	dth(ft):	_		Width(ft):			Width(ft):		
	Direction:	EB	WB		rection:	EB		Direction:			Direction:		
	Speed Limit:	55	55	Speed	d Limit:	55		Speed Limit:	:	S	peed Limit:		
С	bserved Spd:			Observ	ved Spd:			Observed Spd:			Observed Spd:		
	Auto:	258	202		Auto:	95		Auto:	:		Auto:		
	Med Tk:	20	22	=	Med Tk:	7		Med Tk:	-		Med Tk:	-	
	Hvy Tk:	29	34	_	Hvy Tk:	7		Hvy Tk:	:		Hvy Tk:		
	Bus:	0	0	_	Bus:	0		Bus:	:		Bus:	-	
	MCycle:	1	0	_	MCycle:	0		MCycle:	:		MCycle:		
Not	ces:												



M5.01 Site Photos: North:







South:



West:



Project: SR-0		2 10:11 AM ction AIR - A	1				Temperat	ture (F): 57	e □ Partly	☑ Cloudy	-
Setup#: 20 Site ID(s): M5					anne	The Control of the Co	Wind speed (	mph): 2			_
				FI	emir	ıy	Wind dire	ection: Northe	east		_
/leasurement Da	<u>ta</u>										
o: <b>M5.02</b> Start:	11:11	Stop:	<sup>11:31</sup> ☑ 20 m	# 1		L <sub>eq</sub> (dB):	58. 2	$L_{min}(dB)$ :	44.4	$L_{max}(dB)$ :	73.3
GPS (°N,°W):	39.993901 75.857792	- 1066666666 185	□ 30 m ,- □ 24 hr			Calib(dB):	93.98 /	94.03	Meas	. Ht(ft):	5
Location:	330 Count	ry Club Rd. e, PA 19320		ocated S 🗹 No			Pre-	Post-	•		
Type(use, NAC):	Residentia			tographed s □ No				Weighting:	<b>☑</b> A □	в□с□	Z
affic Data											
Roadway #1:	3	30	Roadway #2:	Country Rd	Club	Roadway #3:			Roadway #4	l:	
Width(ft):			Width(ft):			Width(ft):			Width(ft		
Direction:	EB	WB	Direction:	Both		Direction:			Direction	1:	
Speed Limit:	55	55	Speed Limit:			Speed Limit:		S	peed Limit	::	
Observed Spd:			Observed Spd:			Observed Spd:			Observe Spo		
Auto:	246	185	Auto:	35		Auto			Auto	):	
Med Tk:	13	18	Med Tk:	0		Med Tk		<del> </del>	Med T	:	+
Hvy Tk:	26	28	Hvy Tk:	0		Hvy Tk:	:		Hvy T	:	+
Bus:	0	1	Bus:	0		Bus		<del>                                     </del>	Bus	g:	+
MCycle:	0	0	MCycle:	0		MCycle:		<del> </del>	MCycle	<u></u>	+
Totes: Backgrou	nd she	ep nois	е								





M5.02 Site Photos: North:



East:



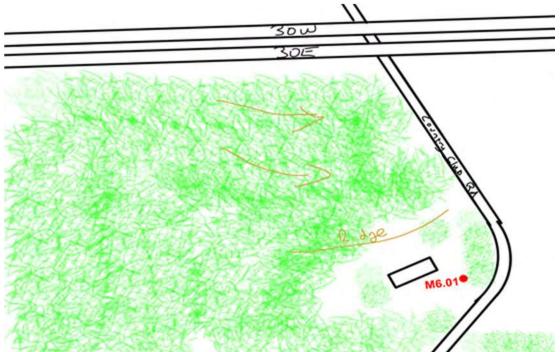
South:



West:



Setup#: 20	atesville, P 5.01	А	_		nne	The same of the sa	Vind speed (		e □ Partly ☑		_
				He	mii	ng	Wind dire	ction:			_
easurement Da	ata_										
M6.01 Start:	11:11	Stop:	11:31 ☑ 20 mir	#:	4228	L <sub>eq</sub> (dB):	55. 3	Lmin(dB):	42 I	max(dB):	69
GPS (°N,°W):		791666666, 116666666		Stor #:	162	Calib(dB):	93.96 /	93.90	Meas.	Ht(ft):	5
Location:	310 Count	ry Club Rd. e, PA 19320	Reloc				Pre-	Post-	-		
Type(use, NAC):	Residentia	al (B)	Site Photo  ☑ Yes	• .				Weighting:	☑ A □ B	□ C □	Z
iffic Data											
Roadway #1:	3	30	Roadway #2:	Country C Rd	lub	Roadway #3:			Roadway #4:		
	3	30 WB	Roadway #2: Width(ft): Direction:		lub	Roadway #3: Width(ft): Direction:			Roadway #4: Width(ft): Direction:		
Roadway #1: Width(ft):			Width(ft):	Rd	lub	Width(ft):			Width(ft):		
Roadway #1: Width(ft): Direction:			Width(ft): Direction:	Rd Both	lub	Width(ft): Direction:			Width(ft): Direction:		
Roadway #1: Width(ft): Direction: Speed Limit:	EB	WB	Width(ft): Direction: Speed Limit:	Both 35	lub	Width(ft): Direction: Speed Limit:			Width(ft): Direction: Speed Limit: Observed		
Width(ft): Direction: Speed Limit: Observed Spd:	EB 55	WB 55	Width(ft): Direction: Speed Limit: Observed Spd:	80th 35 30	lub	Width(ft): Direction: Speed Limit: Observed Spd:			Width(ft): Direction: Speed Limit: Observed Spd:		
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	EB 55 246	WB 55	Width(ft): Direction: Speed Limit: Observed Spd: Auto:	80th 35 30	lub	Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Width(ft): Direction: Speed Limit: Observed Spd: Auto:		
Roadway #1:  Width(ft): Direction: Speed Limit: Observed Spd:  Auto: Med Tk:	EB 55 246 13	WB 55 185 18	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	80th 35 30	lub	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		
Roadway #1:  Width(ft): Direction: Speed Limit: Observed Spd:  Auto: Med Tk: Hvy Tk:	EB 55 246 13 26	55 185 18 28	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk:	80th 35 30	lub	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk:		



M6.01 Site Photos: North:







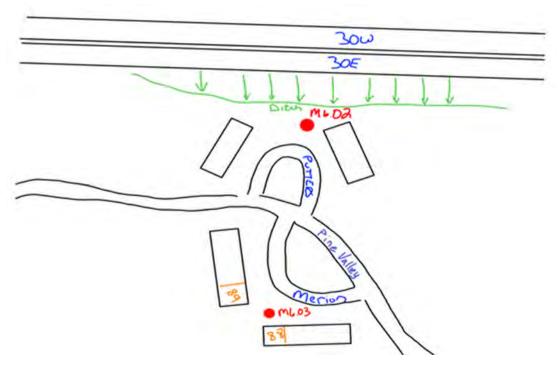
South:



West:



Project: SR-0030 / Section AIR - Coatesville, PA  Setup#: 34 Site ID(s): M6.02   easurement Data				5.7	<u>A</u> nne emir	Chicago and Chicago	Cloud o Wind speed ( Wind dire	mph): 4	ne □ Partly □ C	loudy	-
D: <b>M6.02</b> Start:	13:23	Stop:	13:43	#:	4228	Leq(dB):	65. 3	Lmin(dB):	52.7 Lmax	(dB):	76.
GPS (°N,°W):	39.993309	935, -75.85	□ 30 min 345165 □ 24 hr	Stor #:	188	Calib(dB):	94.05 /	94.12	Meas. Ht	(ft):	5
Location:	4 Putters I	In Coatesvi	Reloca Ile, PA ☐ Yes ☐	ited			Pre-	Post-	_		
Type(use, NAC):	Residentia	al (B)	Site Photo					Weighting	•	I C 🗆	Z
affic Data											
Roadway #1:	3	30	Roadway #2:			Roadway #3:	1		Roadway #4:		
Width(ft):			Width(ft):			Width(ft):			Width(ft):		
Width(ft): Direction:	WB	EB	Width(ft): Direction:			Width(ft): Direction:			Width(ft): Direction:		
Width(ft):			Width(ft):			Width(ft):			Width(ft):		
Width(ft): Direction:	WB	EB	Width(ft): Direction:			Width(ft): Direction:			Width(ft): Direction:		
Width(ft): Direction: Speed Limit:	WB	EB	Width(ft): Direction: Speed Limit:			Width(ft): Direction: Speed Limit:			Width(ft): Direction: Speed Limit: Observed		
<pre>Width(ft):    Direction: Speed Limit: Observed Spd:</pre>	WB 55	EB 55	Width(ft): Direction: Speed Limit: Observed Spd:			Width(ft): Direction: Speed Limit: Observed Spd:			Width(ft): Direction: _ Speed Limit: _ Observed _ Spd: _		
<pre>Width(ft):    Direction: Speed Limit: Observed Spd: Auto:</pre>	WB 55	EB 55	Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Width(ft): Direction: Speed Limit: Observed Spd: Auto:		:	Width(ft): Direction: Speed Limit: Observed Spd: Auto:		
Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	WB 55 291 13	EB 55 275 12	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		, , , , , , , , , , , , , , , , , , ,	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		
Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk:	WB 55 291 13 36	EB 55 275 12 34	Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk: Hvy Tk:			Width(ft):		





M6.02 Site Photos: North:







South:



West:



D: <b>M6.03</b> Start:	13:49	Stop:	14:09	☑ 20 min ☐ 30 min	SLM #:	4228	L <sub>eq</sub> (dB):	54. 2	L <sub>min</sub> (dB):	47.9	$L_{\text{max}}(dB)$ :	64.6
GPS (°N,°W):		7450000005 184999999	i, -	□ 24 hr	Stor #:	189	Calib(dB):	94.05 /	94.12	Meas	. Ht(ft):	5
Location:		n Ct Coatesv	ille, PA	Relocated  ☐ Yes ☑				Pre-	Post-	-		
Type(use, NAC):	Residentia	al (B)		Site Photogra  ☑ Yes □	•				Weighting:	☑ A □ E	- C □	Z
affic Data												
Roadway #1: Width(ft):	3	30	-	.dway #2:			Roadway #3: Width(ft):			Roadway #4		
Direction:	EB	WB	_	rection:			Direction:			Direction		
Speed Limit:	55	55	Spee	d Limit:			Speed Limit:	:	5	Speed Limit	:	1
Observed Spd:			Obser	ved Spd:			Observed Spd:	:		Observe Spd		
Auto:	264	286		Auto:			Auto:	:		Auto	:	
Med Tk:	12	26	-	Med Tk:			Med Tk	:		Med Tk	:	
Hvy Tk:	21	29	-	Hvy Tk:			Hvy Tk:			Hvy Tk	:	
Bus:	6	0	<u>-</u> '	Bus:		,	Bus			Bus	:	
MCycle:	2	0	• •	MCycle:			MCycle:	:		MCycle	:	
Notes: 1:55 bar	ıa from	passin	g lands	cape traile	r.							
		F										
Site Sketch:												
							25.1					
							300					



M6.03 Site Photos: North:



East:



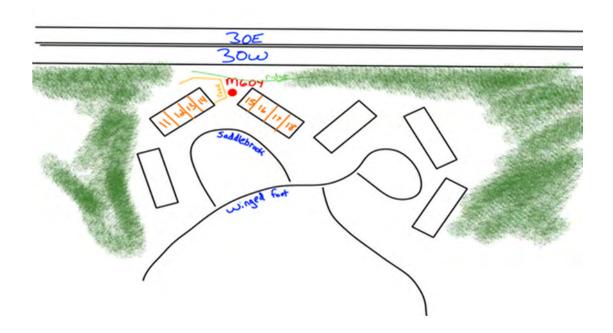
South:



West:



Setup#: Site ID(s):	Co: 36	atesville, F	ction AIR -			Ga.	<u>a</u> nne	tt	Cloud o	E INOII	ie □ Partly	y □ Cloudy	,
·						Fle	min	ig	Wind dire	ection: Southe	east		_
M6.04 S	nt Da Start:	14:17	Stop:		☑ 20 min ☑ 30 min	SLM #:	4228	L <sub>eq</sub> (dB):	59 <b>.</b> 8	L <sub>min</sub> (dB):	44.7	L <sub>max</sub> (dB):	71
GPS (°N,	,°W):		3033333336 511666666		⊒ 24 hr	Stor #:	190	Calib(dB):	94.05 /	94.12	Me	as. Ht(ft):	5
Loca	ation:	15 Saddle			Relocate  ☐ Yes ☑			_	Pre-	Post-	-		
Type(use, N	NAC):	Residentia	al (B)		Site Photogra  ✓ Yes □	•				Weighting:	☑ A □	] B □ C □	] Z
Type(use, N	NAC):	Residentia	al (B)		_	•				Weighting:	☑ A □	] B □ C □	] Z
,, ,	· -		al (B) 30	Roadw	_	•		Roadway #3:	ı		☑ A □		] Z
fic Data  Roadway  Width(f	<b>#1:</b> ft):	;	30	Widt	✓ Yes □  vay #2:	•		Width(ft)	:		Roadway :	<b>#4:</b> t):	] Z
fic Data Roadway	<b>#1:</b> ft):			Widt	√Yes □ √ay #2:	•		Width(ft)			Roadway	<b>#4:</b> t):	] Z
fic Data  Roadway  Width(f	<b>#1:</b> ft): ion:	;	30	Widt Dire	✓ Yes □  vay #2:	•		Width(ft)			Roadway :	#4: t): on:	] Z
fic Data  Roadway  Width(f	#1: ft): ion: mit:	;	30	Widt Dire	Vay #2:h(ft):ction:	•		Width(ft)			Roadway Width(f Directi	#4: t): on: it:	] Z
Roadway Width(f Directi Speed Lin	#1: ft): ion: mit:	;	30	Widt Dire Speed	Vay #2:h(ft):ction:	•		Width(ft): Direction: Speed Limit:			Roadway Width(f Directi Speed Lim Obser S	#4: t): on: it: ved	] Z
Roadway Width(f Directi Speed Lin	#1: ft): ion: mit: Spd:	EB	30 WB	Widt Dire Speed Observe	✓ Yes ☐   yay #2:h(ft): ction: Limit: cd Spd:	•		Width(ft) Direction Speed Limit Observed Spd			Roadway Width(f Directi Speed Lim Obser S	#4: t): on: it: ved pd:	] Z
Fic Data  Roadway Width(f Directi Speed Lin Observed S	#1: ft): ion: mit: Spd: uto:	EB	30 WB	Widt Dire Speed Observe	Vay #2:h(ft):ction: Limit:ed Spd:	•		Width(ft) Direction Speed Limit Observed Spd			Roadway Width(f Directi Speed Lim Obser S	#4: t): on: it: ved pd: to:	] Z
Fic Data  Roadway  Width(f Directi  Speed Lin  Observed S  Au  Med  Hvy	#1: ft): ion: mit: Spd: uto:	EB 263 19	340 19	Widt Dire Speed Observe	Vay #2:h(ft):ction: Limit: ed Spd: Auto:	•		Width(ft) Direction Speed Limit Observed Spd Auto Med Tk			Roadway: Width(f Directi Speed Lim Obser S: Au Med	#4: t): on: it: ved pd: to:	] Z





M6.04 Site Photos: North:



East:



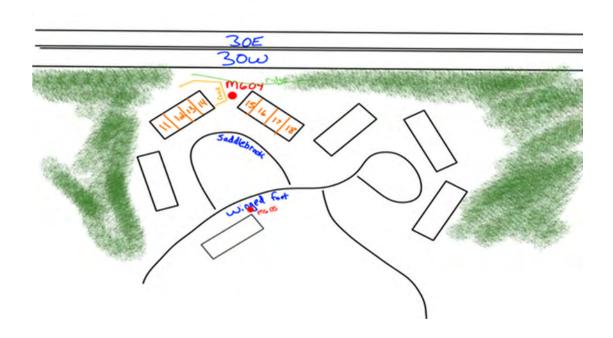
South:



West:



Setup#: 3	Coatesville, PA   37   M6.05			7	ianne Jemin	The same of the sa	Cloud of the Cloud	(mph): 5	ne 🗆 Partly 🛭	Cloudy	- -
		Stop:	<sup>15:08</sup> ☑ 20	ı min	SLM 4228	L <sub>eq</sub> (dB):	55.	L <sub>min</sub> (dB):	46.7	L <sub>max</sub> (dB):	68.5
GPS (°N,°W):		– 783333334, 279999999	□ 30 - □ 24		#: tor 191 #:	Calib(dB):	94.05 /	94.12	Meas	. Ht(ft):	5
				Relocated	-		Pre-	Post-	_		
Location:	61 Winge Coatesvil	e, PA 19320	_ ·	Yes ☑ No							
Location: Type(use, NAC):		e, PA 19320	Site I	Yes ☑ No  Photographed  Yes □ No				Weighting:	· ☑A□E	3 □ C □	Z
Type(use, NAC):	Coatesvil	e, PA 19320	Site I	Photographed				Weighting:	· 🗹 A 🗆 E	3 □ C □	Z
Type(use, NAC):	Coatesvill Residenti	e, PA 19320	Site I	Photographed Yes □ No		Roadway #3	:	Weighting:	: ☑ A □ E		Z
Type(use, NAC):  ffic Data  Roadway #1:  Width(ft):	Coatesvil Residenti	e, PA 19320 al (B) 30	Site    Roadway #  Width(ft	Photographed Yes □ No  #2: =:::::::::::::::::::::::::::::::::		Width(ft)	:	Weighting:	Roadway #4 Width(ft)	: :	Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction:	Residenti  EB	e, PA 19320 al (B) 30	Roadway # Width(ft	Photographed Yes  No  \$2:  bn:		Width(ft) Direction	:		Roadway #4 Width(ft)	:	Z
Type(use, NAC):  ffic Data  Roadway #1:  Width(ft):	Coatesvil Residenti	e, PA 19320 al (B) 30	Site    Roadway #  Width(ft	Photographed Yes  No  \$2:  bn:		Width(ft)	:		Roadway #4 Width(ft)	:	Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction:	Residenti  EB	e, PA 19320 al (B) 30	Roadway # Width(ft	Photographed Yes  No  *2: :::::::::::::::::::::::::::::::::		Width(ft) Direction	:		Roadway #4 Width(ft)	:	Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction: Speed Limit:	Residenti  EB	e, PA 19320 al (B) 30	Roadway # Width(ft Directic	Photographed Yes  No  #2: c): ch: ch:		Width(ft) Direction Speed Limit	:		Roadway #4 Width(ft) Direction Speed Limit Observe	:d	Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	Residenti  EB  55	al (B)  30  WB 55	Roadway # Width(ft Direction Speed Limit Observed Sp	Photographed Yes  No  *2:		Width(ft) Direction Speed Limit Observed Spd	:		Roadway #4 Width(ft) Direction Speed Limit Observe	:d	z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:   Auto:	EB 55	BO WB 55 449	Roadway # Width(ft Direction Speed Limit Observed Sp	Photographed Yes No  #2:		Width(ft) Direction Speed Limit Observed Spd	:		Roadway #4 Width(ft) Direction Speed Limit Observe Spd Auto	:d :	Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:   Auto:   Med Tk:	EB 55	wB 55 449 32	Roadway # Width(ft Direction Speed Limi Observed Sp Aut Med T Hvy T	Photographed Yes No  #2:		Width(ft) Direction Speed Limit Observed Spd Auto Med Tk			Roadway #4 Width(ft) Direction Speed Limit Observe Spd Auto Med Tk	: d :	z



#### Personnel:

M6.05 Site Photos: North:







South:



West:



Setup#: Site ID(s):	: 38 : M6	5.06	<sup>2</sup> A				nne min		Cloud o	E INOII	e □ Partly		_
M6.06 S	Start:	15:26	Stop:		20 min 30 min	SLM #:	4228	L <sub>eq</sub> (dB):	62 <b>.</b> 5	L <sub>min</sub> (dB):	51	L <sub>max</sub> (dB):	77.
GPS (°N,	,°W):	39.99385 75.85103	578333333, 505		24 hr	Stor #:	192	Calib(dB):	94.05 /	94.12	Meas	s. Ht(ft):	5
Loca	ation:		erry Ct Coate	esville,	Relocated  ☐ Yes ☑				Pre-	Post-	-		
	-				C:4- Db-4					Weighting:	♬∧□	в□с□	7
Type(use, N	NAC):	Residentia	al (B)		Site Photogra  ✓ Yes   ☐	•							۷
Type(use, N	NAC):	Residentia	al (B)		_	•							Z
	· -		al (B)	Roadwa	☑ Yes □	•		Roadway #3:	ı		Roadway #4		
fic Data  Roadway  Width(i	<b>#1:</b> ft):	;	30	<b>Roadwa</b> Width	✓ Yes ☐  y #2: (ft):	•		Width(ft):			Roadway #4 Width(ft	<b>4:</b> ):	
fic Data Roadway	<b>#1:</b> ft):			Roadwa	✓ Yes ☐  y #2: (ft):	•		=			Roadway #4	<b>4:</b> ):	
fic Data  Roadway  Width(i	<b>#1:</b> ft): ion:	;	30	<b>Roadwa</b> Width	✓ Yes ☐  y #2:(ft): ttion:	•		Width(ft):			Roadway #4 Width(ft	<b>4:</b> ):	
fic Data  Roadway  Width(find Direct:	#1: ft): ion: mit:	EB	30 WB	Roadwa Width Direc	y #2:	•		Width(ft): Direction:			Roadway #4 Width(ft Direction	#: ): : : :	
Roadway Width() Direct: Speed Lin	#1: ft): ion: mit:	EB	30 WB	Roadwa Width Direc Speed L	y #2:	•		Width(ft): Direction: Speed Limit:			Roadway #4 Width(ft Direction Speed Limit	4: ): : : : : ed	
Roadway Width() Direct: Speed Lin	#1: ft): ion: mit: Spd: uto:	EB 55	30 WB 55	Roadwa Width Direc Speed L Observed	y #2:	-		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway # Width(ft Direction Speed Limit Observe Spo	#: ): n: t: ed d:	
Fic Data  Roadway Width() Direct: Speed Lin Observed S	#1: ft): ion: mit: Spd: uto:	EB 55	30 WB 55 568	Roadwa Width Direc Speed L Observed	Yes	-		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4 Width(ft Direction Speed Limit Observe Spo	#: ): n: t: ed di: o: k:	
Fic Data  Roadway Width() Direct: Speed Lin Observed S  An Med Hvy	#1: ft): ion: mit: Spd: uto:	EB 55	30 WB 55 568 21	Roadwa Width Direc Speed L Observed	Y #2:	-		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4 Width(ft Direction Speed Limit Observe Spo Auto Med Th	#: ): :: :: ed d: :: :: ::	





M6.06 Site Photos: North:







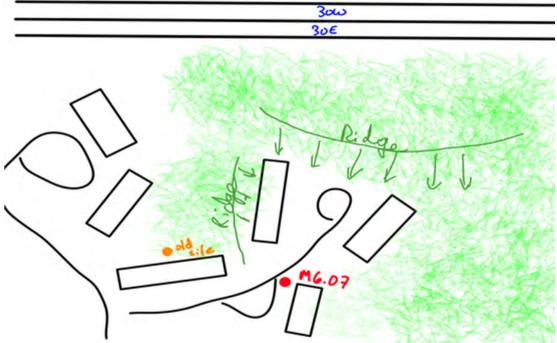
South:



West:



Project:         SR           Co         Setup#:         33	-0030 / Se atesville, F	2 1:07 PM ction AIR - PA				inne nne mir	The same of the sa	Cloud c	mph): 6	e □ Partly ☑	Cloudy	-
								Wind dire	ection: West			-
Measurement Da	easurement Data           M6.07         Start:         14:08         Stop:         14::           GPS (°N,°W):         39.99312993333333, - 75.849410533333333		14:28	☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	53	L <sub>min</sub> (dB):	47.7	L <sub>max</sub> (dB):	64.5
GPS (°N,°W):	75.84941053333333	-	□ 30 min □ 24 hr	Stor #:	175	Calib(dB):	94.10 /	93.86	Meas.	Ht(ft):	5	
Location:	Location: 46 Innisbrook Ln Coatesville, PA 19320	esville,	Relocated  ☑ Yes □ 1	No			Pre-	Post-	<u>-</u>			
Type(use, NAC):	Type(use, NAC): Residential (B)			Site Photograph  ☑ Yes □ N					Weighting:	☑ A □ B	□ C □	Z
Traffic Data												
<pre>Roadway #1:     Width(ft):     Direction:</pre>		30   WB	Wi	dway #2: .dth(ft):		<u> </u>	Roadway #3: Width(ft): Direction:	:		Roadway #4: Width(ft): Direction:		
Speed Limit:	55	55	Spee	ed Limit:			Speed Limit:	:	S	Speed Limit:		-
Observed Spd:			Obser	rved Spd:			Observed Spd:	:		Observed Spd:		
Auto:	288	319		Auto:			Auto:	:		Auto:		
Med Tk:	19	22	-	Med Tk:			Med Tk:	:		Med Tk:		
Hvy Tk:	25	31	-	Hvy Tk:			Hvy Tk:	:		Hvy Tk:		
Bus:	2	1	-	Bus:			Bus	:		Bus:		
MCycle:	0	0	= ·	MCycle:			MCycle:			MCycle:		
Notes: Relocate	ed east	due to	poor l	location, bad	shiel	ding a	nd reflective	e surfac	es behind	apartment u	nit.	
Site Sketch:												
							3000					
							30€					





M6.07 Site Photos: North:







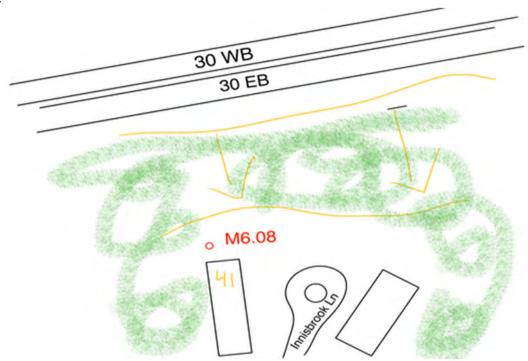
South:



West:



Setup#: 33 Site ID(s): M6	Site ID(s): M6.08  easurement Data					nne mir		Cloud c Wind speed ( Wind dire	mph): 1	e ☑ Partly □	Cloudy	-
		Stop:		☑ 20 min ☑ 30 min	SLM #:	4229	L <sub>eq</sub> (dB):	53. 5	L <sub>min</sub> (dB):	46.3 I	L <sub>max</sub> (dB):	60.
GPS (°N,°W):	GPS (°N,°W): 39.9937286, - 75.849864366666			⊒ 24 hr	Stor #:	194	Calib(dB):	94.08 /	93.81	Meas.	Ht(ft):	5
•			esville,	Relocated	d			Pre-	Post-	-		
Location:	Location: 41 Innisbrook Ln Coatesville PA 19320  Type(use, NAC): Residential (B)											
		ıl (B)		Site Photogra  ☑ Yes □	-				Weighting:	☑ A □ B	□ C □	Z
		ıl (B)		_	-				Weighting:	☑ A □ B	□ C □	Z
Type(use, NAC):	Residentia		Roadw	☑ Yes □	-		Roadway #3:	:			□ c □	Z
Type(use, NAC):	Residentia	II (B)	_	_	-		Roadway #3: Width(ft):			☑ A ☐ B  Roadway #4:  Width(ft):	_ c _	Z
Type(use, NAC):  affic Data  Roadway #1:	Residentia		Widtl	☑ Yes □	-		_	:		Roadway #4:		Z
Type(use, NAC): raffic Data Roadway #1: Width(ft):	Residentia	30	Widtl	✓ Yes ☐	-		Width(ft):			Roadway #4: Width(ft):		Z
Type(use, NAC):  affic Data  Roadway #1:  Width(ft): Direction:	Residentia	30 WB	Widtl Dire	✓ Yes ☐  **ray #2:h(ft):ction: Limit:	-		Width(ft): Direction:	:		Roadway #4: Width(ft): Direction:		Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:	Residentia	30 WB	Widtl Dired Speed	✓ Yes ☐  **ray #2:h(ft):ction: Limit:	-		Width(ft): Direction: Speed Limit:			Roadway #4: Width(ft): Direction: Speed Limit: Observed		Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:	Residentia	0 WB 55	Widtl Direct Speed 1 Observed	✓ Yes ☐   vay #2: _h(ft): _ction: _timit: _cd Spd:	-		Width(ft): Direction: Speed Limit: Observed Spd:	:		Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd:		Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	Residentia	55 319	Widtl Direc Speed 1 Observed	Ves	-		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:		Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:   Med Tk:	EB 55 288 19	30 WB 55 319 22	Widtl Direc Speed 1 Observed	Ves	-		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		Z





#### Personnel:

M6.08 Site Photos: North:







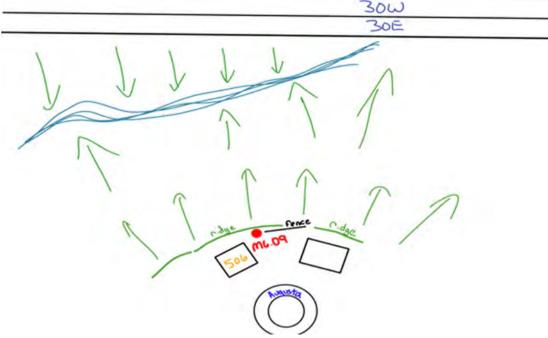
South:



West:



<del></del>	15:58	Stop:	16:18	☑ 20 min ☐ 30 min	SLM #:	4228	L <sub>eq</sub> (dB):	62. 3	L <sub>min</sub> (dB):	52.2 L <sub>max</sub>	dB):	69.6
	39.994218 75.845884	16666666, 65	-	☐ 24 hr	Stor #:	193	Calib(dB):	94.05 /	94.12	Meas. Ht	ft):	5
	506 Augus PA 19320	ta Dr Coate	esville,	Relocated  Yes 🗹 N	lo		_	Pre-	Post-	-		
_	Residentia	I (B)		Site Photograph  ☑ Yes □ N					Weighting:	☑ A □ B □	С	Z
ic Data												
Roadway #1: Width(ft): Direction:	EB	0 WB	Wi	dway #2: .dth(ft):			Roadway #3: Width(ft): Direction:			Roadway #4:		
Speed Limit:	55	55	_	ed Limit:			Speed Limit:		S	peed Limit:		
bserved Spd:			=	ved Spd:		(	Observed Spd:			Observed Spd:		
Auto:	349	495		Auto:	1		Auto		1	Auto:		I
Med Tk:	6	30	-	Med Tk:			Med Tk	:		Med Tk:		
Hvy Tk:	13	22	_	Hvy Tk:			Hvy Tk	:		Hvy Tk:		
Bus:	4	2	=	Bus:			Bus	:		Bus:		
MCycle:	4	6	_	MCycle:			MCycle:	:		MCycle:		







M6.09 Site Photos: North:







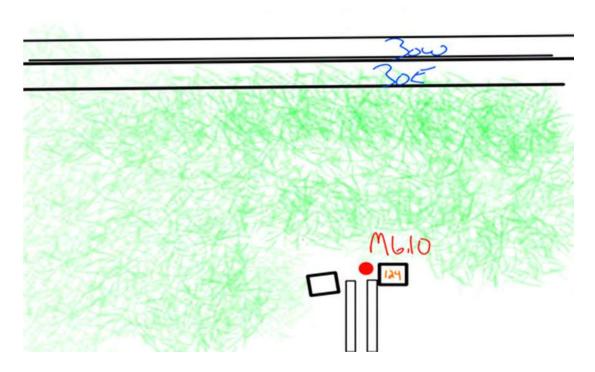
South:







Setup#: 31	Site ID(s): M6.10  easurement Data					emin	Part agreed	Cloud o Wind speed ( Wind dire	mph): <u>10</u>	ne □ Partly ☑ Clou	udy 
Measurement Da	<u>ata</u>										
D: <b>M6.10</b> Start:	11:26	Stop:		☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	60. 5	$L_{min}(dB)$ :	54.2 L <sub>max</sub> (d	в): 65.
GPS (°N,°W):	39.994752 75.842932	- 215, - 138333334		☐ 30 min ☐ 24 hr	Stor #:	173	Calib(dB):	94.10 /	93.86	Meas. Ht(f	t): 5
							<u> </u>	Pre-	Post-		
Location:	124 Burgu Coatesvill	ndy Ln e, PA 19320		Relocated  ☐ Yes ☑							
Location: Type(use, NAC):		e, PA 19320			No phed				Weighting	: 🗹 A 🗆 B 🗆 C	: 🗆 Z
Type(use, NAC):	Coatesvill	e, PA 19320		☐ Yes ☑ Site Photogra	No phed				Weighting:	: ☑A□B□C	: 🗆 z
Type(use, NAC):	Coatesvill Residentia	e, PA 19320		☐ Yes ☑ Site Photogra	No phed		Roadway #3:	:	Weighting:	: ☑ A □ B □ C	: 🗆 z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft):	Coatesvill Residentia	e, PA 19320	<b>Road</b> Wid	☐ Yes ☑  Site Photogra ☑ Yes ☐  Iway #2:  ☐ Lth(ft):	No phed		Width(ft):		Weighting	Roadway #4: Width(ft):	: □ z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:	Residentia  EB	PA 19320	Road Wid Dir	Yes V Site Photogra V Yes   dway #2: ch(ft): cection:	No phed		Width(ft): Direction:			Roadway #4: Width(ft): Direction:	: 🗆 z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft):	Coatesvill Residentia	e, PA 19320	Road Wid Dir	☐ Yes ☑  Site Photogra ☑ Yes ☐  Iway #2:  ☐ Lth(ft):	No phed	<u> </u>	Width(ft):			Roadway #4: Width(ft):	z 🗆 z
Type(use, NAC):  raffic Data  Roadway #1:  Width(ft): Direction:	Residentia  EB	PA 19320	Road Wid Dir Speed	Yes V Site Photogra V Yes   dway #2: ch(ft): cection:	No phed		Width(ft): Direction:			Roadway #4: Width(ft): Direction:	z z
Type(use, NAC):  raffic Data  Roadway #1: Width(ft): Direction: Speed Limit:	Residentia  EB  55	PA 19320	Road Wid Dir Speed	☐ Yes ☑  Site Photogra ☑ Yes ☐  Liway #2: Lth(ft): Lection: Limit:	No phed		Width(ft): Direction: Speed Limit:			Roadway #4: Width(ft): Direction: Speed Limit: Observed	z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:	Residentia  EB  55  55	BO WB 55	Road Wid Dir Speed	Yes V Site Photogra V Yes   the Company way #2:  the Company way #2:  the Company way way way way way way way way way wa	No phed		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd:	z 🗆 z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	EB 55 55 235	BO WB 55	Road Wid Dir Speed Observ	Yes V Site Photogra Ves  Yes  Lith(ft): Pection: Limit: Ped Spd: Auto:	No phed		Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	z z
Type(use, NAC):  raffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:   Auto:   Med Tk:	EB 55 55 235 19	BO WB 55 293 16	Road Wid Dir Speed Observ	Yes V Site Photogra V Yes  Lth(ft): Lection: Limit: Led Spd: Auto: Med Tk:	No phed		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	z





M6.10 Site Photos: North:







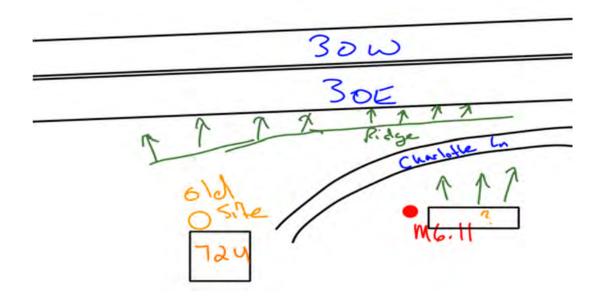
South:



West:



	Project: SR Co Setup#: 32	-0030 / Se atesville, F	22 12:20 PM ection AIR - PA	<u>1</u>	Ga.	<b>A</b>	ett .	Temperat Cloud c	vr: 🗆 Non	e ☑ Partly □	Cloudy	
Mo	Site ID(s): MI	5.11				mir	Chicago and the control of the contr	Wind dire				
ID:	M6.11 Start:	13:15	Stop:	<sup>13:35</sup> ☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	71. 3	L <sub>min</sub> (dB):	57.1 L	max(dB):	83.5
•	GPS (°N,°W):			□ 30 min □ 24 hr	Stor #:	174	Calib(dB):	94.10 /	93.86	Meas.	Ht(ft):	5
	GPS (°N,°W): 39.99664780955352, - 75.84029788261643  Location: 724 Charlotte Ln. Coatesville, PA 19320	Relocat				Pre-	Post-	•				
	Type(use, NAC):	Residenti		Site Photog  ☑ Yes □	-				Weighting:	☑ A □ B	□ C □	Z
<u> raff</u>	<u>ic Data</u>											
	Roadway #1:		30	Roadway #2:			Roadway #3:	i		Roadway #4:		
	Width(ft):		1	Width(ft):			Width(ft):			Width(ft):		
	Direction:	EB	WB	Direction:			Direction:			Direction:		
	Speed Limit:	55	55	Speed Limit:			Speed Limit:	<u></u>	S	peed Limit:		
0	bserved Spd:			Observed Spd:			Observed Spd:			Observed Spd:		
	Auto:	205	274	Auto:			Auto:			Auto:		
	Med Tk:	21	12	Med Tk:			Med Tk:			Med Tk:	-	
	Hvy Tk:	25	44	Hvy Tk:			Hvy Tk:			Hvy Tk:		
	Bus:	3	2	Bus:			Bus:			Bus:	-	
	MCycle:	0	0	MCycle:			MCycle:			MCycle:		
vaca				. Bluster at 1:26 e home. GPS died								(once)
Sit	e Sketch:											



M6.11 Site Photos: North:





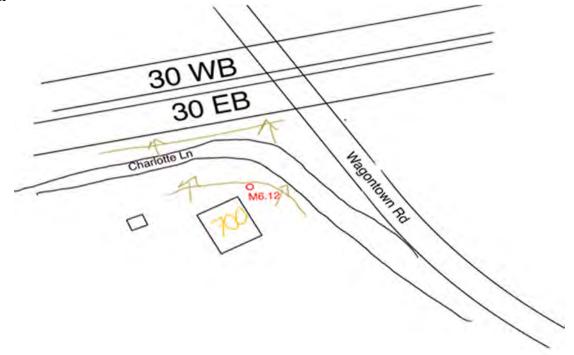
South:







Site ID(s): M6	5.12			Gai Fle		The same of	Vind speed (	· ·			_
						7	Wind dire	ection: West			_
Aeasurement Da	ata										
o: <b>M6.12</b> Start:	13:15	Stop:	<sup>13:35</sup> ☑ 20 min	SLM #:	4229	L <sub>eq</sub> (dB):	68 <b>.</b>	$L_{min}(dB)$ :	55.1 L <sub>max</sub>	(dB):	80.
GPS (°N,°W):	39.996713 75.837539		□ 30 mir □ 24 hr	Stor #:	193	Calib(dB):	94.08 /	93.81	Meas. Ht	(ft):	5
Location:	700 Wago	ntown Rd.	Reloc				Pre-	Post-			
Type(use, NAC):	Coatesville, PA 19320		Site Photo					Weighting:	☑ A □ B □	1 C 🗆	Z
affic Data											
Roadway #1: Width(ft):		30	Roadway #2: Width(ft):	Wagontown	Rd	Roadway #3: Width(ft):			Roadway #4: _ Width(ft):		
Direction:	EB	WB	Direction:	Both		Direction:			Direction:		
Speed Limit:	55	55	Speed Limit:	25		Speed Limit:		S	peed Limit:		
Observed Spd:			Observed Spd:			Observed Spd:			Observed Spd:		
Auto:	205	274	Auto:	12		Auto:			Auto:		
Med Tk:	21	12	Med Tk:	0		Med Tk:			Med Tk:		
	25	44	Hvy Tk:	0		Hvy Tk:			Hvy Tk:		
Hvy Tk:	3	2	Bus:	0		Bus:			Bus:		
Hvy Tk: Bus:	0	0	MCycle:	0		MCycle:			MCycle:		
-											





M6.12 Site Photos: North:



East:



South:



West:



Project: v  Setup#: 2	17.01  Pata  13:48	ection AIR -		FIE	4229		Cloud of Vind speed ( Wind direction 68	cvr:	53.4	L <sub>max</sub> (dB):	81
Location:	PA 19320		Relo	#: cated No			Pre-	Post-	_		
Type(use, NAC):				ographed				Weighting	: ☑ A □ B	□c□	Z
affic Data Roadway #1:	: :	30	Roadway #2:	Country C Rd	lub	Roadway #3:			Roadway #4:		
Width(ft): Direction:		WB	Width(ft): Direction:	Both		Width(ft): Direction:			Width(ft): Direction:		
Speed Limit		55	Speed Limit:			Speed Limit:			Speed Limit:		
Observed Spd			Observed Spd:			Observed Spd:			Observed Spd:		
Auto	223	271	Auto:	10		Auto:			Auto:	1	
Med Tk	30	13	Med Tk:			Med Tk:		<del>                                     </del>	Med Tk:		
Hvy Tk	23	30	Hvy Tk:			Hvy Tk:			Hvy Tk:		
Bus	4	1	Bus:			Bus:			Bus:		
MCycle	0	0	MCycle:			MCycle:			MCycle:		_
Notes: Site Sketch:				/N7.01		Kimberly Cir					
		1	Solid weaden privacy lands		7	<u> </u>					



M7.01 Site Photos: North:







South:



West:



Measurement D  ID: M7.02 Start:	13:48	Stop:	14:08	☑ 20 min	SLM #:	:	L <sub>eq</sub> (dB):	55 <b>.</b> 8	L <sub>min</sub> (dB):	<del></del>	$L_{\text{max}}(dB)$ :	
GPS (°N,°W):	39.994004733333334, - 75.85632874999999			□ 24 hr - Relocat	# :	Stor 164 #:	Calib(dB):	93.96 /	93.90	Meas	. Ht(ft):	5
Location:	Location: 7 Kimberly Cir. Coatesville, PA 19320				ded No			Pre-	Post-			
Type(use, NAC): Residential (B)				Site Photog  ☑ Yes □	-				Weighting:	☑ A 🗆 I	в□с□	Z
raffic Data												
Roadway #1: Width(ft):				adway #2: _	Country	Club	Roadway #3 Width(ft)			Roadway #4		
Direction:		WB		irection:	Both		Direction			Direction		
Speed Limit:	55	55	Spe	ed Limit:	35		Speed Limit	:	S	peed Limit	, <b>:</b>	
Observed Spd:			Obse	rved Spd:	35		Observed Spd	:		Observe Spo		
Auto:	223	271		Auto:	10		Auto	:		Auto	):	1
Med Tk:	30	13	•	Med Tk:		_	Med Tk	:		Med Tk	::	
Hvy Tk:	23	30		Hvy Tk:		_	Hvy Tk	Hvy Tk:		Hvy Tk:		
Bus:	4	0	•	Bus:		_	Bus	:		Bus	;: <u> </u>	
MCycle:	0	0		MCycle:		_	MCycle	:		MCycle	<u>.</u> :	
Notes: Sheds a	nd fenc	es brea	king L	OS from mai	nline.	Dense	foliage and g	round co	over across	from Cour	try Club.	•

Personnel:

1,13

M7.02 Site Photos:







South:



West:



: <b>M7.03</b> Start:	14:24	Stop:	14:44	☑ 20 min	SLM #:	4229	L <sub>eq</sub> (dB):	61. 6	L <sub>min</sub> (dB):	52.1 Lmax(dB)	: 72.
GPS (°N,°W):	39.99385522154129, - 75.85560694249999			□ 24 hr	Stor #:	184 Calib(dB):	93.98 /	94.03	Meas. Ht(ft)	: 5	
Location:	16 Kimbe	rly Cir. Coat	esville,	Relocated ☐ Yes ☑			<del></del>	Pre-	Post-	_	
Type(use, NAC):	PA 19320 Residential (B)			Site Photograp  ☑ Yes □ I	hed				Weighting	• ☑ A □ B □ C	□z
affic Data											
	Roadway #1:30		_	adway #2:			Roadway #3: Width(ft):			Roadway #4: Width(ft):	
Direction	EB	WB	D	irection:			Direction:			Direction:	
Speed Limit	55	55	Spe	ed Limit:			Speed Limit:			Speed Limit:	
Observed Spd	: 		0bse	rved Spd:			Observed Spd:			Observed Spd:	
Auto	315	370		Auto:			Auto:			Auto:	
Med Tk	17	20	_	Med Tk:			Med Tk:	-		Med Tk:	
Hvy Tk	21	38	_	Hvy Tk:			Hvy Tk:			Hvy Tk:	
Bus	: 1	4	_	Bus:			Bus:			Bus:	
MCycle	0	1	<del>-</del> <del>-</del>	MCycle:			MCycle:			MCycle:	

30 WB

30 EB



M7.03 Site Photos: North:



East:



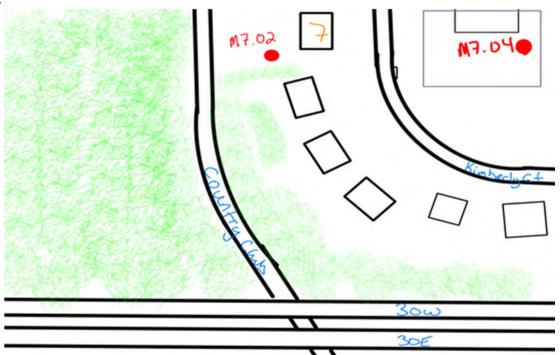
South:



West:



	Date:	_ <u>A</u> p	ril 26, 202	22 1:42 PM		Temperature (F): 60								
	Project:	SR-	-0030 / Se	ection AIR -		Cloud cvr: ☐ None ☐ Partly ☑								=
			atesville, I	PA						0.000	L Non	ie 🗆 Partij	y 🗹 Cloudy	
	Setup#: Site ID(s):	23	7.04			<b>Gannett</b> Wind speed (mph): 3								
	1111		7.04				Fle	mir	na					_
									_	Wind dire	ection: South	east	_	
Mea	suremen	t Da	<u>ata</u>											
ID:	<b>M7.04</b> Sta	art:	14:24	Stop:	14:44	☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	57 <b>.</b> 6	$L_{min}(dB)$ :	50.5	$L_{max}(dB)$ :	66.1
_				_		□ 30 min	# •		<del>_</del>	0	_			
	GPS (°N,°\	W):		3533333336 301666666	, -	☐ 24 hr	Stor #:	165	Calib(dB):	93.96 /	93.90	Me	as. Ht(ft):	5
			/3.83383	301000000		– Relocate				Pre-	Post-	_		
	Locatio	on:		Dr. Coatesvil	le, PA	□ Yes ☑	No							
		-	19320			Site Photogra	phed				Weighting:	[7] A [	] в 🗆 с 🗆	7
	Type(use, NAC): Residential (B)			☑ Yes □ No								_		
raffi	c Data	_			<u>.</u>									
Iaiii	<u>C Data</u>													
	Roadway #			30		adway #2:			Roadway #3			Roadway		
	Width(ft			T 14/5		idth(ft):			Width(ft)			Width(f		1
	Directio		EB	WB	-	irection:			Direction			Directi		
	Speed Limi			55		ed Limit:			Speed Limit		S	Speed Lim		
Ok	served Sp	od:			Obse	rved Spd:			Observed Spd	:		Obser		
			-		=	_				-	<u> </u>	5.	pd:	1
	Aut	to:	315	370		Auto:			Auto	:		Au	to:	
	Med 7	ľk:	17	20	•	Med Tk:			Med Tk	:		Med	Tk:	
	Hvy 7	Γk:	21	38	•	Hvy Tk:			Hvy Tk	:		Hvy	Tk:	
	Ві	ıs:	1	4	-	Bus:			Bus	:		В	us:	
	MCyc]	le:	0	0	•	MCycle:			MCycle	:		MCyc	le:	
	-								_			-		1
Not	og:													
MOL														
										<u> </u>				





M7.04 Site Photos: North:



East:



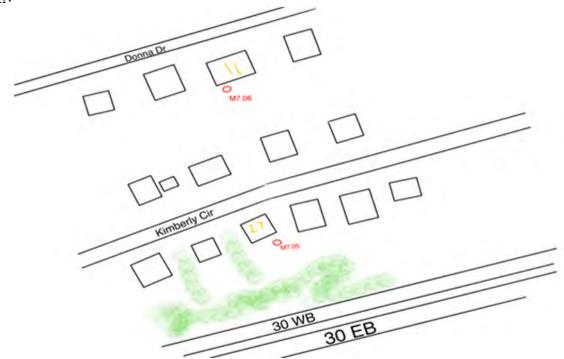
South:



West:



Date:	April 26	, 2022	2:00 PM		Temperature (F): 63									
			tion AIR -						Cloud c	vr: □ No.	ne □ Partly ☑	Cloudy		
Coatesville, PA										L NOI	ie 🗆 Partiy 🖭	Cloudy		
	24 M7.05				Gannett					Wind speed (mph): 4				
3.cc 15(3)	VI7.03					FIE	Fleming							
								-	Wind dire	ction: North	ieast		_	
_														
<u>easurement l</u>	<u>Data</u>													
M7.05 Start:	14	:59	Stop:	15:19	☑ 20 min	SLM #:	4229	Leq(dB):	69. 7	$L_{min}(dB)$ :	53.9	$L_{max}(dB)$ :	79.	
					□ 30 min			<del></del>	,	_				
		39.99405243333333, - 75.85384813333333			☐ 24 hr	Stor #:	185	Calib(dB):	93.98 /	94.03	Meas.	Ht(ft):	5	
	73.03304013333333			Relocated				Pre-	Post-					
Location		imberl .9320	y Cir. Coate	esville,	☑ Yes □	No								
	17.1	.5520			Site Photographed					Weighting	•	□с□	Z	
Type(use, NAC): Residential (B)				✓ Yes	No									
ffic Data														
ine Butu														
Roadway #1		3	0		dway #2:			Roadway #3:			Roadway #4:			
Width(ft) Direction		EB	WB		.dth(ft): .rection:			Width(ft): Direction:		1	Width(ft): Direction:		1	
Speed Limit		55	55		ed Limit:			Speed Limit:		<del>                                     </del>	Speed Limit:			
Observed Spd		55			ved Spd:			Observed Spd:		<u> </u>	Observed			
Observed spa	•			Obser	ved spa:			Observed spa.			Spd:			
Auto	: 3	318	446		Auto:			Auto:		<u> </u>	Auto:			
Med Tk	: =	20	19		Med Tk:			Med Tk:	-		Med Tk:			
Hvy Tk	: -	15	26		Hvy Tk:			Hvy Tk:	. ——	<u> </u>	Hvy Tk:			
Bus		4	1		Bus:			- Bus:		<del> </del>	- Bus:			
	. —	0	0		MCycle:			MCycle:		<del> </del>	MCycle:			
MCvcle			_					1107 0=0		<u> </u>	1102 020			
MCycle	·													
_	_					•								
MCycle otes:	·					<b>,</b>								
_					_									
_					_									



M7.05 Site Photos: North:







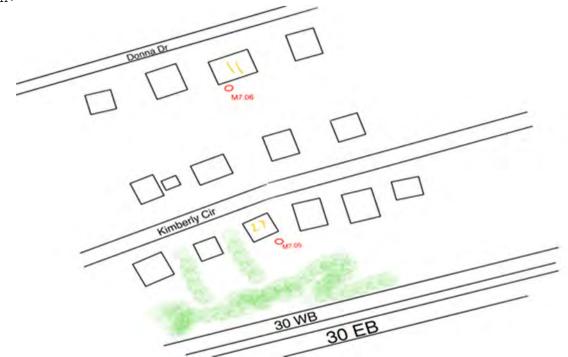
South:



West:



Project: 5  Setup#: 2		22 2:16 PM ection AIR - PA		Temperature (F): 63  Cloud cvr: □ None □ Partly ☑ Cloud  Wind speed (mph): 4  Fleming  Wind direction: South									
Measurement I	<u>Data</u>						villa all c	<u> </u>			-		
D: <b>M7.06</b> Start:	15:59	Stop:	<sup>15:19</sup> ☑ 20 m	# -	4228	Leq(dB):	56. 3	$L_{min}(dB)$ :	48.7	$L_{max}(dB)$ :	66.2		
GPS (°N,°W)	39.9949 75.8539	<del></del> 8261666667, 868	□ 30 m - □ 24 hi		166	Calib(dB):	93.96 /	93.90	Meas. Ht(f		5		
Location	Location: 11 Donna Dr. Coatesville, PA			Relocated  ☐ Yes ☑ No			Pre-	Post-					
Type(use, NAC): Residential (B)				Site Photographed ☑ Yes □ No				Weighting: ☑ A ☐ B ☐ C ☐ Z					
raffic Data													
Roadway #1		30	Roadway #2:			Roadway #3:			Roadway #4				
Width(ft)		14/0	Width(ft):			Width(ft):		<del></del>	Width(ft)		1		
Direction		WB	Direction:			Direction:			Direction				
Speed Limit	: 55	55	Speed Limit:	:		Speed Limit:		S	speed Limit	:			
Observed Spd	:		Observed Spd:	:		Observed Spd:	:		Observed Spd				
Auto	: 318	446	Auto	: [		Auto			Auto	:			
Med Tk	: 20	19	Med Tk	: —		Med Tk:	:		Med Tk	:			
Hvy Tk	: 15	26	Hvy Tk	:		Hvy Tk:	:		Hvy Tk	:			
Bus	: 4	1	Bus	:	-	Bus	:		Bus	:			
MCycle	: 0	0	MCycle:	:		MCycle:	:		MCycle	:			
Notes:					·								
Site Sketch:													





M7.06 Site Photos: North:



East:



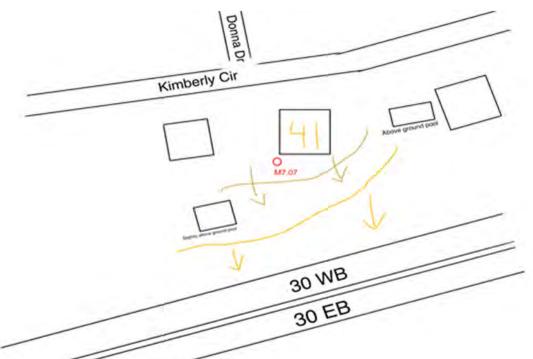
South:



West:



Date:         April 26, 2022 10:57 AM           Project:         SR-0030 / Section AIR - Coatesville, PA           Setup#:         21           Site ID(s):         M7.07				1			inne emil	The Control of the Co	Temperature (F): 63  Cloud cvr: □ None □ Partly ☑ Cloudy  Wind speed (mph): 2  Wind direction: Northeast				
Measuremen			Chan	42.27		SLM	4220	L <sub>eq</sub> (dB):	67.	Lmin(dB):	51.9	L <sub>max</sub> (dB):	75.7
	art:	12:07	Stop:	12:27	☑ 20 min - □ 30 min	#:	4229	<u>нед</u> ( <b>d</b> В):	8	Lmin(GB).		Lmax (QB).	75.7
GPS (°N,°	W):	39.99467791666667, - 75.85130096666667		-				Calib(dB):	93.98 /	94.03	Meas. Ht(ft):		5
Locati	on:		lry Cir. Coate	sville,	Relocated  Yes  No				Pre-	Post-	_		
Type(use, NA	AC):	Residenti			Site Photographed ☑ Yes □ No					Weighting	: 🗹 A 🗆 I	в 🗆 с 🗆	Z
raffic Data													
Roadway :	t):		30	W	adway #2:idth(ft):		<u> </u>	Roadway #3: Width(ft):	:		Roadway #4	:	
Directi		EB	WB		irection:			Direction:			Direction		
Speed Lim	it:	55	55	Spe	ed Limit:			Speed Limit:	:		Speed Limit	:	
Observed S	pd:			Obse:	rved Spd:			Observed Spd:			Observe Spo		
Au	to:	211	246		Auto:	1		Auto	:		Auto	:	ĺ
Med '	Tk:	17	12		Med Tk:			Med Tk	:		Med Tk	:	<del>                                     </del>
Hvy '	Tk:	17	25		Hvy Tk:			Hvy Tk	:		Hvy Tk	:	†
Ві	us:	1	3		Bus:			Bus	:		Bus	:	+
MCyc	le:	0	0		MCycle:			MCycle:	:		MCycle	:	1
Notes:													
Site Sketc	h:												



M7.07 Site Photos: North:



East:



South:



West:



		22 11:18 AN	1				Tempera	eture (F): 63			_
	R-0030 / Se patesville,	ection AIR -					Cloud	cvr: 🗆 Non	e □ Partly 🛭	☑ Cloudy	
Setup#: 21	<u>[</u>	FA		Ga	nne	ett .	Wind speed		,	,	
Site ID(s): M	7.08				mir	Chicago and the control of the contr					-
				7.00	2170	-	Wind dir	ection: South	vest		=
Measurement D	ata										
D: M7.08 Start:	12:07	Stop:	<sup>12:27</sup> ☑ 20 min	SLM	4228	L <sub>eq</sub> (dB):	56.	L <sub>min</sub> (dB):	45.8	L <sub>max</sub> (dB):	62.3
		_	□ 30 min	#:			6	_			
GPS (°N,°W):		2911666667, 3511666666		Stor #:	163	Calib(dB):	93.98 /	93.90	Meas	. Ht(ft):	5
			Relocated				Pre-	Post-	•		
Location:	21 Donna 19320	a Dr. Coatesv	ille, PA ☑ Yes □	No							
Type(use, NAC):	Resident	ial (B)	Site Photogra  ☑ Yes □					Weighting:	☑ A □ E	в□с□	Z
		(= /	<u>v</u> res 🗆	NO							
affic Data											
Roadway #1:		30	Roadway #2:			Roadway #3:	:		Roadway #4	:	
Width(ft): Direction:	EB	WB	Width(ft): Direction:			Width(ft): Direction:			Width(ft) Direction		1
Speed Limit:	55	55	Speed Limit:			Speed Limit:			peed Limit		
Observed Spd:		33	Observed Spd:			Observed Spd:			Observe		
obberved bpd.						obberved bpd			Spd		
Auto:	211	246	Auto:			Auto:	:		Auto	:	
Med Tk:	17	12	Med Tk:			Med Tk:			Med Tk	:	
Hvy Tk:	17	25	Hvy Tk:			Hvy Tk:	:		Hvy Tk	:	-
Bus:	1	3	Bus:			Bus:			Bus	ş:	
MCycle:	0	0	MCycle:			MCycle:	:		MCycle	:	
Notes: Site re	located	d due to	disgruntled resid	ent at	19 Dor	ına.					
Site Sketch:											
						Dago Ar					
					1	XIbour	//	1			
							1	1			
								11			
					_		ex(	1)			
	1			L		W)	7.68	11			
	,							11	$\Box$		
			K	wanta c	1						
				7 [						-	
				ا ل	_						



M7.08 Site Photos: North:



East:



South:



West:



	Project: SI		22 6:34 AM ection AIR - PA						Temperat		e ☑ Partly □	l Cloudy	-
5	Setup#: 2! Site ID(s): N	7.09					nne		Wind speed (	mph): 2			_
						FIE	emi	ng	Wind dire	ection: West			_
Measu	rement D	ata_											
D: <b>M7.</b>	<b>'.09</b> Start:	07:34	Stop:	07:54	☑ 20 min	SLM #:	4229	L <sub>eq</sub> (dB):	67. 4	L <sub>min</sub> (dB):	56.5	$L_{max}(dB)$ :	74.9
	GPS (°N,°W):	39.99491 75.84976	143, - 5544999999		□ 30 min □ 24 hr	Stor #:	186	Calib(dB):	94.08 /	93.81	Meas.	Ht(ft):	5
	Location:		erly Cir. Coate	esville,	Relocated □ Yes ☑	No		<u> </u>	Pre-	Post-	-		
Ту	/pe(use, NAC):	Resident			Site Photograp  ☑ Yes □ N					Weighting:	☑ A □ B	□С□	Z
raffic D	<u>Data</u>												
	adway #1:		30	-	adway #2:			Roadway #3: Width(ft):			Roadway #4 Width(ft)		
	irection:		WB	-	rection:			Direction:		T	Direction		Τ
Spe	ed Limit:	55	55	Spee	ed Limit:			Speed Limit:			Speed Limit	:	
Obse:	rved Spd:			Obser	rved Spd:			Observed Spd:			Observe Spd		
	Auto:	337	326		Auto:			Auto:		1	Auto	:	
	Med Tk:	28	12	-	Med Tk:			Med Tk:	:		Med Tk	:	<del>                                     </del>
	Hvy Tk:	28	26	-	Hvy Tk:			Hvy Tk:	:		Hvy Tk	:	
	Bus:	3	4	-	Bus:			Bus:		<del>                                     </del>	Bus	:	
	MCycle:	0	1	-	MCycle:			MCycle:			MCycle	:	
	: Plane a	it 7:48											



M7.09 Site Photos: North:



East:



South:



West:



Setup#: 25   Site ID(s):   MT	7.10  3ta  07:34  39.99542	Stop: — 2043333333,	07:54		4228 167		Wind speed ( Wind dire		49 Meas	L <sub>max</sub> (dB): . Ht(ft):	69.3
Location:		erly Cir. Coate		No		_	Pre-	Post-	-		
Type(use, NAC):	Residenti	ial (B)	Site Photogr ☑ Yes □	-				Weighting:	☑ A □ B	C 🗆	Z
Roadway #1: Width(ft): Direction:	EB	30 WB	Roadway #2: Width(ft): Direction:			Roadway #3 Width(ft) Direction	:		Roadway #4 Width(ft) Direction	:	
Speed Limit:	55	55	Speed Limit:			Speed Limit		<del>                                     </del>	Speed Limit		
Observed Spd:			Observed Spd:			Observed Spd			Observe Spd		
Auto:	337	326	Auto:			Auto	:	1	Auto	:	I
Med Tk:	28	12	Med Tk:			Med Tk	:		Med Tk	:	
Hvy Tk:	28	26	Hvy Tk:			Hvy Tk	:		Hvy Tk	:	
Bus:	3	4	Bus:			Bus	:		Bus	:	
MCycle:	0	1	MCycle:			MCycle	:		MCycle	:	
Notes:											
Site Sketch:				M.	1.10						

30€

M7.10 Site Photos: North:







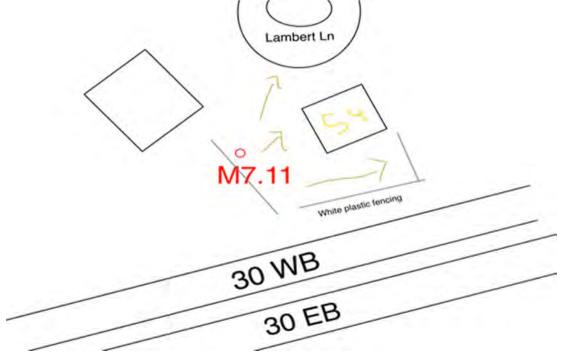
South:



West:



Project:         SR           Co         Setup#:         26	-0030 / Se atesville, F	2 7:07 AM ction AIR - PA		C. C.	anne Jemii		Cloud c	vr: ☑ Non	e □ Partly □	] Cloudy	-
						-	Wind dire	ction: West			-
/leasurement Da	ata										
D: <b>M7.11</b> Start:	08:08	Stop:		20 min <sup>SL</sup> 30 min		L <sub>eq</sub> (dB):	66. 6	Lmin(dB):	52.3	$L_{\text{max}}(dB)$ :	81.9
GPS (°N,°W):	39.99521 75.84833	608333334, 335		94 hr Sto	r 187	Calib(dB):	94.08 /	93.81	Meas	Ht(ft):	5
Location:	54 Lambe PA 19320	ert Ln. Coate	sville,	Relocated ] Yes ☑ No			Pre-	Post-			
Type(use, NAC):	Residentia	al (B)		te Photographed ☑ Yes □ No				Weighting:	☑ A □ B	□ C □	Z
affic Data											
Roadway #1:		30	Roadway	#2:		Roadway #3:			Roadway #4	:	
Width(ft):			Width(			Width(ft):			Width(ft)		
Direction:	EB	WB	Direct	ion:		Direction:			Direction	:	
Speed Limit:	55	55	Speed Lir	mit:		Speed Limit:		5	Speed Limit	:	
Observed Spd:			Observed S	Spd:		Observed Spd:			Observe Spd		
Auto:	300	258	Aı	uto:		Auto:			Auto	:	1
Med Tk:	33	19	Med	Tk:		Med Tk:			Med Tk	:	†
Hvy Tk:	23	25	Hvy	Tk:		Hvy Tk:			Hvy Tk	:	<u> </u>
Bus:	1	5	- I	Bus:		Bus:			Bus	:	+
MCycle:	0	0	МСус	cle:		MCycle:			MCycle	:	
Notes:											
Site Sketch:											



M7.11 Site Photos: North:



East:



South:



West:



			2 7:09 AM ection AIR -	<u></u>			*			rature (F):	46				
<u>-</u>		tesville, F							Cloud	ı cvr: 🔽	] None	e 🗆 Par	tly □ Clo	udy	
Setup#: _ Site ID(s):	26 M7.	12				Ga.	nne	tt	Wind speed	d (mph):	5				
Site 1D(s)	IVI7.	12				Fle	mir	ng	Wind di	_	West				
										_	West				
Measurement	Da	ta													
ID: <b>M7.12</b> Star		08:08	Stop:	<sup>08:28</sup> ☑ 20		SLM #:	4228	L <sub>eq</sub> (dB):	58. 2	Lmin	(dB):	49	L <sub>max</sub> (d	lB):	71.4
GPS (°N,°W		39.99603 75.84822	2133333333, - 805	□ 30 □ 24		Stor #:	168	Calib(dB):	94.10 /	93.8	6	A	Meas. Ht(f	it):	5
Location		55 Lambe PA 19320	ert Ln. Coates		Relocated Yes 🗹 N	lo		_	Pre-	Post-				-	
Type(use, NAC	_	Residenti			Photographo Yes 🗆 No					Weigh	nting:	<b>☑</b> A	□ в □ (	. 🗆 :	Z
Traffic Data															
Roadway #1	1:		30	Roadway #	:2:			Roadway #3	:		1	Roadway	r #4:		
Width(ft			30	Width(ft				Width(ft)				Width(			
Direction	n:	EB	WB	Directio	n: 			Direction	:			Direct	ion:		
Speed Limit	t:	55	55	Speed Limi	t:		<u>.</u>	Speed Limit	:		S	peed Li	.mit:		
Observed Spo	d:			Observed Sp	od:			Observed Spd	:			Obse	erved Spd:		
Auto	0:	300	258	Aut	.0:			Auto	:			A	uto:	1	
Med T	k:	33	19	Med T	'k:			Med Tk	:			Med	l Tk:	-	
Hvy Tl	k:	23	25	Hvy T	'k:			Hvy Tk	:			Hvy	Tk:		
Bus	s:	1	5	Bu	ıs:			Bus	:				Bus:	-	
MCycle	e:	0	0	MCycl	e:			MCycle	:		_	МСУ	rcle:		
Notes: Moved Line of sight							hieldi	ng condition	s due t	o hard	scapiı	ng in f	ront of	hous	e.
Site Sketch	:	A.	Milan		LAN	MB CR	1/2	<b>S</b>	η7.I						
		J. Commission			<	>		12.	1						

M7.12 Site Photos: North:







South:



West:



Date:			2 10:20 AM	1			1		Tempera	ture (F): 50			_
Project:			ction AIR -						Cloud	vr: 🔽 Non	e □ Partly [	- Cloudy	
Setup#:		atesville, F	PA					4.2		ı INUII	с ш таппу ц	_ cloudy	
Site ID(s):	_	7.13					nne	Charles and the control of the contr	Wind speed (	mph):			_
						FIE	?mir	ng e	Wind dire	ection: \Most			
									Willia all e	ection: West			_
Maga	+ D-												
<u>Measuremen</u>													
ID: <b>M7.13</b> St	art:	11:26	Stop:	11:46	☑ 20 min	SLM #:	4229	L <sub>eq</sub> (dB):	65. 2	$L_{min}(dB)$ :	55.7	$L_{max}(dB)$ :	77.1
GDS (0N 0	), a ()	20.00550	47222222		□ 30 min	Stor	402	Calib(dB):	04.00 /		Mong	. Ht(ft):	_
GPS (°N,°	/vv):		173333333, 680000001	-	□ 24 hr	#:	192	Calib(ub).	94.08 /	93.81	Meas	. nt(1t).	5
Logat	ion.	120 Mino	ral Carina Dd	1	Relocate			<u> </u>	Pre-	Post-	•		
Locat	ion:		ral Spring Rd e, PA 19320	l.	☐ Yes ☑	l No							
Tump/usp N	۸۵۱.	Docidonti	al (D)		Site Photogra	-				Weighting:	☑ A □ E	в 🗆 с 🗆	Z
Type(use, N	AC): -	Residentia	аі (в)		☑ Yes □	l No							
raffic Data													
Roadway Width(f			30		adway #2: _ idth(ft):			Roadway #3 Width(ft)			Roadway #4 Width(ft)		
Directi		EB	WB		irection:			Direction		T	Direction		
Speed Lim	it:	55	55	Spe	ed Limit:			Speed Limit	:	S	peed Limit	:	
Observed S					rved Spd:			Observed Spd		<del>                                     </del>	- Observe		
	_										Spd		
Au	to:	235	293		Auto:	ı		Auto	:	1	Auto	:	l
Med	Tk:	19	16	•	Med Tk:			Med Tk	. ——	<del>                                     </del>	Med Tk	:	
Hvy		28	39	•	Hvy Tk:			Hvy Tk		<del> </del>	Hvy Tk		
_	us:	0	1	•	Bus:			Bus		<del>                                     </del>	Bus		
MCyc	le:	0	1		MCycle:			MCycle	:		MCycle	:	
		pike fr	om card	board	hitting fend	ce 11:38	spike	phone dropp	ed on me	tal rake			
Site Sketc	n:										-		
						Mineral	Springs F	Rd					
					presey	tervo.	7						
							1						
						M7	.13						
					1								
				_									
							1						
					/		/						
					/		-				_		
					1	-	/_						
			Tion is	raffic (	slimbing 30								
			MB	lamo	.,,	WB							
		_				EB							
					30	ا ا							



M7.13 Site Photos: North:



East:



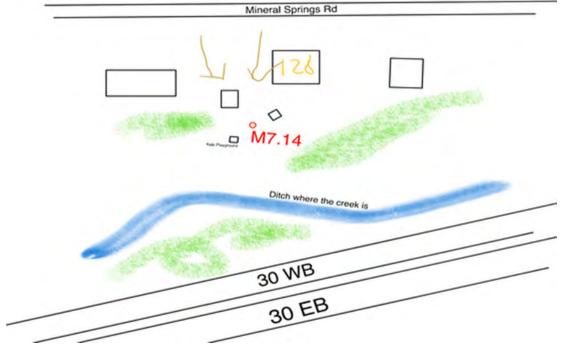
South:



West:



	Date: _ Project:	SR-	-0030 / Se	2 9:47 AM ction AIR -						Tempera Cloud		ne □ Partly □	1 Claudy	=
			atesville, F	PA							<u>F</u> I/I/OI	ie 🗆 Partiy L	Cloudy	
	Setup#: _ Site ID(s):	30 M7	7.14					nne	The Control of the Co	Wind speed	( <b>mph):</b> 5			
		1417					Fle	mi	ng	Wind dire	ection: West			_
											<del></del>			_
Me	asurement	Da	ata_											
ID:	<b>M7.14</b> Star	t:	10:48	Stop:	11:08	☑ 20 min - □ 30 min	SLM #:	4229	L <sub>eq</sub> (dB):	67. 5	L <sub>min</sub> (dB):	52.3	$L_{\text{max}}(dB)$ :	76.4
	GPS (°N,°W	/):	39.99668 75.84285	62, - 008333332		☐ 24 hr	Stor #:	191	Calib(dB):	94.08 /	93.81	Meas	. Ht(ft):	5
	Location		120 Mino	ral Spring Ro	1	Relocated			<u></u>	Pre-	Post-	_		
	LOCATION	n:		e, PA 19320		□ Yes ☑	No							
	Type(use, NAC	C): _	Residentia	al (B)		Site Photograp ☑ Yes □ I					Weighting:	☑ A □ B	□ C □	Z
raf	fic Data													
	Roadway #:			30	_	adway #2:			Roadway #3			Roadway #4		
	Width(ft Direction		EB	WB	_	idth(ft):			Width(ft): Direction:		<del></del>	Width(ft) Direction		T
	Speed Limit		55	55	_	ed Limit:			Speed Limit		<del>                                     </del>	Speed Limit		
,	Observed Spo			33	_	rved Spd:			Observed Spd			Observe		_
	observed spo	u·			- ODSE				Observed Spa			Spd		
	Auto	0:	186	232		Auto:			Auto	:	1	Auto	:	
	Med T	k:	15	14	-	Med Tk:			Med Tk	:	<del> </del>	Med Tk	:	1
	Hvy T	k:	27	29	-	Hvy Tk:			Hvy Tk	:	<del> </del>	Hvy Tk	:	1
	Bus	s:	0	1	-	Bus:			Bus	:	<del>                                     </del>	Bus	:	†
	MCycle	e:	0	0	-	MCycle:			MCycle	:		MCycle	:	
No	tes:													
Si	te Sketch	:												
			_				Mir	neral S	prings Rd				•	







M7.14 Site Photos: North:





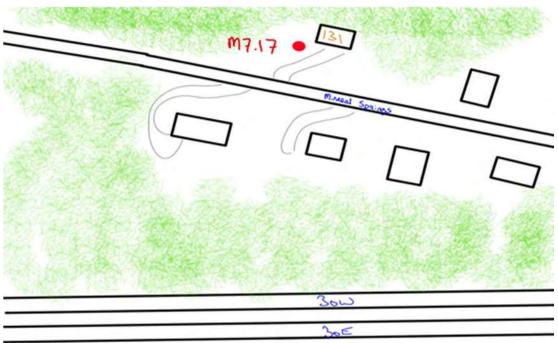
South:



West:



Setup#:	SR-0030 / S Coatesville 30 M7.15	Section AIR - , PA	·		A) nne emir	Contract of the Contract of th	Cloud Wind speed Wind din	(mph): 4	e ☑ Partly □ Cloud	ly 
Measurement		61	44.00	GT M	4220	T (4D)-	63	T (4D):	50.7 t /dp	. 71
D: <b>M7.15</b> Start	11:48	Stop:	11:08 <b>2</b> 0 min	SLM #:	4228	Leq(dB):	63. 4	L <sub>min</sub> (dB):	52.7 L <sub>max</sub> (dB)	71.
GPS (°N,°W)		36272329755, 30978935824	□ 30 min □ 24 hr	Stor #:	172	Calib(dB):	94.10 /	93.86	Meas. Ht(ft	: 5
Location		neral Spring Reville, PA 19320				<del></del>	Pre-	Post-	-	
Type(use, NAC)	: Resider	ntial (B)	Site Photogr  ☑ Yes □					Weighting:	⊠А □ B □ C	□Z
affic Data										
Roadway #1		30	Roadway #2:			Roadway #3:			Roadway #4:	
Width(ft) Direction		WB	Width(ft):			Width(ft): Direction:		<del></del>	Width(ft): Direction:	
Speed Limit		55	Speed Limit:			Speed Limit:			speed Limit:	
Observed Spo		33	Observed Spd:			Observed Spd:			Observed Spd:	
Auto	: 186	232	- Auto:	ĺ		Auto:		<del></del>	Auto:	i
Med Tk	: 15	14	Med Tk:			Med Tk:		<del>                                     </del>	Med Tk:	
Hvy Tk	: 27	29	- Hvy Tk:			Hvy Tk:		+	Hvy Tk:	
Bus	: 0	1	- Bus:			Bus:		+	Bus:	
MCycle	: 0	0	MCycle:			MCycle:		<del> </del>	MCycle:	
MCycle Notes:	0	0	MCycle:			MCycle:			MCycle:	





M7.15 Site Photos: North:



East:



South:



West:



Date: _ Project:	SR-0030 / S							Temperat	-	o 🗆 Dorthy 🗆	Cloudy	-
Setup#:	Coatesville, 29	, PA			-		4.4		<u>A</u> MOU	e □ Partly □	Cloudy	
Site ID(s):	M7.16					nne		Wind speed (	<b>mph):</b> 3			-
					FIE	emir	iy	Wind dire	ection: West			_
Measurement												
ID: <b>M7.16</b> Star	t: 10:12	Stop:		☑ 20 min	SLM #:	4229	Leq(dB):	72. 7	L <sub>min</sub> (dB):	55.3	$L_{max}(dB)$ :	85.5
GPS (°N,°W	/): 39.9968 75.8407	2436666667, 4745		□ 30 min □ 24 hr	Stor #:	190	Calib(dB):	94.08 /	93.81	Meas	. Ht(ft):	5
Locatio		neral Spring Ro ille, PA 19320		Relocate ☐ Yes ☑	No			Pre-	Post-			
Type(use, NAC	C): Residen	tial (B)		Site Photogra  ✓ Yes □	-				Weighting:	☑ A □ E	СС	Z
Traffic Data												
Roadway #		30		<b>vay #2:</b>			Roadway #3: Width(ft):			Roadway #4 Width(ft)		
Direction		WB	_	ection:			Direction:		T	Direction		
Speed Limi	t: 55	55	Speed	Limit:			Speed Limit:	:	S	peed Limit	:	
Observed Spe	d:		Observe	ed Spd:			Observed Spd:			Observe Spd		
Aut	o: 232	229		Auto:			Auto:	:		Auto	:	
Med T	k: 23	14	_ 	Med Tk:			Med Tk:	:		Med Tk	:	
Hvy T	k: 29	41	I	Hvy Tk:			Hvy Tk:	:		Hvy Tk	:	
Bu	s: 1	3	_	Bus:			Bus:	:		Bus		
MCycl	e: 0	0	I	MCycle:			MCycle:	:		MCycle	:	
Notes: Site Sketch	1:							_				
				Mineral S	Springs Ro	1						
		[			7	M7.16	36 V	100				
				Very lo	w creek	ditch	A TOTAL STREET			_		
				- Inda	-00	WB		_				
					30		30 EB					
						_						



M7.16 Site Photos: North:







South:

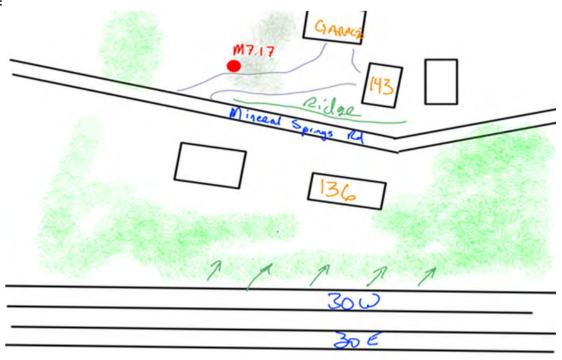


West:



<u></u>	ril 27, 202				*		Temperat	ure (F): 48		
	-0030 / Se						Cloud c	vr: □ None	e ☑ Partly □ Clou	ıdv
	atesville, F	PA							e w Faitiy 🗆 Clot	ady
Setup#: 29 Site ID(s): M	7.17			Gā	nne	ett v	Wind speed (	mph): 4		
Site 10(3).  V	7.17			FIE	emii	na				
				7.00	20000	-3	Wind dire	ction: West		
Measurement Da	<u>ata</u>									
ID: <b>M7.17</b> Start:	10:12	Stop:	10:32 🔽 20	0 min SLM	4228	L <sub>eq</sub> (dB):	64.	Lmin(dB):	55.3 L <sub>max</sub> (d	в): 73.8
		_		0 min #:			9			-
GPS (°N,°W):	39.997220	076666666	_	4 hr Stor	171	Calib(dB):	94.10 /	93.86	Meas. Ht(f	t): 5
	75.841036	641666668		#:		<u> </u>				
Location:	143 Mine	ral Spring R	d. 🗆	Relocated Yes ☑ No			Pre-	Post-		
200000111		e, PA 19320		yes ⊻i No						
Towns (von MAC)	Danisla sati	-1 (D)		Photographed				Weighting:	☑ A □ B □ C	: 🗆 z
Type(use, NAC):	Residentia	аі (Б)		l Yes ☑ No						
Traffic Data										
Roadway #1:		30	Roadway			Roadway #3:			Roadway #4:	
Width(ft): Direction:		WB	Width(f Directi	· -		Width(ft): Direction:		<del></del>	Width(ft): Direction:	1
	EB		_							
Speed Limit:	55	55	Speed Lim	iit:		Speed Limit:	·	S	peed Limit:	
Observed Spd:	·		Observed S	pd:		Observed Spd:	:		Observed	
			-					<u> </u>	Spd:	
Auto:	232	229	Au	ito:		Auto	:		Auto:	
Med Tk:	23	14	Med	Tk:		Med Tk:	:	<del>                                     </del>	Med Tk:	
Hvy Tk:	29	41	Hvy	Tk:		Hvy Tk:			Hvy Tk:	
Bus:	1	3	- В	Bus:		Bus	:		Bus:	
MCycle:	0	0	- MCyc	le:		MCycle:	:		MCycle:	
	-	1	-					<u> </u>		

Notes: Meet moved slight west due to dog at residence. Some slowing due to Penndot truck rolling through project. Occasional dog barking at start of measurement but very faint.



M7.17 Site Photos: North:



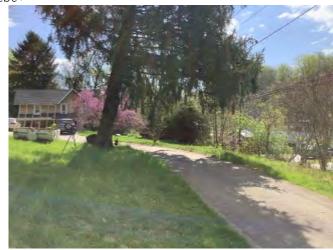




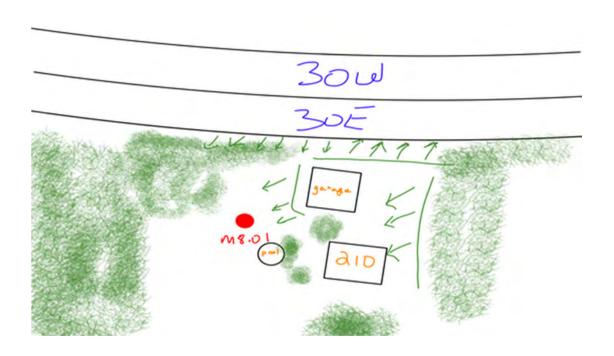
South:



West:



		1ay 11, 202					1		Tempera	ture (F): 55			_
	-	R-0030 / Se		-					Cloud o	vr: 🖂 Non	e □ Partly □ (	loudy	
		oatesville,	PA							E NOI	e 🗆 Faitiy 🗆 🤇	Lioudy	
	Setup#: 4 Site ID(s): N	1 18.01				Ga	nne	ett v	Wind speed (	<b>mph):</b> 0			
	Site ib(s).	10.01				Fle	mii	na					-
								-	Wind dire	ection:			_
Me	asurement D	<u>ata</u>											
ID:	M8.01 Start:	07:12	Stop:	07:32	☑ 20 min	SLM #:	4228	Leq(dB):	66. 3	$L_{min}(dB)$ :	50.4 Lma	ax(dB):	76.6
		-	_	-	□ 30 min	#.			3	_			
	GPS (°N,°W):		3083333333 331666666		□ 24 hr	Stor #:	195	Calib(dB):	93.88 /	93.94	Meas. H	t(ft):	5
		73.83043	331000000		Relocated				Pre-	Post-	-		
	Location:		nt Airy Rd. le, PA 19320	n	□ Yes 🗹	No							
		Coatesvii	ie, PA 19320		Site Photogra	ohed				Weighting:	☑ A □ B □	1 C $\square$	7
	Type(use, NAC):	Residenti	ial (B)		✓ Yes □	No							_
Traff	fic Data												
	Roadway #1:		30	Pos	adway #2:			Roadway #3:			Roadway #4:		
	Width(ft):		30	_	dway #2: Ldth(ft):			Width(ft):		<del></del>	Width(ft):		
	Direction:		WB	_	rection:			Direction:			Direction:		
	Speed Limit:	55	55	_ Spee	ed Limit:			Speed Limit:			peed Limit:		
С	bserved Spd:			- Obser	rved Spd:			Observed Spd:		<del>                                     </del>	Observed		<del>                                     </del>
	_			_	_			_			Spd:		
	Auto:	508	222		Auto:			Auto:		1	Auto:		ĺ
	Med Tk:	20	16	=	Med Tk:			Med Tk:			Med Tk:		
	Hvy Tk:	26	19	_	Hvy Tk:			Hvy Tk:			Hvy Tk:		
	Bus:	1	4	=	Bus:			Bus:	-	<del> </del>	Bus:		
	MCycle:	2	1	_	MCycle:			MCycle:		<del>                                     </del>	MCycle:		
				_							-		
Not	tes:												





M8.01 Site Photos: North:









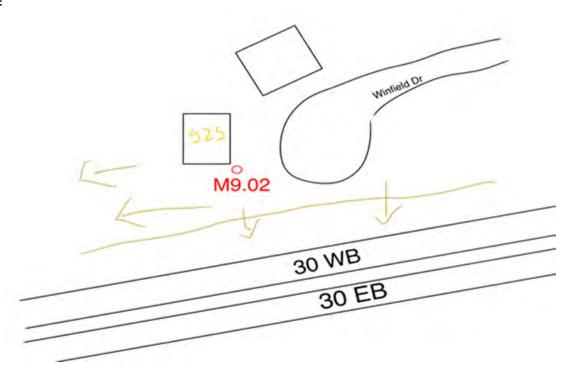
South:



West:



Setup#: 27 Site ID(s): MS	9.02	'A				nne mir		Cloud o Wind speed ( Wind dire	mph): 6	e □ Partly □	Cloudy	-
easurement Da M9.02 Start:	08:50	Stop:	09:10	☑ 20 min □ 30 min	SLM #:	4229	L <sub>eq</sub> (dB):	72. 4	L <sub>min</sub> (dB):	59.1	L <sub>max</sub> (dB):	81.
GPS (°N,°W):		531666667, L19999999		□ 24 hr	Stor #:	188	Calib(dB):	94.08 /	93.81	Meas.	Ht(ft):	5
		d Dr. Coate	sville,	Relocated  ☐ Yes ☑			<del>_</del>	Pre-	Post-	_		
Location:	PA 19320											
Type(use, NAC):	PA 19320 Residentia	al (B)		Site Photogra  ☑ Yes □					Weighting:	☑ A □ B	□ C □	Z
Type(use, NAC):		al (B)							Weighting:	☑ A □ B	□ C □	Z
Type(use, NAC):	Residentia	.,	Roa				Roadway #3	:	Weighting:	☑ A □ B  Roadway #4:		Z
Type(use, NAC):	Residentia	al (B)	_	☑ Yes □			Roadway #3 Width(ft)		Weighting:			Z
Type(use, NAC):  ffic Data  Roadway #1:	Residentia	.,	_ Wi				_	:	Weighting:	Roadway #4:		Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft):	Residentia	30	- - Wi Di	☑ Yes ☐  adway #2: idth(ft):			Width(ft)			Roadway #4: Width(ft):		Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction:	Residentia	30 WB	Wi Di Spee	✓ Yes ☐  adway #2: idth(ft): irection:			Width(ft) Direction	:		Roadway #4: Width(ft): Direction:		Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction: Speed Limit:	Residentia	30 WB	Wi Di Spee	Yes   adway #2: idth(ft): irection: ed Limit:			Width(ft) Direction Speed Limit			Roadway #4: Width(ft): Direction: Speed Limit: Observed		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit: Observed Spd:	Residentia	30 WB 55	Wi Di Spee	Yes   adway #2: idth(ft): irection: ed Limit: eved Spd:			Width(ft) Direction Speed Limit Observed Spd	:		Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd:		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:   Auto:	EB 55	30 WB 55	Wi Di Spee	Yes   adway #2: idth(ft): irection: ed Limit: cved Spd:  Auto:			Width(ft) Direction Speed Limit Observed Spd			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:   Auto:   Med Tk:	EB 55	30 WB 55 S 231 17	Wi Di Spee	Adway #2: idth(ft): irection: ed Limit: cved Spd:  Auto: Med Tk:			Width(ft) Direction Speed Limit Observed Spd Auto Med Tk			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		Z



M9.02 Site Photos: North:



East:



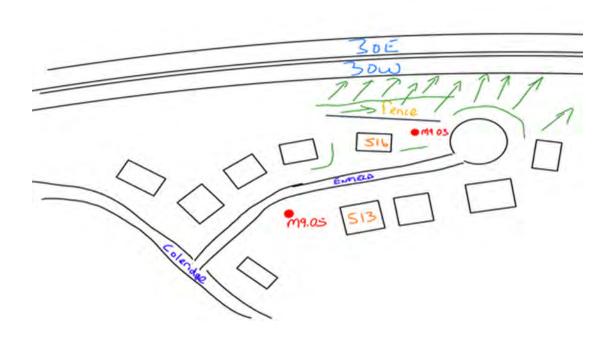
South:



West:



Setup#: 40	atesville, P	A				nne min		Wind speed ( Wind dire	mph): 0	e 🗆 Partly 🗆	Cloudy	<del>.</del>
M9.03 Start:	16:55	Stop:	17:15	☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	66. 7	L <sub>min</sub> (dB):	51.5 L <sub>n</sub>	max(dB):	76.
GPS (°N,°W):		- 193333333 <i>,</i> 141666666	-	□ 30 min □ 24 hr	Stor #:	194	Calib(dB):	94.05 /	94.12	Meas. I	Ht(ft):	5
•		d Dr. Coate	sville,	Relocated  ☐ Yes ☑			_	Pre-	Post-	-		
Location:	PA 19320											
Location: Type(use, NAC):				Site Photograp  ☑ Yes □ I					Weighting:	☑ A □ B	□ C □	Z
Type(use, NAC):	PA 19320								Weighting:	☑ A □ B	□ C □	Z
	PA 19320 Residentia		Roa				Roadway #3:	ı		☑ A □ B   Roadway #4:	□ c □	Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft):	PA 19320 Residentia	il (B)	W	✓ Yes ☐    adway #2:			Width(ft):	:		Roadway #4: Width(ft):		Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction:	PA 19320 Residentia	30 WB	Wi Di	d Yes ☐    adway #2: idth(ft): irection:			Width(ft): Direction:			Roadway #4: Width(ft): Direction:		Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction: Speed Limit:	PA 19320 Residentia	il (B)	Wi Di Spee	adway #2: idth(ft): irection: ed Limit:			Width(ft): Direction: Speed Limit:			Roadway #4: Width(ft): Direction: Speed Limit:		Z
Type(use, NAC):  ffic Data  Roadway #1: Width(ft): Direction:	PA 19320 Residentia	30 WB	Wi Di Spee	d Yes ☐    adway #2: idth(ft): irection:			Width(ft): Direction:			Roadway #4: Width(ft): Direction:		Z
Type(use, NAC):  Iffic Data  Roadway #1: Width(ft): Direction: Speed Limit:	PA 19320 Residentia	30 WB	Wi Di Spee	adway #2: idth(ft): irection: ed Limit:			Width(ft): Direction: Speed Limit:			Roadway #4: Width(ft): Direction: Speed Limit: Observed		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit: Observed Spd:	Residentia  EB  55	00 WB 55	Wi Di Spee	Adway #2: idth(ft): irection: ed Limit: rved Spd:			Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd:		Z
Type(use, NAC):  ffic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:   Auto:	PA 19320  Residentia  EB  55  387	80 WB 55	Wi Di Spee	adway #2: idth(ft): irection: ed Limit: rved Spd:			Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto:		Z
Type(use, NAC):  Iffic Data  Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:  Auto: Med Tk:	PA 19320 Residentia  EB  55  387  7	30 WB 55 S26 25	Wi Di Spee	adway #2: idth(ft): irection: ed Limit: rved Spd: Auto: Med Tk:			Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:		Z





M9.03 Site Photos: North:



East:



South:

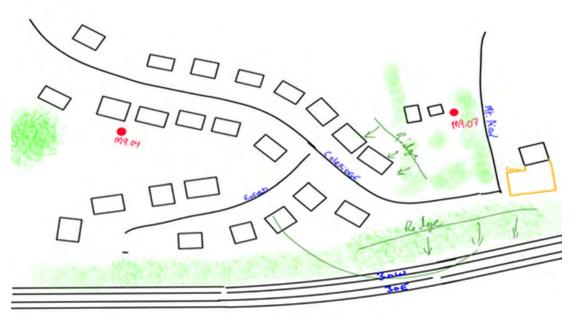


West:



Date: _ A	pril 27, 202	2 7:51 AM				1		Temperat	ture (F):46			_
	R-0030 / Se					$\triangle$		Cloud	vr: □ Non	o 🔽 Darthu	□ Claudy	
	Coatesville, F	PA							🗀 NON	e 🗹 Partly	□ Cloudy	
Setup#: 2					Ga	nne	ett v	Wind speed (	<b>mph):</b> 10			
Site ID(s):	<i>1</i> 9.04				FIR	ımiı						=
							<i>'</i> 9	Wind dire	ection: West			=
Measurement D	Data											
ID: <b>M9.04</b> Start:	08:50	Stop:	09:10	☑ 20 min	SLM #:	4228	L <sub>eq</sub> (dB):	63. 2	Lmin(dB):	54.6	$L_{\text{max}}(dB)$ :	72.4
GPS (°N,°W):		936666666, 966666667	-	☐ 30 min ☐ 24 hr	Stor #:	169	Calib(dB):	94.10 /	93.86	Meas	s. Ht(ft):	5
	-			Relocated	d		<del></del>	Pre-	Post-	_		
Location:	241 Coler	idge Ln. le, PA 19320		□ Yes ☑	No							
	Coatesviii	e, FA 19320		Site Photogra	phed				Weighting:	IJΔΠ	в□с□	7
Type(use, NAC):	Residentia	al (B)		✓ Yes	No							_
Tueffic Data												
Traffic Data												
Roadway #1:	:	30	Roa	dway #2:			Roadway #3:			Roadway #	4:	
Width(ft)	:		-	dth(ft):			Width(ft):			Width(ft		
Direction	: EB	WB	Di	rection:			Direction:			Direction	n:	
Speed Limit	: 55	55	Spee	ed Limit:			Speed Limit:		S	peed Limi	t:	
Observed Spd	:		Obser	ved Spd:			Observed Spd:			Observ	ed	
-			_,				-			Spo	d:	
Auto	: 264	231		Auto:	İ		Auto:			Aut	o:	
Med Tk	: 28	17	-	Med Tk:			Med Tk:	:		Med T	ζ:	
Hvy Tk	: 35	32	-	Hvy Tk:			Hvy Tk:			Hvy T	ς:	
Bus	: 1	1	-	Bus:			Bus:	-		Bu	s:	
MCycle	: 0	0	-	MCycle:			MCycle:	:		MCycl	e:	
	-	1	-					-				1

Notes: Some wind gust through measurement but not causing spiking or noise from vegetation. Helicopter at minute 18.



M9.04 Site Photos: North:







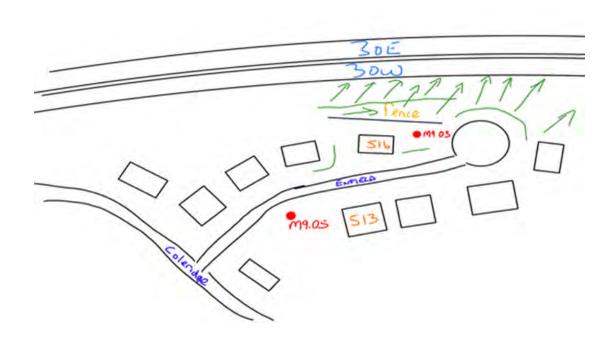
#### South:



#### West:



Setup#: 40	atesville, P	A			nnet Imin		Cloud cvr: ☑ None □ Partly □ Cloudy  Wind speed (mph): 5  Wind direction: North				<b>-</b>
Measurement Da D: M9.05 Start:	16:55	Stop:	17:15 ☑ 20 min ☐ 30 min	SLM #:	4229	L <sub>eq</sub> (dB):	54. 4	L <sub>min</sub> (dB):	46.8	L <sub>max</sub> (dB):	66.2
GPS (°N,°W):	39.99889 <sup>4</sup> 75.831802	400000005 78333333		Stor #:	195	Calib(dB):	94.14 /	93.98	Meas	. Ht(ft):	5
•			Reloca			-	Pre-	Post-	<del>-</del>		
Location:	253 Coleri Coatesville	uge Ln. e, PA 19320	☑ Yes [								
Location: Type(use, NAC):		e, PA 19320	✓ Yes L Site Photog ✓ Yes [	graphed				Weighting:	<b>☑</b> A □ 1	в□с□	Z
Type(use, NAC):	Coatesville	e, PA 19320	Site Photog	graphed				Weighting:	<b>☑</b> A □ □	в 🗆 с 🗆	Z
	Coatesville Residentia	e, PA 19320	Site Photog	graphed		Roadway #3:	·		☑ A □ I		Z
Type(use, NAC): raffic Data Roadway #1: Width(ft):	Residentia 3	PA 19320	Site Photog  Ves [  Roadway #2:  Width(ft):	graphed	<u></u>	Width(ft):	:		Roadway #4	:	Z
Type(use, NAC):  affic Data  Roadway #1:	Coatesville Residentia	e, PA 19320	Site Photog ☑ Yes [  Roadway #2:	graphed		_	:		Roadway #4	:	Z
Type(use, NAC): raffic Data Roadway #1: Width(ft):	Residentia 3	PA 19320	Site Photog  Ves [  Roadway #2:  Width(ft):	graphed		Width(ft):			Roadway #4	:: ::	Z
Type(use, NAC):  affic Data  Roadway #1:  Width(ft): Direction:	Residentia 3	PA 19320	Roadway #2: Width(ft): Direction:	graphed		Width(ft): Direction:			Roadway #4 Width(ft)	:	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:	Residentia 3	PA 19320	Roadway #2: Width(ft): Direction: Speed Limit:	graphed		Width(ft): Direction: Speed Limit:			Roadway #4 Width(ft) Direction Speed Limit	:: :: ::	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:	Residentia  EB  55	BO WB 55	Roadway #2: Width(ft): Direction: Speed Limit: Observed Spd:	graphed		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway #4 Width(ft) Direction Speed Limit Observe	: : : : : : : : : : : : : : : : : : :	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:	Residentia  EB  55	BO WB 55	Roadway #2: Width(ft): Direction: Speed Limit: Observed Spd:	graphed		Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway #4 Width(ft) Direction Speed Limit Observe Spo	:: :: :: :: :: :: :: :: :: :: :: :: ::	Z
Type(use, NAC):  affic Data  Roadway #1:   Width(ft):   Direction:   Speed Limit:   Observed Spd:  Auto:   Med Tk:	EB 55	BO WB 55 526 25	Roadway #2: Width(ft): Direction: Speed Limit: Observed Spd:  Auto: Med Tk:	graphed		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway #4 Width(ft) Direction Speed Limit Observe Spo	: : : : : : : : : : : : : : : : : : :	Z





M9.05 Site Photos: North:



East:



South:



West:



ta					mir	iy	Wind dire	ction: West			_
09:25	Stop:			SLM #:	4229	L <sub>eq</sub> (dB):	60. 3	$L_{min}(dB)$ :	51	L <sub>max</sub> (dB):	73.6
				Stor #:	189	Calib(dB):	94.08 /	93.81	Meas.	Ht(ft):	5
			Relocated Yes ☑ N	lo			Pre-	Post-	•		
								Weighting:	⊠А □ B	□ C □	Z
31	0	Roadway	#2:			Roadway #3:			Roadway #4:		
-		Width(f	t):			Width(ft):		-	Width(ft):	-	
EB	WB	Directi	on:			Direction:			Direction:		
55	55	Speed Lim	it:			Speed Limit:		S	peed Limit:		
		Observed S	pd:			Observed Spd:					
290	239	Au	to:	ĺ		Auto:			Auto:		I
27	22	Med	Tk:			Med Tk:			Med Tk:		
31	29	Hvy	Tk:			Hvy Tk:			Hvy Tk:		
		-	us:			Bus:			Bus:		
1	7	B	ub.								
: (	09:25 39.999230(75.829251- 140 Mount Coatesville Residential  55  290 27	09:25 Stop:	09:25 Stop: 09:45	09:25 Stop: 09:45	09:25 Stop: 09:45	09:25 Stop: 09:45	09:25 Stop: 09:45	09:25 Stop: 09:45	O9:25   Stop:   O9:45	O9:25   Stop:   O9:45	109:25   Stop:   09:45   20 min   SLM   4229   Leq(dB):   60.   Lmin(dB):   51   Lmax(dB):   30 min     30 min   30 min     30 min     30 min     30 min     30 min     30 min   30 min     30 min     30 min     30 min     30 min     30 min   30 min     30 min   30



M9.06 Site Photos: North:



East:



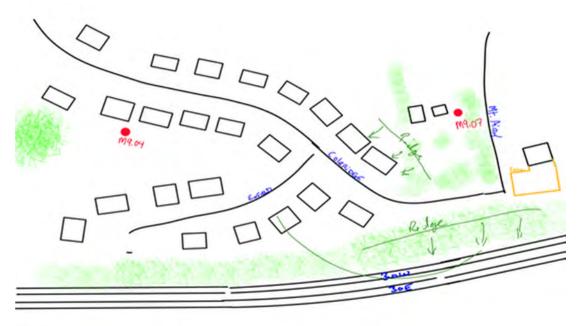
South:



West:



Coatesville, PA   28   M9.07   M9.07				Gannett Fleming					Cloud cvr: □ None ☑ Partly □ Cloudy  Wind speed (mph): 10  West				
Measurement Date   D: M9.07 Start:	09:25	Stop:	09:45	20 min 30 min	SLM #:	4228	L <sub>eq</sub> (dB):	56. 2	Lmin(dB):	49.5	L <sub>max</sub> (dB):	64.	
GPS (°N,°W):	39.999720 75.830005	)483333334 36666667	_	24 hr	Stor #:	170	Calib(dB):	94.10 /	93.86	Mea	s. Ht(ft):	5	
Location:	140 Moun			Relocate  ☐ Yes ☑	d			Pre-	Post-	-			
	Coatesville	., 13320											
Type(use, NAC):	Residentia			Site Photogra  ✓ Yes	•				Weighting:	• <b>☑</b> A □	в 🗆 С 🗆	Z	
				•	•				Weighting:		В 🗆 С 🗆	Z	
	Residentia		Roadwa	☑ Yes □	•		Roadway #3:	ı	Weighting:	☑ A □		Z	
affic Data  Roadway #1: Width(ft):	Residentia	BO	<b>Roadwa</b> Width	✓ Yes ☐  ay #2: h(ft):	•		Width(ft):	:	Weighting:	Roadway #	: <b>4:</b> ):	Z	
Roadway #1: Width(ft): Direction:	Residentia	30 WB	Roadwa Width Direc	▼ Yes □  ay #2: h(ft): ction:	•		Width(ft): Direction:			Roadway # Width(ft	4: ): 	Z	
affic Data  Roadway #1: Width(ft):	Residentia	BO	<b>Roadwa</b> Width	Yes   ay #2:  h(ft): ction:  Limit:	•		Width(ft):			Roadway #	4: ): n: t:	Z	
Roadway #1: Width(ft): Direction: Speed Limit:	Residentia	30 WB	Roadwa Width Direc Speed I	Yes   ay #2:  h(ft): ction:  Limit:	•		Width(ft): Direction: Speed Limit:			Roadway # Width(ft Directio	4: ): n: t: ed d:	Z	
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd:	Residentia	60 WB 55	Roadwa Width Direc Speed I Observed	Yes Day #2:h(ft):ction: Limit:d Spd:	•		Width(ft): Direction: Speed Limit: Observed Spd:			Roadway # Width(ft Directio Speed Limi Observ Sp	4: ): n: t: ed d:	Z	
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto:	EB 55	WB 55	Roadwa Width Direc Speed I Observed	■ Yes □  ay #2: h(ft): ction: Limit: d Spd: Auto:	•		Width(ft): Direction: Speed Limit: Observed Spd: Auto:			Roadway # Width(ft Directio Speed Limi Observ Sp Aut	### ### ### ### #### #################	Z	
Roadway #1: Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:	EB 55 290 27	30 WB 55 239 22	Roadwa Width Direc Speed I Observed	wy #2:	•		Width(ft): Direction: Speed Limit: Observed Spd: Auto: Med Tk:			Roadway # Width(ft Directio Speed Limi Observ Sp Aut Med T	### ### ### #### #####################	Z	





M9.07 Site Photos: North:







South:



West:



# APPENDIX B

Traffic Volumes and TNM Traffic Inputs

US 30 EB	2019 Existing Conditions								
Class	1	4	2 & 3	5	6 through 13	T			
			Auto	Medium Trucks	Heavy Trucks				
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume			
			Single Unit)	Truck)	Trucks)				
12:00 AM	0	3	75	9	16	103			
01:00 AM	0	2	40	3	12	57			
02:00 AM	0	5	36	3	22	66			
03:00 AM	0	4	67	6	30	107			
04:00 AM	0	9	231	22	41	303			
05:00 AM	1	10	736	115	62	924			
06:00 AM	1	21	1370	291	82	1765			
07:00 AM	2	17	1106	105	60	1290			
08:00 AM	2	14	982	112	63	1173			
09:00 AM	0	33	885	78	87	1083			
10:00 AM	1	24	686	84	63	858			
11:00 AM	0	21	643	67	85	816			
12:00 PM	3	20	657	81	74	835			
01:00 PM	1	30	734	88	53	906			
02:00 PM	1	29	771	91	66	958			
03:00 PM	1	20	953	82	34	1090			
04:00 PM	0	18	925	66	32	1041			
05:00 PM	1	5	1067	78	24	1175			
06:00 PM	0	5	780	48	27	860			
07:00 PM	0	5	491	20	31	547			
08:00 PM	0	8	372	33	17	430			
09:00 PM	0	2	254	15	22	293			
10:00 PM	0	4	192	14	28	238			
11:00 PM	1	5	101	5	27	139			
TOTAL	15	314	14154	1516	1058	17057			

US 30 WB			2019 Existing Co	nditions		
Class	1	4	2 & 3	5	6 through 13	Т
			Auto	Medium Trucks	Heavy Trucks	
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume
			Single Unit)	Truck)	Trucks)	
12:00 AM	0	1	98	7	17	123
01:00 AM	0	1	41	6	14	62
02:00 AM	0	0	38	1	11	50
03:00 AM	0	3	43	6	17	69
04:00 AM	1	2	125	18	47	193
05:00 AM	0	9	253	33	67	362
06:00 AM	1	17	556	62	56	692
07:00 AM	1	15	790	65	66	937
08:00 AM	0	42	744	69	54	909
09:00 AM	1	32	602	70	76	781
10:00 AM	2	32	599	66	106	805
11:00 AM	3	14	640	61	107	825
12:00 PM	1	31	644	77	98	851
01:00 PM	1	27	749	102	103	982
02:00 PM	2	30	994	98	85	1209
03:00 PM	2	22	1372	141	78	1615
04:00 PM	0	23	1675	236	90	2024
05:00 PM	3	7	1541	101	69	1721
06:00 PM	4	6	1075	59	43	1187
07:00 PM	1	4	701	59	27	792
08:00 PM	0	5	517	27	15	564
09:00 PM	0	1	445	22	24	492
10:00 PM	1	0	262	7	16	286
11:00 PM	0	3	189	10	15	217
TOTAL	24	327	14693	1403	1301	17748

US 30 EB		2050 No Build Conditions								
Class	1	4	2 & 3	5	6 through 13	T				
			Auto	Medium Trucks	Heavy Trucks					
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume				
			Single Unit)	Truck)	Trucks)					
12:00 AM	0	4	94	11	20	129				
01:00 AM	0	3	50	4	15	72				
02:00 AM	0	6	45	4	28	83				
03:00 AM	0	5	84	8	38	135				
04:00 AM	0	11	289	28	51	379				
05:00 AM	1	13	922	144	78	1158				
06:00 AM	1	26	1717	365	103	2212				
07:00 AM	3	21	1386	132	75	1617				
08:00 AM	3	18	1230	140	79	1470				
09:00 AM	0	41	1109	98	109	1357				
10:00 AM	1	30	860	105	79	1075				
11:00 AM	0	26	806	84	106	1022				
12:00 PM	4	25	823	101	93	1046				
01:00 PM	1	38	920	110	66	1135				
02:00 PM	1	36	966	114	83	1200				
03:00 PM	1	25	1194	103	43	1366				
04:00 PM	0	23	1159	83	40	1305				
05:00 PM	1	6	1337	98	30	1472				
06:00 PM	0	6	977	60	34	1077				
07:00 PM	0	6	615	25	39	685				
08:00 PM	0	10	466	41	21	538				
09:00 PM	0	3	318	19	28	368				
10:00 PM	0	5	241	18	35	299				
11:00 PM	1	6	127	6	34	174				
TOTAL	18	393	17735	1901	1327	21374				

US 30 WB	2050 No Build Conditions								
Class	1	4	2 & 3	5	6 through 13	T			
			Auto	Medium Trucks	Heavy Trucks				
	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume			
Description			Single Unit)	Truck)	Trucks)				
12:00 AM	0	1	123	9	21	154			
01:00 AM	0	1	51	8	18	78			
02:00 AM	0	0	48	1	14	63			
03:00 AM	0	4	54	8	21	87			
04:00 AM	1	3	157	23	59	243			
05:00 AM	0	11	317	41	84	453			
06:00 AM	1	21	697	78	70	867			
07:00 AM	1	19	990	81	83	1174			
08:00 AM	0	53	932	86	68	1139			
09:00 AM	1	40	754	88	95	978			
10:00 AM	3	40	750	83	133	1009			
11:00 AM	4	18	802	76	134	1034			
12:00 PM	1	39	807	96	123	1066			
01:00 PM	1	34	938	128	129	1230			
02:00 PM	3	38	1245	123	106	1515			
03:00 PM	3	28	1719	177	98	2025			
04:00 PM	0	29	2099	296	113	2537			
05:00 PM	4	9	1931	127	86	2157			
06:00 PM	5	8	1347	74	54	1488			
07:00 PM	1	5	878	74	34	992			
08:00 PM	0	6	648	34	19	707			
09:00 PM	0	1	558	28	30	617			
10:00 PM	1	0	328	9	20	358			
11:00 PM	0	4	237	13	19	273			
TOTAL	30	412	18410	1761	1631	22244			

Appendix B
Traffic Volume and TNM Traffic Inputs

US 30 EB	2050 Build Conditions								
Class	1	4	2 & 3	5	6 through 13	T			
			Auto	Medium Trucks	Heavy Trucks				
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume			
			Single Unit)	Truck)	Trucks)				
12:00 AM	0	5	115	14	25	159			
01:00 AM	0	3	61	5	18	87			
02:00 AM	0	8	55	5	34	102			
03:00 AM	0	6	103	9	46	164			
04:00 AM	0	14	354	34	63	465			
05:00 AM	2	15	1129	176	95	1417			
06:00 AM	2	32	2102	446	126	2708			
07:00 AM	3	26	1697	161	92	1979			
08:00 AM	3	21	1506	172	97	1799			
09:00 AM	0	51	1358	120	133	1662			
10:00 AM	2	37	1052	129	97	1317			
11:00 AM	0	32	986	103	130	1251			
12:00 PM	5	31	1008	124	114	1282			
01:00 PM	2	46	1126	135	81	1390			
02:00 PM	2	44	1183	140	101	1470			
03:00 PM	2	31	1462	126	52	1673			
04:00 PM	0	28	1419	101	49	1597			
05:00 PM	2	8	1637	120	37	1804			
06:00 PM	0	8	1197	74	41	1320			
07:00 PM	0	8	753	31	48	840			
08:00 PM	0	12	571	51	26	660			
09:00 PM	0	3	390	23	34	450			
10:00 PM	0	6	295	21	43	365			
11:00 PM	2	8	155	8	41	214			
TOTAL	27	483	21714	2328	1623	26175			

US 30 WB	2050 Build Conditions								
Class	1	4	2 & 3	5	6 through 13	T			
			Auto	Medium Trucks	Heavy Trucks				
	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume			
Description			Single Unit)	Truck)	Trucks)				
12:00 AM	0	2	150	11	26	189			
01:00 AM	0	2	63	9	21	95			
02:00 AM	0	0	58	2	17	77			
03:00 AM	0	5	66	9	26	106			
04:00 AM	2	3	192	28	72	297			
05:00 AM	0	14	388	51	103	556			
06:00 AM	2	26	853	95	86	1062			
07:00 AM	2	23	1212	100	101	1438			
08:00 AM	0	64	1141	106	83	1394			
09:00 AM	2	49	924	107	117	1199			
10:00 AM	3	49	919	101	163	1235			
11:00 AM	5	21	982	94	164	1266			
12:00 PM	2	48	988	118	150	1306			
01:00 PM	2	41	1149	156	158	1506			
02:00 PM	3	46	1525	150	130	1854			
03:00 PM	3	34	2105	216	120	2478			
04:00 PM	0	35	2570	362	138	3105			
05:00 PM	5	11	2364	155	106	2641			
06:00 PM	6	9	1649	91	66	1821			
07:00 PM	2	6	1075	91	41	1215			
08:00 PM	0	8	793	41	23	865			
09:00 PM	0	2	683	34	37	756			
10:00 PM	2	0	402	11	25	440			
11:00 PM	0	5	290	15	23	333			
TOTAL	41	503	22541	2153	1996	27234			

		AIRPORT ROAD N	NORTHBOUND 2019 EXIST	ING - REQUESTED CLASSE	S	
Class	1	4	2 & 3	5	6 through 13	T
Description	Motorcycle	Bus	Auto (Passenger Car & 4 Tire Single Unit)	Medium Trucks (2-Axle 6 Tire Single Unit Truck)	Heavy Trucks (3-Axle and Greater Trucks)	Total Volume
12:00 AM	1	0	17	1	2	21
01:00 AM	1	0	15	2	1	19
02:00 AM	0	0	11	0	3	14
03:00 AM	1	0	15	2	2	20
04:00 AM	1	0	45	4	7	57
05:00 AM	1	0	152	14	6	173
06:00 AM	4	5	284	19	10	322
07:00 AM	5	9	306	11	21	352
08:00 AM	4	3	261	7	7	282
09:00 AM	2	1	184	13	10	210
10:00 AM	1	9	232	10	15	267
11:00 AM	3	1	249	15	17	285
12:00 PM	3	3	261	18	14	299
01:00 PM	2	8	260	12	8	290
02:00 PM	3	5	271	20	9	308
03:00 PM	2	6	356	11	8	383
04:00 PM	4	0	338	16	13	371
05:00 PM	0	1	315	17	7	340
06:00 PM	2	0	230	17	5	254
07:00 PM	1	1	135	12	2	151
08:00 PM	1	0	100	2	5	108
09:00 PM	1	0	86	6	4	97
10:00 PM	3	0	69	1	6	79
11:00 PM	1	0	29	0	1	31
TOTAL	47	52	4221	230	183	4733

		AIRPORT ROAD N	IORTHBOUND 2050 NO BU	JILD - REQUESTED CLASSI	ES .	
Class	1	4	2 & 3	5	6 through 13	T
			Auto	Medium Trucks	Heavy Trucks	
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single	(3-Axle and Greater	Total Volume
			Single Unit)	Unit Truck)	Trucks)	
12:00 AM	2	0	32	2	4	40
01:00 AM	2	0	28	4	2	36
02:00 AM	0	0	21	0	6	27
03:00 AM	2	0	28	4	4	38
04:00 AM	2	0	84	8	13	107
05:00 AM	2	0	285	26	11	324
06:00 AM	8	9	533	36	19	605
07:00 AM	9	17	574	21	39	660
MA 00:80	8	6	490	13	13	530
09:00 AM	4	2	345	24	19	394
10:00 AM	2	17	435	19	28	501
11:00 AM	6	2	467	28	32	535
12:00 PM	6	6	490	34	26	562
01:00 PM	4	15	488	23	15	545
02:00 PM	6	9	508	38	17	578
03:00 PM	4	11	668	21	15	719
04:00 PM	8	0	634	30	24	696
05:00 PM	0	2	591	32	13	638
06:00 PM	4	0	431	32	9	476
07:00 PM	2	2	253	23	4	284
08:00 PM	2	0	188	4	9	203
09:00 PM	2	0	161	11	8	182
10:00 PM	6	0	129	2	11	148
11:00 PM	2	0	54	0	2	58
TOTAL	93	98	7917	435	343	8886

		AIRPORT ROAD	NORTHBOUND 2050 BUIL	D - REQUESTED CLASSES		
Class	1	4	2 & 3	5	6 through 13	T
			Auto	Medium Trucks	Heavy Trucks	
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single	(3-Axle and Greater	Total Volume
			Single Unit)	Unit Truck)	Trucks)	
12:00 AM	2	0	36	2	4	44
01:00 AM	2	0	32	4	2	40
02:00 AM	0	0	24	0	6	30
03:00 AM	2	0	32	4	4	42
04:00 AM	2	0	96	9	15	122
05:00 AM	2	0	325	30	13	370
06:00 AM	9	11	607	41	21	689
07:00 AM	11	19	654	24	45	753
MA 00:80	9	6	558	15	15	603
09:00 AM	4	2	393	28	21	448
10:00 AM	2	19	496	21	32	570
11:00 AM	6	2	532	32	36	608
12:00 PM	6	6	558	38	30	638
01:00 PM	4	17	556	26	17	620
02:00 PM	6	11	579	43	19	658
03:00 PM	4	13	761	24	17	819
04:00 PM	9	0	722	34	28	793
05:00 PM	0	2	673	36	15	726
06:00 PM	4	0	492	36	11	543
07:00 PM	2	2	289	26	4	323
08:00 PM	2	0	214	4	11	231
09:00 PM	2	0	184	13	9	208
10:00 PM	6	0	147	2	13	168
11:00 PM	2	0	62	0	2	66
TOTAL	98	110	9022	492	390	10112

		AIRPORT ROAD	SOUTHBOUND 2019 EXIST	ING - REQUESTED CLASSES		
Class	1	4	2 & 3	5	6 through 13	T
Description	Motorcycle	Bus	Auto (Passenger Car & 4 Tire Single Unit)	Medium Trucks (2-Axle 6 Tire Single Unit Truck)	Heavy Trucks (3-Axle and Greater Trucks)	Total Volume
12:00 AM	0	0	21	0	1	22
01:00 AM	0	0	15	0	0	15
02:00 AM	0	0	18	3	2	23
03:00 AM	0	0	14	0	4	18
04:00 AM	0	0	47	1	3	51
05:00 AM	0	0	87	4	4	95
06:00 AM	0	6	135	15	14	170
07:00 AM	0	4	157	11	8	180
08:00 AM	1	8	183	12	11	215
09:00 AM	2	4	195	9	10	220
10:00 AM	3	2	179	8	11	203
11:00 AM	0	0	197	13	15	225
12:00 PM	1	4	267	10	15	297
01:00 PM	2	3	248	11	11	275
02:00 PM	1	4	289	15	17	326
03:00 PM	2	8	398	19	11	438
04:00 PM	3	2	390	20	7	422
05:00 PM	1	1	374	5	12	393
06:00 PM	0	1	288	9	7	305
07:00 PM	1	0	203	7	5	216
08:00 PM	0	0	179	5	5	189
09:00 PM	0	0	140	4	2	146
10:00 PM	0	0	71	1	1	73
11:00 PM	0	0	34	0	2	36
TOTAL	17	47	4129	182	178	4553

		AIRPORT ROAD S	OUTHBOUND 2050 NO BU	JILD - REQUESTED CLASSES	i	
Class	1	4	2 & 3	5	6 through 13	T
			Auto	Medium Trucks	Heavy Trucks	
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume
			Single Unit)	Truck)	Trucks)	
12:00 AM	0	0	40	0	2	42
01:00 AM	0	0	29	0	0	29
02:00 AM	0	0	35	6	4	45
03:00 AM	0	0	27	0	8	35
04:00 AM	0	0	91	2	6	99
05:00 AM	0	0	168	8	8	184
06:00 AM	0	12	260	29	27	328
07:00 AM	0	8	303	21	15	347
08:00 AM	2	15	353	23	21	414
09:00 AM	4	8	376	17	19	424
10:00 AM	6	4	345	15	21	391
11:00 AM	0	0	380	25	29	434
12:00 PM	2	8	515	19	29	573
01:00 PM	4	6	478	21	21	530
02:00 PM	2	8	557	29	33	629
03:00 PM	4	15	767	37	21	844
04:00 PM	6	4	752	39	13	814
05:00 PM	2	2	721	10	23	758
06:00 PM	0	2	555	17	13	587
07:00 PM	2	0	391	13	10	416
08:00 PM	0	0	345	10	10	365
09:00 PM	0	0	270	8	4	282
10:00 PM	0	0	137	2	2	141
11:00 PM	0	0	66	0	4	70
TOTAL	34	92	7961	351	343	8781

		AIRPORT ROAD	SOUTHBOUND 2050 BUIL	LD - REQUESTED CLASSES		
Class	1	4	2 & 3	5	6 through 13	T
			Auto	Medium Trucks	Heavy Trucks	
Description	Motorcycle	Bus	(Passenger Car & 4 Tire	(2-Axle 6 Tire Single Unit	(3-Axle and Greater	Total Volume
			Single Unit)	Truck)	Trucks)	
12:00 AM	0	0	50	0	2	52
01:00 AM	0	0	36	0	0	36
02:00 AM	0	0	43	7	5	55
03:00 AM	0	0	33	0	10	43
04:00 AM	0	0	112	2	7	121
05:00 AM	0	0	207	10	10	227
06:00 AM	0	14	321	36	33	404
07:00 AM	0	10	373	26	19	428
MA 00:80	2	19	435	29	26	511
09:00 AM	5	10	463	21	24	523
10:00 AM	7	5	425	19	26	482
11:00 AM	0	0	468	31	36	535
12:00 PM	2	10	634	24	36	706
01:00 PM	5	7	589	26	26	653
02:00 PM	2	10	686	36	40	774
03:00 PM	5	19	945	45	26	1040
04:00 PM	7	5	926	48	17	1003
05:00 PM	2	2	888	12	29	933
06:00 PM	0	2	684	21	17	724
07:00 PM	2	0	482	17	12	513
08:00 PM	0	0	425	12	12	449
09:00 PM	0	0	333	10	5	348
10:00 PM	0	0	169	2	2	173
11:00 PM	0	0	81	0	5	86
TOTAL	39	113	9808	434	425	10819

	2050 BUILD ESTIMATED HOURLY TRAFFIC						
AIR	PORT ROAD	AIF	RPORT ROAD	AII	RPORT ROAD	AIF	RPORT ROAD
EB ON-	RAMP TO US 30	WB OFF-F	RAMP FROM US 30	EB-OFF F	RAMP FROM US 30	WB ON	-RAMP TO US 3
Hour	Volume	Hour	Volume	Hour	Volume	Hour	Volume
12:00 AM	48	12:00 AM	49	12:00 AM	18	12:00 AM	16
01:00 AM	34	01:00 AM	38	01:00 AM	14	01:00 AM	11
02:00 AM	42	02:00 AM	29	02:00 AM	11	02:00 AM	14
03:00 AM	73	03:00 AM	53	03:00 AM	20	03:00 AM	25
04:00 AM	176	04:00 AM	124	04:00 AM	46	04:00 AM	59
05:00 AM	434	05:00 AM	162	05:00 AM	61	05:00 AM	146
06:00 AM	942	06:00 AM	330	06:00 AM	123	06:00 AM	317
07:00 AM	940	07:00 AM	506	07:00 AM	189	07:00 AM	316
MA 00:80	646	08:00 AM	551	08:00 AM	206	08:00 AM	217
09:00 AM	663	09:00 AM	414	09:00 AM	155	09:00 AM	223
10:00 AM	468	10:00 AM	407	10:00 AM	152	10:00 AM	157
11:00 AM	497	11:00 AM	381	11:00 AM	143	11:00 AM	167
12:00 PM	495	12:00 PM	445	12:00 PM	166	12:00 PM	167
01:00 PM	558	01:00 PM	533	01:00 PM	199	01:00 PM	188
02:00 PM	652	02:00 PM	590	02:00 PM	220	02:00 PM	220
03:00 PM	772	03:00 PM	986	03:00 PM	368	03:00 PM	260
04:00 PM	843	04:00 PM	1139	04:00 PM	426	04:00 PM	284
05:00 PM	827	05:00 PM	1066	05:00 PM	398	05:00 PM	278
06:00 PM	566	06:00 PM	617	06:00 PM	231	06:00 PM	191
07:00 PM	285	07:00 PM	489	07:00 PM	183	07:00 PM	96
08:00 PM	266	08:00 PM	438	08:00 PM	164	08:00 PM	90
09:00 PM	258	09:00 PM	281	09:00 PM	105	09:00 PM	87
10:00 PM	151	10:00 PM	146	10:00 PM	55	10:00 PM	51
11:00 PM	61	11:00 PM	124	11:00 PM	46	11:00 PM	20
2050 ADT	10700	2050 ADT	9900	2050 ADT	3700	2050 ADT	3600

# APPENDIX C

**Noise Meter Certificates of Calibration** 



ISO 17025: 2017, ANSI/NCSL Z540:1994 Part 1 ACCREDITED by NVLAP (an ILAC MRA signatory)



## Calibration Certificate No.47717

Instrument:

**Sound Level Meter** 

Model:

831

Manufacturer:

**Larson Davis** 

Serial number: Tested with:

0004228

Microphone 377C20 s/n 163246

Preamplifier PRM831 s/n 046381

Type (class):

**Environmental Acoustics** 

Tel/Fax:

Customer:

717-886-5291 / 717-763-8150

Date Calibrated:3/16/2022 Cal Due: 3/16/2023

Status:

Received Sent

In tolerance:

X X

Out of tolerance:

See comments:

Contains non-accredited tests: Yes X No

Calibration service: \_\_ Basic X Standard

Address: 207 Senate Avenue,

Camp Hill, PA 17011

Tested in accordance with the following procedures and standards:

Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015 SLM & Dosimeters - Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence		
mstrument - Manufacturer	Description	3/N	Cal. Date	Cal. Lab / Accreditation	Cal. Due	
483B-Norsonic .	SME Cal Unit	31052	Nov 8, 2021	Scantek, Inc./ NVLAP	Nov 8, 2022	
DS-360-SRS	Function Generator	88077	Dec 3, 2020	ACR Env./ A2LA	Dec 3, 2022	
34401A-Agilent Technologies	Digital Voltmeter	MY47011118	Mar 10, 2022	ACR Env. / A2LA	Mar 10, 2023	
PTU300-Vaisala	EnvironmentalMonitor	P5011262	Sept 10, 2021	ACR Env./ A2LA	Sept 10, 2022	
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.		
1251-Norsonic	Calibrator	30878	Oct 27, 2021	Scantek, Inc./ NVLAP	Oct 27, 2022	

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

#### **Environmental conditions:**

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
21.5	100.03	35.5

Calibrated by:	Bailey Partoza	Authorized signatory:	, William Gallagher
Signature	7	Signature	Wille Dollar
Date	3/16/22	Date	3/22/2022

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory. This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored Y:\Calibration Lab\SLM 2022\LD831\_0004228\_M1.doc

Page 1 of 2

## Scantek, Inc. CALIBRATION LABORATORY

ISO 17025: 2017, ANSI/NCSL Z540:1994 Part 1 ACCREDITED by NVLAP (an ILAC MRA signatory)



## Calibration Certificate No.46035

**Sound Level Meter** Instrument:

Model:

**Larson Davis** Manufacturer: 0004229 Serial number:

Tested with:

Microphone 377C20 s/n 319404

Preamplifier PRM831 s/n 046380

Type (class):

Customer:

**Environmental Acoustics** 

Tel/Fax:

717-886-5291 / 717-763-8150

Date Calibrated:4/16/2021 Cal Due: 4/16/2022

Status: Received Sent In tolerance: X X

Out of tolerance:

See comments:

Contains non-accredited tests: \_\_Yes X No

Calibration service: \_\_\_ Basic X Standard

207 Senate Avenue, Address:

Camp Hill, PA 17011

#### Tested in accordance with the following procedures and standards:

Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015 SLM & Dosimeters - Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	D	e to	and made	Traceability evidence	Cal. Due
instrument - Manufacturer	Description	S/N	Cal. Date	Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31061	Jul 31, 2020	Scantek, Inc./ NVLAP	Jul 31, 2021
DS-360-SRS	Function Generator	61646	Dec 3, 2020	ACR Env./ A2LA	Dec 3, 2022
34401A-Agilent Technologies	Digital Voltmeter	MY41022043	Dec 04, 2020	ACR Env./ A2LA	Dec 04, 2021
HM30-Thommen	Meteo Station	1040170/39633	Dec 7, 2020	ACR Env./ AZLA	Dec 7, 2021
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	
1251-Norsonic	Calibrator	30878	Oct 26, 2020	Scantek, Inc./ NVLAP	Oct 26, 2021

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

#### **Environmental conditions:**

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
22.8	99.28	47.6

Calibrated by:	Ronnie Buchanan	Authorized signatory:	/ William P. Gallagher
Signature	Konno Buchanan	Signature	Wille & Ballyla
Date	4/16/2021	Date	4/19/2021

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory. This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST,

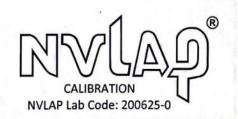
or any agency of the federal government.

Document stored Y:\Calibration Lab\SLM 2021\LD831\_0004229\_M1.doc

Page 1 of 2

## Scantek, Inc.

ISO 17025: 2017, ANSI/NCSL Z540:1994 Part 1 ACCREDITED by NVLAP (an ILAC MRA signatory)



## Calibration Certificate No.47723

Instrument:

**Acoustical Calibrator** 

Model:

**CAL200** 

Manufacturer:

**Larson Davis** 

Serial number:

16398

Class (IEC 60942):

Barometer type: Barometer s/n:

Customer:

Tel/Fax:

717-886-5291 / 717-763-8150

**Environmental Acoustics** 

Address:

Status:

In tolerance: Out of tolerance:

See comments:

207 Senate Avenue,

Contains non-accredited tests: Yes X No

Date Calibrated: 3/15/2022 Cal Due: 3/15/2023

Received

X

Sent

X

Camp Hill, PA 17011

Tested in accordance with the following procedures and standards:

Calibration of Acoustical Calibrators, Scantek Inc., Rev. 10/1/2010

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

				Traceability evidence	Cal. Due	
Instrument - Manufacturer	Description	S/N	Cal. Date	Cal. Lab / Accreditation	Cal. Due	
483B-Norsonic	SME Cal Unit	31052	Nov 8, 2021	Scantek, Inc./ NVLAP	Nov 8, 2022	
DS-360-SRS	Function Generator	88077	Dec 3, 2020	ACR Env./ A2LA	Dec 3, 2022	
34401A-Agilent Technologies	Digital Voltmeter	MY47011118	Mar 10, 2022	ACR Env. / A2LA	Mar 10, 2023	
PTU300-Vaisala	EnvironmentalMonitor	P5011262	Sept 10, 2021	ACR Env./ A2LA	Sept 10, 2022	
140-Norsonic	Real Time Analyzer	1406423	Nov 8, 2021	Scantek / NVLAP	Nov 8, 2022	
PC Program 1018 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-	
4134-Brüel&Kjær	Microphone	173368	Nov 8, 2021	Scantek, Inc. / NVLAP	Nov 8, 2022	
1203-Norsonic	Preamplifier	14059	Mar 3, 2022	Scantek, Inc./ NVLAP	Mar 3, 2023	

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK)

Calibrated by:	Bailey Part	oza	Authorized signatory:	1	(Gallagher
Signature	3/1	7	Signature	Willert	Belly
Date	3/15/	122	Date	3/22	12022

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory. This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored as: Y:\Calibration Lab\Cal 2022\LDCAL200\_16398\_M2.doc

Page 1 of 2

## APPENDIX D

PENNDOT Warranted, Feasible, and Reasonable Worksheets

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category 12 and impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	more activating category in, D, C, D, or D teceptor(6).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determinative recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Sa.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-6 Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	to be sents a ll to be dressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision		
Is the Noise Wall WARRANTED?	Yes	☐ No		
Is the Noise Wall FEASIBLE?	Yes	☐ No		
Is the Noise Wall REASONABLE?	Yes	☐ No		
Additional Reasons for Decision:				
Responsible/Qualified Individuals Making the Above Decisions				
PennDOT, Engineering District Enviro	onmental M	Date:anager		
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:		

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category 12 and impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	more activating category in, D, C, D, or D teceptor(6).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determinative recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Sa.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-6 Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	to be sents a ll to be dressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision		
Is the Noise Wall WARRANTED?	Yes	☐ No		
Is the Noise Wall FEASIBLE?	Yes	☐ No		
Is the Noise Wall REASONABLE?	Yes	☐ No		
Additional Reasons for Decision:				
Responsible/Qualified Individuals Making the Above Decisions				
PennDOT, Engineering District Enviro	onmental M	Date:anager		
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:		

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category 12 and impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	more activating category in, D, C, D, or D teceptor(6).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determinative recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Sa.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	□ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-6 Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	to be sents a ll to be dressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision		
Is the Noise Wall WARRANTED?	Yes	☐ No		
Is the Noise Wall FEASIBLE?	Yes	☐ No		
Is the Noise Wall REASONABLE?	Yes	☐ No		
Additional Reasons for Decision:				
Responsible/Qualified Individuals Making the Above Decisions				
PennDOT, Engineering District Enviro	onmental M	Date:anager		
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:		

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category 12 and impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	more activating category in, D, C, D, or D teceptor(6).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determinative recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Sa.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	□ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-6 Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	to be sents a ll to be dressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision	
Is the Noise Wall WARRANTED?	Yes	☐ No	
Is the Noise Wall FEASIBLE?	Yes	☐ No	
Is the Noise Wall REASONABLE?	Yes	☐ No	
Additional Reasons for Decision:			
Responsible/Qualified Individuals Making the Above Decisions			
PennDOT, Engineering District Enviro	PennDOT, Engineering District Environmental Manager		
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:	

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category L times impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	2.2.2.2 Ac 2.2.2.2.3 Category 1.4, 2, C, 2, or 2 1000ptox(0).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
2. Square Footage Per Benefited Receptor (SF/BR) Evaluation a. Area (SF) of the proposed noise wall	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	Yes No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determination the recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Ba.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-62) Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	r to be sents a ll to be ldressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision	
Is the Noise Wall WARRANTED?	Yes	☐ No	
Is the Noise Wall FEASIBLE?	Yes	☐ No	
Is the Noise Wall REASONABLE?	Yes	☐ No	
Additional Reasons for Decision:			
Responsible/Qualified Individuals Making the Above Decisions			
PennDOT, Engineering District Enviro	PennDOT, Engineering District Environmental Manager		
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:	

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category L times impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	2.2.2.2 Ac 2.2.2.2.3 Category 1.4, 2, C, 2, or 2 1000ptox(0).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
2. Square Footage Per Benefited Receptor (SF/BR) Evaluation a. Area (SF) of the proposed noise wall	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	Yes No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determination the recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Ba.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-62) Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	r to be sents a ll to be ldressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision	
Is the Noise Wall WARRANTED?	Yes	☐ No	
Is the Noise Wall FEASIBLE?	Yes	☐ No	
Is the Noise Wall REASONABLE?	Yes	☐ No	
Additional Reasons for Decision:			
Responsible/Qualified Individuals Making the Above Decisions			
PennDOT, Engineering District Enviro	PennDOT, Engineering District Environmental Manager		
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:	

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category L times impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	2.2.2.2 Ac 2.2.2.2.3 Category 1.4, 2, C, 2, or 2 1000ptox(0).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determinative recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Sa.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-6 Category E receptors?	and C $\square$ $\mathbf{v}_{as}$	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	to be sents a ll to be dressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision	
Is the Noise Wall WARRANTED?	Yes	☐ No	
Is the Noise Wall FEASIBLE?	Yes	☐ No	
Is the Noise Wall REASONABLE?	Yes	☐ No	
Additional Reasons for Decision:			
Responsible/Qualified Individuals Making the Above Decisions			
PennDOT, Engineering District Enviro	onmental M	Date:anager	
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:	

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category 12 and impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	more activating category in, D, C, D, or D teceptor(6).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determinative recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Sa.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-6 Category E receptors?	and C $\square$ $\mathbf{v}_{as}$	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	to be sents a ll to be dressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision	
Is the Noise Wall WARRANTED?	Yes	☐ No	
Is the Noise Wall FEASIBLE?	Yes	☐ No	
Is the Noise Wall REASONABLE?	Yes	☐ No	
Additional Reasons for Decision:			
Responsible/Qualified Individuals Making the Above Decisions			
PennDOT, Engineering District Enviro	onmental M	Date:anager	
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:	

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category 12 and impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	more activating category in, D, C, D, or D teceptor(6).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determinative recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Sa.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-6 Category E receptors?	and C $\square$ $\mathbf{v}_{as}$	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	to be sents a ll to be dressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision	
Is the Noise Wall WARRANTED?	Yes	☐ No	
Is the Noise Wall FEASIBLE?	Yes	☐ No	
Is the Noise Wall REASONABLE?	Yes	☐ No	
Additional Reasons for Decision:			
Responsible/Qualified Individuals Making the Above Decisions			
PennDOT, Engineering District Enviro	onmental M	Date:anager	
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:	

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category 12 and impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	more activating category in, D, C, D, or D teceptor(6).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
2. Square Footage Per Benefited Receptor (SF/BR) Evaluation a. Area (SF) of the proposed noise wall	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	Yes No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determination the recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Ba.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-62) Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	r to be sents a ll to be ldressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision
Is the Noise Wall WARRANTED?	Yes	☐ No
Is the Noise Wall FEASIBLE?	Yes	☐ No
Is the Noise Wall REASONABLE?	Yes	☐ No
Additional Reasons for Decision:		
Responsible/Qualified Individuals Making the Above Decisions		
PennDOT, Engineering District Enviro	onmental M	Date:anager
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category L times impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	2.2.2.2 Ac 2.2.2.2.3 Category 1.4, 2, C, 2, or 2 1000ptox(0).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	Yes No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	Yes No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	☐ Yes ☐ No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
2. Square Footage Per Benefited Receptor (SF/BR) Evaluation a. Area (SF) of the proposed noise wall	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	Yes No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determination the recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Ba.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-62) Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	r to be sents a ll to be ldressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision
Is the Noise Wall WARRANTED?	Yes	☐ No
Is the Noise Wall FEASIBLE?	Yes	☐ No
Is the Noise Wall REASONABLE?	Yes	☐ No
Additional Reasons for Decision:		
Responsible/Qualified Individuals Making the Above Decisions		
PennDOT, Engineering District Enviro	onmental M	Date:anager
Qualified Professional Performing the (name, title, and company name)	Analysis	Date:

Da		<u> </u>
Pro	oject Name	<u></u>
Co	ounty	<u> </u>
SR	A. Section	<u> </u>
Co	ommunity Name and/or NSA #	<u> </u>
No	oise Wall Identification (i.e., Wall 1)	<u> </u>
Ge	eneral	
1.	Type of project (new location, reconstruction, etc.):	
2.	Total number of impacted receptor units in community Category A units impacted	
	Category B units impacted	
	Category C units impacted	
	Category D units impacted (if interior analysis required)	
	Category E units impacted	
	Category L times impacted	
W	arranted	
1.	Community Documentation  a. Date community was permitted (for new developments or developments planned for or under construction)	
	b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	
	c. Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of <i>CE</i> , <i>ROD</i> , <i>or FONSI</i> , as appropriate."	☐ Yes ☐ No
2.	Criteria requiring consideration of noise abatement (note N/A if category is not impacted or present or analysis not required). A "yes" answer to any of the following three questions requires the consideration of noise abatement.  a. With the proposed project, are design year noise levels predicted to approach or exceed the NAC level(s) in	
	Table 1?	Yes No
	b. With the proposed project, is there predicted to be a substantial design year noise level increase of 10 dB(A) or more at Activity Category A, B, C, D, or E receptor(s)?	☐ Yes ☐ No
	2.2.2.2 Ac 2.2.2.2.3 Category 1.4, 2, C, 2, or 2 1000ptox(0).	

<ul> <li>c. With the proposed project, are design year noise levels predicted to be less than existing noise levels, but still approach or exceed the NAC levels in Table 1 for the relevant Activity Category?</li> <li>Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.</li> </ul>	☐ Yes ☐ No
Impacted receptor units     a. Total number of impacted receptor units:	
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	
c. Is the percentage 50 or greater?	☐ Yes ☐ No
2. Can the noise wall be designed and physically constructed at the proposed location?	☐ Yes ☐ No
3. Can the noise wall be constructed without causing a safety problem?	☐ Yes ☐ No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	Yes No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	☐ Yes ☐ No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	Yes No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	☐ Yes ☐ No
Reasonableness	
<ol> <li>Community Desires Related to the Barrier         <ul> <li>Do at least 50 percent of the responding benefited receptor unit owner(s) and renters desire the noise wall? If yes, continue with Reasonableness questions. If no, the noise wall can be considered not to be reasonable. Proceed to "Decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the benefited receptor unit owners do not desire the noise wall."</li> </ul> </li> </ol>	☐ Yes ☐ No
<ol> <li>Square Footage Per Benefited Receptor (SF/BR) Evaluation</li> <li>a. Area (SF) of the proposed noise wall</li> </ol>	
<ul> <li>b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)</li> <li>c. SF/BR = 2a/2b</li> </ul>	
d. Is 2c less than or equal to the MaxSF/BR value of 2000?	☐ Yes ☐ No

3.	Noise Reduction Design Goals (Activity Categories A and E) A "yes" answer is required to Question 3a. noise wall to be determined to be reasonable. Quest through 3e represent desirable goals that need not be moise wall to be determined reasonable. However, the be addressed and should be considered in the determination the recommended noise wall.	for the ions 3b net for a ey must	
	a. Does the noise wall reduce design year exterior levels by at least 7 dB(A) for at least one be receptor?		☐ No
	b. Does the noise wall provide an insertion loss of at dB(A) for more receptors than required under 3 still conforming to the MaxSF/BR value of 2,000 "point of diminishing returns" evaluation?	Ba.while	☐ No
	c. Does the noise wall provide insertion losses of than 7 dB(A) while still conforming to the Max value of 2,000 and a "point of diminishing revaluation?	xSF/BR	☐ No
	d. Does the noise wall reduce future exterior levels low-60-decibel range (60-63) for Category B receptors and the upper-60 dB(A) range (65-62) Category E receptors?	and C	☐ No
	e. Does the noise wall reduce design year noise leve to existing levels?	els back Yes	☐ No
4.	Noise Reduction Design Goals (Activity Category D) answer is required to Question 4a. for the barrier determined to be reasonable. Question 4b representational representational determined reasonable. However, this goal must be ad and should be considered in the determination recommended noise wall.  a. Does noise wall reduce design year interior noise least 7 dB(A) for the facility's analysis point?	r to be sents a ll to be ldressed of the	☐ No
	b. While conforming to the MaxSF/BR criteria and j by a "point of diminishing returns' evaluation, d noise wall provide an interior insertion loss abov dB(A) minimum	loes the	☐ No

	Dec	ision
Is the Noise Wall WARRANTED?	Yes	☐ No
Is the Noise Wall FEASIBLE?	Yes	☐ No
Is the Noise Wall REASONABLE?	Yes	☐ No
Additional Reasons for Decision:		
Responsible/Qualified Individuals Making the Above Decisions		
PennDOT, Engineering District Enviro	onmental M	Date:anager
Qualified Professional Performing the (name, title, and company name)	Analysis	Date: