TRAFFIC NOISE TECHNICAL REPORT
FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67

PREPARED FOR

POST OFFICE BOX 67676
HARRISBURG, PENNSYLVANIA 17106

PREPARED BY

449 EISENHOWER BOULEVARD, SUITE 300
HARRISBURG, PENNSYLVANIA 17111

JANUARY 18, 2016

R11-0341.001

TABLE OF CONTENTS

PAGE

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES
(CONTINUED)

ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
BR	Benefited Receptors
CE	Categorical Exclusion
dB	Decibel (measure of sound pressure level on a logarithmic scale)
dBA	A-weighted decibel (sound pressure level)
DU	Dwelling Unit
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
Hz	Hertz
IL	Insertion Loss
Lx	Measured noise level exceeded x percent of the measurement period
Leq	Equivalent sound level (energy averaged sound level)
Leq(1h)	A-weighted, energy average sound level during a 1-hour period
Lmax	Maximum measured noise level
LT	Long Term
Max SF/BR	Maximum Square Foot per Benefited Receptor
MP	Mile Post
NAC	Noise Abatement Criteria
NSA	Noise Sensitive Area
PennDOT	Pennsylvania Department of Transportation
PTC	Pennsylvania Turnpike Commission
ROD	Record of Decision
ROW	Right of Way
SF/BR	Square Foot per Benefited Receptor
SLM	Sound Level Meter
ST	Short Term
SR	State Route
TNM	Traffic Noise Model
UNT	Unnamed Tributary
v/c	Volume to capacity ratio
vph	Vehicles per hour

EXECUTIVE SUMMARY

ES.1 PROJECT DESCRIPTION SUMMARY

The Full-Depth Roadway Reconstruction and Widening of The Pennsylvania Turnpike (I-76) From Milepost T57 to Milepost T67 entails the proposed widening and reconstruction of the existing Pennsylvania Turnpike (I-76) from four lanes to six lanes between MP 57 and MP 67, including the reconstruction of the Irwin Interchange and toll booth plaza. Preliminary plans indicate that the existing 80-foot pavement will be widened to approximately 122 feet. Several bridge/structure replacements are proposed as part of the project: PA Turnpike over State Route (S.R.) 0030 at MP 67.1; PA Turnpike over Pennsylvania Avenue at MP 66.9; PA Turnpike over Brush Hill Road at MP 66.1; PA Turnpike over Broadway Street, Brush Creek, R/R tracks, and Bridge Street; PA Turnpike over Harvison Road at MP 61.8; PA Turnpike over Byers Run at MP 61.2; PA Turnpike over Lyons Run at MP 60.7; PA Turnpike over Lyons Run at MP 60.5; structure carrying S.R. 4033 (Trafford Road) over PA Turnpike at MP 59.5; PA Turnpike over Turtle Creek at MP 59.0; PA Turnpike over R/R tracks at MP 58.8; PA Turnpike over Abers Creek Road at MP 58.4; PA Turnpike over unnamed tributary (UNT) to Turtle Creek at MP 58.4; PA Turnpike over UNT to Turtle Creek at MP 57.5; PA Turnpike over UNT to Turtle Creek at MP 57.9; and structure carrying Northern Pike over PA Turnpike at MP 57.0. Figure 1 contains an overview of the project location.

ES.2 NOISE LEVELS AND NOISE IMPACTS

The Pennsylvania Turnpike Commission (PTC) follows Pennsylvania Department of Transportation (PennDOT) noise guidelines as stated in "*Pennsylvania Department of Transportation, Project Level Highway Traffic Noise Handbook, Publication No. 24, dated July 2011*." The noise analysis included a total of 223 measurement/modeled prediction locations (receivers) representing 308 individual noise sensitive dwelling units (receptors). In order to simplify the reporting of noise levels, noise impacts, and noise mitigation and in adherence with preferred PennDOT analysis methodology, these receptors were organized in 18 defined Noise Sensitive Areas (NSAs) within the general project area. The NSAs and the Noise Monitoring Sites are shown in Figures 2A through 2E.

Existing noise levels were predicted to determine the extent of the noise impact relative to the project edge of pavement (PTC recommends analysis out to 500 feet unless impacts are determined beyond that limit). Existing condition noise models were successfully validated at

36 short-term measurement locations. Existing and future (Design Year 2034) noise levels were determined and modeled using standard Federal Highway Administration (FHWA) and PennDOT methodologies. These predicted levels were compared with the existing noise conditions and evaluated for potential impacts as defined by FHWA and PennDOT criteria.

Table ES-1 presents a summary of each of the identified NSAs in the project area along with its associated FHWA/PennDOT noise impact, Land Use, Activity Category, Noise Abatement Criteria (NAC), number of modeled receptor locations, number of representative equivalent units (dwelling units), number of impacted receptors, predicted existing noise level, future noise level, and type of impact.

TABLE ES-1
SUMMARY OF IDENTIFIED NOISE SENSITIVE AREAS (NSAs)

NSA ID	Land Use	Activity Category	Noise Abatement Criteria	# of Modeled Receivers	# of Receptors/ Equivalent Residential Units	# of Impacted Receptors (2034)	Predicted Existing Noise Level Range of Leq(1h), dBA	Predicted Future Noise Level Range of Leq(1h), dBA	Type of Impact NAC/ Increase/ None or Both
2	Residential	B	66	9	21	6	56-66	58-69	NAC
3	Recreational	C	66	1	1	0	61-72	64	None
4	Residential	B	66	10	11	3	47-66	50-69	NAC
5	Residential	B	66	3	7	0	53-59	55-62	None
6	Residential	B	66	3	3	1	47-63	49-66	NAC
7	Residential	B	66	5	5	3	62-68	64-72	NAC
8	Residential	B	66	11	10	4	49-67	52-77	NAC
9	Residential	B	66	5	6	3	57-73	58-78	NAC
10	Residential	B	66	21	31	26	63-71	63-76	NAC
11	Residential	B	66	13	15	8	57-66	57-69	NAC
12	Residential	B	66	12	19	7	57-70	57-73	NAC
13	Residential	B	66	29	35	23	56-68	58-71	NAC
14	Residential	B	66	20	31	13	55-68	57-72	NAC
15	Residential	B	66	8	10	0	46-62	48-65	None
16	Residential/Recreational	B, C	66	28	33	12	55-72	56-73	NAC
17	Residential/ Cemetery/ Day Care/Church	B, C	66	33	56	16	57-68	60-69	NAC
18	Residential	B	66	11	13	0	49-65	54-63	None
19	Residential	B	66	1	1	0	58	62	None
TOTAL				**223**	**308**	**125**			

Noise levels were predicted for all receptor locations for the Existing and Future Build alternative using the FHWA Traffic Noise Model (TNM), Version 2.5. Predictions assumed worst-case hourly equivalent noise levels (1-hour Leq, dBA) using projected peak-hour design year traffic volumes and speeds. The highest predicted future noise levels for each NSA (among the range of noise levels for all modeled receptors within the NSA), are summarized in Table ES-1. Figures 3A through 3E outline the location of the modeling sites, impacted receptors, as well as the locations of the sound walls analyzed for those areas warranting consideration.

The PennDOT noise manual defines a traffic noise impact under two separate conditions: 1) when the future predicted traffic noise level is equal to or exceeds the PennDOT NAC or 2) when the future predicted traffic noise level creates a substantial increase of 10 dBA over existing noise levels. NAC values vary depending on land use, but are generally either 66 dBA (1-hr Leq, exterior) for residential, institutional, and outdoor active use areas or 71 dBA (1-hr Leq, exterior) for noise sensitive commercial areas, (including hotels and offices). NAC values for each NSA are indicated in Table ES-1. It should be noted that no receptors are expected to experience substantial increase over existing noise levels.

ES.3 NOISE ABATEMENT CONSIDERATIONS AND COMMITMENTS

FHWA and PennDOT policy require that, when noise impacts are identified, noise abatement must be evaluated; if noise abatement is found to be feasible and reasonable, it must be incorporated into the project. The PennDOT noise manual specifies that for noise abatement to be feasible it must be capable of providing a 5 dBA insertion loss (the net noise reduction provided by the barrier) for the majority (50% or greater) of impacted receptors and that it must meet safety, constructability, and access requirements. For an abatement measure to be reasonable, it must meet a maximum square foot per benefited receptor (Max SF/BR) criterion. PennDOT noise barrier cost reasonableness value is based on a Max SF/BR value of 2,000 square feet. The square footage of a barrier is based on its length multiplied by its height above the finished ground at its base to the top elevation. The benefited receptor values are determined by counting all receptors receiving a 5 dBA or greater insertion loss (IL). Although at least a 5 dBA IL for the majority of receptors is required to meet the feasibility criterion, the proposed barrier must reduce noise level by at least 7 dBA for at least one benefited receptor. It is desirable to provide this IL for additional impacted receptors while confirming to the Max SF/BR criteria and if justified by a “point of diminishing returns” evaluation. While optimizing a

proposed noise barrier, the desired abatement goals should be evaluated in terms of establishing insertion loss for impacted receptors only.

The final factor of reasonableness is determined by the benefited receptors. The benefited receptors must be surveyed to get their input on whether or not they would approve the barrier. If a majority of the benefited receptors approve of the barrier (greater than 50%), then the barrier is deemed as reasonable.

Each impacted NSA was evaluated to determine if noise abatement, typically in the form of noise walls, was feasible and reasonable. The analyses for each NSA are presented in Section 5. A summary of recommended noise abatement are presented in Table ES-2. Figures 3A through 3E show the proposed placement of the barrier walls. Final wall design and placement is pending approval from PTC and final design. Noise walls were primarily used in the analysis; however, NSAs 12, 13, and 16 allow for the construction of earthen berms in place of portions of several noise walls. Final design will include a refinement of all proposed walls and berms.

TABLE ES-2
PROPOSED NOISE ABATEMENT RECOMMENDATION SUMMARY

Descriptions	NSA 12	NSA 13	NSA 16	NSA 17
Number of Impacted Receptors	7	23	12	16
Number of Benefited Receptors	10	28	18	30
Barrier Evaluation Method	TNM	TNM	TNM	TNM
Length (ft)	1,880	3,153	787	1,700
Average Height (ft)	10.6	15	15	14
Minimum Height (ft)	5.4	15	15	14
Maximum Height (ft)	17.6	15	15	14
Area (ft^2)	19,950	47,297	11,808	23,800
Calculated SF/BR	1,995	1,689	656	793
Number of Receptors meeting Design Goal (7 dBA)	4	15	2	8
Design Goal Met?	Yes	Yes	Yes	Yes
Feasible?	Yes	Yes	Yes	Yes
Reasonable?	Yes	Yes	Yes	Yes

ES.4 CONSTRUCTION NOISE

This work consists of making every effort to minimize the effect of noise on the surrounding community and conducting an initial community meeting or distributing a Construction Notice to adjacent property owners prior to commencing construction and at other times prior to critical phases of the project.

ES.5 INFORMATION FOR LOCAL OFFICIALS

FHWA and PennDOT policy specify that local officials should be provided appropriate information to assist with future compatible land use planning, especially with regard to the future planning and development of currently undeveloped lands near the proposed project right-of-way. This technical noise report will serve as the primary information source to help local officials avoid future incompatible land use planning with regard to noise generated by this project. Two representative undeveloped lands were used as references for the entire project site: one of the undeveloped land contours represents topographically flat areas (line-of-sight (LOS) between receptor and sources) and the other represents a 'cut' section (no LOS). The shorter distance represents a typical 'cut' section; the longer distance represents a typical flat section. For convenience, this table is presented below as Table ES-3.

TABLE ES-3
NOISE IMPACT DISTANCES FOR UNDEVELOPED LANDS

Representative Undeveloped Land	Estimated Impact Distance (feet)	
	66 dBA (Categories B and C)	71 dBA (Category E)
Typical Unobstructed Areas (line of sight to the roadway)	500'	200'
Typical Obstructed Areas (no line of sight to the roadway)	200'	100'

Note: The impact distances are measured from the edge of pavement of I-76.

1. INTRODUCTION AND PROJECT DESCRIPTION

PROJECT DESCRIPTION

The Full-Depth Roadway Reconstruction and Widening of The Pennsylvania Turnpike (I-76) From Milepost T57 to Milepost T67 entails the proposed widening and reconstruction of the existing Pennsylvania Turnpike (I-76) from four lanes to six lanes between MP 57 and MP 67, including the reconstruction of the Irwin Interchange and toll booth plaza. Preliminary plans indicate that the existing 80-foot pavement will be widened to approximately 122 feet. Several bridge/structure replacements are proposed as part of the project: PA Turnpike over S.R. 0030 at MP 67.1; PA Turnpike over Pennsylvania Avenue at MP 66.9; PA Turnpike over Brush Hill Road at MP 66.1; PA Turnpike over Broadway Street, Brush Creek, R/R tracks, and Bridge Street; PA Turnpike over Harvison Road at MP 61.8; PA Turnpike over Byers Run at MP 61.2; PA Turnpike over Lyons Run at MP 60.7; PA Turnpike over Lyons Run at MP 60.5; structure carrying S.R. 4033 (Trafford Road) over PA Turnpike at MP 59.5; PA Turnpike over Turtle Creek at MP 59.0; PA Turnpike over R/R tracks at MP 58.8; PA Turnpike over Abers Creek Road at MP 58.4; PA Turnpike over UNT to Turtle Creek at MP 58.4; PA Turnpike over UNT to Turtle Creek at MP 57.5; PA Turnpike over UNT to Turtle Creek at MP 57.9; and structure carrying Northern Pike over PA Turnpike at MP 57.0. Figure 1 contains an overview of the project location.

2. NOISE ANALYSIS OVERVIEW

This section identifies and reviews the methodology and policy for the technical tasks and analyses used in this report. The actual results of these tasks and analyses are presented in subsequent sections of this report.

2.1 REGULATORY OVERVIEW

2.1.1 Federal Regulations

The FHWA noise policy is contained within The Code of Federal Regulations, Title 23, Part 772 (23 CFR 772) which provides procedures for preparing operational and construction noise studies and evaluating noise abatement considered for federal and federal-aid highway projects. The code was updated in July 2010. Under the current version of 23 CFR 772.5, projects are categorized as Type I, Type II or Type III projects. The FHWA defines a Type I project as a proposed federal or federal-aid highway project for the construction of a highway on a new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes.

Type I projects include those that create a completely new noise source as well as those that increase the volume or speed of traffic or move the traffic closer to a receptor. Type I projects include the addition of through traffic lanes, an interchange, ramp, auxiliary lane, or truck-climbing lane to an existing highway or the widening of an existing ramp by a full lane width for its entire length. Projects unrelated to increased noise levels, such as lighting, signing, and landscaping, are not normally considered Type I projects. Due to the addition of through traffic lanes throughout the project area, the proposed project would be considered Type I.

2.1.2 FHWA Noise Abatement Criteria (NAC)

Under 23 CFR 772.13, noise abatement must be considered for Type I projects if the project is predicted to result in traffic noise impacts. In such cases, 23 CFR 772 requires that the project sponsor “consider” noise abatement before adoption of the final PTC document. This process involves identification of noise abatement measures that are reasonable, feasible, and likely to be incorporated into the project and of noise impacts for which no apparent solution is available.

Traffic noise impacts, as defined in 23 CFR 772.5, occur when the design year condition noise levels approach or exceed the noise abatement criteria (NAC) specified in 23 CFR 772, or design year condition noise levels create a substantial noise increase over existing noise levels. 23 CFR 772 does not specifically define the terms “substantial increase” or “approach;” these criteria are defined in the PennDOT *Publication No. 24 (May 2011)*, as described in the following section.

Table 2-1 summarizes the FHWA NAC corresponding to various defined land use activity categories. Activity categories and related traffic noise impacts are determined based on the actual land use in a given area. In identifying noise impacts, primary consideration is given to exterior areas of frequent human use. In situations where there are no exterior activities or where the exterior activities are far from the roadway or physically shielded in a manner that prevents an impact on exterior activities, the interior criterion (Activity Category D) may be used as the basis for determining a noise impact.

The federal regulation also covers such topics as traffic noise prediction, analysis of traffic noise impacts, analysis of noise abatement, information for public officials, and construction noise issues, all of which have been incorporated into the current PennDOT noise manual, as discussed in the next section.

TABLE 2-1
FHWA NOISE ABATEMENT CRITERIA
HOURLY A-WEIGHTED SOUND LEVEL IN DECIBELS (dBA)

ACTIVITY CATEGORY	Leq(h)	DESCRIPTION OF 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.
B[2]	67 (Exterior)	Residential
C[2]	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.

ACTIVITY CATEGORY	Leq(h)	DESCRIPTION OF ACTIVITY CATEGORY
E[2]	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A, B, or C.
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.

[1] Impact thresholds should not be used as design standards for noise abatement purposes.
[2] Includes undeveloped lands permitted for this activity category
Source: 23 CFR Part 772

2.1.3 State Regulations and Policies

The PTC follows PennDOT noise guidelines. PennDOT's noise policy provides guidance in the analysis of highway traffic noise and the evaluation of noise mitigation measures. The noise guidelines are titled "*Pennsylvania Department of Transportation, Project Level Highway Traffic Noise Handbook, Publication No. 24, dated July 2011*" (hereafter referred to as "noise manual"). It includes current policies, procedures, and practices to be used by agencies that sponsor new construction or reconstruction of federal or federal-aid highway projects. The NAC specified in the noise manual are the same as those specified in the most recent version of 23 CFR 772. The PennDOT noise manual states that a sound level is considered to approach the NAC level when the Leq(h) sound level is 1 dBA less than the NAC identified in 23 CFR 772. This means that a peak hour noise level of 66 dBA is considered to approach the NAC of 67 dBA, but 65 dBA does not. The PennDOT noise manual defines a noise increase as substantial when the predicted traffic noise levels with project implementation exceed existing noise levels by 10 dBA. The PennDOT noise manual provides detailed technical guidance for the evaluation of highway traffic noise. This includes field measurement methods, noise modeling methods, and report preparation guidance.

In addition to the NAC criteria above, the PennDOT noise manual also specifies the following definitions and policies:

> A **Benefited Receptor** is a receptor predicted to receive at least 5 dBA net noise reduction, also referred to as insertion loss (IL), from the proposed mitigation and inclusive of all such residences, not limited to those receptors in the first row.
>
> A **Feasible Noise Abatement Measure** is a mitigation measure that is acoustically feasible and meets engineering requirements for constructability. A

feasible noise barrier must provide a minimum of 5 dBA IL for a majority (50% or greater) of the impacted receptors.

The **Insertion loss Design Goal** is the optimum desired dBA noise reduction determined from calculating the difference between future build noise levels with abatement, to future build noise levels without abatement. The PennDOT design goal is a 7 dBA IL for at least one benefited receptor.

A **Reasonable Noise Abatement Measure** is defined by PennDOT as a Maximum Square Footage of Abatement Per Benefited Receptor (MaxSF/BR) value of 2,000. In determining the MaxSF value, the square footage of the barrier shall be based upon its length and its height from the finished ground elevation at the base of the barrier to its top elevation. In determining the Benefited Receptor (BR) value, count any receptor receiving 5 dBA IL or greater as being benefited.

Consideration of Viewpoints of benefited property owners and residence is ultimately required for noise abatement to be considered Reasonable.

2.2 DEFINING AREA OF POTENTIAL IMPACT

The PennDOT noise manual references the FHWA "Highway Traffic Noise: Analysis and Abatement Guideline," FHWA-HEP-10-025HP dated December 2011. The extent of the noise study analysis area should include all receptors potentially impacted by the project. The FHWA does not establish a fixed distance to define the noise impact analysis area. Historically, absolute noise impacts (those areas with noise levels approaching or exceeding the NAC – 66 dBA for residential land uses) rarely exist beyond about 400 to 500 feet from the roadway. It is also established that the FHWA Traffic Noise Model is less reliable at predicting noise levels beyond this range, so a 500 foot screening distance from the edge of the proposed highway is established as a default value for the area of potential impact. Several unique topographical conditions within the study area require the assessment of receptors beyond the 500-foot distance in this study area.

2.3 NOISE MEASUREMENT PROCEDURES

A variety of field noise measurements were conducted for this project. In general, the noise measurement procedures in the field follow recommended standard procedures, including those outlined in the FHWA's Measurement of Highway Related Noise, May 1996, and the PennDOT noise manual. Specifically, the following practices and procedures were used.

- Both long- and short-term noise measurements were conducted (Appendix A).
- The long-term measurements (24 hours) were used primarily to document the daily variation in existing traffic noise levels and to identify the worst case noise hour, if there was one. Long-term measurements were conducted at or near the highway right-of-way (ROW) line in order to best document hourly variation in traffic noise level with minimal influence from non-highway noise sources.
- The short-term noise measurements (10 minutes) were conducted at actual noise sensitive receptor locations and were used primarily to validate noise models (at locations where traffic noise was dominant).
- Short-term noise measurements were generally conducted at areas of frequent exterior human use and were only conducted during periods of free flowing traffic, dry roadways, and low to moderate wind speeds (less than 12 mph to avoid extraneous wind noise).
- Only ANSI (American National Standards Institute) Rated Type 2 sound levels meters were used. The meters were subjected to a field calibration check before and after each measurement. Calibration certificates and raw data for each meter used in the Project can be found in Appendix A.
- Concurrent classified (auto, medium and heavy trucks) traffic counts for the acoustically dominant road were conducted for each short-term measurement (either via live count or by videotape). Observed traffic counts can be found in Appendix A on the site sketches, official traffic counts used in the TNM modeling can be found in Appendix B.
- All field data were recorded on field data sheets, which included the time, name and location of the measurement, instrumentation data, 10-minute Leq noise levels, observed meteorological data, a measurement site diagram, and notes as to the dominant noise sources and any other observed acoustically relevant events (such as aircraft over-flights, emergency vehicle passbys, etc.). Field sheets used in this project can be found in Appendix A.
- Photographs were taken for each measurement location showing the location relative to the dwelling and the noise source. Photographs of the measurement locations, along with a general description of the location, can be found in Appendix A.

2.4 ANALYSIS OBJECTIVES

The purpose of this draft noise analysis report is to identify and document potential noise impacts associated with the future alternative of the proposed project and to identify feasible and reasonable abatement. The general analysis procedure for the Project noise study includes the following steps.

1. **Review Project Description:** Review the project description and project data to be analyzed and collect additional required data (including roadway design files, existing and future traffic data, land use data, etc.). Consider all alternatives,

design options, and construction phasing scenarios. This information is presented in Section 1 of this report.

2. **Identify Regulatory Framework:** Investigate and establish the regulatory framework to be followed for the noise analysis, including federal and state regulations. This information is presented in Section 2.1 of this report.

3. **Establish Existing Land Use and Noise Environment:** Investigate and document the existing noise environment for the project area, including existing noise sensitive land uses and existing noise levels in the project area. These were accomplished with a careful review of local zoning information, review of aerial photography and a site visit to the Project area. This information is presented in Section 3 of this report and background information can be found in Appendix A.

4. **Predict Future Noise Levels:** Future noise levels at noise sensitive land uses for the future project alternative are predicted using the FHWA Traffic Noise Model (TNM) Version 2.5. This information is presented in Section 4 of this report and a summary of the TNM modeling can be found in Appendix C.

5. **Assess Future Noise Impacts:** For the proposed design option, compare future noise levels (as well as increases in future noise levels over existing noise levels) to appropriate identified noise impact criteria and quantify resulting noise impacts. This information is presented in Section 4 of this report and a summary of the TNM modeling can be found in Appendix C.

6. **Evaluate Noise Abatement:** Where noise impacts are identified, evaluate potential noise abatement measures. Abatement measures are evaluated for feasibility and reasonableness according to FHWA and PennDOT standards. This information is presented in Section 5 of this report and a summary of the TNM modeling can be found in Appendix C. Worksheets from PennDOT Pub. #24 Appendix A "Warranted, Reasonable and Feasible Worksheets" are located in Appendix E.

7. **Consider Construction Noise Impacts:** Analyze potential construction noise impacts and discuss available mitigation options. This information is presented in Section 6 of this report.

8. **Information for Public Officials:** Provide or identify appropriate information for local public officials to help avoid future noise impacts. This information is presented in Section 7 of this report.

A more detailed accounting of the specific procedures involved in each of the above analysis steps is provided in the indicated report section.

2.5 SELECTION OF NOISE SENSITIVE RECEPTORS

In general, noise-sensitive receptors are selected to represent potentially impacted land uses within the project area. Initially, the entire project area was reviewed and noise sensitive areas were identified. A noise sensitive area, or NSA, is generally defined as a geographical area covering multiple properties with similar land uses and noise environments and that might benefit from a single noise abatement measure, such as a noise wall. An NSA might represent a single isolated property or an entire neighborhood. The delineated NSAs for this project are described in Section 3 of this report. Within each NSA, several representative noise measurement and noise prediction locations may be identified. Typically, each NSA would have one measurement location and multiple noise prediction locations, although some smaller adjacent NSAs may share a single measurement location. The number and locations of the receptors (measurement and modeling locations) within each NSA are selected to adequately represent all of the noise-sensitive property units (dwellings) within that NSA, and these properties may include Activity Categories A through E in Table 2-1 (including residential, noise sensitive commercial, parks, schools, hotels, etc.). Activity Categories F and G (agriculture, retail, industrial, transportation, utilities, and undeveloped land) typically would not have associated NSAs or receptor locations. For residential properties in particular, more isolated residences would generally be modeled as individual receptors, while residences in multi-family buildings and densely populated neighborhoods may be modeled with one modeled receptor location representing multiple dwelling units or homes (receptors).

All receptor locations (short-term measurement locations and all modeled locations) are located to represent an area of frequent exterior human use. For residential properties, this would normally be an exterior activity area between the structure and the proposed project roadway. If no specific outdoor activity area is identified, a position at approximately 10 to 20 feet from the building façade exposed to the project roadway would be used. For commercial and other non-residential properties, some other area of frequent exterior human use would be selected.

2.6 WORST-CASE NOISE CONDITIONS

When determining noise impacts, traffic noise predictions must be made for the worst-case noise hour (generally during level of service [LOS] C or D with high heavy truck volumes and speeds close to the posted speed limit or design speed). The worst-case noise hour is typically either the peak vehicular truck hour or the peak vehicular volume hour (with LOS A

through D conditions). Long-term noise measurements were used to evaluate peak traffic noise hours at two locations within the project area.

2.7 NOISE ABATEMENT REQUIREMENTS

According to the PennDOT noise manual, once a noise impact has been identified, feasible and reasonable noise abatement measures must be considered. For noise abatement, primary consideration is given to exterior areas of frequent human use. When traffic noise impacts are identified, noise barrier walls, at a minimum, are required to be considered.

When noise barriers are considered, a preliminary noise barrier design analysis must show that the barrier is feasible and reasonable. This typically requires that the barrier provides a minimum level of insertion loss. According to the PennDOT noise manual, feasible noise barriers must provide at least 5 dBA of insertion loss for the majority (50% or greater) of impacted receptors. In addition to meeting minimum insertion loss requirements, noise barriers must also meet engineering and constructability feasibility requirements in terms of safety, property and emergency access, drainage control, overhead and underground utilities clearance, and other issues.

For an abatement measure to be reasonable it must meet a maximum square foot per benefited receptor (Max SF/BR) criterion. PennDOT noise barrier cost reasonableness value is based on a Max SF/BR value of 2,000 square feet. The square footage of a barrier is based on its length multiplied by its height above the finished ground at its base to the top elevation. The benefited receptor values are determined by counting all receptors receiving a 5 dBA or greater insertion loss (IL). Although at least a 5 dBA IL for the majority of receptors is required to meet the feasibility criterion, the proposed barrier must reduce noise level by at least 7 dBA for at least one benefited receptor.

If noise barriers are determined to be reasonable and feasible then the viewpoints of property owners and residences should be taken into consideration. Half (50%) of all responding benefited owners and residences must be in favor of implementing noise abatement. The polling is typically conducted after the Draft Noise Analysis is prepared and approved.

2.8 NOISE MODELING METHODOLOGY

Future build noise levels, along with existing noise levels, were predicted using the FHWA TNM Version 2.5, the most recent version available at the time of the analysis. All

conventional modeling techniques and recommendations for TNM by both FHWA and PennDOT were implemented by highly experienced TNM modelers. These included the following modeling procedures and conventions:

- All roadway pavement types were modeled as “Average.”
- Traffic speeds and volumes for peak traffic hour as provided in the traffic data were modeled to predict worst case noise levels. Traffic speeds and volumes used in this analysis were provided by the project engineers and are listed in Appendix B.
- Existing terrain lines (topography), buildings, ground zones and tree zones were modeled.
- All TNM model runs were detail checked for accuracy by an independent noise analyst.

2.9 PROJECT TRAFFIC DATA

Existing traffic data and traffic mix (autos, medium trucks, and heavy trucks) were provided by the PTC and its consultant team. Future design year (2034) traffic projections were generated based on the existing traffic data and an estimated growth percentage. Traffic data used in this analysis can be found in Appendix B.

3. EXISTING NOISE ENVIRONMENT AND NOISE SENSITIVE AREAS

3.1 EXISTING LAND USE AND ZONING

3.1.1 Existing Land Uses

The vicinity of the project area consists of land uses such as residential, commercial, public, and vacant, agricultural or open space. The residential neighborhoods are dispersed along the study area along with other isolated single-family homes. The commercial and industrial use is primarily located near the US 30 Interchange.

3.1.2 Noise Sensitive Areas

In order to better categorize the potential noise impacts and evaluate noise abatement for the various project alternatives, all of the potentially impacted, noise-sensitive receptors have been organized into Noise Sensitive Areas, or NSAs. An NSA is defined as a geographical area that includes a variety of individual noise-sensitive receptor units (individual homes, apartment units, institutional properties, etc.) which have a similar land use and noise environment, and if impacted, would likely be protected by a single noise abatement element, such as a noise barrier. Descriptions of delineated NSAs, including geographic area, primary land use, and type of noise-sensitive receptors are listed in Table 3-1. Figures 2A through 2E present all of the defined NSA locations with measurement sites and Figures 3A through 3E present all of the associated noise modeling locations within each NSA.

TABLE 3-1
NOISE SENSITIVE AREAS (NSAs)

NSA ID	Description	Long-term Measurement ID	Short-term Measurement ID
2	East of I-76, Southwest of Northern Pike Single-Family Residences		5
3	West of I-76, South of Abers Creek Road Recreational Facility	12	
4	East of I-76, Southwest of Meadowbrook Road Single-Family Residences		15, 16, 19
5	East of I-76, Immediately South of Trafford Road Multi-Family Residences		20
6	East of I-76, East of Lyons Run Road Single-Family Residences		21
7	East of I-76, East of Trafford Road and Lyons Run Road Single-Family Residences		

NSA ID	Description	Long-term Measurement ID	Short-term Measurement ID
8	West of I-76, South of Murrysville Road Single-Family Residences		22, 24
9	West of I-76, South of Harvison Road Single-Family Residences		25
10	East of I-76, Along Pleasant Valley Road Single-Family Residences	27	26, 28
11	East of I-76, Along Sandy Hill Road Single-Family Residences		29, 30
12	West of I-76, South of SR 0130, West of Nike Site Road Single-Family Residences		32, 33
13	West of I-76, West of Nike Site Road Single-Family Residences		34, 35, 36
14	East of I-76, West of Sandy Hill Road Single-Family Residences		37, 38, 39
15	East of I-76, West of Sandy Hill Road Single-Family Residences		40, 41
16	West of I-76, North of Broadway Street Single-Family Residences, Recreational Fields		42, 43, 44, 45
17	West of I-76, North and South of Brush Hill Road Single-Family Residences, Cemetery, Church, Day-Care		47, 48, 49, 50
18	East of I-76, North and South of Broadway Street Single-Family Residences		51, 52
19	East of I-76, South of Gina Drive Single-Family Residence		54

3.2 EXISTING NOISE LEVELS

3.2.1 Noise Measurements

Multiple noise measurements were conducted for this project on November 4 through 6 and November 20, 2013, and March 5, March 6, and April 1, 2014, including long-term (24-hour) and short-term (10-minute) measurements. Noise measurements were conducted for several reasons, including the following.

1. To empirically determine the peak noise hour, if one exists, in different areas of the project (long-term measurement). Leq values reported in Tables 3-2 and 3-5 and subsequently used for model validation were a result of an energy average of the individual interval values recorded on the data sheets.
2. To provide information for noise model validation (short-term measurements with accompanying classified traffic counts).

A total of 34 short-term noise measurements were conducted as summarized in Table 3-2. Figures 2A through 2E show an overview of the project area, designated NSAs and

each measurement location. A total of two long-term noise measurements were conducted as summarized in Table 3-3. Appendix A contains all the measurement data collected.

TABLE 3-2
SHORT-TERM NOISE MEASUREMENT SUMMARY

Receptor	Location	Date	Start Time	End Time	Measured Leq, dBA
5	156 W Patty Lane	11/20/2013	11:12:00 AM	11:22:00 AM	62
15	3010 Meadowbrook Road	11/20/2013	11:56:00 AM	12:06:00 PM	61
16	3111 Hope Street	11/20/2013	1:57:00 PM	2:07:00 PM	60
19	3433 Mayer Drive	11/20/2013	1:25:00 PM	1:35:00 PM	62
20	1433 Lyons Chase Circle	3/5/2014	10:23:00 AM	10:33:00 AM	60
21	995 Lyons Run Road	3/5/2014	10:23:00 AM	10:33:00 AM	62
22	449 Murrysville Road	3/5/2014	10:23:00 AM	10:33:00 AM	63
24	459 Hemlock Road	3/5/2014	10:23:00 AM	10:33:00 AM	54
25	118 Harvison Court	3/5/2014	11:18:00 AM	11:28:00 AM	72
26	1005 Pikeview Lane	3/5/2014	11:18:00 AM	11:28:00 AM	63
28	7060 Pleasant Valley Road	3/5/2014	1:10:00 PM	1:20:00 PM	62
29	1017 Sandy Hill Road	3/5/2014	1:10:00 PM	1:20:00 PM	61
30	1034 Sandy Hill Road	3/5/2014	1:10:00 PM	1:20:00 PM	65
32	4006 Route 130	3/5/2014	1:10:00 PM	1:20:00 PM	61
33	Layfette Circle	3/5/2014	1:10:00 PM	1:20:00 PM	67
34	1094 Nike Site Road	3/5/2014	2:25:00 PM	2:35:00 PM	65
35	212 Durst Road	3/5/2014	2:25:00 PM	2:35:00 PM	58
36	1272 Nike Site Road	3/5/2014	2:25:00 PM	2:35:00 PM	62
37	128 Birchwood Way	3/6/2014	8:45:00 AM	8:55:00 AM	65
38	150 Birchwood Way	3/6/2014	8:45:00 AM	8:55:00 AM	49
39	125 Tanglewood Court	3/6/2014	8:45:00 AM	8:55:00 AM	55
40	Kingsbury Lane	3/6/2014	9:28:00 AM	9:38:00 AM	51
41	10190 Kingsbury Lane	3/6/2014	9:28:00 AM	9:38:00 AM	57
42	1261 Robbie Drive	3/6/2014	10:37:00 AM	10:47:00 AM	60
43	1211 Robbie Drive	3/6/2014	10:37:00 AM	10:47:00 AM	61
44	10041 Brentzel Drive	3/6/2014	10:37:00 AM	10:47:00 AM	59
45	9501 Don Drive	3/6/2014	10:37:00 AM	10:47:00 AM	72
47	1815 Highland Ave	3/6/2014	12:33:00 PM	12:43:00 PM	61
48	1909 Highland Ave	3/6/2014	12:33:00 PM	12:43:00 PM	64
49	2005 Highland Ave	3/6/2014	12:33:00 PM	12:43:00 PM	66
50	160 Carriage Drive	4/1/2014	10:17:00 AM	10:27:00 AM	57
51	9182 Scull Road	3/6/2014	12:33:00 PM	12:43:00 PM	62
52	1000 Castleview Drive	3/6/2014	12:33:00 PM	12:43:00 PM	59

Receptor	Location	Date	Start Time	End Time	Measured Leq, dBA
54	9000 Gina Drive	4/1/2014	10:17:00 AM	10:27:00 AM	58

TABLE 3-3
LONG-TERM NOISE MEASUREMENT SUMMARY

Receptor	Location	Start Date	Start Time	End Date	End Time	Minimum and Maximum Measured Leq, dBA
12	Abers Creek Road	11/4/2013	4:20:00 PM	11/6/2013	6:55:00 AM	63 - 76
27	7012 Pleasant Valley Road	11/4/2013	4:00:00 PM	11/6/2013	6:55:00 AM	54 - 73

Long-term noise measurements were conducted at fence-line locations in order to identify general trends in noise variation over the course of the day. These were used to determine if or when noise levels peaked during the day or if noise levels were reduced at peak traffic hours due to traffic congestion. In general, the measurement data showed that, while traffic noise levels fluctuated somewhat over the course of the day, there was generally no identified discrete "worst hour," with noise levels loudest between about 6:00 A.M. and 6:00 P.M. The data also provided no indication that noise levels were substantially reduced due to congestion at any time during the day.

3.2.2 Noise Monitoring Equipment and Atmospheric Conditions

ANSI (American National Standards Institute) Rated Type 2 Sound Levels Meters were used. Meters were subjected to a field calibration check before the start of each measurement period. Current annual factory calibration certificates for the meters used on this project can be found in Appendix A.

Weather conditions in the project area were recorded using Kestrel 3000 Pocket Weather Meters. These data were recorded on the noise measurement field sheets in Appendix A. Meteorological conditions were noted for all short-term noise measurements to document that conditions were appropriate. All measurements were conducted during appropriate and acceptable meteorological weather conditions with dry roadways (i.e., acceptable temperature and humidity ranges, wind less than 12 mph).

All field data were recorded on field data sheets, which included the time, name and location of the measurement, instrumentation data, 10-minute Leq noise levels, meteorological data, a measurement site diagram, and notes as to the dominant noise sources and any other observed acoustically relevant events (such as aircraft over-flights, emergency vehicle passbys, etc.). Classified traffic counts were generally taken from video shot during the noise measurements. Speeds used for validation runs were values indicated on the field data sheets as "observed" speeds. Existing speeds were estimated by driving through the project roadway during periods with similar traffic conditions and noting vehicle speed. For this project, the observed speeds during noise measurement activities were approximately the same as posted speeds. Field sheets used for this project can be found in Appendix A.

3.2.3 Noise Model Validation and Results

The FHWA TNM Version 2.5 was used to predict noise levels for the future build alternative as well as existing noise levels at receptor locations where noise levels are dominated by traffic noise on project roadways. To demonstrate that the noise model is predicting noise levels within a reasonable margin of error, the noise model runs are validated by comparing predicted noise levels to measured noise levels for similar traffic conditions. Acoustical measurements were only taken when traffic was free-flowing. However, since the TNM only predicts noise levels associated with traffic noise, the model runs can only be validated at measurement locations where current noise levels are dominated by traffic noise sources. For this project, noise model validation was possible for all noise measurement locations. Noise models are considered to be validated according to the PennDOT noise manual if the difference between measured and modeled noise levels for comparable conditions is within an acceptable margin of error (±3 dBA). The results of the noise validation effort are presented in Table 3-4.

TABLE 3-4
TNM MODEL VALIDATION SUMMARY

Receptor	Location	Date	NSA	Measured Leq, dBA	Modeled Leq, dBA	Difference
5	156 W Patty Lane	11/20/2013	2	62.3	64.0	-1.7
15	3010 Meadowbrook Road	11/20/2013	4	61.2	63.9	-2.7
16	3111 Hope Street	11/20/2013	4	60.2	61.3	-1.1
19	3433 Mayer Drive	11/20/2013	4	61.5	64.5	-3.0

Receptor	Location	Date	NSA	Measured Leq, dBA	Modeled Leq, dBA	Difference
20	1433 Lyons Chase Circle	3/5/2014	5	59.5	57.7	1.8
21	995 Lyons Run Road	3/5/2014	6	61.5	61.7	-0.2
22	449 Murrysville Road	3/5/2014	8	63.0	65.2	-2.2
24	459 Hemlock Road	3/5/2014	8	54.1	55.9	-1.8
25	118 Harvison Court	3/5/2014	9	71.7	71.0	0.7
26	1005 Pikeview Lane	3/5/2014	10	63.0	65.3	-2.3
28	7060 Pleasant Valley Road	3/5/2014	10	62.4	64.5	-2.1
29	1017 Sandy Hill Road	3/5/2014	11	61.1	60.1	1.0
30	1034 Sandy Hill Road	3/5/2014	11	64.7	63.3	1.4
32	4006 Route 130	3/5/2014	12	61.3	64.3	-3.0
33	Layfette Circle	3/5/2014	12	66.9	67.7	-0.8
34	1094 Nike Site Road	3/5/2014	13	64.8	65.9	-1.1
35	212 Durst Road	3/5/2014	13	58.2	58.7	-0.5
36	1272 Nike Site Road	3/5/2014	13	61.5	63.0	-1.5
37	128 Birchwood Way	3/6/2014	14	65.3	64.9	0.4
38	150 Birchwood Way	3/6/2014	14	49.4	53.9	-4.5
39	125 Tanglewood Court	3/6/2014	14	54.9	57.5	-2.6
40	Kingsbury Lane	3/6/2014	15	51.2	51.0	0.2
41	10190 Kingsbury Lane	3/6/2014	15	57.2	58.2	-1.0
42	1261 Robbie Drive	3/6/2014	16	60.3	62.9	-2.6
43	1211 Robbie Drive	3/6/2014	16	61.0	63.2	-2.2
44	10041 Brentzel Drive	3/6/2014	16	59.4	60.9	-1.5
45	9501 Don Drive	3/6/2014	16	72.1	70.2	1.9
47	1815 Highland Ave	3/6/2014	17	60.8	58.5	2.3
48	1909 Highland Ave	3/6/2014	17	63.7	65.9	-2.2
49	2005 Highland Ave	3/6/2014	17	66.0	67.3	-1.3
50	160 Carriage Drive	4/1/2014	17	57.3	57.5	-0.2
51	9182 Scull Road	3/6/2014	18	62.3	63.7	-1.4
52	1000 Castleview Drive	3/6/2014	18	58.5	57.4	1.1
54	9000 Gina Drive	4/1/2014	19	57.9	56.2	1.7

As shown in Table 3-4, the calculated differences between modeled and measured noise levels are less than 3.0 dBA, with the exception of R-38 (4.5 dBA). Therefore, the noise models in those locations are considered validated.

3.2.4 Observed Traffic Counts

The observed traffic counts are used for validating the TNM models. The field-observed values are compared with the predicted values. If the difference between the two values is less than ±3 decibels, then the model is considered to be within an acceptable level of accuracy. All NSAs were within ±3 decibels. The observed traffic data videotaped or hand-counted during the noise measurements and used in the validation process can be found in Appendix A. TNM validation runs developed for this project are available on request.

3.2.5 Existing Noise Levels

Existing noise levels for NSAs were predicted by modeling the receptor locations using the FHWA TNM. Table 3-5 presents a summary of existing noise levels for all modeled receptors in the project area. Existing levels range from 44 to 77 dBA. Figures 2A through 2E present an overview of the project area showing measured receptor locations within each NSA, represented by a triangle. Figures 3A through 3E present an overview of the project area showing both the measured receptor locations in addition to all modeled receptor locations within each NSA.

TABLE 3-5
PREDICTED EXISTING NOISE LEVELS

NSA ID	NSA Description	# of Modeled Receivers	# of Receptors/Equivalent Residential Units	Predicted Existing Noise Level, Range of Leq(1h) dBA
2	East of I-76, Southwest of Northern Pike Single-Family Residences	9	21	56 - 66
3	West of I-76, South of Abers Creek Road Recreational Facility	1	1	61-72
4	East of I-76, Southwest of Meadowbrook Road Single-Family Residences	10	11	47-66
5	East of I-76, Immediately South of Trafford Road Multi-Family Residences	3	7	53-59
6	East of I-76, East of Lyons Run Road Single-Family Residences	3	3	47-63
7	East of I-76, East of Trafford Road and Lyons Run Road Single-Family Residences	5	5	62-68
8	West of I-76, South of Murrysville Road	11	10	49-67

NSA ID	NSA Description	# of Modeled Receivers	# of Receptors/Equivalent Residential Units	Predicted Existing Noise Level, Range of Leq(1h) dBA
	Single-Family Residences			
9	West of I-76, South of Harvison Road Single-Family Residences	5	6	57-73
10	East of I-76, Along Pleasant Valley Road Single-Family Residences	21	31	63-71
11	East of I-76, Along Sandy Hill Road Single-Family Residences	13	15	57-66
12	West of I-76, South of SR 0130, West of Nike Site Road Single-Family Residences	12	19	57-70
13	West of I-76, West of Nike Site Road Single-Family Residences	29	35	56-68
14	East of I-76, West of Sandy Hill Road Single-Family Residences	20	31	56-68
15	East of I-76, West of Sandy Hill Road Single-Family Residences	8	10	46-62
16	West of I-76, North of Broadway Street Single-Family Residences, Recreational Fields	28	33	55-72
17	West of I-76, North and South of Brush Hill Road Single-Family Residences, Cemetery, Church, Day-Care	33	56	57-68
18	East of I-76, North and South of Broadway Street Single-Family Residences	11	13	49-65
19	East of I-76, South of Gina Drive Single-Family Residence	1	1	58

4. FUTURE NOISE LEVELS AND IMPACTS

This section presents predicted noise levels and noise impacts (or noise impact distances or both identified NSA areas and general undeveloped areas.

4.1 PREDICTED NOISE LEVELS AND NOISE IMPACTS

Future build alternative noise levels, along with existing noise levels, were predicted using the FHWA TNM Version 2.5, the most recent version available at the time of the analysis. All conventional modeling techniques and recommendations for TNM by both FHWA and PennDOT were implemented by highly experienced TNM modelers. These included the following modeling procedures and conventions.

- All roadway pavement types were modeled as "Average."
- Traffic speeds and volumes for peak traffic hour as provided in the traffic data were modeled to predict worst-case noise levels. Traffic speeds and volumes used in this analysis are listed in Appendix B. Modeled vehicle-type traffic data (i.e., car, medium truck, heavy truck) are located in Appendix B.
- All TNM runs were detail checked for accuracy by an independent noise analyst.

An "Approach or Exceed" noise impact occurs when the predicted future noise level at an identified noise receptor location approaches or exceeds the FHWA NAC within 1 dBA. Table 4-1 summarizes the number of absolute or "Approach or Exceed" noise impacts for the Future Build alternative.

A "Substantial Increase" noise impact occurs when the predicted future noise level at an identified noise receptor location exceeds the existing condition noise level by 10 dBA or more. No substantial increase impacts have been identified for the project area.

Table 4-1 contains a summary of the predicted noise levels and noise impacts at all NSA locations in the project area for the existing condition and the future Build alternative. Additional predicted noise levels and noise impacts for each individual modeled receptor location are provided in Appendix C.

Figures 3A through 3J contain an overview of the study area showing all Future Build modeled receptor locations.

TABLE 4-1
PREDICTED NOISE LEVELS AND IMPACT SUMMARY

NSA ID	Dwelling Units	Predicted Noise Levels (range) Leq (1h), dBA		Impacted Receptors	
		Existing (2014)	Future Build (2034)	Number	Type of Impact
2	21	56-66	58-69	6	NAC
3	1	61-72	64	NA	None
4	11	47-66	50-69	3	NAC
5	7	53-59	55-62	NA	None
6	3	47-63	49-66	1	NAC
7	5	62-68	64-72	3	NAC
8	10	49-67	52-77	4	NAC
9	6	57-73	58-78	3	NAC
10	31	63-71	63-76	26	NAC
11	15	57-66	57-69	8	NAC
12	19	57-70	57-73	7	NAC
13	35	56-68	58-71	23	NAC
14	31	55-68	57-72	13	NAC
15	10	46-62	48-65	NA	None
16	33	55-72	56-73	12	NAC
17	56	57-68	60-69	16	NAC
18	13	49-65	54-63	NA	None
19	1	58	62	NA	None

4.2 PREDICTED IMPACT DISTANCE FOR UNDEVELOPED LANDS

FHWA and PennDOT policy specify that local officials should be provided appropriate information to assist with future compatible land use planning, especially with regard to the future planning and development of currently undeveloped lands near the proposed project ROW.

Two representative undeveloped lands were used as references for the entire project site: one of the undeveloped land contours represents topographically flat areas (LOS between receptor and sources) and the other represents a ‘cut’ section (no LOS). The shorter distance represents a typical ‘cut’ section; the longer distance represents a typical flat section. For convenience, this table is presented below as Table 4-2.

TABLE 4-2
NOISE IMPACT DISTANCES FOR UNDEVELOPED LANDS

Representative Undeveloped Land	Estimated Impact Distance (feet)	
	66 dBA (Categories B and C)	**71 dBA (Category E)**
Typical Unobstructed Areas (line of sight to the roadway)	500’	200’
Typical Obstructed Areas (no line of sight to the roadway)	200’	100’

5. NOISE ABATEMENT EVALUATION

5.1 NOISE ABATEMENT MEASURES

According to FHWA and PennDOT policies, when noise impacts are identified, noise barriers (at a minimum) must be considered as noise abatement. Noise barriers were evaluated for 13 of the 18 NSAs for feasibility and reasonableness. Five NSAs (3, 5, 15, 18, and 19) were acoustically modeled and the results showed that they do not have any receptors that approached or exceed the NAC criteria. The following sections describe results of barrier assessment.

5.2 FEASIBLE AND REASONABLE CRITERIA AND REQUIREMENTS

In order for mitigation to be recommended, the barrier must meet certain feasibility and reasonability requirements established by PennDOT in the noise manual.

When noise barriers are considered, a preliminary noise barrier design analysis must show that the barrier is feasible. This typically requires that the barrier provides a minimum level of insertion loss (IL). According to PennDOT policy, feasible noise barriers must provide at least 5 dBA of IL for a majority (50% or greater) of impacted receptors. In addition to meeting minimum IL requirements, noise barriers must also meet engineering and constructability feasibility requirements in terms of safety, property and emergency access, drainage control, overhead and underground utilities clearance, and other issues.

Noise barrier reasonableness generally is related to cost effectiveness. PennDOT noise barrier cost reasonableness value is based on a Maximum Square Foot per Benefited Residence (Max SF/BR) value of 2,000 square feet. The square footage of a barrier is based on its length multiplied by its height above the finished ground at its base to the top elevation. The benefited receptor values are determined by counting all receptors receiving a 5 dBA or greater IL. Although at least a 5 dBA IL for the majority of receptors is required to meet the feasibility criterion, the proposed barrier must reduce noise level by at least 7 dBA for at least one benefited receptor.

If noise barriers are determined to be reasonable and feasible, then the viewpoints of property owners and residents should be taken into consideration. Agreement of half (50%) of all responding benefited owners and residences is needed to implement noise abatement. Polling for the viewpoints of benefited receptors typically occurs after the Draft Noise Analysis is prepared and approved.

5.3 DESIGN GOAL REQUIREMENTS

PennDOT defines its IL design goal as 7 dBA. The IL design goal is not to be confused with the 5 dBA feasibility criterion (see section 3.3.3.2 *"Noise Reduction Design Criteria and Goals"* of the PennDOT noise manual). It is PennDOT policy that at least one benefited property must receive at least a 7 dBA reduction in noise levels with the proposed abatement measure. The IL design goal results in the construction of more effective barriers.

5.4 FINDINGS AND RECOMMENDATIONS FOR NOISE ABATEMENT

Noise abatement was considered for each NSA with noise impacted receptors. Initially, noise abatement was checked for feasibility (5 dBA reduction at a minimum of half of impacted receptors and access restrictions). If abatement was feasible, the abatement was analyzed for reasonableness factors.

If the abatement was found to be both reasonable and feasible, it would be recommended for inclusion in the project pending a polling of viewpoints from benefited receptors per PennDOT Pub. #24, Section 6.4 "Voting Procedures." The narrative results of abatement evaluations for each impacted NSA are summarized below. Table 5-1 summarizes the barrier analysis for each NSA location. Appendix C contains a summary of the TNM modeling results. Appendix E presents PennDOT Pub. #24's "Warranted, Reasonable and Feasible Worksheets."

TABLE 5-1
SUMMARY OF BARRIER ANALYSIS FOR EACH NSA LOCATION

NSA	Description	Number of Imacted Receptors	Method[1]	Feasible[2]	Reasonable[3]	Proposed Barrier Length (ft)	Average Height (ft)	Total Square feet	Number of Benefited Receptors	SF/BR	Recommeded?
2	East of I-76, Southwest of Northern Pike	6	TNM	No	No	NA	NA	NA	NA	NA	No
3	West of I-76, South of Abers Creek Road	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	East of I-76, Southwest of Meadowbrook Road	3	TNM	No	No	NA	NA	NA	NA	NA	No
5	East of I-76, Immediately South of Trafford Road	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	East of I-76, East of Lyons Run Road	1	TNM	No	No	NA	NA	NA	NA	NA	No
7	East of I-76, East of Trafford Road and Lyons Run Road	3	TNM	No	No	NA	NA	NA	NA	NA	No
8	West of I-76, South of Murrysville Road	4	TNM	Yes	No	1,501	20.0	30,033	3	10,011	No
9	West of I-76, South of Harvison Road	3	TNM	Yes	No	862	15.0	12,936	4	3,234	No
10	East of I-76, Along Pleasant Valley Road	26	TNM	Yes	No	6,400	12.0	80,016	29	2,759	No
11	East of I-76, Along Sandy Hill Road	8	TNM	Yes	No	2,075	17.0	35,275	9	3,919	No
12	West of I-76, South of SR 0130, West of Nike Site Road	7	TNM	Yes	Yes	1,880	10.6	19,950	10	1,995	Yes
13	West of I-76, West of Nike Site Road	23	TNM	Yes	Yes	3,153	15.0	47,297	28	1,689	Yes
14	East of I-76, West of Sandy Hill Road	13	TNM	No	No	NA	NA	NA	NA	NA	No
15	East of I-76, West of Sandy Hill Road	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	West of I-76, North of Broadway Street	12	TNM	Yes	Yes	787	15.0	11,808	18	656	Yes
17	West of I-76, North and South of Brush Hill Road	16	TNM	Yes	Yes	1,700	14.0	23,800	30	793	Yes
18	East of I-76, North and South of Broadway Street	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	East of I-76, South of Gina Drive	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Tables 5-2 through 5-14 summarize the narrative results for abatement evaluations for each of the 13 NSAs that were determined to have impacted receptors. Table 5-15 presents the summary of recommended noise abatement.

NSA 2 - Residential

NSA 2 contains two identified receptors representing six equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. All of these receptors are representative of single-family residential land uses in a residential community east of I-76 and southwest of Northern Pike. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be not feasible. A 2,000 foot long, 20 foot tall noise barrier was evaluated along the edge of shoulder of the west bound lanes, beginning at Station 588+00 and terminating at Station 567+75. This barrier failed to provide the required 5 dBA noise reduction for any of the six noise impacted residences. The elevated nature of this community in relation to the highway prohibits a noise abatement design that provides the required noise reductions. Table 5-2 summarizes the barrier analysis for NSA 2.

TABLE 5-2
BARRIER ANALYSIS SUMMARY - NSA 2

Descriptions	Results
Number of Impacted Equivalent Residential Units	6
Number of Benefited Equivalent Residential Units	0
Barrier Evaluation Method	TNM
Length (ft)	2,000
Average Height (ft)	20
Minimum Height (ft)	20
Maximum Height (ft)	20
Area (ft^2)	39,999
Calculated SF/BR	NA
Number of Receptors meeting Design Goal (7 dBA)	0
Design Goal Met?	No
Feasible?	No
Reasonable?	No

:

NSA 4 - Residential

NSA 4 contains three identified receptors representing three equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. All of these receptors are representative of single-family residential land uses in a residential community east of I-76 and southwest of Meadowbrook Road. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be not feasible. A 5,726 foot long, 20 foot tall noise barrier was evaluated along the edge of shoulder of the west bound lanes, beginning at Station 680+50 and terminating at Station 622+75. This barrier was only able to provide a > 5 dBA noise reduction for one of the three noise impacted residences. The elevated nature of this community in relation to the highway prohibits a noise abatement design that provides the required noise reductions. Table 5-3 summarizes the barrier analysis for NSA 4.

TABLE 5-3
BARRIER ANALYSIS SUMMARY - NSA 4

Descriptions	Results
Number of Impacted Equivalent Residential Units	3
Number of Benefited Equivalent Residential Units	1
Barrier Evaluation Method	TNM
Length (ft)	5,726
Average Height (ft)	20
Minimum Height (ft)	20
Maximum Height (ft)	20
Area (ft^2)	114,517
Calculated SF/BR	NA
Number of Receptors meeting Design Goal (7 dBA)	1
Design Goal Met?	No
Feasible?	No
Reasonable?	No

NSA 6 - Residential

NSA 6 contains one identified receptor representing one equivalent residential unit that is predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. This receptor represents a single-family residential land use along Lyons Run Road east of I-76 and southwest of the community along Wilcox Circle. Noise abatement was evaluated for the identified noise impact within the NSA and determined to be not feasible. A 2,100 foot long, 20 foot tall noise barrier was evaluated along the edge of shoulder of the west bound lanes, beginning at Station 713+25 and terminating at Station 692+00. This barrier failed to provide the required 5 dBA noise reduction for the noise impacted residence. The elevated nature of this residential land use in relation to the highway prohibits a noise abatement design that provides the required noise reductions. Table 5-4 summarizes the barrier analysis for NSA 6.

TABLE 5-4
BARRIER ANALYSIS SUMMARY - NSA 6

Descriptions	Results
Number of Impacted Equivalent Residential Units	1
Number of Benefited Equivalent Residential Units	0
Barrier Evaluation Method	TNM
Length (ft)	2,100
Average Height (ft)	20
Minimum Height (ft)	20
Maximum Height (ft)	20
Area (ft^2)	42,012
Calculated SF/BR	NA
Number of Receptors meeting Design Goal (7 dBA)	0
Design Goal Met?	No
Feasible?	No
Reasonable?	No

NSA 7 - Residential

NSA 7 contains three identified receptors representing three equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. All of these receptors are representative of single-family residential land uses along Murrysville Road/Trafford Road immediately adjacent to the west bound lanes of I-76 and immediately north of the intersection of Trafford Road and Lyons Run Road. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be not feasible. A 1,130 foot long barrier with an average height of 15.6 feet was evaluated along the edge of shoulder of the west bound lanes, beginning at Station 680+50 and terminating at Station 669+25, and was only able to provide > 5 dBA noise reductions for one of the three noise impacted residences (while providing a > 5 dBA benefit to a non-impacted residence). Table 5-5 summarizes the barrier analysis for NSA 7.

TABLE 5-5
BARRIER ANALYSIS SUMMARY - NSA 7

Descriptions	Results
Number of Impacted Equivalent Residential Units	3
Number of Benefited Equivalent Residential Units	2
Barrier Evaluation Method	TNM
Length (ft)	900
Average Height (ft)	15.6
Minimum Height (ft)	12
Maximum Height (ft)	16
Area (ft^2)	13,999
Calculated SF/BR	7,000
Number of Receptors meeting Design Goal (7 dBA)	2
Design Goal Met?	No
Feasible?	No
Reasonable?	No

NSA 8 - Residential

NSA 8 contains four identified receptors representing four equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. All of these receptors are representative of single-family residential land uses along Murrysville Road/Trafford Road immediately adjacent to the east bound lanes of I-76. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be feasible but not reasonable. A two-barrier system, with a barrier on either side of the Trafford Road overpass, was evaluated to determine feasibility and reasonableness. A 355 foot long, 20 foot tall barrier at the top of cut (from approximately Station 682+785 to Station 679+25) in combination with an 1,150 foot long, 20 foot tall barrier along the edge of shoulder (beginning at Station 679+25 and terminating at Station 667+75) was able to provide > 5 dBA noise reductions for three of the four noise impacted residences. This barrier system was determined to not be reasonable because the size of the barrier required (approximately 10,011 square feet per benefited receptor) to provide the minimum required noise reduction exceeds the maximum allowable amount of 2,000 square feet per benefited receptor as well as not providing at least a 7 dBA noise reduction for one noise impacted residence. Table 5-6 summarizes the barrier analysis for NSA 8.

TABLE 5-6
BARRIER ANALYSIS SUMMARY - NSA 8

Descriptions	Results
Number of Impacted Equivalent Residential Units	4
Number of Benefited Equivalent Residential Units	3
Barrier Evaluation Method	TNM
Length (ft)	1,501
Average Height (ft)	20
Minimum Height (ft)	20
Maximum Height (ft)	20
Area (ft^2)	30,033
Calculated SF/BR	10,011
Number of Receptors meeting Design Goal (7 dBA)	0
Design Goal Met?	No
Feasible?	Yes
Reasonable?	No

NSA 9 - Residential

NSA 9 contains two identified receptors representing three equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. All of these receptors are representative of single-family residential land uses along Harvison Road/Harvison Court immediately adjacent to the east bound lanes of I-76 and immediately north of the Harvison Road overpass. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be feasible but not reasonable. An 862 foot long, 15 foot tall barrier was evaluated along the edge of shoulder of the east bound lanes, beginning at Station 782+00 and terminating at Station 790+60. This barrier was able to provide > 5 dBA noise reductions for all three noise impacted residences while providing an additional > 5 dBA benefit to a non-impacted residence. This barrier was determined to not be reasonable because the size of the barrier required (approximately 3,234 square feet per benefited receptor) to provide the minimum required noise reduction exceeds the maximum allowable amount of 2,000 square feet per benefited receptor. Table 5-7 summarizes the barrier analysis for NSA 9.

TABLE 5-7
BARRIER ANALYSIS SUMMARY - NSA 9

Descriptions	Results
Number of Impacted Equivalent Residential Units	3
Number of Benefited Equivalent Residential Units	4
Barrier Evaluation Method	TNM
Length (ft)	862
Average Height (ft)	15
Minimum Height (ft)	15
Maximum Height (ft)	15
Area (ft^2)	12,936
Calculated SF/BR	3,234
Number of Receptors meeting Design Goal (7 dBA)	3
Design Goal Met?	Yes
Feasible?	Yes
Reasonable?	No

NSA 10 - Residential

NSA 10 contains 17 identified receptors representing 26 equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. These receptors are representative of single-family residential land uses along Pleasant Valley Road immediately adjacent to the west bound lanes of I-76. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be feasible but not reasonable. A 6,400 foot long, 10 foot minimum/14 foot maximum height barrier was evaluated along the edge of shoulder of the west bound lanes, beginning at Station 863+50 and terminating at Station 800+00. This barrier was able to provide > 5 dBA noise reductions for 24 of the 26 noise impacted residences while providing additional > 5 dBA benefits for five non-impacted residences. This barrier was determined to not be reasonable because the size of the barrier required (approximately 2,759 square feet per benefited receptor) to provide the minimum required noise reduction exceeds the maximum allowable amount of 2,000 square feet per benefited receptor. Table 5-8 summarizes the barrier analysis for NSA 10.

TABLE 5-8
BARRIER ANALYSIS SUMMARY - NSA 10

Descriptions	Results
Number of Impacted Equivalent Residential Units	26
Number of Benefited Equivalent Residential Units	29
Barrier Evaluation Method	TNM
Length (ft)	6,400
Average Height (ft)	12
Minimum Height (ft)	10
Maximum Height (ft)	14
Area (ft^2)	80,016
Calculated SF/BR	2,759
Number of Receptors meeting Design Goal (7 dBA)	21
Design Goal Met?	Yes
Feasible?	Yes
Reasonable?	No

NSA 11 - Residential

NSA 11 contains six identified receptors representing eight equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. These receptors are representative of single-family residential land uses along Sandy Hill Road, east of I-76 and south of S.R. 0130. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be feasible but not reasonable. Due to the location of a PTC maintenance facility between the westbound lanes and Sandy Hill Road and its access requirements, a single continuous barrier was not able to be evaluated. A two barrier system allowing access to the maintenance facility was evaluated to determine feasibility and reasonableness. A 1,550 foot long, 17 foot tall barrier beginning east of Station 887+00 and terminating at Station 872+00 was evaluated in combination with a 525 foot long, 17 foot tall barrier beginning at Station 869+00 and terminating east of Station 864+00. This two barrier system was able to provide > 5 dBA noise reductions for five of the eight noise impacted residences while providing additional > 5 dBA benefits for three non-impacted residences. This barrier was determined to not be reasonable because the size of the barrier required (approximately 3,919 square feet per benefited receptor) to provide the minimum required noise reduction exceeds the maximum allowable amount of 2,000 square feet per benefited receptor. Table 5-9 summarizes the barrier analysis for NSA 11.

TABLE 5-9
BARRIER ANALYSIS SUMMARY - NSA 11

Descriptions	Results
Number of Impacted Equivalent Residential Units	8
Number of Benefited Equivalent Residential Units	9
Barrier Evaluation Method	TNM
Length (ft)	2,075
Average Height (ft)	17
Minimum Height (ft)	17
Maximum Height (ft)	17
Area (ft^2)	35,275
Calculated SF/BR	3,919
Number of Receptors meeting Design Goal (7 dBA)	1
Design Goal Met?	Yes
Feasible?	Yes
Reasonable?	No

NSA 12 - Residential

NSA 12 contains five identified receptors representing seven equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. These receptors are representative of single-family residential land uses along S.R. 0130, west of I-76 and also the community along Layfette Circle, south of S.R. 0130, west of I-76 and immediately west of Nike Site Road. Noise abatement was evaluated for all identified noise impacts within the NSA and a 1,900 foot long, 16 foot tall noise barrier from approximately Station 862+75 to Station 881+50 was determined to be both feasible and reasonable. Subsequent to this feasible and reasonable determination, highway design engineers determined that conditions allowed for the construction of an earth mound /reduced height barrier combination for a portion of the barrier. The current recommended abatement design includes an 11.3 foot minimum/17.6 foot maximum height barrier from approximately Station 862+75 to Station 873+00. From Station 873+00 to Station 881+50, a 5.4 foot minimum/7.1 foot maximum height barrier atop an earth mound providing noise reductions equal to the previously evaluated barrier is being proposed. Table 5-10 summarizes the barrier analysis for NSA 12.

TABLE 5-10
BARRIER ANALYSIS SUMMARY - NSA 12

Descriptions	Results
Number of Impacted Equivalent Residential Units	7
Number of Benefited Equivalent Residential Units	10
Barrier Evaluation Method	TNM
Length (ft)	1,880
Average Height (ft)	10.6
Minimum Height (ft)	5.4
Maximum Height (ft)	17.6
Area (ft^2)	19,950
Calculated SF/BR	1,995
Number of Receptors meeting Design Goal (7 dBA)	4
Design Goal Met?	Yes
Feasible?	Yes
Reasonable?	Yes

NSA 13 - Residential

NSA 13 contains 19 identified receptors representing 23 equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. These receptors are representative of single-family residential land uses along Nike Site Road, west of I-76 and also the communities along Hawthorne Lane, Arbor Court, and Durst Road, west of I-76 and immediately west of Nike Site Road. Noise abatement was evaluated for all identified noise impacts within the NSA and a 3,696 foot long, 16 foot tall noise barrier from approximately Station 889+50 to Station 927+00 was determined to be both feasible and reasonable. Subsequent to this feasible and reasonable determination, a design modification requiring the inclusion of a PTC access road at Station 901+00 divided the continuous noise wall into two distinct sections. Highway design engineers also determined that conditions allowed for the construction of an earth mound of sufficient height in place of part of the eastern end of the noise barrier. The current recommended abatement design includes a 15 foot tall noise barrier from approximately Station 889+50 to Station 900+75. After a small gap to allow for a PTC access road, a second 15 foot tall barrier begins from Station 901+25 to Station 920+00. At approximately Station 920+00, the barrier transitions into an earth mound until terminating near Station 927+00. This two barrier system with earth mound provides noise reductions equal to the previously evaluated barrier. Table 5-11 summarizes the barrier analysis for NSA 13.

TABLE 5-11
BARRIER ANALYSIS SUMMARY - NSA 13

Descriptions	Results
Number of Impacted Equivalent Residential Units	23
Number of Benefited Equivalent Residential Units	28
Barrier Evaluation Method	TNM
Length (ft)	3,153
Average Height (ft)	15
Minimum Height (ft)	15
Maximum Height (ft)	15
Area (ft^2)	47,297
Calculated SF/BR	1,689
Number of Receptors meeting Design Goal (7 dBA)	15
Design Goal Met?	Yes
Feasible?	Yes
Reasonable?	Yes

NSA 14 - Residential

NSA 14 contains 8 identified receptors representing 13 equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. These receptors are representative of single-family residential land uses along Birchwood Way and Tanglewood Court east of I-76, south of S.R. 0130. Noise abatement was evaluated for all identified noise impacts within the NSA and determined to be not feasible. A 2,825 foot long, 20 foot tall noise barrier was evaluated along the edge of shoulder of the west bound lanes, beginning at Station 930+25, transitioning to the top of cut at approximately Station 925+00 before transitioning back to the edge of shoulder at Station 910+00, terminating at Station 902+25. This barrier was only able to provide 5 dBA noise reductions for 2 of the 13 noise impacted residences. A 1,885 foot long, 20 foot tall noise barrier was also evaluated midway up the slope behind the residential property boundaries of the Birchwood Way residences. This barrier was only able to provide 5 dBA noise reductions for 6 of the 13 noise impacted residences. The elevated nature of this community in relation to the highway prohibits a noise abatement design that provides enough required noise reductions to attain feasibility. Table 5-12 summarizes the barrier analysis for NSA 14.

TABLE 5-12
BARRIER ANALYSIS SUMMARY - NSA 14

Descriptions	Results
Number of Impacted Equivalent Residential Units	13
Number of Benefited Equivalent Residential Units	6
Barrier Evaluation Method	TNM
Length (ft)	1,885
Average Height (ft)	20
Minimum Height (ft)	20
Maximum Height (ft)	20
Area (ft^2)	37,546
Calculated SF/BR	NA
Number of Receptors meeting Design Goal (7 dBA)	3
Design Goal Met?	No
Feasible?	No
Reasonable?	No

NSA 16 - Residential

NSA 16 contains 9 identified receptors representing 12 equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. These receptors are representative of single-family residential land uses along Don Drive, Brentzel Drive, and Robbie Drive west of I-76 approximately 1.5 miles from the US 30 interchange. Noise abatement was evaluated for all identified noise impacts within the NSA and a 2,108 foot long, 15 foot tall noise barrier from approximately Station 979+25 to Station 1000+25 was determined to be both feasible and reasonable. Subsequent to this feasible and reasonable determination, highway design engineers determined that conditions allowed for the construction of an earth mound of sufficient height in place of part of the noise barrier. The current recommended abatement design includes a 15 foot tall noise barrier from approximately Station 979+25 to Station 986+75. From Station 986+75 to Station 1000+25, an earth mound providing noise reductions equal to the previously evaluated barrier is being proposed. Table 5-13 summarizes the barrier analysis for NSA 16.

TABLE 5-13
BARRIER ANALYSIS SUMMARY - NSA 16

Descriptions	Results
Number of Impacted Equivalent Residential Units	12
Number of Benefited Equivalent Residential Units	18
Barrier Evaluation Method	TNM
Length (ft)	787
Average Height (ft)	15
Minimum Height (ft)	15
Maximum Height (ft)	15
Area (ft^2)	11,808
Calculated SF/BR	656
Number of Receptors meeting Design Goal (7 dBA)	2
Design Goal Met?	Yes
Feasible?	Yes
Reasonable?	Yes

NSA 17 - Residential

NSA 17 contains 9 identified receptors representing 16 equivalent residential units that are predicted to exceed the NAC in the design year 2034 as a result of the proposed widening project. These receptors are representative of single-family residential land uses along Highland Avenue west of I-76. Noise abatement was evaluated for all identified noise impacts within the NSA and a 1,700 foot long, 14 foot tall noise barrier from approximately Station 1030+00 to Station 1047+25 was determined to be both feasible and reasonable. Table 5-14 summarizes the barrier analysis for NSA 17.

TABLE 5-14
BARRIER ANALYSIS SUMMARY - NSA 17

Descriptions	Results
Number of Impacted Equivalent Residential Units	16
Number of Benefited Equivalent Residential Units	30
Barrier Evaluation Method	TNM
Length (ft)	1,700
Average Height (ft)	14
Minimum Height (ft)	14
Maximum Height (ft)	14
Area (ft^2)	23,800
Calculated SF/BR	793
Number of Receptors meeting Design Goal (7 dBA)	8
Design Goal Met?	Yes
Feasible?	Yes
Reasonable?	Yes

TABLE 5-15
RECOMMENDED NOISE ABATEMENT SUMMARY

Descriptions	NSA 12	NSA 13	NSA 16	NSA 17
Number of Impacted Receptors	7	23	12	16
Number of Benefited Receptors	10	28	18	30
Barrier Evaluation Method	TNM	TNM	TNM	TNM
Length (ft)	1,880	3,153	787	1,700
Average Height (ft)	10.6	15	15	14
Minimum Height (ft)	5.4	15	15	14
Maximum Height (ft)	17.6	15	15	14
Area (ft^2)	19,950	47,297	11,808	23,800
Calculated SF/BR	1,995	1,689	656	793
Number of Receptors meeting Design Goal (7 dBA)	4	15	2	8
Design Goal Met?	Yes	Yes	Yes	Yes
Feasible?	Yes	Yes	Yes	Yes
Reasonable?	Yes	Yes	Yes	Yes

5.5 VIEWPOINTS OF BENEFITTED RESIDENTS

When proposed noise abatement is found to be reasonable and feasible in accordance with PennDOT policy, benefited residents and owners are polled to determine if they are in favor of having the noise abatement constructed. When noise abatement is recommended, a "Statement of Likelihood" is required that states that the recommended abatement is based on preliminary design data and that the abatement might not be provided if the final design changes significantly.

Polling for the viewpoints of benefited receptors will be conducted by the PTC Engineer's Office and typically occurs after the Draft Noise Analysis is prepared and approved.

6. CONSTRUCTION NOISE CONTROL AND COMMUNITY COORDINATION

The PTC is committed to minimizing disruption to local residents, business owners, and the traveling public while also providing for the efficient construction of the proposed improvements. To this end, it is anticipated that a specification will be included in the construction contract(s) detailing responsibilities and actions relative to pending disruptions and noise levels (a sample of which is included below).

SAMPLE CONSTRUCTION NOISE SPECIFICATION

The Commission is committed to minimizing disruption to local residents, business owners, and the traveling public. The Commission will assign an individual to support this commitment. Indicate at the pre-construction conference the individual assigned this responsibility.

Coordinate activities with the Commission's Manager of Public Information & Involvement. Refer media contacts to the Commission's Manager of Public Information & Involvement.

At least two (2) weeks in advance of the start of construction activity affecting the local residents, business owners, and traveling public, make arrangements with the local municipality to conduct an initial community meeting or distribute a Construction Notice to adjacent property owners. For this meeting, have appropriate company personnel attend and be prepared to inform the public of the planned construction activities and their impacts. At other times as necessary, attend municipal meetings to inform the public of anticipated major changes to construction activities. If distribution of a Construction Notice is chosen, the contractor must have personnel distribute a handout to adjacent property owners stating:

(a) *that the contractor is performing work for the Commission*
(b) *the type of work to be performed*
(c) *the specific nights of the week , with dates, and the hours of work*
(d) *the contractor's Name and Phone Number to provide further information*

Coordinate with local municipalities and schedule short-term road closures so as not to impact civic or sport events.

Throughout the project duration, provide notifications to local residents, business owners, and the traveling public for any temporary inconveniences such as utility service interruptions,

driveway construction, traffic interruptions, temporary and permanent road closures, detours, and other construction coordination as required.

COMMUNITY AWARENESS - Keep the Representative aware of all planned activities and specifically identify those that could have significant noise impact on the community due to close proximity of work to receptors.

7. INFORMATION FOR LOCAL GOVERNMENT OFFICIALS

To minimize future traffic noise impacts on currently undeveloped lands of Type I projects, PennDOT is required to inform local jurisdictions (where the proposed highway project is located) of the following:

1. Noise compatible planning concepts.

2. The best estimation of the future design year noise levels at various distances from the edge of the nearest travel lane of the highway, where the future noise levels meet PennDOT's definition of "approach" for undeveloped lands or properties within the project limits. At a minimum, the distance to PennDOT's exterior NAC from Table 2-1 must be identified (this information is provided in Table 4-2).

To fulfill these two requirements, at a minimum, PTC must send a cover letter to local jurisdictions, along with copies of the noise study, explaining noise compatible planning concepts. A face-to-face meeting between PTC and the local jurisdiction(s) will likely better convey information than only sending a letter with attachments. The letter must also include a table of future noise levels at specific locations or a figure showing the distances to typical noise levels along the roadway for unpermitted, undeveloped lands in the project area. The letter should encourage local officials to make this information available for disclosure in real estate transactions. Local officials should be made aware that funds for traffic noise abatement are not available for development that occurs after the date of public knowledge of the project as explained in the letter.

The letter and copies of the noise technical report must be provided to and reviewed by City and/or County planning departments. The letter and the report should be distributed with the environmental document. The distribution information, including names and date distributed, and any follow-up contact with local agencies must be documented in the project files.

8. CONCLUSIONS AND RECOMMENDATIONS

The noise analysis included a total of 223 measurement/prediction locations (receivers) representing 308 individual noise sensitive dwelling units (receptors). In order to simplify the reporting of noise levels, noise impacts, and noise mitigation and in adherence with preferred PennDOT analysis methodology, these receptors were organized in 18 NSAs within the general project area.

Of the 18 NSAs evaluated, 13 NSAs contained receptors with predicted future noise levels approaching or exceeding the NAC. The 13 NSAs were evaluated for noise abatement by modeling with TNM. Noise barriers for four NSAs were found to be both feasible and reasonable following PennDOT's noise manual. Therefore, noise abatement is recommended for NSAs 12, 13, 16, and 17.

9. REFERENCES

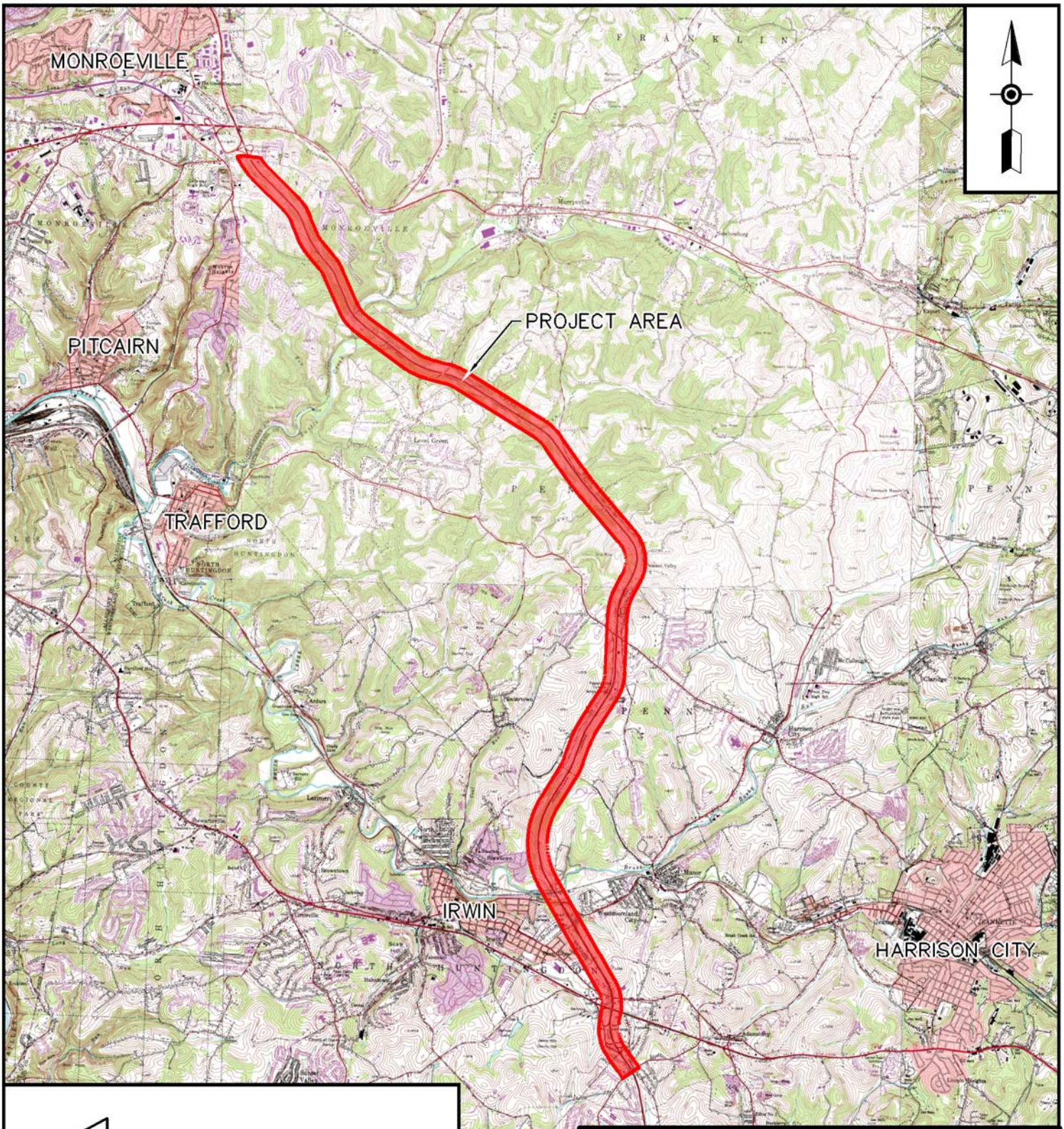
Pennsylvania Department of Transportation, Publication #24, Revision 2 "*Project Level Highway Traffic Noise Handbook*," 12-12-13.

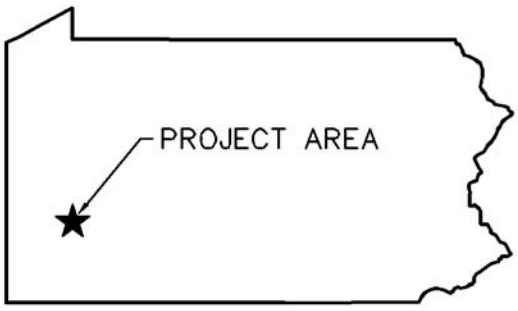
Federal Highway Administration, 23 CFR 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, July 2010.

Federal Highway Administration (FHWA). 2011. Highway Traffic Noise: Analysis and Abatement Guidance. U.S. Department of Transportation, Federal Highway Administration, Washington, DC.

Lee, C.S.Y. and G.G. Fleming. 1996. Measurement of Highway Related Noise, Federal Highway Administration Report FHWA-PD-96-046. U.S. Department of Transportation, Research and Special Programs Administration, John A. Volpe National Transportation Systems Center, Cambridge, MA.

10. FIGURES





SKELLY and LOY, Inc.	Jun., 2014	Figure 1

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

PROJECT LOCATION MAP

Allegheny & Westmoreland County, Pennsylvania

Source: PASDA.EDU, 7.5' U.S.G.S. Quadrangles	Job No.: R13-0341.001	Scale: 1" = 7,000'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Figure 1.dwg By: DBair

William Penn Highway

Northern Pike

Mosside Blvd.

NSA 2

5

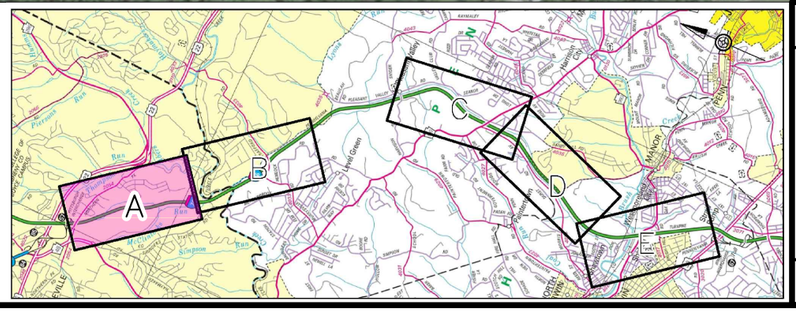
0 600 1200 1800

Legend

1000' Buffer (500' each side CL)

Noise Study Areas (NSAs)

Monitored Sites



SKELLY and LOY, Inc.	Jan., 2016	Figure 2A

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE STUDY AREA (NSA) LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 600'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Study Area Locations (1-13-16).dwg

By: DBair

Trafford Road

Murrysville Road

NSA 3

NSA 4

NSA 5

NSA 6

NSA 7

NSA 8

12

15

16

19

20

21

22

24

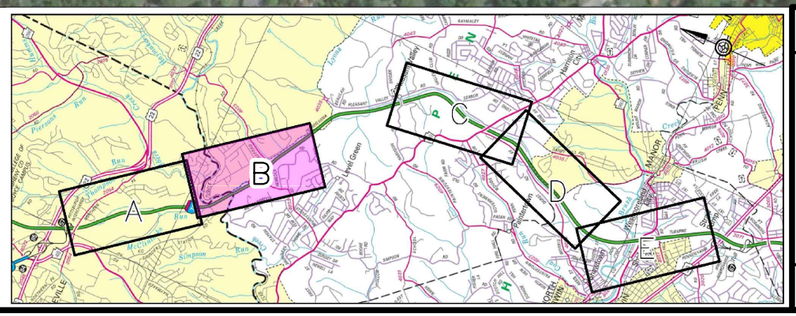
0 600 1200 1800

Legend

1000' Buffer (500' each side CL)

Noise Study Areas (NSAs)

Monitored Sites



SKELLY and LOY, Inc.	Jan., 2016	Figure 2B

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE STUDY AREA (NSA) LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 600'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Study Area Locations (1-13-16).dwg

By: DBair

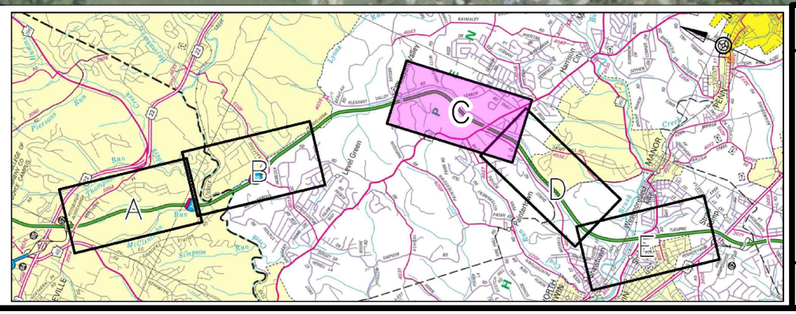
NSA 10
26
Pleasant Valley Road
27
Pleasant Valley Road
28
Route 130
29
Sandy Hill Road
30
NSA 11
NSA 9
25
32
33
Route 130
NSA 12
NSA 13
0
600
1200
1800

Legend

1000' Buffer (500' each side CL)

Noise Study Areas (NSAs)

Monitored Sites



SKELLY and LOY, Inc.	Jan., 2016	Figure 2C

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE STUDY AREA (NSA) LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 600'

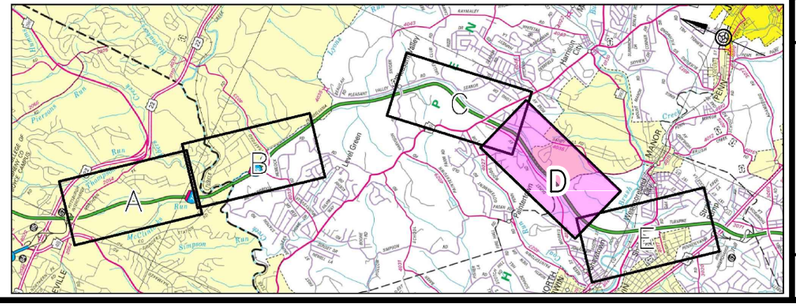
Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Study Area Locations (1-13-16).dwg

By: DBair

NSA 11
NSA 13
NSA 14
NSA 15
30
34
35
36
37
38
39
40
41
Nike Site Road
Morris Avenue
Durst Road
0
600
1200
1800

Legend

1000' Buffer (500' each side CL)
Noise Study Areas (NSAs)
Monitored Sites



SKELLY and LOY, Inc.	Jan., 2016	Figure 2D

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE STUDY AREA (NSA) LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 600'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Study Area Locations (1-13-16).dwg

By: DBair

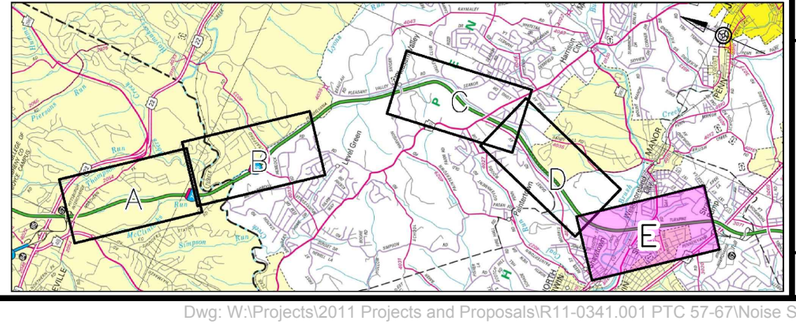
NSA 16
NSA 18
NSA 19
NSA 17
42
43
44
45
47
48
49
50
51
52
54
Broadway Street
Broadway Street
Brush Hill Road
Pennsylvania Avenue
Lincoln Highway
0
600
1200
1800

Legend

1000' Buffer (500' each side CL)

Noise Study Areas (NSAs)

Monitored Sites



SKELLY and LOY, Inc.	Jan., 2016	Figure 2E

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

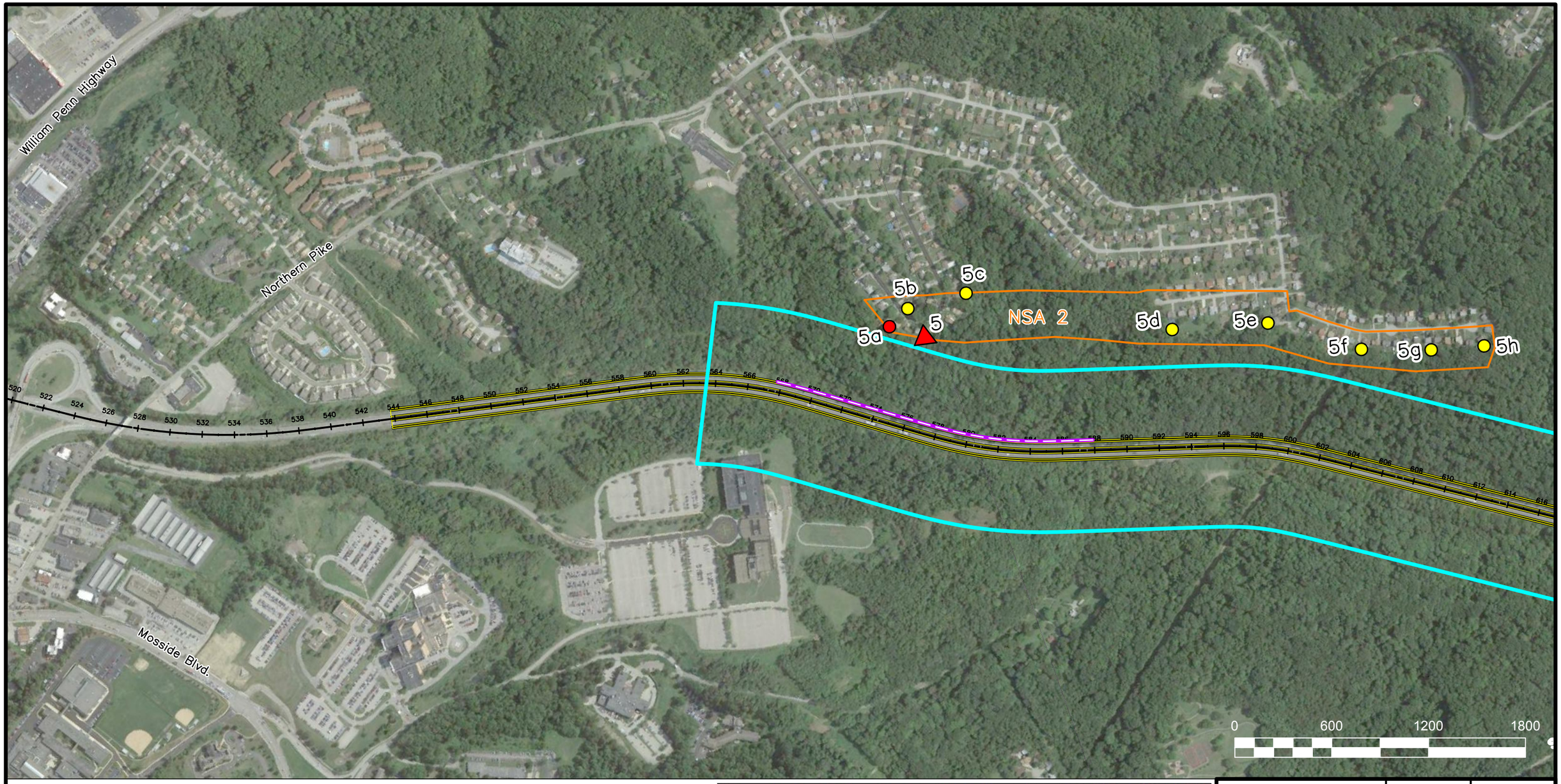
NOISE STUDY AREA (NSA) LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 600'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Study Area Locations (1-13-16).dwg

By: DBair



Legend

552 — Mainline Centerline

Proposed Edge of Shoulder

Monitored Sites

Modeled Sites

Impacted Monitored Sites

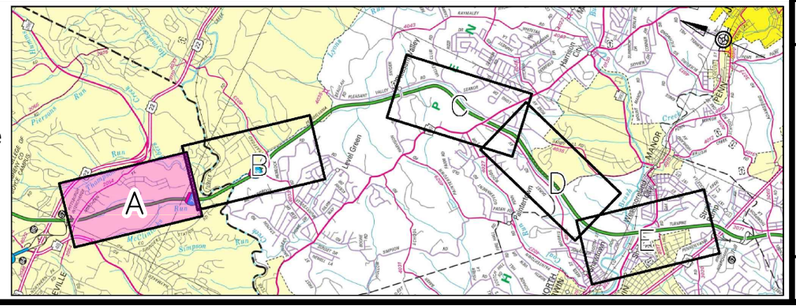
Impacted Modeled Sites

1000' Buffer (500' each side CL)

Noise Wall - Feasible/Reasonable

Noise Wall - Not Feasible/Reasonable

Noise Study Areas (NSAs)



SKELLY and LOY, Inc.	Jan., 2016	Figure 3A

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

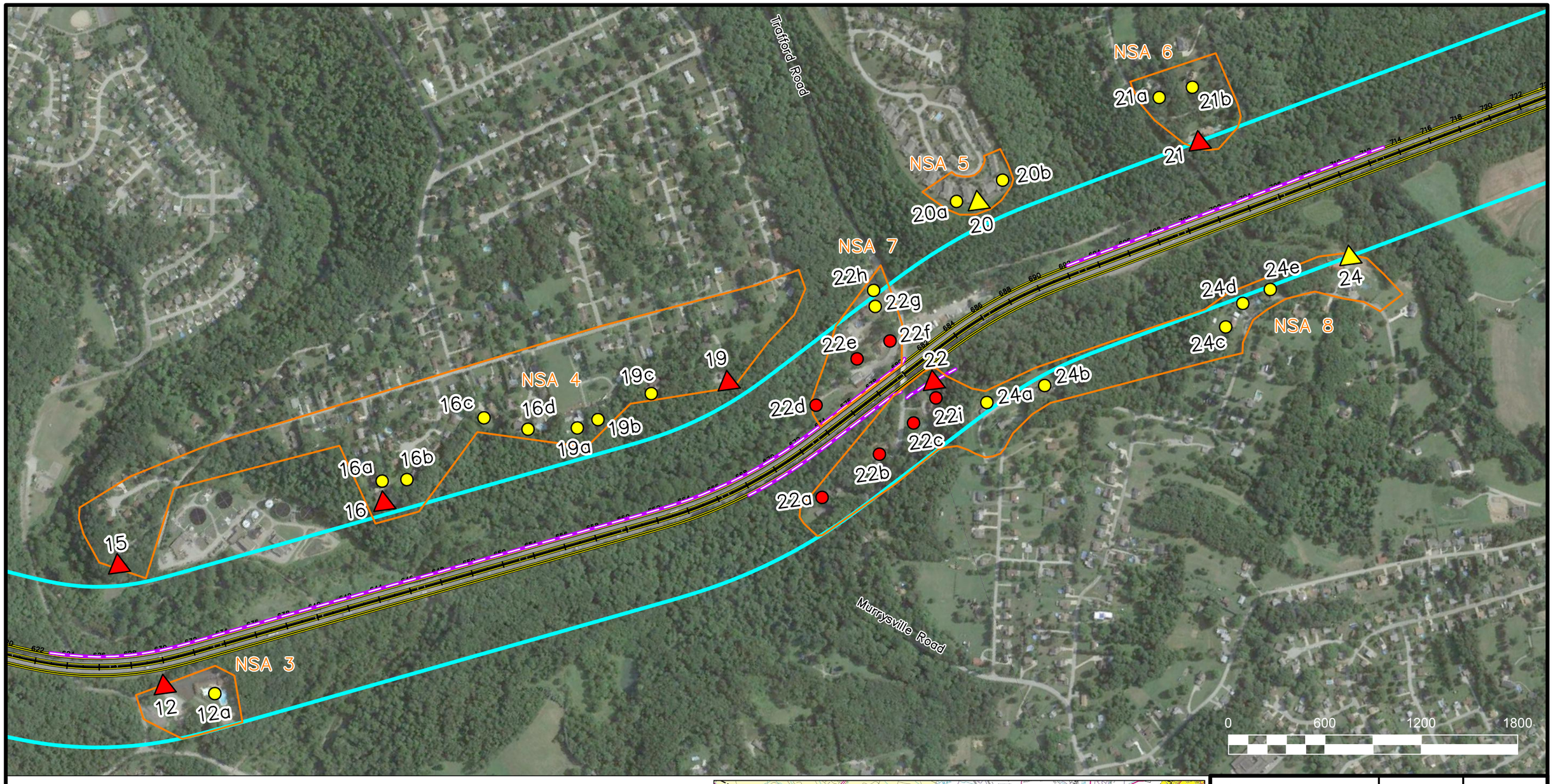
NOISE RECEPTOR AND MITIGATION LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 600'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Receptor and Mitigation Locations (1-13-16).dwg

By: DBair



Legend

552 — Mainline Centerline

Proposed Edge of Shoulder

Monitored Sites

Modeled Sites

Impacted Monitored Sites

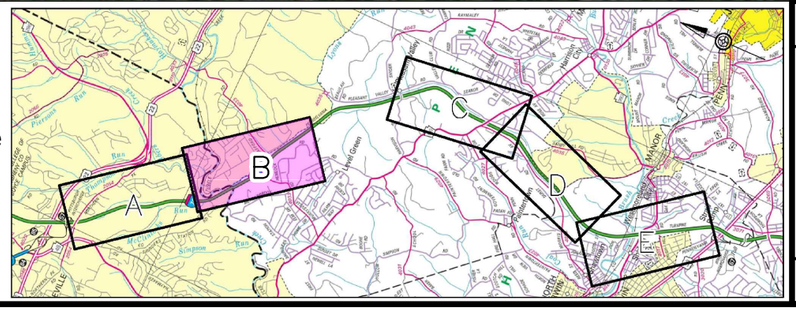
Impacted Modeled Sites

1000' Buffer (500' each side CL)

Noise Wall - Feasible/Reasonable

Noise Wall - Not Feasible/Reasonable

Noise Study Areas (NSAs)



SKELLY and LOY, Inc.	Jan., 2016	Figure 3B

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE RECEPTOR AND MITIGATION LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 600'

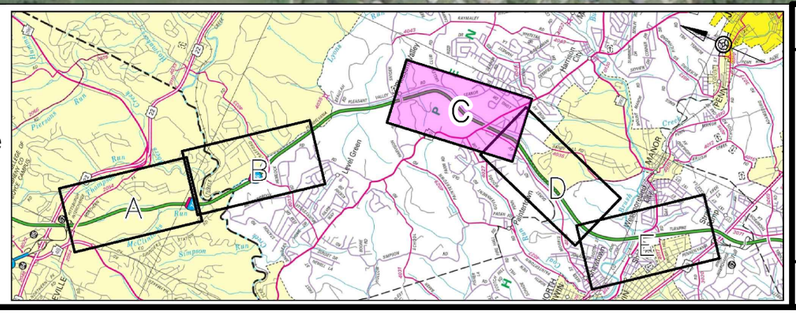
Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Receptor and Mitigation Locations (1-13-16).dwg

By: DBair

NSA 10
NSA 9
NSA 11
NSA 12
NSA 13
Pleasant Valley Road
Route 130
Sandy Hill Road
25a
25b
25c
25d
25e
25
26a
26b
26c
26d
26e
26f
26
27a
27b
27c
27d
27
27e
27f
28a
28b
28c
28d
28e
28
29a
29b
29c
29d
29e
29
30a
30b
30c
30d
30e
30f
30
32a
32b
32
33a
33b
33c
33d
33e
33f
33g
33h
33
34a
34b
34c
34d
34e
34f
34g
0
650
1300

Legend

552 Mainline Centerline
Proposed Edge of Shoulder
Monitored Sites
Modeled Sites
Impacted Monitored Sites
Impacted Modeled Sites
1000' Buffer (500' each side CL)
Noise Wall - Feasible/Reasonable
Noise Wall - Not Feasible/Reasonable
Noise Study Areas (NSAs)



SKELLY and LOY, Inc.	Jan., 2016	Figure 3C

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE RECEPTOR AND MITIGATION LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001	Scale: 1" = 650'

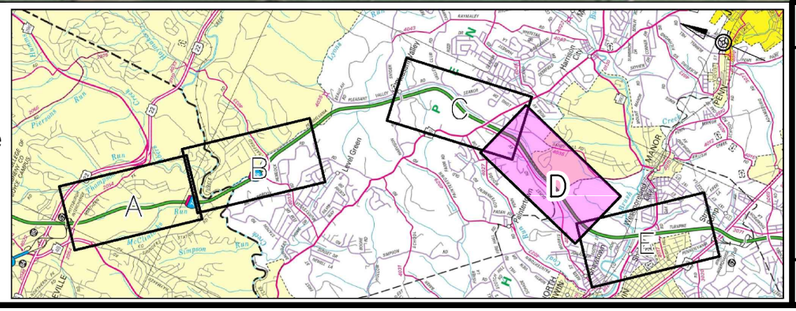
Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Receptor and Mitigation Locations (1-13-16).dwg

By: DBair

NSA 11
NSA 13
NSA 14
NSA 15
Nike Site Road
Durst Road
Morris Avenue
0
600
1200
1800

Legend

552 Mainline Centerline
Proposed Edge of Shoulder
Monitored Sites
Modeled Sites
Impacted Monitored Sites
Impacted Modeled Sites
1000' Buffer (500' each side CL)
Noise Wall - Feasible/Reasonable
Noise Wall - Not Feasible/Reasonable
Noise Study Areas (NSAs)



SKELLY and LOY, Inc. | Jan., 2016 | Figure 3D

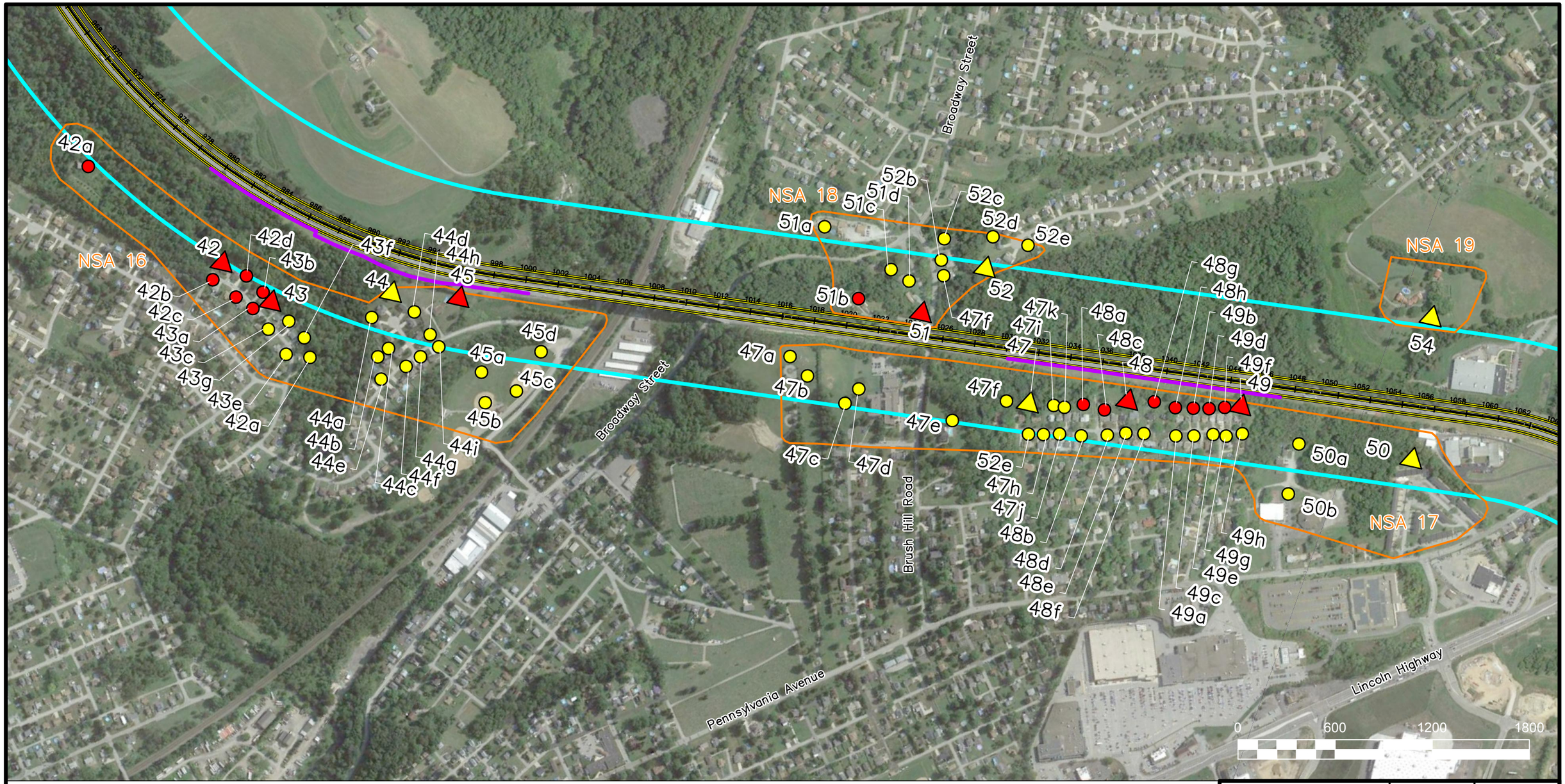
Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE RECEPTOR AND MITIGATION LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001 | Scale: 1" = 600'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Receptor and Mitigation Locations (1-13-16).dwg By: DBair



Legend

552 — Mainline Centerline

Proposed Edge of Shoulder

Monitored Sites

Modeled Sites

Impacted Monitored Sites

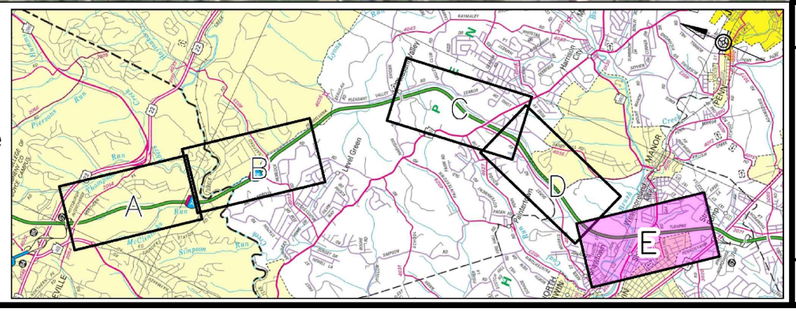
Impacted Modeled Sites

1000' Buffer (500' each side CL)

Noise Wall - Feasible/Reasonable

Noise Wall - Not Feasible/Reasonable

Noise Study Areas (NSAs)



SKELLY and LOY, Inc. | Jan., 2016 | Figure 3E

Pennsylvania Turnpike Commission
Full-Depth Roadway Reconstruction Project
Milepost T57 to Milepost T67

NOISE RECEPTOR AND MITIGATION LOCATIONS

Allegheny & Westmoreland County, Pennsylvania

Job No.:R11-0341.001 | Scale: 1" = 600'

Dwg: W:\Projects\2011 Projects and Proposals\R11-0341.001 PTC 57-67\Noise Receptor and Mitigation Locations (1-13-16).dwg

By: DBair

APPENDICES

APPENDIX A - SITE SKETCHES/NOISE METER PRITNOUTS/NOISE METER AND CALIBRATOR CALIBRATION CERTIFICATES

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 05 **Description:** 152 W Patty Lane

MONITORING INFORMATION

Notes:

Date:	11/20/2013
Start Time:	11:12:00
End Time:	11:22:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	128 / 107
MT:	6 / 10
HT:	35 / 34

Time	Lav (dBA)
11:11:54	61.8
11:12:53	63.9
11:13:52	62.7
11:14:51	60.2
11:15:50	63.5
11:16:49	60.8
11:17:48	59.8
11:18:47	64.0
11:19:46	62.6
11:20:45	60.8
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

Leq (dBA)
62.3

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	KJP, CMI

Atmospheric Conditions :
clear, light wind (7 mph wind), 39° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 15 **Description:** 3010 Meadowbrook Road

MONITORING INFORMATION

Notes:

Date:	11/20/2013
Start Time:	11:56:00
End Time:	12:06:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	117 / 127
MT:	16 / 14
HT:	25 / 28

Time	Lav (dBA)
11:55:58	62.3
11:56:56	62.4
11:57:54	60.6
11:58:52	60.5
11:59:50	60.0
12:00:48	61.4
12:01:46	58.9
12:02:44	62.2
12:03:42	60.2
12:04:40	62.1
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

Leq (dBA)
61.2

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	KJP, CMI

Atmospheric Conditions :
clear, light wind (7 mph wind), 39° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 16 **Description:** 3111 Hope Court

MONITORING INFORMATION

Notes:

Date:	11/20/2013
Start Time:	13:57:00
End Time:	14:07:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	139 / 186
MT:	9 / 8
HT:	29 / 37

Time	Lav (dBA)
13:56:56	60.1
13:57:52	61.8
13:58:48	58.7
13:59:44	58.8
14:00:40	60.3
14:01:36	58.6
14:02:32	58.8
14:03:28	58.5
14:04:24	60.5
14:05:20	63.0
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

Leq (dBA)
60.2

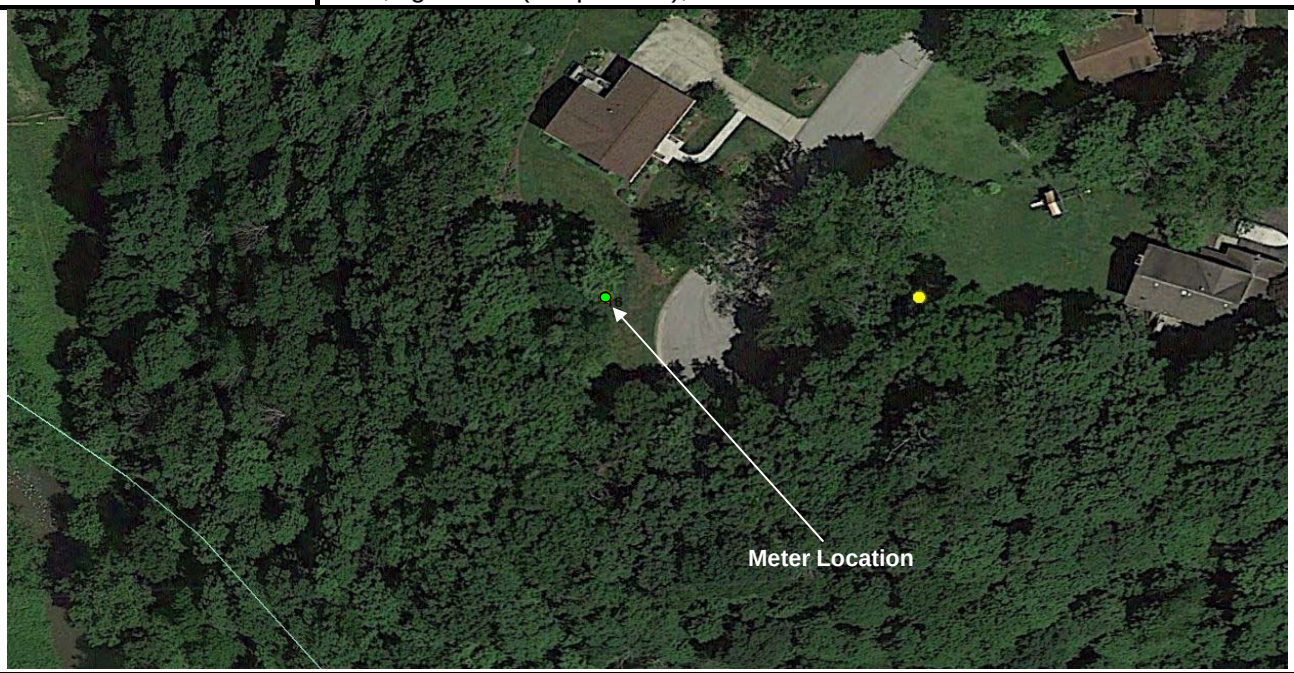
SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	KJP, CMI

Atmospheric Conditions :
clear, light wind (7 mph wind), 39° F



PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 19 **Description:** 3469 Mayer Drive

MONITORING INFORMATION

Notes:

Date:	11/20/2013
Start Time:	13:25:00
End Time:	13:35:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	139 / 189
MT:	8 / 18
HT:	26 / 41

Time	Lav (dBA)
13:24:58	61.9
13:25:56	59.4
13:26:54	60.8
13:27:52	61.9
13:28:50	61.1
13:29:48	60.3
13:30:46	58.5
13:31:44	64.9
13:32:42	62.3
13:33:40	60.5
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

Leq (dBA)
61.5

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	KJP, CMI

Atmospheric Conditions :
clear, light wind (7 mph wind), 39° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 20 **Description:** 1433 Lyons Chase Cir

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	10:23:00
End Time:	10:33:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	112 / 117
MT:	3 / 7
HT:	41 / 39

Time	Lav (dBA)
10:23:00	59.8
10:23:30	59.2
10:24:00	61.5
10:24:30	60.1
10:25:00	59.1
10:25:30	58.7
10:26:00	59.1
10:26:30	59.1
10:27:00	60.2
10:27:30	58.0
10:28:00	58.6
10:28:30	58.7
10:29:00	59.4
10:29:30	57.8
10:30:00	57.7
10:30:30	60.0
10:31:00	58.8
10:31:30	59.9
10:32:00	59.6
10:32:30	62.2

Leq (dBA)
59.5

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 21 **Description:** 995 Lyons Run Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	10:23:00
End Time:	10:33:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	112 / 117
MT:	3 / 7
HT:	41 / 39

Time	Lav (dBA)
10:23:00	62.6
10:23:30	62.1
10:24:00	62.1
10:24:30	61.9
10:25:00	60.7
10:25:30	61.0
10:26:00	60.7
10:26:30	61.3
10:27:00	61.6
10:27:30	60.8
10:28:00	59.5
10:28:30	62.1
10:29:00	60.1
10:29:30	59.7
10:30:00	60.3
10:30:30	61.2
10:31:00	62.8
10:31:30	60.4
10:32:00	63.9
10:32:30	62.9

Leq (dBA)
61.5

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 22 **Description:** 449 Murrysville Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	10:23:00
End Time:	10:33:00
Meter ID:	db-3080 SN 3897
Response Rate:	slow
Roadway:	I-76 (PA TP) WB / EB
Cars:	112 / 117
MT:	3 / 7
HT:	41 / 39

Time	Lav (dBA)
10:23:00	62.8
10:23:30	64.9
10:24:00	64.1
10:24:30	62.0
10:25:00	63.0
10:25:30	61.8
10:26:00	63.0
10:26:30	61.9
10:27:00	64.6
10:27:30	59.5
10:28:00	64.1
10:28:30	63.6
10:29:00	60.4
10:29:30	62.4
10:30:00	61.6
10:30:30	62.9
10:31:00	62.3
10:31:30	63.6
10:32:00	64.4
10:32:30	64.0

Leq (dBA)
63.0

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 24 **Description:** 459 Hemlock Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	10:23:00
End Time:	10:33:00
Meter ID:	db-3080 SN 4618
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	112 / 117
MT:	3 / 7
HT:	41 / 39

Time	Lav (dBA)
10:23:00	55.5
10:23:30	55.1
10:24:00	54.3
10:24:30	54.2
10:25:00	53.2
10:25:30	52.8
10:26:00	54.7
10:26:30	54.3
10:27:00	52.3
10:27:30	53.5
10:28:00	54.3
10:28:30	52.2
10:29:00	53.8
10:29:30	52.8
10:30:00	53.9
10:30:30	54.8
10:31:00	53.7
10:31:30	55.7
10:32:00	54.5
10:32:30	54.7

Leq (dBA)
54.1

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 25 **Description:** 118 Harvison Court

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	11:18:00
End Time:	11:28:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	114 / 132
MT:	5 / 5
HT:	40 / 33

Time	Lav (dBA)
11:18:00	68.0
11:18:30	70.0
11:19:00	72.4
11:19:30	71.3
11:20:00	70.4
11:20:30	75.6
11:21:00	70.3
11:21:30	71.4
11:22:00	74.2
11:22:30	69.4
11:23:00	73.3
11:23:30	71.1
11:24:00	69.4
11:24:30	71.4
11:25:00	73.0
11:25:30	72.4
11:26:00	66.9
11:26:30	68.0
11:27:00	73.9
11:27:30	70.8

Leq (dBA)
71.7

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (5 mph wind), 30° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 26 **Description:** 1005 Pikeview Lane

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	11:18:00
End Time:	11:28:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	114 / 132
MT:	5 / 5
HT:	40 / 33

Time	Lav (dBA)
11:18:00	63.9
11:18:30	62.9
11:19:00	61.1
11:19:30	62.4
11:20:00	60.1
11:20:30	64.8
11:21:00	64.5
11:21:30	63.0
11:22:00	61.1
11:22:30	62.2
11:23:00	65.9
11:23:30	62.6
11:24:00	63.2
11:24:30	64.9
11:25:00	61.8
11:25:30	61.3
11:26:00	58.7
11:26:30	64.2
11:27:00	62.8
11:27:30	62.8

Leq (dBA)
63.0

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (5 mph wind), 30° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 28 **Description:** 7060 Pleasant Valley Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	13:10:00
End Time:	13:20:00
Meter ID:	db-3080 SN 2125
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 133
MT:	4 / 4
HT:	17 / 30

Time	Lav (dBA)
"13:10:06"	61.2
"13:10:36"	64.2
"13:11:06"	63.8
"13:11:36"	61.8
"13:12:06"	62.8
"13:12:36"	62.3
"13:13:06"	62.0
"13:13:36"	61.8
"13:14:06"	63.5
"13:14:36"	62.1
"13:15:06"	62.8
"13:15:36"	60.7
"13:16:06"	61.0
"13:16:36"	63.1
"13:17:06"	62.9
"13:17:36"	61.5
"13:18:06"	60.4
"13:18:36"	60.9
"13:19:06"	62.2
"13:19:36"	63.7

Leq (dBA)
62.4

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 33° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 29 **Description:** 1017 Sandy Hill Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	13:10:00
End Time:	13:20:00
Meter ID:	db-3080 SN 3897
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 133
MT:	4 / 4
HT:	17 / 30

Time	Lav (dBA)
13:10:00	62.4
13:10:30	60.7
13:11:00	61.3
13:11:30	61.6
13:12:00	61.8
13:12:30	56.5
13:13:00	60.5
13:13:30	59.8
13:14:00	67.9
13:14:30	63.9
13:15:00	53.0
13:15:30	62.9
13:16:00	61.7
13:16:30	61.4
13:17:00	59.6
13:17:30	52.6
13:18:00	48.6
13:18:30	51.0
13:19:00	58.7
13:19:30	57.0

Leq (dBA)
61.1

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 33° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 30 **Description:** 1034 Sandy Hill Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	13:10:00
End Time:	13:20:00
Meter ID:	db-3080 SN 4618
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 133
MT:	4 / 4
HT:	17 / 30

Time	Lav (dBA)
13:10:00	66.3
13:10:30	62.3
13:11:00	66.6
13:11:30	63.2
13:12:00	65.0
13:12:30	61.9
13:13:00	65.1
13:13:30	65.0
13:14:00	62.8
13:14:30	64.1
13:15:00	61.1
13:15:30	67.1
13:16:00	67.1
13:16:30	65.1
13:17:00	64.0
13:17:30	60.6
13:18:00	62.6
13:18:30	66.4
13:19:00	66.8
13:19:30	61.3

Leq (dBA)
64.7

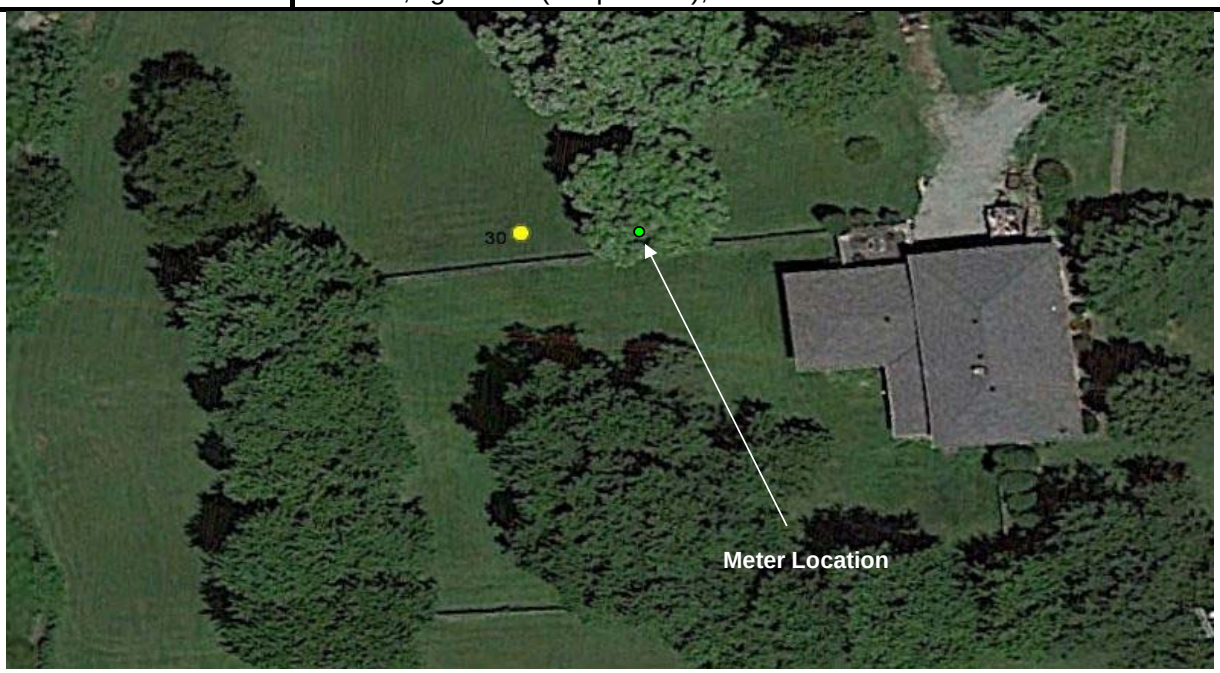
SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 33° F



PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 32 **Description:** 4006 Route 130

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	13:10:00
End Time:	13:20:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 133
MT:	4 / 4
HT:	17 / 30

Time	Lav (dBA)
13:10:00	60.7
13:10:30	62.3
13:11:00	62.5
13:11:30	60.7
13:12:00	61.6
13:12:30	61.4
13:13:00	61.8
13:13:30	58.4
13:14:00	61.7
13:14:30	61.0
13:15:00	62.2
13:15:30	58.4
13:16:00	58.7
13:16:30	62.7
13:17:00	61.2
13:17:30	60.7
13:18:00	60.0
13:18:30	61.3
13:19:00	62.0
13:19:30	63.6

Leq (dBA)
61.3

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 33° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 33 **Description:** Lafayette Circle

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	13:10:00
End Time:	13:20:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 133
MT:	4 / 4
HT:	17 / 30

Time	Lav (dBA)
13:10:00	68.4
13:10:30	66.1
13:11:00	69.6
13:11:30	68.9
13:12:00	65.4
13:12:30	67.7
13:13:00	64.8
13:13:30	65.9
13:14:00	67.5
13:14:30	64.8
13:15:00	68.9
13:15:30	58.8
13:16:00	60.8
13:16:30	71.1
13:17:00	66.1
13:17:30	59.0
13:18:00	65.4
13:18:30	64.9
13:19:00	64.2
13:19:30	69.0

Leq (dBA)
66.9

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (7 mph wind), 33° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 34 **Description:** 1094 Nike Site Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	14:25:00
End Time:	14:35:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	125 / 160
MT:	4 / 6
HT:	34 / 27

Time	Lav (dBA)
14:25:00	58.4
14:25:30	62.3
14:26:00	64.1
14:26:30	66.7
14:27:00	65.3
14:27:30	58.1
14:28:00	63.3
14:28:30	67.9
14:29:00	65.9
14:29:30	64.8
14:30:00	67.1
14:30:30	64.3
14:31:00	65.9
14:31:30	63.3
14:32:00	67.8
14:32:30	62.0
14:33:00	59.3
14:33:30	62.9
14:34:00	67.5
14:34:30	62.6

Leq (dBA)
64.8

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (9 mph wind), 33° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 35 **Description:** 212 Durst Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	14:25:00
End Time:	14:35:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	125 / 160
MT:	4 / 6
HT:	34 / 27

Time	Lav (dBA)
14:25:00	58.3
14:25:30	58.4
14:26:00	59.8
14:26:30	60.1
14:27:00	57.9
14:27:30	56.7
14:28:00	56.2
14:28:30	59.9
14:29:00	55.8
14:29:30	59.3
14:30:00	56.1
14:30:30	59.5
14:31:00	58.8
14:31:30	55.1
14:32:00	58.1
14:32:30	59.2
14:33:00	54.5
14:33:30	59.4
14:34:00	56.9
14:34:30	57.7

Leq (dBA)
58.2

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (9 mph wind), 33° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 36 **Description:** 1272 Nike Site Road

MONITORING INFORMATION

Notes:

Date:	3/5/2014
Start Time:	14:25:00
End Time:	14:35:00
Meter ID:	db-3080 SN 3897
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	125 / 160
MT:	4 / 6
HT:	34 / 27

Time	Lav (dBA)
14:25:00	58.0
14:25:30	55.4
14:26:00	62.1
14:26:30	64.6
14:27:00	56.2
14:27:30	61.0
14:28:00	63.5
14:28:30	62.6
14:29:00	60.8
14:29:30	63.5
14:30:00	61.5
14:30:30	62.3
14:31:00	60.3
14:31:30	54.4
14:32:00	65.2
14:32:30	56.4
14:33:00	61.2
14:33:30	61.0
14:34:00	60.3
14:34:30	62.9

Leq (dBA)
61.5

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly below highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (9 mph wind), 33° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 37 **Description:** 128 Birchwood Way

MONITORING INFORMATION

Notes:

No Photo Available

Date:	3/6/2014
Start Time:	8:45:00
End Time:	8:55:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	173 / 133
MT:	18 / 7
HT:	31 / 30

Time	Lav (dBA)
8:45:00	65.3
8:45:30	62.3
8:46:00	66.8
8:46:30	64.0
8:47:00	63.7
8:47:30	66.0
8:48:00	65.6
8:48:30	65.1
8:49:00	66.9
8:49:30	68.4
8:50:00	66.2
8:50:30	65.6
8:51:00	66.1
8:51:30	63.0
8:52:00	64.3
8:52:30	64.1
8:53:00	63.1
8:53:30	65.5
8:54:00	63.8
8:54:30	64.6

Leq (dBA)
65.3

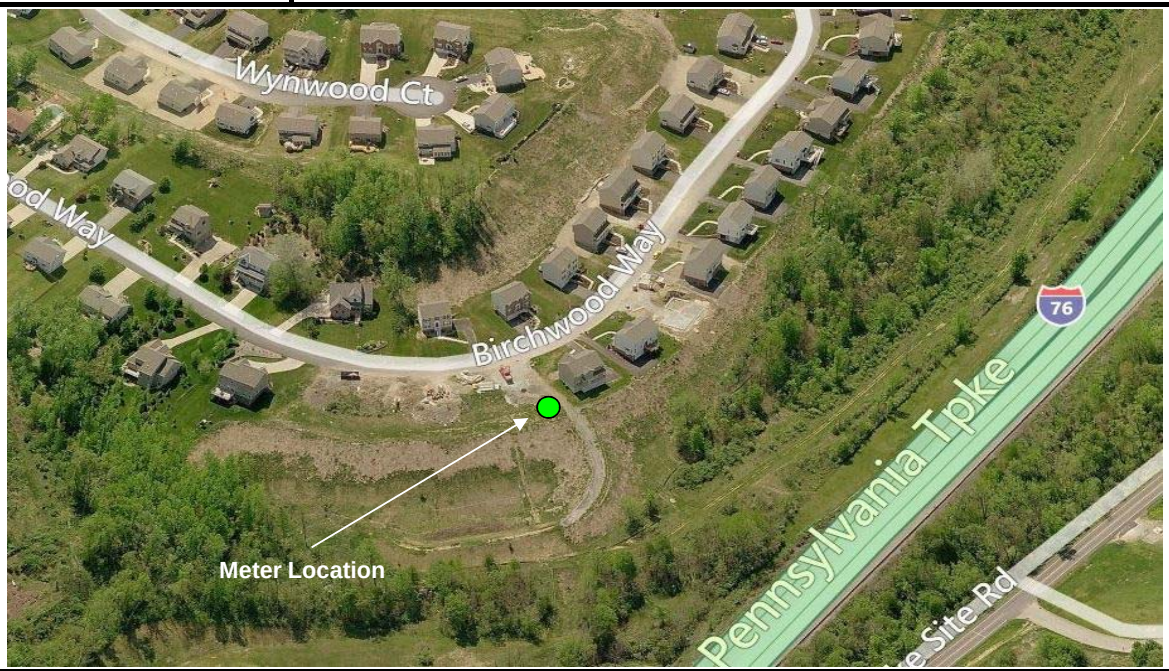
SITE SKETCH:

North Arrow ↓

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (7 mph wind), 21° F



PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 38 **Description:** 150 Birchwood Way

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	8:45:00
End Time:	8:55:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	173 / 133
MT:	18 / 7
HT:	31 / 30

Time	Lav (dBA)
8:45:00	48.7
8:45:30	48.2
8:46:00	48.0
8:46:30	51.0
8:47:00	50.1
8:47:30	52.3
8:48:00	48.5
8:48:30	50.8
8:49:00	49.6
8:49:30	49.9
8:50:00	49.4
8:50:30	49.3
8:51:00	48.4
8:51:30	48.8
8:52:00	50.4
8:52:30	48.4
8:53:00	47.6
8:53:30	48.4
8:54:00	48.1
8:54:30	49.5

Leq (dBA)
49.4

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (7 mph wind), 21° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 39 **Description:** 125 Tanglewood Court

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	8:45:00
End Time:	8:55:00
Meter ID:	db-3080 SN 2125
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	173 / 133
MT:	18 / 7
HT:	31 / 30

Time	Lav (dBA)
" 8:44:58"	55.2
" 8:45:28"	54.8
" 8:45:58"	53.5
" 8:46:28"	51.7
" 8:46:58"	56.1
" 8:47:28"	56.2
" 8:47:58"	51.6
" 8:48:28"	56.6
" 8:48:58"	56.2
" 8:49:28"	55.1
" 8:49:58"	53.6
" 8:50:28"	54.7
" 8:50:58"	54.0
" 8:51:28"	53.4
" 8:51:58"	55.4
" 8:52:28"	53.3
" 8:52:58"	54.4
" 8:53:28"	54.6
" 8:53:58"	55.0
" 8:54:28"	57.2

Leq (dBA)
54.9

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (7 mph wind), 21° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 40 **Description:** Kingsbury Lane

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	9:21:00
End Time:	9:25:30
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	129 / 138
MT:	8 / 8
HT:	44 / 21

No Photo Available

Time	Lav (dBA)
9:21:30	48.6
9:22:00	49.7
9:22:30	48.6
9:23:00	52.2
9:23:30	50.8
9:24:00	54.1
9:24:30	52.9
9:25:00	49.1
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

Leq (dBA)
51.2

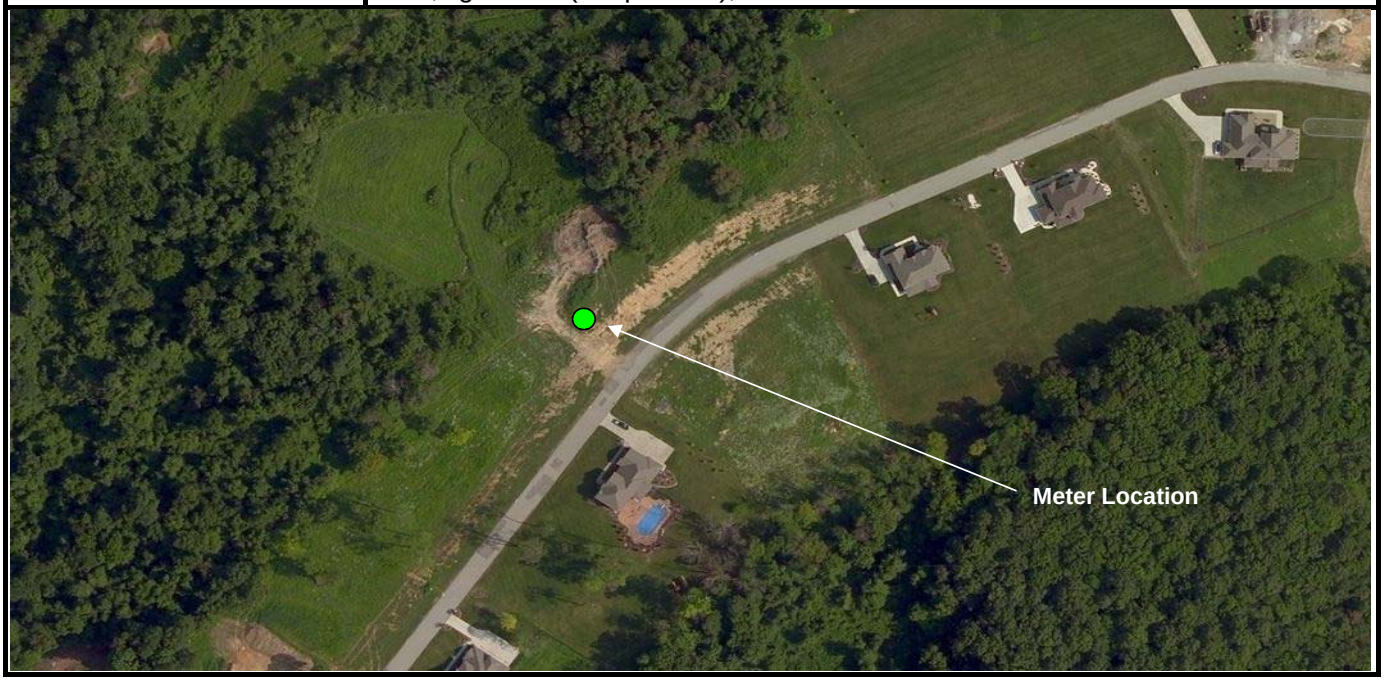
SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (7 mph wind), 21° F



PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 41 **Description:** 10190 Kingsbury Lane

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	9:28:00
End Time:	9:38:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	129 / 138
MT:	8 / 8
HT:	44 / 21

Time	Lav (dBA)
9:27:58	56.9
9:28:27	51.8
9:28:56	55.2
9:29:25	56.7
9:29:54	56.8
9:30:23	57.1
9:30:52	57.7
9:31:21	56.0
9:31:50	57.2
9:32:19	59.7
9:32:48	57.8
9:33:17	57.8
9:33:46	56.3
9:34:15	59.6
9:34:44	58.4
9:35:13	54.3
9:35:42	55.8
9:36:11	58.1
9:36:40	57.7
9:37:09	57.5

Leq (dBA)
57.2

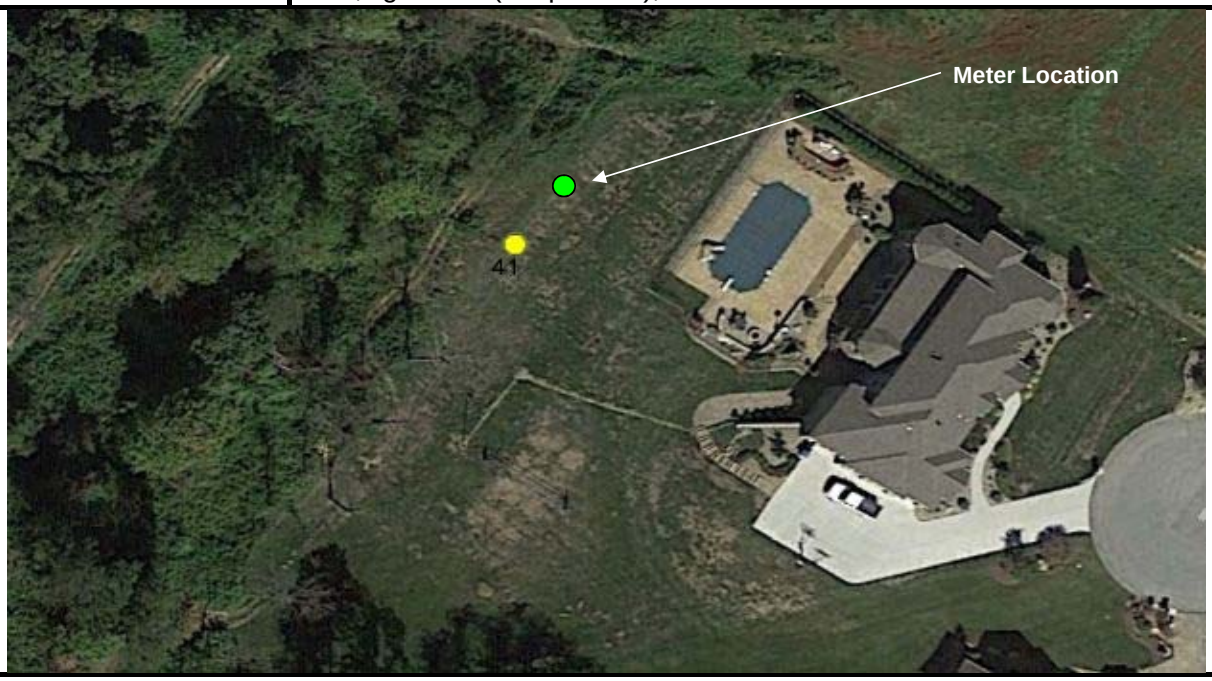
SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (7 mph wind), 21° F



PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 42 **Description:** 1261 Robbie Drive

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	10:37:00
End Time:	10:47:00
Meter ID:	db-3080 SN 3897
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 138
MT:	2 / 4
HT:	45 / 27

Time	Lav (dBA)
10:37:00	59.7
10:37:30	60.3
10:38:00	59.9
10:38:30	61.3
10:39:00	62.9
10:39:30	58.9
10:40:00	59.4
10:40:30	60.3
10:41:00	62.2
10:41:30	57.8
10:42:00	58.3
10:42:30	59.1
10:43:00	58.1
10:43:30	55.4
10:44:00	58.0
10:44:30	60.6
10:45:00	60.3
10:45:30	61.6
10:46:00	62.6
10:46:30	61.7

Leq (dBA)
60.3

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 43 **Description:** 1211 Robbie Drive

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	10:37:00
End Time:	10:47:00
Meter ID:	db-3080 SN 4618
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 138
MT:	2 / 4
HT:	45 / 27

Time	Lav (dBA)
10:37:00	61.1
10:37:30	59.5
10:38:00	61.6
10:38:30	62.8
10:39:00	62.9
10:39:30	60.1
10:40:00	60.7
10:40:30	62.7
10:41:00	61.8
10:41:30	58.6
10:42:00	59.9
10:42:30	59.5
10:43:00	57.8
10:43:30	56.3
10:44:00	59.8
10:44:30	59.4
10:45:00	61.9
10:45:30	62.9
10:46:00	63.1
10:46:30	60.6

Leq (dBA)
61.0

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 44 **Description:** 10041 Brentzel Drive

MONITORING INFORMATION

Notes:

No Photo Available

Date:	3/6/2014
Start Time:	10:37:00
End Time:	10:47:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
Roadway:	I-76 (PA TP) WB / EB
Cars:	132 / 138
MT:	2 / 4
HT:	45 / 27

Time	Lav (dBA)
10:37:00	59.1
10:37:30	58.1
10:38:00	59.3
10:38:30	59.7
10:39:00	60.9
10:39:30	59.4
10:40:00	58.7
10:40:30	60.4
10:41:00	61.4
10:41:30	59.3
10:42:00	55.4
10:42:30	56.5
10:43:00	59.2
10:43:30	58.4
10:44:00	57.7
10:44:30	59.0
10:45:00	59.6
10:45:30	59.5
10:46:00	61.2
10:46:30	60.8

Leq (dBA)
59.4

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 45 **Description:** 9501 Don Drive

MONITORING INFORMATION

Notes:

No Photo Available

Date:	3/6/2014
Start Time:	10:37:00
End Time:	10:47:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	132 / 138
MT:	2 / 4
HT:	45 / 27

Time	Lav (dBA)
10:37:00	71.3
10:37:30	71.7
10:38:00	72.1
10:38:30	71.9
10:39:00	73.7
10:39:30	72.3
10:40:00	70.1
10:40:30	72.5
10:41:00	73.8
10:41:30	73.2
10:42:00	68.2
10:42:30	70.3
10:43:00	72.0
10:43:30	69.7
10:44:00	67.5
10:44:30	72.7
10:45:00	71.4
10:45:30	72.5
10:46:00	74.3
10:46:30	74.1

Leq (dBA)
72.1

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 28° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 47 **Description:** 1815 Highland Ave

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	12:33:00
End Time:	12:43:00
Meter ID:	db-3080 SN 2125
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	141 / 168
MT:	8 / 7
HT:	37 / 42

Time	Lav (dBA)
"12:32:51"	63.2
"12:33:21"	58.7
"12:33:51"	56.1
"12:34:21"	59.4
"12:34:51"	59.1
"12:35:21"	60.0
"12:35:51"	63.7
"12:36:21"	61.6
"12:36:51"	64.0
"12:37:21"	59.6
"12:37:51"	58.1
"12:38:21"	56.9
"12:38:51"	58.9
"12:39:21"	58.2
"12:39:51"	61.5
"12:40:21"	61.0
"12:40:51"	58.5
"12:41:21"	54.8
"12:41:51"	61.0
"12:42:21"	65.0

Leq (dBA)
60.8

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 30° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 48 **Description:** 1909 Highland Ave

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	12:33:00
End Time:	12:43:00
Meter ID:	db-3080 SN 3897
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	141 / 168
MT:	8 / 7
HT:	37 / 42

Time	Lav (dBA)
12:33:00	63.3
12:33:30	61.4
12:34:00	60.7
12:34:30	63.6
12:35:00	62.6
12:35:30	65.9
12:36:00	64.3
12:36:30	64.2
12:37:00	63.1
12:37:30	62.8
12:38:00	60.6
12:38:30	61.3
12:39:00	60.6
12:39:30	63.7
12:40:00	64.6
12:40:30	62.0
12:41:00	59.3
12:41:30	62.2
12:42:00	69.9
12:42:30	63.7

Leq (dBA)
63.7

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	at grade with highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 30° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 49 **Description:** 2005 Highland Ave

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	12:33:00
End Time:	12:43:00
Meter ID:	db-3080 SN 4618
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	141 / 168
MT:	8 / 7
HT:	37 / 42

Time	Lav (dBA)
12:33:00	62.0
12:33:30	62.4
12:34:00	65.9
12:34:30	64.4
12:35:00	65.4
12:35:30	69.7
12:36:00	67.9
12:36:30	65.8
12:37:00	66.4
12:37:30	63.3
12:38:00	65.6
12:38:30	64.7
12:39:00	65.2
12:39:30	67.5
12:40:00	65.3
12:40:30	62.9
12:41:00	61.3
12:41:30	65.9
12:42:00	71.0
12:42:30	64.1

Leq (dBA)
66.0

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly below highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 30° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 50 **Description: 160 Carriage Drive**

MONITORING INFORMATION

Notes:

Date:	4/1/2014
Start Time:	10:17:00
End Time:	10:27:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	136 / 125
MT:	6 / 5
HT:	8 / 31

Time	Lav (dBA)
10:17:00	56.7
10:17:30	61.7
10:18:00	55.9
10:18:30	55.8
10:19:00	57.1
10:19:30	58.0
10:20:00	57.6
10:20:30	56.2
10:21:00	56.0
10:21:30	56.5
10:22:00	58.3
10:22:30	56.8
10:23:00	56.2
10:23:30	56.8
10:24:00	58.6
10:24:30	56.3
10:25:00	57.2
10:25:30	55.3
10:26:00	56.8
10:26:30	56.4

Leq (dBA)
57.3

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly below highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (6 mph wind), 50° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 51 **Description:** 9182 Scull Road

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	12:33:00
End Time:	12:43:00
Meter ID:	db-3080 SN 5093
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	141 / 168
MT:	8 / 7
HT:	37 / 42

Time	Lav (dBA)
12:33:00	63.5
12:33:30	62.7
12:34:00	57.2
12:34:30	59.0
12:35:00	62.0
12:35:30	60.4
12:36:00	57.1
12:36:30	56.7
12:37:00	70.2
12:37:30	57.5
12:38:00	61.7
12:38:30	60.0
12:39:00	60.1
12:39:30	64.0
12:40:00	60.9
12:40:30	60.5
12:41:00	60.0
12:41:30	58.1
12:42:00	59.3
12:42:30	64.7

Leq (dBA)
62.3

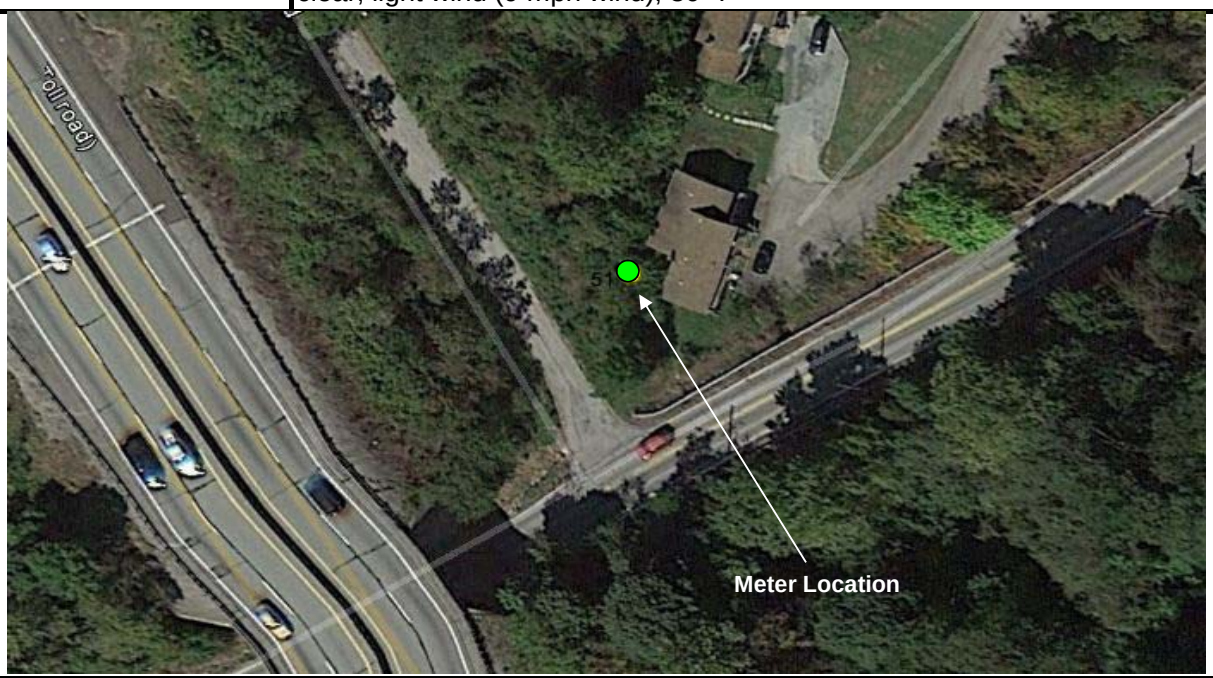
SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly below highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 30° F



PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch

Short-term Ambient Monitoring

Site # 52 **Description: 1000 Castleview Drive**

MONITORING INFORMATION

Notes:

Date:	3/6/2014
Start Time:	12:33:00
End Time:	12:43:00
Meter ID:	db-3080 SN 3895
Response Rate:	slow
	I-76 (PA TP)
Roadway:	WB / EB
Cars:	141 / 168
MT:	8 / 7
HT:	37 / 42

Time	Lav (dBA)
12:33:00	59.4
12:33:30	59.0
12:34:00	52.7
12:34:30	55.6
12:35:00	58.3
12:35:30	58.4
12:36:00	55.8
12:36:30	55.8
12:37:00	65.4
12:37:30	53.9
12:38:00	58.3
12:38:30	56.9
12:39:00	57.3
12:39:30	57.7
12:40:00	58.8
12:40:30	56.8
12:41:00	58.0
12:41:30	55.8
12:42:00	57.3
12:42:30	60.1

Leq (dBA)
58.5

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	slightly below highway	soft	AJD, KJP

Atmospheric Conditions :
clear, light wind (9 mph wind), 30° F

PTC 57-67 Full-Depth Reconstruction Noise Monitoring Site Sketch
Short-term Ambient Monitoring

Site # 54 **Description: 9000 Gina Drive**

MONITORING INFORMATION

Notes:

Date:	4/1/2014
Start Time:	10:17:00
End Time:	10:27:00
Meter ID:	db-3080 SN 4618
Response Rate:	slow
Roadway:	I-76 (PA TP) WB / EB
Cars:	136 / 125
MT:	6 / 5
HT:	8 / 31

Time	Lav (dBA)
10:17:00	57.4
10:17:30	57.5
10:18:00	58.2
10:18:30	58.0
10:19:00	59.3
10:19:30	59.4
10:20:00	57.9
10:20:30	57.0
10:21:00	59.8
10:21:30	58.5
10:22:00	57.4
10:22:30	56.1
10:23:00	56.1
10:23:30	57.6
10:24:00	58.1
10:24:30	58.2
10:25:00	57.1
10:25:30	57.0
10:26:00	58.4
10:26:30	56.6

Leq (dBA)
57.9

SITE SKETCH:

North Arrow

Site Specifics

Pavement Type:	Grade:	Site Surface:	Employee:
concrete	elevated above highway	soft	AJD, KJP

Atmospheric Conditions :
overcast, light wind (6 mph wind), 50° F

```
**********************************************************************
Filename..............PTC-54
Test Location..........9000 Gina Drive
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 4618
REPORT PRINTED ON 04/02/14 at 15:06:29

User ID: _____________________________




LOGGING STARTED......04/01/14 at 09:54:30
TOTAL LOGGING TIME...0 DAYS 00:39:37
LOGGING STOPPED......04/01/14 at 10:34:07
TOTAL INTERVALS......80
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....04/01/14 AT 09:22:16
PRE-TEST CALIBRATION RANGE...44.2 TO 144.2 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  57.9dB
Lav ( 80)......  44.2dB
Lav ( 90)......  44.2dB
SEL.............  91.5dB

TWA.............  47.1dB
TWA ( 80)......  44.2dB
TWA ( 90)......  44.2dB

Lmax............  74.9dB  04/01/14 at 10:34:06
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
04/01/14					
09:54:30	58.0	59.5	UNDER	58.2	56.2
09:55:00	58.0	59.7	UNDER	59.2	56.2
09:55:30	57.6	58.5	UNDER	58.2	56.2
09:56:00	57.4	58.9	UNDER	58.2	56.2
09:56:30	58.6	60.2	UNDER	59.2	56.2
09:57:00	58.1	60.1	UNDER	59.2	57.2
09:57:30	58.4	60.5	UNDER	59.2	56.2
09:58:00	58.2	59.8	UNDER	59.2	56.2
09:58:30	58.7	62.7	UNDER	60.2	56.2
09:59:00	58.2	59.1	UNDER	58.2	57.2
09:59:30	57.9	60.1	UNDER	59.2	55.2
10:00:00	55.5	57.1	UNDER	56.2	54.2
10:00:30	55.8	58.5	UNDER	56.2	53.2
10:01:00	55.9	57.1	UNDER	56.2	54.2
10:01:30	56.5	58.5	UNDER	57.2	55.2
10:02:00	58.2	59.5	UNDER	59.2	56.2
10:02:30	58.1	60.5	UNDER	59.2	56.2
10:03:00	58.3	59.0	UNDER	58.2	57.2
10:03:30	57.2	59.1	UNDER	58.2	55.2
10:04:00	58.7	60.9	UNDER	60.2	57.2
10:04:30	60.1	61.7	UNDER	60.2	58.2
10:05:00	58.9	60.9	UNDER	59.2	57.2
10:05:30	57.8	59.9	UNDER	58.2	56.2
10:06:00	58.3	61.7	UNDER	59.2	56.2
10:06:30	59.5	61.5	UNDER	60.2	58.2
10:07:00	59.4	60.9	UNDER	60.2	57.2
10:07:30	59.6	61.9	UNDER	61.2	57.2
10:08:00	59.8	61.3	UNDER	60.2	58.2
10:08:30	58.5	60.1	UNDER	59.2	57.2
10:09:00	58.7	60.6	UNDER	59.2	57.2
10:09:30	59.6	61.1	UNDER	60.2	57.2
10:10:00	57.9	59.7	UNDER	59.2	56.2
10:10:30	57.4	58.6	UNDER	58.2	56.2
10:11:00	57.2	58.3	UNDER	57.2	56.2
10:11:30	57.7	60.6	UNDER	58.2	56.2
10:12:00	57.3	58.8	UNDER	58.2	55.2
10:12:30	57.7	58.9	UNDER	58.2	55.2
10:13:00	56.4	58.5	UNDER	57.2	54.2
10:13:30	57.6	61.7	UNDER	59.2	54.2
10:14:00	59.3	61.1	UNDER	60.2	58.2
10:14:30	58.3	60.3	UNDER	59.2	56.2
10:15:00	56.4	58.3	UNDER	57.2	55.2
10:15:30	56.1	57.3	UNDER	56.2	55.2
10:16:00	57.7	59.1	UNDER	58.2	56.2
10:16:30	57.6	59.1	UNDER	58.2	55.2
10:17:00	57.4	59.3	UNDER	58.2	55.2
10:17:30	57.5	59.3	UNDER	58.2	55.2
10:18:00	58.2	60.4	UNDER	59.2	57.2
10:18:30	58.0	60.3	UNDER	59.2	56.2
10:19:00	59.3	61.5	UNDER	61.2	57.2
10:19:30	59.4	61.5	UNDER	60.2	57.2
10:20:00	57.9	59.4	UNDER	58.2	56.2

10:20:30	57.0	59.9	UNDER	58.2	55.2
10:21:00	59.8	61.9	UNDER	61.2	57.2
10:21:30	58.5	61.3	UNDER	60.2	56.2
10:22:00	57.4	58.9	UNDER	58.2	55.2
10:22:30	56.1	57.9	UNDER	57.2	55.2
10:23:00	56.1	56.9	UNDER	56.2	55.2
10:23:30	57.6	60.5	UNDER	59.2	55.2
10:24:00	58.1	60.1	UNDER	59.2	56.2
10:24:30	58.2	61.2	UNDER	59.2	56.2
10:25:00	57.1	58.9	UNDER	58.2	55.2
10:25:30	57.0	58.5	UNDER	57.2	55.2
10:26:00	58.4	59.8	UNDER	59.2	56.2
10:26:30	56.6	58.4	UNDER	57.2	55.2
10:27:00	56.0	58.0	UNDER	57.2	54.2
10:27:30	56.9	58.7	UNDER	58.2	54.2
10:28:00	58.1	59.3	UNDER	58.2	56.2
10:28:30	57.3	58.7	UNDER	58.2	55.2
10:29:00	56.8	58.5	UNDER	57.2	54.2
10:29:30	55.9	56.9	UNDER	56.2	54.2
10:30:00	55.0	56.3	UNDER	55.2	53.2
10:30:30	55.6	57.7	UNDER	56.2	54.2
10:31:00	56.6	58.2	UNDER	57.2	55.2
10:31:30	57.6	59.5	UNDER	58.2	56.2
10:32:00	57.3	57.9	UNDER	57.2	56.2
10:32:30	58.3	59.3	UNDER	58.2	57.2
10:33:00	56.9	58.5	UNDER	57.2	55.2
10:33:30	57.9	59.6	UNDER	58.2	56.2
10:34:00	62.9	74.9	UNDER	57.2	56.2

****

Filename.....PTC-52
Test Location.....1000 Castleview Drive
Employee Name.....AJD, KJP
Employee Number.....
Department.....ENV
Short-term noise measurem
ents for PTC MP 57 to 67
reconstruction project.

Calibrator Type.....Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14

****

METROSONICS db-3080 V1.12 SERIAL # 3895
REPORT PRINTED ON 03/13/14 at 14:43:08

User ID: _____

LOGGING STARTED.....03/06/14 at 12:13:00
TOTAL LOGGING TIME...0 DAYS 00:33:56
LOGGING STOPPED.....03/06/14 at 12:46:56
TOTAL INTERVALS.....68
INTERVAL LENGTH.....00:00:30

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:26:59
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION TIME...03/13/14 AT 09:50:10
POST-TEST CALIBRATION RANGE...40.5 TO 140.5
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 57.2dB
Lav (80)..... 40.5dB
Lav (90)..... 40.5dB
SEL..... 90.2dB

TWA..... 45.7dB
TWA (80)..... 40.5dB
TWA (90)..... 40.5dB

Lmax..... 71.8dB 03/06/14 at 12:37:05
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
12:13:00	50.7	55.0	UNDER	52.5	47.5
12:13:30	56.5	61.8	UNDER	59.5	52.5
12:14:00	52.6	57.4	UNDER	56.5	47.5
12:14:30	56.4	60.2	UNDER	59.5	50.5
12:15:00	53.3	56.1	UNDER	55.5	49.5
12:15:30	56.1	59.4	UNDER	59.5	53.5
12:16:00	56.5	59.4	UNDER	59.5	52.5
12:16:30	56.9	59.0	UNDER	58.5	53.5
12:17:00	54.7	61.4	UNDER	58.5	49.5
12:17:30	59.3	67.0	UNDER	63.5	53.5
12:18:00	54.2	57.0	UNDER	56.5	49.5
12:18:30	53.6	55.6	UNDER	55.5	49.5
12:19:00	53.5	54.8	UNDER	54.5	52.5
12:19:30	57.3	60.2	UNDER	59.5	51.5
12:20:00	55.3	60.6	UNDER	59.5	49.5
12:20:30	57.9	60.2	UNDER	59.5	54.5
12:21:00	55.5	61.4	UNDER	59.5	50.5
12:21:30	58.8	61.8	UNDER	61.5	53.5
12:22:00	55.1	57.4	UNDER	57.5	51.5
12:22:30	54.1	56.6	UNDER	55.5	52.5
12:23:00	53.9	56.2	UNDER	55.5	51.5
12:23:30	56.9	61.8	UNDER	60.5	51.5
12:24:00	59.8	64.6	UNDER	63.5	54.5
12:24:30	55.6	60.6	UNDER	57.5	53.5
12:25:00	58.7	61.8	UNDER	61.5	53.5
12:25:30	55.5	59.0	UNDER	58.5	52.5
12:26:00	56.7	61.4	UNDER	60.5	51.5
12:26:30	56.0	61.6	UNDER	60.5	49.5
12:27:00	54.9	57.8	UNDER	56.5	49.5
12:27:30	54.8	58.6	UNDER	57.5	49.5
12:28:00	55.4	58.6	UNDER	57.5	50.5
12:28:30	59.1	62.6	UNDER	61.5	50.5
12:29:00	59.5	64.2	UNDER	62.5	52.5
12:29:30	54.9	57.4	UNDER	56.5	51.5
12:30:00	53.3	55.8	UNDER	55.5	51.5
12:30:30	56.1	58.2	UNDER	57.5	52.5
12:31:00	56.9	59.8	UNDER	58.5	54.5
12:31:30	60.4	63.8	UNDER	62.5	55.5
12:32:00	57.3	62.4	UNDER	59.5	53.5
12:32:30	55.0	57.4	UNDER	56.5	52.5
12:33:00	59.4	63.8	UNDER	62.5	55.5
12:33:30	59.0	63.4	UNDER	63.5	48.5
12:34:00	52.7	55.4	UNDER	54.5	48.5
12:34:30	55.6	57.8	UNDER	57.5	52.5
12:35:00	58.3	62.6	UNDER	61.5	53.5
12:35:30	58.4	63.8	UNDER	63.5	52.5
12:36:00	55.8	62.7	UNDER	57.5	51.5
12:36:30	55.8	59.0	UNDER	57.5	53.5
12:37:00	65.4	71.8	UNDER	70.5	52.5
12:37:30	53.9	56.2	UNDER	55.5	51.5
12:38:00	58.3	62.8	UNDER	62.5	52.5

12:38:30	56.9	60.2	UNDER	59.5	52.5
12:39:00	57.3	59.5	UNDER	59.5	53.5
12:39:30	57.7	63.8	UNDER	61.5	49.5
12:40:00	58.8	62.6	UNDER	61.5	53.5
12:40:30	56.8	61.0	UNDER	59.5	50.5
12:41:00	58.0	60.4	UNDER	59.5	52.5
12:41:30	55.8	59.8	UNDER	58.5	51.5
12:42:00	57.3	62.6	UNDER	59.5	51.5
12:42:30	60.1	66.2	UNDER	63.5	52.5
12:43:00	60.4	68.1	UNDER	65.5	51.5
12:43:30	57.5	61.8	UNDER	60.5	53.5
12:44:00	55.5	60.2	UNDER	59.5	51.5
12:44:30	54.9	57.0	UNDER	56.5	52.5
12:45:00	53.0	54.4	UNDER	53.5	51.5
12:45:30	57.0	63.1	UNDER	61.5	51.5
12:46:00	56.6	61.8	UNDER	60.5	49.5
12:46:30	52.4	59.8	UNDER	53.5	50.5

```
**********************************************************************
Filename..............PTC-51
Test Location..........9182 Scull Road
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 5093
REPORT PRINTED ON 03/13/14 at 14:49:37

User ID: _____________________________




LOGGING STARTED......03/06/14 at 12:01:30
TOTAL LOGGING TIME...0 DAYS 00:53:46
LOGGING STOPPED......03/06/14 at 12:55:16
TOTAL INTERVALS......108
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:23:27
PRE-TEST CALIBRATION RANGE...39.0 TO 139.0 dB
POST-TEST CALIBRATION TIME...03/13/14 AT 13:16:34
POST-TEST CALIBRATION RANGE...39.2 TO 139.2
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  61.2dB
Lav ( 80)......  44.2dB
Lav ( 90)......  39.0dB
SEL.............  96.2dB

TWA.............  51.7dB
TWA ( 80)......  39.0dB
TWA ( 90)......  39.0dB

Lmax............  80.8dB  03/06/14 at 12:24:25
Lpk.............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
12:01:30	62.1	72.1	UNDER	64.0	51.0
12:02:00	64.3	73.2	UNDER	69.0	54.0
12:02:30	60.0	64.5	UNDER	63.0	52.0
12:03:00	59.2	63.0	UNDER	62.0	50.0
12:03:30	58.1	64.0	UNDER	62.0	50.0
12:04:00	61.3	68.4	UNDER	65.0	47.0
12:04:30	56.1	61.3	UNDER	58.0	51.0
12:05:00	60.5	66.0	UNDER	64.0	49.0
12:05:30	57.7	63.1	UNDER	61.0	48.0
12:06:00	58.2	62.4	UNDER	61.0	49.0
12:06:30	69.0	78.9	UNDER	74.0	52.0
12:07:00	59.3	63.6	UNDER	62.0	51.0
12:07:30	61.7	67.9	UNDER	65.0	50.0
12:08:00	58.2	64.9	UNDER	62.0	47.0
12:08:30	58.6	66.5	UNDER	62.0	46.0
12:09:00	59.5	64.4	UNDER	63.0	50.0
12:09:30	58.8	64.0	UNDER	63.0	50.0
12:10:00	58.5	63.6	UNDER	61.0	52.0
12:10:30	59.6	64.5	UNDER	63.0	49.0
12:11:00	57.2	61.2	UNDER	59.0	49.0
12:11:30	59.2	64.5	UNDER	63.0	47.0
12:12:00	58.5	62.1	UNDER	60.0	51.0
12:12:30	59.9	65.5	UNDER	64.0	51.0
12:13:00	52.4	58.4	UNDER	56.0	44.0
12:13:30	60.1	64.3	UNDER	63.0	51.0
12:14:00	57.9	64.0	UNDER	61.0	46.0
12:14:30	60.5	66.9	UNDER	64.0	49.0
12:15:00	56.2	60.8	UNDER	58.0	49.0
12:15:30	59.9	64.4	UNDER	62.0	52.0
12:16:00	60.6	65.2	UNDER	64.0	51.0
12:16:30	63.4	70.9	UNDER	66.0	52.0
12:17:00	58.6	64.3	UNDER	62.0	46.0
12:17:30	62.6	70.9	UNDER	67.0	53.0
12:18:00	57.0	64.3	UNDER	62.0	47.0
12:18:30	58.5	63.2	UNDER	61.0	48.0
12:19:00	57.5	62.9	UNDER	61.0	50.0
12:19:30	62.4	66.4	UNDER	64.0	58.0
12:20:00	59.3	65.5	UNDER	64.0	50.0
12:20:30	62.4	67.7	UNDER	64.0	54.0
12:21:00	56.8	66.3	UNDER	59.0	49.0
12:21:30	63.3	71.7	UNDER	67.0	51.0
12:22:00	58.3	63.6	UNDER	60.0	49.0
12:22:30	57.8	67.2	UNDER	58.0	51.0
12:23:00	56.8	63.6	UNDER	60.0	49.0
12:23:30	61.1	65.6	UNDER	64.0	51.0
12:24:00	70.2	80.8	UNDER	74.0	55.0
12:24:30	60.2	68.9	UNDER	64.0	51.0
12:25:00	62.3	68.5	UNDER	65.0	52.0
12:25:30	57.4	62.4	UNDER	61.0	51.0
12:26:00	58.5	62.4	UNDER	60.0	53.0
12:26:30	58.3	66.1	UNDER	63.0	46.0

12:27:00	62.4	71.2	UNDER	66.0	53.0
12:27:30	57.2	62.9	UNDER	61.0	48.0
12:28:00	58.9	64.1	UNDER	62.0	49.0
12:28:30	62.1	67.2	UNDER	65.0	49.0
12:29:00	60.5	66.0	UNDER	64.0	50.0
12:29:30	64.5	72.4	UNDER	69.0	54.0
12:30:00	56.3	62.0	UNDER	60.0	49.0
12:30:30	57.8	63.6	UNDER	61.0	50.0
12:31:00	60.2	63.3	UNDER	62.0	53.0
12:31:30	63.2	67.2	UNDER	65.0	53.0
12:32:00	64.5	70.0	UNDER	68.0	51.0
12:32:30	58.5	61.7	UNDER	61.0	52.0
12:33:00	63.5	69.7	UNDER	68.0	56.0
12:33:30	62.7	68.4	UNDER	67.0	46.0
12:34:00	57.2	64.0	UNDER	60.0	46.0
12:34:30	59.0	64.5	UNDER	63.0	51.0
12:35:00	62.0	68.0	UNDER	64.0	56.0
12:35:30	60.4	65.9	UNDER	63.0	52.0
12:36:00	57.1	63.2	UNDER	61.0	50.0
12:36:30	56.7	60.4	UNDER	59.0	52.0
12:37:00	70.2	79.6	UNDER	76.0	51.0
12:37:30	57.5	62.8	UNDER	60.0	50.0
12:38:00	61.7	67.1	UNDER	64.0	55.0
12:38:30	60.0	64.4	UNDER	62.0	56.0
12:39:00	60.1	64.4	UNDER	62.0	49.0
12:39:30	64.0	74.0	UNDER	69.0	47.0
12:40:00	60.9	65.3	UNDER	63.0	52.0
12:40:30	60.5	64.5	UNDER	62.0	51.0
12:41:00	60.0	64.5	UNDER	63.0	49.0
12:41:30	58.1	64.9	UNDER	63.0	48.0
12:42:00	59.3	64.7	UNDER	62.0	50.0
12:42:30	64.7	74.1	UNDER	68.0	53.0
12:43:00	61.2	67.3	UNDER	65.0	53.0
12:43:30	60.0	66.9	UNDER	64.0	50.0
12:44:00	59.3	66.3	UNDER	63.0	51.0
12:44:30	60.3	63.6	UNDER	62.0	52.0
12:45:00	58.1	63.1	UNDER	60.0	49.0
12:45:30	61.0	68.8	UNDER	64.0	50.0
12:46:00	60.1	68.4	UNDER	63.0	47.0
12:46:30	57.6	64.4	UNDER	60.0	49.0
12:47:00	61.9	67.3	UNDER	64.0	51.0
12:47:30	58.3	63.6	UNDER	61.0	49.0
12:48:00	59.5	63.2	UNDER	62.0	53.0
12:48:30	61.8	69.7	UNDER	65.0	51.0
12:49:00	62.7	70.0	UNDER	65.0	55.0
12:49:30	62.4	67.1	UNDER	66.0	54.0
12:50:00	60.8	64.9	UNDER	64.0	54.0
12:50:30	59.6	66.0	UNDER	62.0	52.0
12:51:00	58.5	63.6	UNDER	61.0	52.0
12:51:30	60.6	64.0	UNDER	62.0	52.0
12:52:00	56.2	61.3	UNDER	59.0	48.0
12:52:30	59.9	64.9	UNDER	63.0	48.0
12:53:00	58.0	63.1	UNDER	61.0	48.0
12:53:30	60.7	64.9	UNDER	64.0	48.0
12:54:00	57.9	63.6	UNDER	60.0	49.0
12:54:30	59.0	66.1	UNDER	62.0	50.0
12:55:00	60.3	69.7	UNDER	62.0	53.0

```
**********************************************************************
Filename..............PTC-50
Test Location..........160 Carriage Drive
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 04/02/14 at 15:06:18

User ID: _____________________________




LOGGING STARTED......04/01/14 at 09:36:00
TOTAL LOGGING TIME...0 DAYS 01:04:33
LOGGING STOPPED......04/01/14 at 10:40:33
TOTAL INTERVALS......130
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....04/01/14 AT 09:17:45
PRE-TEST CALIBRATION RANGE...40.4 TO 140.4 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  57.4dB
Lav ( 80)......  40.4dB
Lav ( 90)......  40.4dB
SEL.............  93.2dB

TWA.............  48.7dB
TWA ( 80)......  40.4dB
TWA ( 90)......  40.4dB

Lmax............  67.7dB  04/01/14 at 10:17:41
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
04/01/14					
09:36:00	58.2	66.0	UNDER	60.4	53.4
09:36:30	57.6	60.1	UNDER	59.4	55.4
09:37:00	58.5	62.1	UNDER	61.4	55.4
09:37:30	60.1	63.5	UNDER	62.4	57.4
09:38:00	57.7	59.7	UNDER	59.4	56.4
09:38:30	58.4	60.5	UNDER	60.4	56.4
09:39:00	59.8	63.2	UNDER	62.4	56.4
09:39:30	58.4	60.8	UNDER	59.4	57.4
09:40:00	56.4	59.7	UNDER	58.4	54.4
09:40:30	55.8	58.0	UNDER	57.4	53.4
09:41:00	58.0	60.9	UNDER	60.4	53.4
09:41:30	54.6	55.9	UNDER	55.4	53.4
09:42:00	57.1	59.7	UNDER	59.4	53.4
09:42:30	55.8	58.4	UNDER	57.4	53.4
09:43:00	57.4	60.1	UNDER	59.4	54.4
09:43:30	55.1	58.5	UNDER	58.4	53.4
09:44:00	57.6	61.3	UNDER	60.4	53.4
09:44:30	55.4	57.7	UNDER	57.4	53.4
09:45:00	57.2	60.5	UNDER	59.4	55.4
09:45:30	57.0	60.9	UNDER	59.4	54.4
09:46:00	57.2	59.7	UNDER	59.4	54.4
09:46:30	58.7	60.9	UNDER	60.4	54.4
09:47:00	58.1	59.8	UNDER	59.4	55.4
09:47:30	58.7	62.1	UNDER	61.4	54.4
09:48:00	59.2	61.7	UNDER	60.4	56.4
09:48:30	56.5	58.5	UNDER	58.4	54.4
09:49:00	54.8	56.5	UNDER	55.4	53.4
09:49:30	57.1	59.3	UNDER	58.4	53.4
09:50:00	56.5	58.9	UNDER	57.4	54.4
09:50:30	57.9	60.4	UNDER	59.4	55.4
09:51:00	58.0	59.7	UNDER	59.4	56.4
09:51:30	57.6	60.5	UNDER	59.4	54.4
09:52:00	56.9	58.1	UNDER	57.4	54.4
09:52:30	57.7	60.9	UNDER	60.4	54.4
09:53:00	56.9	58.5	UNDER	58.4	54.4
09:53:30	56.5	58.9	UNDER	58.4	54.4
09:54:00	57.8	60.2	UNDER	59.4	56.4
09:54:30	59.0	61.7	UNDER	61.4	54.4
09:55:00	58.6	60.8	UNDER	60.4	55.4
09:55:30	58.9	60.5	UNDER	60.4	56.4
09:56:00	58.9	60.5	UNDER	60.4	56.4
09:56:30	58.5	60.9	UNDER	60.4	55.4
09:57:00	58.6	60.6	UNDER	60.4	55.4
09:57:30	59.3	62.9	UNDER	62.4	56.4
09:58:00	56.6	59.8	UNDER	57.4	54.4
09:58:30	56.5	59.9	UNDER	58.4	54.4
09:59:00	56.9	59.9	UNDER	58.4	54.4
09:59:30	55.4	56.5	UNDER	56.4	54.4
10:00:00	58.0	60.3	UNDER	59.4	55.4
10:00:30	56.4	59.3	UNDER	58.4	52.4
10:01:00	57.8	63.3	UNDER	61.4	52.4
10:01:30	57.4	59.7	UNDER	58.4	53.4

10:02:00	56.3	58.2	UNDER	57.4	53.4
10:02:30	57.1	62.0	UNDER	60.4	54.4
10:03:00	57.4	59.7	UNDER	59.4	55.4
10:03:30	57.1	59.3	UNDER	58.4	54.4
10:04:00	55.9	58.6	UNDER	56.4	54.4
10:04:30	57.3	60.2	UNDER	59.4	54.4
10:05:00	58.5	62.9	UNDER	61.4	56.4
10:05:30	56.8	58.1	UNDER	57.4	55.4
10:06:00	59.7	62.1	UNDER	61.4	57.4
10:06:30	58.1	60.9	UNDER	60.4	56.4
10:07:00	59.7	63.3	UNDER	62.4	56.4
10:07:30	58.6	60.5	UNDER	60.4	57.4
10:08:00	59.0	61.8	UNDER	60.4	57.4
10:08:30	57.8	59.7	UNDER	58.4	56.4
10:09:00	58.1	60.1	UNDER	59.4	56.4
10:09:30	57.5	60.2	UNDER	59.4	54.4
10:10:00	56.5	58.9	UNDER	58.4	55.4
10:10:30	57.2	60.9	UNDER	58.4	55.4
10:11:00	56.9	60.5	UNDER	58.4	55.4
10:11:30	56.2	58.1	UNDER	57.4	54.4
10:12:00	57.2	58.9	UNDER	58.4	54.4
10:12:30	56.9	58.5	UNDER	58.4	54.4
10:13:00	56.5	57.7	UNDER	57.4	55.4
10:13:30	56.3	58.5	UNDER	58.4	53.4
10:14:00	57.9	61.3	UNDER	59.4	54.4
10:14:30	56.1	59.3	UNDER	58.4	53.4
10:15:00	56.2	58.5	UNDER	57.4	54.4
10:15:30	58.0	60.1	UNDER	59.4	56.4
10:16:00	57.9	60.9	UNDER	60.4	55.4
10:16:30	55.6	57.3	UNDER	56.4	54.4
10:17:00	56.7	58.5	UNDER	57.4	55.4
10:17:30	61.7	67.7	UNDER	65.4	55.4
10:18:00	55.9	56.9	UNDER	56.4	55.4
10:18:30	55.8	56.9	UNDER	56.4	55.4
10:19:00	57.1	59.7	UNDER	59.4	55.4
10:19:30	58.0	60.5	UNDER	60.4	55.4
10:20:00	57.6	60.5	UNDER	59.4	54.4
10:20:30	56.2	57.3	UNDER	57.4	54.4
10:21:00	56.0	57.3	UNDER	56.4	54.4
10:21:30	56.5	58.1	UNDER	57.4	55.4
10:22:00	58.3	63.1	UNDER	62.4	54.4
10:22:30	56.8	58.9	UNDER	58.4	54.4
10:23:00	56.2	58.7	UNDER	56.4	54.4
10:23:30	56.8	58.9	UNDER	57.4	55.4
10:24:00	58.6	61.7	UNDER	60.4	55.4
10:24:30	56.3	59.0	UNDER	58.4	54.4
10:25:00	57.2	58.1	UNDER	57.4	56.4
10:25:30	55.3	58.1	UNDER	56.4	53.4
10:26:00	56.8	59.4	UNDER	58.4	54.4
10:26:30	56.4	58.5	UNDER	57.4	54.4
10:27:00	55.8	58.9	UNDER	58.4	53.4
10:27:30	57.0	59.3	UNDER	58.4	53.4
10:28:00	55.6	58.1	UNDER	57.4	53.4
10:28:30	55.5	58.1	UNDER	56.4	53.4
10:29:00	56.4	58.4	UNDER	57.4	53.4
10:29:30	56.5	57.5	UNDER	57.4	54.4
10:30:00	56.9	59.0	UNDER	58.4	54.4
10:30:30	59.3	63.3	UNDER	62.4	56.4
10:31:00	57.6	59.2	UNDER	58.4	55.4
10:31:30	58.0	60.9	UNDER	59.4	56.4
10:32:00	58.2	61.7	UNDER	60.4	55.4
10:32:30	57.9	59.8	UNDER	59.4	55.4
10:33:00	56.5	58.5	UNDER	58.4	54.4

10:33:30	56.9	60.9	UNDER	59.4	54.4
10:34:00	55.5	57.3	UNDER	56.4	53.4
10:34:30	56.8	58.5	UNDER	57.4	55.4
10:35:00	56.3	59.3	UNDER	58.4	54.4
10:35:30	56.5	59.3	UNDER	58.4	54.4
10:36:00	55.9	58.5	UNDER	57.4	53.4
10:36:30	56.3	61.9	UNDER	58.4	53.4
10:37:00	59.6	61.9	UNDER	60.4	57.4
10:37:30	56.6	59.3	UNDER	58.4	54.4
10:38:00	55.3	56.1	UNDER	55.4	54.4
10:38:30	55.1	56.4	UNDER	56.4	53.4
10:39:00	59.0	65.7	UNDER	62.4	54.4
10:39:30	56.8	59.0	UNDER	58.4	54.4
10:40:00	55.4	56.5	UNDER	56.4	53.4
10:40:30	55.0	55.4	UNDER	55.4	54.4

```
**********************************************************************
Filename..............PTC-49
Test Location.........2005 Highland Avenue
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 4618
REPORT PRINTED ON 03/13/14 at 14:50:34

User ID: _____________________________




LOGGING STARTED......03/06/14 at 12:02:00
TOTAL LOGGING TIME...0 DAYS 01:12:48
LOGGING STOPPED......03/06/14 at 13:14:48
TOTAL INTERVALS......146
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 06:55:41
PRE-TEST CALIBRATION RANGE...44.5 TO 144.5 dB
POST-TEST CALIBRATION TIME...03/13/14 AT 13:15:16
POST-TEST CALIBRATION RANGE...44.6 TO 144.6
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  65.1dB
Lav ( 80)......  45.8dB
Lav ( 90)......  44.5dB
SEL............. 101.4dB

TWA.............  56.9dB
TWA ( 80)......  44.5dB
TWA ( 90)......  44.5dB

Lmax............  80.8dB  03/06/14 at 12:31:28
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
12:02:00	62.3	66.2	UNDER	63.5	59.5
12:02:30	64.8	69.6	UNDER	68.5	57.5
12:03:00	63.8	68.8	UNDER	67.5	54.5
12:03:30	63.5	68.4	UNDER	66.5	58.5
12:04:00	64.2	69.9	UNDER	68.5	56.5
12:04:30	64.5	68.9	UNDER	67.5	58.5
12:05:00	65.9	72.4	UNDER	69.5	54.5
12:05:30	64.9	69.6	UNDER	68.5	57.5
12:06:00	60.9	63.4	UNDER	62.5	57.5
12:06:30	71.6	79.5	UNDER	77.5	58.5
12:07:00	66.3	68.6	UNDER	68.5	62.5
12:07:30	62.1	68.4	UNDER	65.5	57.5
12:08:00	62.6	66.6	UNDER	64.5	60.5
12:08:30	64.4	68.6	UNDER	66.5	60.5
12:09:00	64.3	68.6	UNDER	66.5	60.5
12:09:30	66.4	69.0	UNDER	68.5	61.5
12:10:00	65.8	71.2	UNDER	70.5	57.5
12:10:30	68.2	74.8	UNDER	72.5	56.5
12:11:00	63.5	67.8	UNDER	65.5	56.5
12:11:30	61.9	66.8	UNDER	64.5	57.5
12:12:00	63.4	70.5	UNDER	67.5	57.5
12:12:30	66.8	71.7	UNDER	70.5	62.5
12:13:00	62.5	69.6	UNDER	66.5	57.5
12:13:30	63.8	68.6	UNDER	66.5	59.5
12:14:00	65.6	70.3	UNDER	68.5	60.5
12:14:30	62.5	69.1	UNDER	65.5	57.5
12:15:00	66.8	72.2	UNDER	69.5	61.5
12:15:30	65.7	69.6	UNDER	68.5	59.5
12:16:00	62.8	64.7	UNDER	63.5	60.5
12:16:30	63.8	68.4	UNDER	67.5	57.5
12:17:00	58.2	61.0	UNDER	60.5	54.5
12:17:30	65.7	71.6	UNDER	69.5	60.5
12:18:00	64.5	70.5	UNDER	68.5	58.5
12:18:30	63.1	68.8	UNDER	66.5	59.5
12:19:00	63.2	68.4	UNDER	66.5	58.5
12:19:30	64.7	67.8	UNDER	67.5	61.5
12:20:00	65.9	69.7	UNDER	68.5	59.5
12:20:30	65.2	68.2	UNDER	67.5	60.5
12:21:00	66.4	72.8	UNDER	69.5	58.5
12:21:30	66.5	71.4	UNDER	70.5	58.5
12:22:00	65.5	70.9	UNDER	69.5	57.5
12:22:30	64.1	68.7	UNDER	66.5	60.5
12:23:00	65.4	71.0	UNDER	68.5	59.5
12:23:30	63.7	68.0	UNDER	65.5	60.5
12:24:00	66.6	73.2	UNDER	69.5	62.5
12:24:30	67.4	73.2	UNDER	71.5	60.5
12:25:00	65.8	70.4	UNDER	68.5	59.5
12:25:30	63.7	68.0	UNDER	66.5	59.5
12:26:00	65.8	70.7	UNDER	70.5	59.5
12:26:30	62.3	67.8	UNDER	65.5	55.5
12:27:00	65.9	74.8	UNDER	67.5	61.5

12:27:30	65.7	73.7	UNDER	66.5	60.5
12:28:00	63.8	67.8	UNDER	65.5	59.5
12:28:30	62.4	68.0	UNDER	65.5	57.5
12:29:00	65.4	73.6	UNDER	70.5	56.5
12:29:30	65.3	69.6	UNDER	68.5	60.5
12:30:00	65.1	69.4	UNDER	67.5	60.5
12:30:30	68.2	71.2	UNDER	70.5	61.5
12:31:00	71.0	80.8	UNDER	74.5	60.5
12:31:30	67.0	78.0	UNDER	70.5	58.5
12:32:00	63.8	69.8	UNDER	67.5	59.5
12:32:30	69.8	74.4	UNDER	73.5	61.5
12:33:00	62.0	67.2	UNDER	65.5	57.5
12:33:30	62.4	66.2	UNDER	64.5	58.5
12:34:00	65.9	69.1	UNDER	67.5	57.5
12:34:30	64.4	71.0	UNDER	68.5	57.5
12:35:00	65.4	70.9	UNDER	68.5	59.5
12:35:30	69.7	74.6	UNDER	72.5	64.5
12:36:00	67.9	73.0	UNDER	70.5	64.5
12:36:30	65.8	70.3	UNDER	69.5	62.5
12:37:00	66.4	69.6	UNDER	68.5	62.5
12:37:30	63.3	66.0	UNDER	64.5	60.5
12:38:00	65.6	71.6	UNDER	68.5	61.5
12:38:30	64.7	69.1	UNDER	67.5	59.5
12:39:00	65.2	68.9	UNDER	67.5	60.5
12:39:30	67.5	70.0	UNDER	69.5	64.5
12:40:00	65.3	70.7	UNDER	68.5	58.5
12:40:30	62.9	68.4	UNDER	65.5	58.5
12:41:00	61.3	63.5	UNDER	62.5	58.5
12:41:30	65.9	69.1	UNDER	67.5	61.5
12:42:00	71.0	80.2	UNDER	75.5	62.5
12:42:30	64.1	68.7	UNDER	66.5	56.5
12:43:00	62.5	68.3	UNDER	66.5	57.5
12:43:30	61.2	64.1	UNDER	62.5	58.5
12:44:00	64.6	71.8	UNDER	68.5	57.5
12:44:30	64.5	69.2	UNDER	67.5	58.5
12:45:00	62.9	66.8	UNDER	65.5	58.5
12:45:30	65.7	71.6	UNDER	69.5	57.5
12:46:00	62.9	67.9	UNDER	65.5	58.5
12:46:30	61.4	69.3	UNDER	66.5	52.5
12:47:00	68.1	73.9	UNDER	70.5	63.5
12:47:30	63.7	67.6	UNDER	67.5	58.5
12:48:00	66.4	69.5	UNDER	68.5	61.5
12:48:30	66.6	69.2	UNDER	68.5	60.5
12:49:00	65.0	70.5	UNDER	68.5	58.5
12:49:30	64.5	69.6	UNDER	66.5	58.5
12:50:00	69.7	76.9	UNDER	73.5	61.5
12:50:30	64.7	70.4	UNDER	68.5	57.5
12:51:00	65.2	70.2	UNDER	67.5	58.5
12:51:30	65.0	69.0	UNDER	67.5	62.5
12:52:00	63.1	69.5	UNDER	67.5	55.5
12:52:30	66.5	70.2	UNDER	69.5	57.5
12:53:00	63.0	67.9	UNDER	66.5	57.5
12:53:30	60.3	65.2	UNDER	63.5	54.5
12:54:00	63.1	69.6	UNDER	66.5	58.5
12:54:30	62.4	67.1	UNDER	65.5	55.5
12:55:00	63.6	69.0	UNDER	67.5	58.5
12:55:30	63.4	70.0	UNDER	67.5	56.5
12:56:00	65.8	69.6	UNDER	68.5	60.5
12:56:30	64.3	70.8	UNDER	67.5	59.5
12:57:00	66.8	70.4	UNDER	69.5	62.5
12:57:30	63.5	66.2	UNDER	64.5	61.5
12:58:00	65.9	72.3	UNDER	69.5	62.5
12:58:30	63.8	66.4	UNDER	65.5	62.5

12:59:00	62.6	65.2	UNDER	64.5	59.5
12:59:30	60.5	65.2	UNDER	63.5	56.5
13:00:00	63.8	68.8	UNDER	66.5	60.5
13:00:30	65.4	70.0	UNDER	69.5	59.5
13:01:00	64.4	68.8	UNDER	67.5	58.5
13:01:30	63.7	70.0	UNDER	66.5	59.5
13:02:00	60.5	65.8	UNDER	62.5	55.5
13:02:30	67.0	72.2	UNDER	70.5	58.5
13:03:00	65.0	69.6	UNDER	67.5	59.5
13:03:30	62.7	68.1	UNDER	65.5	57.5
13:04:00	63.1	67.3	UNDER	66.5	57.5
13:04:30	63.8	67.6	UNDER	66.5	58.5
13:05:00	65.3	70.2	UNDER	68.5	59.5
13:05:30	63.3	69.2	UNDER	66.5	55.5
13:06:00	61.6	65.9	UNDER	64.5	56.5
13:06:30	62.8	66.1	UNDER	65.5	60.5
13:07:00	62.8	67.4	UNDER	65.5	59.5
13:07:30	64.7	69.2	UNDER	67.5	59.5
13:08:00	64.4	70.8	UNDER	67.5	59.5
13:08:30	61.3	64.4	UNDER	63.5	57.5
13:09:00	67.1	74.6	UNDER	70.5	62.5
13:09:30	63.8	69.2	UNDER	66.5	61.5
13:10:00	62.6	69.0	UNDER	65.5	57.5
13:10:30	61.0	64.9	UNDER	63.5	58.5
13:11:00	63.4	68.7	UNDER	67.5	56.5
13:11:30	62.0	67.9	UNDER	64.5	56.5
13:12:00	62.6	67.8	UNDER	66.5	56.5
13:12:30	63.3	68.0	UNDER	65.5	59.5
13:13:00	63.3	66.8	UNDER	66.5	59.5
13:13:30	63.7	68.2	UNDER	67.5	56.5
13:14:00	62.4	67.4	UNDER	65.5	55.5
13:14:30	62.6	67.2	UNDER	66.5	58.5

```
**********************************************************************
Filename..............PTC-48
Test Location.........1909 Highland Ave
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3897
REPORT PRINTED ON 03/13/14 at 14:50:10

User ID: _____________________________




LOGGING STARTED......03/06/14 at 12:10:00
TOTAL LOGGING TIME...0 DAYS 01:32:24
LOGGING STOPPED......03/06/14 at 13:42:24
TOTAL INTERVALS......185
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 06:58:13
PRE-TEST CALIBRATION RANGE...40.3 TO 140.3 dB
POST-TEST CALIBRATION TIME...03/13/14 AT 13:20:58
POST-TEST CALIBRATION RANGE...40.3 TO 140.3
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  63.1dB
Lav ( 80)......  51.2dB
Lav ( 90)......  40.3dB
SEL............. 100.4dB

TWA.............  56.0dB
TWA ( 80)......  44.0dB
TWA ( 90)......  40.3dB

Lmax............  83.2dB  03/06/14 at 13:32:06
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
12:10:00	64.8	67.5	UNDER	67.3	58.3
12:10:30	62.2	67.3	UNDER	66.3	53.3
12:11:00	62.3	68.7	UNDER	66.3	51.3
12:11:30	60.6	64.3	UNDER	63.3	56.3
12:12:00	59.0	62.3	UNDER	61.3	52.3
12:12:30	64.5	71.2	UNDER	69.3	58.3
12:13:00	60.8	65.6	UNDER	63.3	57.3
12:13:30	60.2	64.8	UNDER	63.3	56.3
12:14:00	62.1	66.3	UNDER	64.3	58.3
12:14:30	61.8	65.2	UNDER	64.3	58.3
12:15:00	62.7	67.2	UNDER	66.3	54.3
12:15:30	62.7	65.2	UNDER	64.3	58.3
12:16:00	61.2	63.2	UNDER	62.3	58.3
12:16:30	60.3	63.2	UNDER	62.3	56.3
12:17:00	59.4	64.8	UNDER	63.3	54.3
12:17:30	62.1	67.5	UNDER	66.3	54.3
12:18:00	62.0	66.9	UNDER	66.3	56.3
12:18:30	59.4	62.0	UNDER	61.3	56.3
12:19:00	60.4	64.8	UNDER	63.3	55.3
12:19:30	61.8	65.2	UNDER	63.3	58.3
12:20:00	62.6	66.4	UNDER	65.3	57.3
12:20:30	63.4	66.1	UNDER	65.3	61.3
12:21:00	63.5	67.6	UNDER	65.3	58.3
12:21:30	64.9	68.0	UNDER	67.3	60.3
12:22:00	61.4	66.7	UNDER	64.3	54.3
12:22:30	62.7	66.1	UNDER	65.3	57.3
12:23:00	63.7	70.0	UNDER	68.3	56.3
12:23:30	61.0	65.8	UNDER	64.3	56.3
12:24:00	63.6	66.5	UNDER	65.3	60.3
12:24:30	64.7	69.6	UNDER	68.3	59.3
12:25:00	63.1	66.4	UNDER	65.3	60.3
12:25:30	61.3	66.4	UNDER	65.3	56.3
12:26:00	63.3	66.8	UNDER	65.3	57.3
12:26:30	59.2	61.3	UNDER	60.3	55.3
12:27:00	60.2	64.4	UNDER	63.3	55.3
12:27:30	64.3	71.9	UNDER	68.3	60.3
12:28:00	61.3	63.2	UNDER	62.3	58.3
12:28:30	62.4	65.4	UNDER	64.3	55.3
12:29:00	60.0	66.9	UNDER	65.3	54.3
12:29:30	61.7	67.4	UNDER	64.3	56.3
12:30:00	63.4	65.6	UNDER	65.3	56.3
12:30:30	64.4	68.3	UNDER	67.3	58.3
12:31:00	65.4	67.6	UNDER	66.3	61.3
12:31:30	69.2	77.7	UNDER	75.3	56.3
12:32:00	59.0	64.9	UNDER	60.3	55.3
12:32:30	65.3	69.4	UNDER	68.3	58.3
12:33:00	63.3	69.0	UNDER	66.3	55.3
12:33:30	61.4	64.4	UNDER	63.3	56.3
12:34:00	60.7	65.2	UNDER	64.3	56.3
12:34:30	63.6	66.8	UNDER	66.3	58.3
12:35:00	62.6	66.4	UNDER	65.3	58.3

12:35:30	65.9	71.6	UNDER	70.3	60.3
12:36:00	64.3	67.6	UNDER	66.3	60.3
12:36:30	64.2	67.6	UNDER	66.3	60.3
12:37:00	63.1	65.6	UNDER	65.3	59.3
12:37:30	62.8	66.0	UNDER	64.3	58.3
12:38:00	60.6	63.2	UNDER	62.3	55.3
12:38:30	61.3	64.8	UNDER	64.3	56.3
12:39:00	60.6	64.8	UNDER	63.3	56.3
12:39:30	63.7	67.2	UNDER	66.3	57.3
12:40:00	64.6	68.8	UNDER	67.3	60.3
12:40:30	62.0	66.8	UNDER	65.3	57.3
12:41:00	59.3	62.8	UNDER	60.3	56.3
12:41:30	62.2	66.0	UNDER	64.3	58.3
12:42:00	69.9	78.9	UNDER	75.3	59.3
12:42:30	63.7	71.2	UNDER	64.3	60.3
12:43:00	59.2	63.6	UNDER	62.3	56.3
12:43:30	60.9	65.6	UNDER	64.3	56.3
12:44:00	61.7	66.4	UNDER	65.3	56.3
12:44:30	60.1	62.8	UNDER	61.3	57.3
12:45:00	62.0	64.4	UNDER	63.3	57.3
12:45:30	62.2	67.2	UNDER	65.3	57.3
12:46:00	61.3	64.8	UNDER	64.3	56.3
12:46:30	59.8	62.8	UNDER	61.3	55.3
12:47:00	64.2	69.6	UNDER	68.3	57.3
12:47:30	63.4	65.6	UNDER	65.3	60.3
12:48:00	62.5	66.8	UNDER	65.3	58.3
12:48:30	63.8	65.2	UNDER	64.3	61.3
12:49:00	64.4	67.2	UNDER	66.3	58.3
12:49:30	60.9	65.2	UNDER	63.3	56.3
12:50:00	64.4	69.9	UNDER	68.3	59.3
12:50:30	66.4	72.0	UNDER	69.3	59.3
12:51:00	61.5	66.4	UNDER	65.3	56.3
12:51:30	61.4	63.6	UNDER	63.3	58.3
12:52:00	62.2	65.2	UNDER	64.3	57.3
12:52:30	62.9	67.6	UNDER	67.3	55.3
12:53:00	62.4	67.3	UNDER	65.3	58.3
12:53:30	59.7	62.4	UNDER	61.3	54.3
12:54:00	61.5	66.8	UNDER	65.3	53.3
12:54:30	60.6	62.4	UNDER	62.3	56.3
12:55:00	58.1	60.8	UNDER	60.3	54.3
12:55:30	63.3	66.4	UNDER	65.3	55.3
12:56:00	61.8	68.0	UNDER	65.3	53.3
12:56:30	62.7	67.6	UNDER	66.3	55.3
12:57:00	62.5	67.6	UNDER	65.3	59.3
12:57:30	61.7	66.8	UNDER	65.3	57.3
12:58:00	62.6	68.0	UNDER	66.3	58.3
12:58:30	61.9	65.2	UNDER	64.3	58.3
12:59:00	61.5	63.9	UNDER	63.3	59.3
12:59:30	59.2	61.6	UNDER	61.3	55.3
13:00:00	61.4	64.8	UNDER	64.3	56.3
13:00:30	62.4	67.2	UNDER	66.3	54.3
13:01:00	62.2	64.8	UNDER	64.3	60.3
13:01:30	61.0	65.2	UNDER	64.3	57.3
13:02:00	59.9	63.2	UNDER	62.3	54.3
13:02:30	62.2	68.9	UNDER	66.3	54.3
13:03:00	63.0	66.4	UNDER	65.3	57.3
13:03:30	62.2	65.5	UNDER	64.3	58.3
13:04:00	58.4	64.0	UNDER	62.3	54.3
13:04:30	62.3	64.8	UNDER	64.3	57.3
13:05:00	62.2	66.4	UNDER	65.3	55.3
13:05:30	60.2	64.5	UNDER	63.3	57.3
13:06:00	62.0	65.2	UNDER	64.3	59.3
13:06:30	59.1	63.2	UNDER	60.3	55.3

13:07:00	60.6	63.2	UNDER	62.3	56.3
13:07:30	60.5	63.9	UNDER	63.3	56.3
13:08:00	62.6	66.1	UNDER	65.3	56.3
13:08:30	61.2	67.6	UNDER	65.3	57.3
13:09:00	60.5	63.2	UNDER	62.3	56.3
13:09:30	64.4	69.6	UNDER	68.3	58.3
13:10:00	61.9	66.0	UNDER	65.3	56.3
13:10:30	61.3	65.1	UNDER	64.3	51.3
13:11:00	58.1	61.2	UNDER	60.3	50.3
13:11:30	61.4	66.4	UNDER	64.3	54.3
13:12:00	61.1	64.8	UNDER	64.3	54.3
13:12:30	61.0	63.7	UNDER	63.3	55.3
13:13:00	61.4	65.3	UNDER	64.3	57.3
13:13:30	61.4	64.0	UNDER	62.3	58.3
13:14:00	61.4	64.2	UNDER	63.3	58.3
13:14:30	59.9	62.2	UNDER	61.3	57.3
13:15:00	62.4	66.4	UNDER	65.3	56.3
13:15:30	63.5	66.8	UNDER	66.3	57.3
13:16:00	64.0	67.1	UNDER	66.3	57.3
13:16:30	60.1	62.8	UNDER	62.3	56.3
13:17:00	64.6	67.5	UNDER	66.3	57.3
13:17:30	60.3	64.4	UNDER	63.3	54.3
13:18:00	64.4	70.1	UNDER	68.3	57.3
13:18:30	63.5	68.4	UNDER	67.3	57.3
13:19:00	63.5	68.4	UNDER	66.3	57.3
13:19:30	62.9	65.7	UNDER	65.3	59.3
13:20:00	63.5	68.8	UNDER	66.3	56.3
13:20:30	67.7	75.3	UNDER	72.3	58.3
13:21:00	62.8	65.6	UNDER	64.3	58.3
13:21:30	61.6	66.0	UNDER	64.3	55.3
13:22:00	62.4	65.5	UNDER	65.3	57.3
13:22:30	64.5	67.5	UNDER	66.3	61.3
13:23:00	60.3	64.0	UNDER	62.3	56.3
13:23:30	61.3	66.4	UNDER	65.3	54.3
13:24:00	63.8	68.4	UNDER	66.3	54.3
13:24:30	58.0	60.4	UNDER	59.3	55.3
13:25:00	64.1	67.9	UNDER	66.3	56.3
13:25:30	63.2	66.4	UNDER	65.3	58.3
13:26:00	61.4	65.7	UNDER	64.3	57.3
13:26:30	59.7	62.8	UNDER	62.3	54.3
13:27:00	60.4	63.5	UNDER	62.3	56.3
13:27:30	62.5	67.2	UNDER	65.3	57.3
13:28:00	64.2	68.4	UNDER	66.3	58.3
13:28:30	62.0	66.9	UNDER	65.3	55.3
13:29:00	66.0	74.0	UNDER	71.3	57.3
13:29:30	64.2	71.1	UNDER	69.3	55.3
13:30:00	63.3	68.0	UNDER	65.3	57.3
13:30:30	63.8	68.0	UNDER	67.3	58.3
13:31:00	62.0	64.0	UNDER	63.3	59.3
13:31:30	60.9	65.9	UNDER	63.3	55.3
13:32:00	75.1	83.2	UNDER	81.3	60.3
13:32:30	62.5	67.0	UNDER	65.3	58.3
13:33:00	61.6	66.8	UNDER	65.3	55.3
13:33:30	64.4	69.2	UNDER	68.3	58.3
13:34:00	63.6	66.4	UNDER	65.3	58.3
13:34:30	62.4	67.2	UNDER	66.3	58.3
13:35:00	58.5	60.8	UNDER	60.3	55.3
13:35:30	63.1	65.2	UNDER	64.3	56.3
13:36:00	61.6	65.0	UNDER	64.3	59.3
13:36:30	60.8	64.8	UNDER	63.3	54.3
13:37:00	62.2	66.4	UNDER	65.3	57.3
13:37:30	65.5	70.5	UNDER	68.3	57.3
13:38:00	64.2	66.0	UNDER	65.3	60.3

13:38:30	63.0	66.3	UNDER	65.3	59.3
13:39:00	62.2	65.5	UNDER	64.3	57.3
13:39:30	61.9	67.2	UNDER	65.3	57.3
13:40:00	60.5	66.8	UNDER	63.3	56.3
13:40:30	63.3	66.0	UNDER	65.3	59.3
13:41:00	63.1	67.4	UNDER	66.3	52.3
13:41:30	62.2	66.8	UNDER	65.3	58.3
13:42:00	67.0	71.0	UNDER	70.3	58.3

```
**********************************************************************
Filename..............PTC-44
Test Location..........9501 Don Drive
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 03/13/14 at 14:42:56

User ID: _____________________________




LOGGING STARTED......03/06/14 at 10:33:00
TOTAL LOGGING TIME...0 DAYS 00:15:50
LOGGING STOPPED......03/06/14 at 10:48:50
TOTAL INTERVALS......32
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:26:59
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  72.3dB
Lav ( 80).......  51.7dB
Lav ( 90).......  40.5dB
SEL............. 102.0dB

TWA.............  57.6dB
TWA ( 80).......  40.5dB
TWA ( 90).......  40.5dB

Lmax............  81.0dB  03/06/14 at 10:46:20
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
10:33:00	72.6	78.2	UNDER	76.5	65.5
10:33:30	75.1	80.2	UNDER	77.5	67.5
10:34:00	73.9	77.0	UNDER	75.5	70.5
10:34:30	73.6	78.6	UNDER	77.5	68.5
10:35:00	71.5	75.0	UNDER	74.5	67.5
10:35:30	67.8	71.9	UNDER	71.5	59.5
10:36:00	70.4	75.0	UNDER	73.5	64.5
10:36:30	73.4	76.6	UNDER	75.5	68.5
10:37:00	71.3	75.0	UNDER	73.5	68.5
10:37:30	71.7	76.1	UNDER	75.5	67.5
10:38:00	72.1	75.8	UNDER	74.5	65.5
10:38:30	71.9	76.6	UNDER	75.5	62.5
10:39:00	73.7	78.6	UNDER	76.5	68.5
10:39:30	72.3	76.7	UNDER	75.5	63.5
10:40:00	70.1	75.0	UNDER	72.5	61.5
10:40:30	72.5	74.6	UNDER	74.5	68.5
10:41:00	73.8	77.0	UNDER	75.5	68.5
10:41:30	73.2	77.0	UNDER	76.5	67.5
10:42:00	68.2	73.3	UNDER	72.5	60.5
10:42:30	70.3	75.0	UNDER	73.5	57.5
10:43:00	72.0	75.8	UNDER	75.5	65.5
10:43:30	69.7	73.8	UNDER	72.5	64.5
10:44:00	67.5	70.3	UNDER	70.5	60.5
10:44:30	72.7	78.9	UNDER	76.5	63.5
10:45:00	71.4	74.2	UNDER	73.5	66.5
10:45:30	72.5	77.8	UNDER	75.5	64.5
10:46:00	74.3	81.0	UNDER	76.5	69.5
10:46:30	74.1	79.0	UNDER	77.5	66.5
10:47:00	72.9	77.3	UNDER	75.5	67.5
10:47:30	73.4	77.4	UNDER	75.5	68.5
10:48:00	70.3	75.8	UNDER	73.5	61.5
10:48:30	73.5	76.6	UNDER	75.5	64.5

```
**********************************************************************
Filename..............PTC-43
Test Location..........10041 Brentzel Drive
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 5093
REPORT PRINTED ON 03/13/14 at 14:49:24

User ID: _____________________________




LOGGING STARTED......03/06/14 at 10:23:30
TOTAL LOGGING TIME...0 DAYS 00:28:28
LOGGING STOPPED......03/06/14 at 10:51:58
TOTAL INTERVALS......57
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:23:27
PRE-TEST CALIBRATION RANGE...39.0 TO 139.0 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  59.8dB
Lav ( 80).......  39.0dB
Lav ( 90).......  39.0dB
SEL.............  92.0dB

TWA.............  47.6dB
TWA ( 80).......  39.0dB
TWA ( 90).......  39.0dB

Lmax............  73.6dB  03/06/14 at 10:23:47
Lpk............. 110.7dB  03/06/14 at 10:51:57
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
10:23:30	68.3	73.6	UNDER	71.0	59.0
10:24:00	58.9	60.4	UNDER	60.0	56.0
10:24:30	57.7	59.0	UNDER	58.0	56.0
10:25:00	56.6	58.0	UNDER	57.0	54.0
10:25:30	57.5	59.2	UNDER	58.0	56.0
10:26:00	58.7	61.1	UNDER	60.0	56.0
10:26:30	62.1	64.0	UNDER	63.0	56.0
10:27:00	61.1	62.9	UNDER	62.0	58.0
10:27:30	56.8	58.8	UNDER	58.0	54.0
10:28:00	56.9	58.9	UNDER	58.0	55.0
10:28:30	57.2	58.2	UNDER	57.0	56.0
10:29:00	58.0	59.2	UNDER	58.0	56.0
10:29:30	56.6	58.0	UNDER	57.0	54.0
10:30:00	58.9	60.9	UNDER	59.0	57.0
10:30:30	57.0	59.1	UNDER	58.0	52.0
10:31:00	58.4	60.8	UNDER	60.0	53.0
10:31:30	59.8	62.0	UNDER	61.0	57.0
10:32:00	59.2	61.1	UNDER	60.0	57.0
10:32:30	59.8	62.4	UNDER	61.0	57.0
10:33:00	60.4	64.0	UNDER	61.0	56.0
10:33:30	61.6	63.3	UNDER	62.0	60.0
10:34:00	61.2	62.9	UNDER	62.0	59.0
10:34:30	62.4	66.5	UNDER	64.0	58.0
10:35:00	60.3	62.7	UNDER	61.0	58.0
10:35:30	58.5	60.6	UNDER	60.0	56.0
10:36:00	58.8	60.9	UNDER	60.0	56.0
10:36:30	59.7	60.4	UNDER	60.0	59.0
10:37:00	59.1	60.7	UNDER	60.0	57.0
10:37:30	58.1	59.6	UNDER	58.0	57.0
10:38:00	59.3	62.0	UNDER	61.0	55.0
10:38:30	59.7	62.8	UNDER	61.0	55.0
10:39:00	60.9	63.8	UNDER	62.0	57.0
10:39:30	59.4	64.0	UNDER	61.0	54.0
10:40:00	58.7	60.9	UNDER	60.0	54.0
10:40:30	60.4	62.1	UNDER	61.0	58.0
10:41:00	61.4	63.0	UNDER	62.0	59.0
10:41:30	59.3	60.9	UNDER	60.0	57.0
10:42:00	55.4	58.8	UNDER	57.0	52.0
10:42:30	56.5	59.3	UNDER	58.0	54.0
10:43:00	59.2	61.0	UNDER	60.0	56.0
10:43:30	58.4	60.0	UNDER	59.0	55.0
10:44:00	57.7	60.0	UNDER	58.0	55.0
10:44:30	59.0	61.6	UNDER	61.0	54.0
10:45:00	59.6	61.7	UNDER	61.0	57.0
10:45:30	59.5	61.6	UNDER	60.0	56.0
10:46:00	61.2	63.3	UNDER	62.0	58.0
10:46:30	60.8	62.2	UNDER	61.0	58.0
10:47:00	59.8	62.9	UNDER	61.0	55.0
10:47:30	58.1	59.7	UNDER	59.0	55.0
10:48:00	58.9	62.2	UNDER	60.0	55.0
10:48:30	58.6	60.1	UNDER	60.0	57.0
10:49:00	58.0	60.2	UNDER	59.0	53.0

10:49:30	58.8	62.1	UNDER	61.0	53.0
10:50:00	58.2	60.8	UNDER	59.0	55.0
10:50:30	60.9	63.5	UNDER	62.0	58.0
10:51:00	60.1	63.6	UNDER	61.0	56.0
10:51:30	58.3	72.8	110.7	60.0	54.0

```
**********************************************************************
Filename..............PTC-42
Test Location.........1211 Robbie Drive
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 4618
REPORT PRINTED ON 03/13/14 at 14:50:25

User ID: _____________________________




LOGGING STARTED......03/06/14 at 10:35:30
TOTAL LOGGING TIME...0 DAYS 00:17:05
LOGGING STOPPED......03/06/14 at 10:52:35
TOTAL INTERVALS......35
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 06:55:41
PRE-TEST CALIBRATION RANGE...44.5 TO 144.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  61.3dB
Lav ( 80)......  44.5dB
Lav ( 90)......  44.5dB
SEL.............  91.3dB

TWA.............  46.9dB
TWA ( 80)......  44.5dB
TWA ( 90)......  44.5dB

Lmax............  70.4dB  03/06/14 at 10:49:28
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
10:35:30	60.3	62.6	UNDER	62.5	58.5
10:36:00	61.2	63.6	UNDER	63.5	58.5
10:36:30	61.3	65.0	UNDER	63.5	58.5
10:37:00	61.1	63.0	UNDER	62.5	57.5
10:37:30	59.5	61.0	UNDER	60.5	56.5
10:38:00	61.6	64.0	UNDER	63.5	58.5
10:38:30	62.8	66.2	UNDER	64.5	60.5
10:39:00	62.9	64.8	UNDER	64.5	59.5
10:39:30	60.1	61.9	UNDER	61.5	58.5
10:40:00	60.7	63.2	UNDER	61.5	58.5
10:40:30	62.7	65.3	UNDER	64.5	60.5
10:41:00	61.8	65.8	UNDER	64.5	59.5
10:41:30	58.6	62.5	UNDER	60.5	54.5
10:42:00	59.9	62.4	UNDER	61.5	57.5
10:42:30	59.5	61.5	UNDER	60.5	57.5
10:43:00	57.8	60.2	UNDER	59.5	55.5
10:43:30	56.3	59.2	UNDER	58.5	53.5
10:44:00	59.8	62.8	UNDER	62.5	56.5
10:44:30	59.4	61.0	UNDER	60.5	57.5
10:45:00	61.9	65.6	UNDER	64.5	57.5
10:45:30	62.9	66.0	UNDER	65.5	59.5
10:46:00	63.1	65.3	UNDER	64.5	61.5
10:46:30	60.6	63.2	UNDER	61.5	58.5
10:47:00	61.3	66.0	UNDER	62.5	58.5
10:47:30	59.4	61.5	UNDER	61.5	56.5
10:48:00	61.8	64.3	UNDER	63.5	60.5
10:48:30	62.2	64.7	UNDER	64.5	58.5
10:49:00	64.0	70.4	UNDER	65.5	58.5
10:49:30	61.0	66.0	UNDER	64.5	57.5
10:50:00	62.5	64.6	UNDER	63.5	60.5
10:50:30	62.9	65.0	UNDER	63.5	61.5
10:51:00	60.4	62.4	UNDER	62.5	57.5
10:51:30	62.2	65.8	UNDER	65.5	57.5
10:52:00	61.0	62.7	UNDER	62.5	58.5
10:52:30	62.5	63.1	UNDER	63.5	61.5

```
**********************************************************************
Filename..............PTC-41
Test Location..........1261 Robbie Drive
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3897
REPORT PRINTED ON 03/13/14 at 14:50:01

User ID: _____________________________




LOGGING STARTED......03/06/14 at 10:29:30
TOTAL LOGGING TIME...0 DAYS 00:19:17
LOGGING STOPPED......03/06/14 at 10:48:47
TOTAL INTERVALS......39
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 06:58:13
PRE-TEST CALIBRATION RANGE...40.3 TO 140.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  61.0dB
Lav ( 80).......  40.3dB
Lav ( 90).......  40.3dB
SEL.............  91.5dB

TWA.............  47.1dB
TWA ( 80).......  40.3dB
TWA ( 90).......  40.3dB

Lmax............  68.9dB  03/06/14 at 10:48:40
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
10:29:30	60.4	62.7	UNDER	62.3	56.3
10:30:00	60.8	62.2	UNDER	61.3	58.3
10:30:30	57.9	61.6	UNDER	60.3	50.3
10:31:00	59.9	64.0	UNDER	63.3	55.3
10:31:30	62.0	65.0	UNDER	63.3	60.3
10:32:00	63.4	66.8	UNDER	65.3	58.3
10:32:30	61.8	66.8	UNDER	64.3	56.3
10:33:00	63.6	67.8	UNDER	66.3	57.3
10:33:30	62.8	67.7	UNDER	64.3	58.3
10:34:00	63.2	66.0	UNDER	65.3	58.3
10:34:30	60.4	62.4	UNDER	61.3	58.3
10:35:00	59.4	63.2	UNDER	62.3	55.3
10:35:30	61.4	65.6	UNDER	64.3	57.3
10:36:00	60.7	62.7	UNDER	61.3	58.3
10:36:30	62.9	66.0	UNDER	64.3	59.3
10:37:00	59.7	62.2	UNDER	61.3	56.3
10:37:30	60.3	62.0	UNDER	61.3	57.3
10:38:00	59.9	61.6	UNDER	60.3	56.3
10:38:30	61.3	62.8	UNDER	62.3	60.3
10:39:00	62.9	64.4	UNDER	63.3	61.3
10:39:30	58.9	61.6	UNDER	60.3	57.3
10:40:00	59.4	61.2	UNDER	60.3	57.3
10:40:30	60.3	62.0	UNDER	61.3	58.3
10:41:00	62.2	65.2	UNDER	64.3	57.3
10:41:30	57.8	61.0	UNDER	60.3	54.3
10:42:00	58.3	60.9	UNDER	60.3	55.3
10:42:30	59.1	60.4	UNDER	60.3	57.3
10:43:00	58.1	60.4	UNDER	59.3	56.3
10:43:30	55.4	58.0	UNDER	57.3	51.3
10:44:00	58.0	63.6	UNDER	60.3	51.3
10:44:30	60.6	62.8	UNDER	62.3	58.3
10:45:00	60.3	64.8	UNDER	64.3	54.3
10:45:30	61.6	66.4	UNDER	65.3	58.3
10:46:00	62.6	66.0	UNDER	65.3	58.3
10:46:30	61.7	63.6	UNDER	63.3	59.3
10:47:00	61.7	65.6	UNDER	63.3	58.3
10:47:30	61.5	65.4	UNDER	64.3	57.3
10:48:00	59.7	62.3	UNDER	61.3	57.3
10:48:30	64.4	68.9	UNDER	66.3	59.3

```
*****************************************************************
Filename..............PTC-39A
Test Location..........10190 Kingsbury Lane
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
*****************************************************************

METROSONICS db-3080  V1.20  SERIAL # 5093
REPORT PRINTED ON 03/13/14 at 14:49:11

User ID: _____________________________




LOGGING STARTED......03/06/14 at 09:27:00
TOTAL LOGGING TIME...0 DAYS 00:13:03
LOGGING STOPPED......03/06/14 at 09:40:03
TOTAL INTERVALS......27
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:23:27
PRE-TEST CALIBRATION RANGE...39.0 TO 139.0 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  56.9dB
Lav ( 80).......  39.0dB
Lav ( 90).......  39.0dB
SEL.............  85.8dB

TWA.............  41.3dB
TWA ( 80).......  39.0dB
TWA ( 90).......  39.0dB

Lmax............  70.6dB  03/06/14 at 09:40:02
Lpk.............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
09:27:00	57.1	59.0	UNDER	58.0	54.0
09:27:29	54.0	56.4	UNDER	55.0	50.0
09:27:58	56.9	58.5	UNDER	58.0	54.0
09:28:27	51.8	56.1	UNDER	54.0	45.0
09:28:56	55.2	57.7	UNDER	57.0	51.0
09:29:25	56.7	59.2	UNDER	58.0	51.0
09:29:54	56.8	59.1	UNDER	58.0	53.0
09:30:23	57.1	60.4	UNDER	60.0	51.0
09:30:52	57.7	61.2	UNDER	60.0	54.0
09:31:21	56.0	60.5	UNDER	59.0	51.0
09:31:50	57.2	59.8	UNDER	59.0	52.0
09:32:19	59.7	61.4	UNDER	60.0	57.0
09:32:48	57.8	62.5	UNDER	61.0	52.0
09:33:17	57.8	60.8	UNDER	60.0	53.0
09:33:46	56.3	60.4	UNDER	59.0	50.0
09:34:15	59.6	62.2	UNDER	62.0	56.0
09:34:44	58.4	60.2	UNDER	59.0	55.0
09:35:13	54.3	56.6	UNDER	56.0	51.0
09:35:42	55.8	57.7	UNDER	57.0	52.0
09:36:11	58.1	60.6	UNDER	60.0	55.0
09:36:40	57.7	60.4	UNDER	59.0	54.0
09:37:09	57.5	60.4	UNDER	59.0	54.0
09:37:38	55.7	59.2	UNDER	58.0	47.0
09:38:07	54.0	56.9	UNDER	56.0	47.0
09:38:36	55.5	58.4	UNDER	57.0	51.0
09:39:05	55.9	58.4	UNDER	57.0	54.0
09:39:34	62.1	70.6	UNDER	65.0	58.0

```
**********************************************************************
Filename..............PTC-39-1
Test Location.........lot on Kingsbury Lane
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.
          Meter fell during run.
Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 03/21/14 at 12:23:26

User ID: _____________________________




LOGGING STARTED......03/06/14 at 09:21:30
TOTAL LOGGING TIME...0 DAYS 00:19:48
LOGGING STOPPED......03/06/14 at 09:41:18
TOTAL INTERVALS......40
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:26:59
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS.................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  78.4dB
Lav ( 80)......  78.4dB
Lav ( 90)......  78.3dB
SEL............. 109.1dB

TWA.............  64.6dB
TWA ( 80)......  64.6dB
TWA ( 90)......  64.5dB

Lmax............ 108.2dB  03/06/14 at 09:25:36
Lpk............. 138.4dB  03/06/14 at 09:25:36
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.28%
PROJ. DOSE (80).. 6.78%
DOSE (90)........ 0.27%
PROJ. DOSE (90).. 6.54%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
09:21:30	48.6	55.3	UNDER	50.5	46.5
09:22:00	49.7	56.2	UNDER	52.5	45.5
09:22:30	48.6	55.0	UNDER	51.5	44.5
09:23:00	52.2	61.0	UNDER	55.5	44.5
09:23:30	50.8	54.9	UNDER	52.5	46.5
09:24:00	54.1	61.0	UNDER	58.5	46.5
09:24:30	52.9	59.7	UNDER	55.5	47.5
09:25:00	49.1	53.4	UNDER	51.5	46.5
09:25:30	94.3	108.2	138.4	96.5	44.5
09:26:00	44.4	45.0	UNDER	44.5	43.5
09:26:30	44.0	44.5	UNDER	44.5	43.5
09:27:00	44.1	44.8	UNDER	44.5	43.5
09:27:30	44.0	44.6	UNDER	44.5	43.5
09:28:00	44.1	45.0	UNDER	44.5	43.5
09:28:30	44.3	45.2	UNDER	45.5	43.5
09:29:00	45.1	49.8	UNDER	47.5	43.5
09:29:30	44.3	45.3	UNDER	45.5	43.5
09:30:00	43.8	44.2	UNDER	44.5	43.5
09:30:30	44.3	45.6	UNDER	45.5	43.5
09:31:00	44.1	45.0	UNDER	44.5	43.5
09:31:30	44.4	45.0	UNDER	44.5	43.5
09:32:00	46.7	50.2	UNDER	48.5	44.5
09:32:30	49.0	52.1	UNDER	50.5	46.5
09:33:00	49.7	52.4	UNDER	51.5	48.5
09:33:30	48.7	49.8	UNDER	49.5	47.5
09:34:00	49.1	50.6	UNDER	49.5	47.5
09:34:30	48.3	49.0	UNDER	48.5	47.5
09:35:00	47.4	48.6	UNDER	48.5	46.5
09:35:30	45.7	47.0	UNDER	46.5	45.5
09:36:00	45.3	46.2	UNDER	45.5	44.5
09:36:30	44.6	45.0	UNDER	44.5	44.5
09:37:00	44.8	45.4	UNDER	45.5	44.5
09:37:30	44.2	44.9	UNDER	44.5	43.5
09:38:00	44.0	44.6	UNDER	44.5	43.5
09:38:30	43.9	44.2	UNDER	44.5	43.5
09:39:00	43.9	44.6	UNDER	44.5	43.5
09:39:30	44.3	45.2	UNDER	44.5	43.5
09:40:00	44.3	45.4	UNDER	45.5	43.5
09:40:30	66.2	78.7	113.1	71.5	44.5
09:41:00	70.7	78.6	UNDER	75.5	47.5

****

Filename.....PTC-37
Test Location.....150 Birchwood Way
Employee Name.....AJD, KJP
Employee Number.....
Department.....ENV
Short-term noise measurem
ents for PTC MP 57 to 67
reconstruction project.

Calibrator Type.....Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14

****

METROSONICS db-3080 V1.20 SERIAL # 5093
REPORT PRINTED ON 03/13/14 at 14:48:53

User ID: _____

LOGGING STARTED.....03/06/14 at 08:44:00
TOTAL LOGGING TIME...0 DAYS 00:18:11
LOGGING STOPPED.....03/06/14 at 09:02:11
TOTAL INTERVALS.....37
INTERVAL LENGTH.....00:00:30

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:23:27
PRE-TEST CALIBRATION RANGE...39.0 TO 139.0 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 49.6dB
Lav (80)..... 39.0dB
Lav (90)..... 39.0dB
SEL..... 79.9dB

TWA..... 39.0dB
TWA (80)..... 39.0dB
TWA (90)..... 39.0dB

Lmax..... 62.1dB 03/06/14 at 09:02:10
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
08:44:00	49.1	51.0	UNDER	50.0	46.0
08:44:30	48.9	50.1	UNDER	49.0	48.0
08:45:00	48.7	49.7	UNDER	49.0	47.0
08:45:30	48.2	50.2	UNDER	49.0	46.0
08:46:00	48.0	54.8	UNDER	49.0	46.0
08:46:30	51.0	56.8	UNDER	54.0	47.0
08:47:00	50.1	54.0	UNDER	53.0	47.0
08:47:30	52.3	58.1	UNDER	54.0	48.0
08:48:00	48.5	51.3	UNDER	50.0	46.0
08:48:30	50.8	56.8	UNDER	53.0	48.0
08:49:00	49.6	50.8	UNDER	50.0	48.0
08:49:30	49.9	52.0	UNDER	51.0	47.0
08:50:00	49.4	51.0	UNDER	50.0	47.0
08:50:30	49.3	50.5	UNDER	50.0	47.0
08:51:00	48.4	51.3	UNDER	50.0	46.0
08:51:30	48.8	54.1	UNDER	51.0	46.0
08:52:00	50.4	53.3	UNDER	52.0	46.0
08:52:30	48.4	50.4	UNDER	49.0	46.0
08:53:00	47.6	49.3	UNDER	48.0	46.0
08:53:30	48.4	50.5	UNDER	50.0	46.0
08:54:00	48.1	50.5	UNDER	49.0	45.0
08:54:30	49.5	52.4	UNDER	50.0	47.0
08:55:00	48.8	50.9	UNDER	50.0	45.0
08:55:30	46.0	47.8	UNDER	47.0	44.0
08:56:00	48.2	51.2	UNDER	50.0	45.0
08:56:30	53.9	57.8	UNDER	56.0	50.0
08:57:00	48.5	50.4	UNDER	50.0	47.0
08:57:30	49.0	51.3	UNDER	50.0	47.0
08:58:00	49.3	52.1	UNDER	50.0	47.0
08:58:30	48.7	50.8	UNDER	50.0	47.0
08:59:00	50.4	53.3	UNDER	52.0	48.0
08:59:30	50.7	55.7	UNDER	52.0	48.0
09:00:00	50.0	52.8	UNDER	51.0	47.0
09:00:30	47.3	49.7	UNDER	47.0	45.0
09:01:00	49.1	55.3	UNDER	50.0	46.0
09:01:30	50.9	55.7	UNDER	53.0	46.0
09:02:00	54.6	62.1	UNDER	60.0	50.0

```
**********************************************************************
Filename..............PTC-36
Test Location..........128 Birchwood Way
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 03/13/14 at 14:42:04

User ID: _____________________________




LOGGING STARTED......03/06/14 at 08:31:00
TOTAL LOGGING TIME...0 DAYS 00:25:51
LOGGING STOPPED......03/06/14 at 08:56:51
TOTAL INTERVALS......52
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/06/14 AT 07:26:59
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  65.3dB
Lav ( 80).......  40.5dB
Lav ( 90).......  40.5dB
SEL.............  97.1dB

TWA.............  52.7dB
TWA ( 80).......  40.5dB
TWA ( 90).......  40.5dB

Lmax............  77.4dB  03/06/14 at 08:31:00
Lpk.............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/06/14					
08:31:00	68.0	77.4	UNDER	73.5	55.5
08:31:30	64.6	68.2	UNDER	67.5	57.5
08:32:00	66.0	68.8	UNDER	68.5	62.5
08:32:30	65.5	69.0	UNDER	68.5	59.5
08:33:00	65.7	67.8	UNDER	67.5	62.5
08:33:30	62.1	65.0	UNDER	64.5	56.5
08:34:00	62.8	66.6	UNDER	65.5	57.5
08:34:30	65.1	67.4	UNDER	66.5	59.5
08:35:00	66.2	68.6	UNDER	67.5	62.5
08:35:30	64.2	68.0	UNDER	67.5	58.5
08:36:00	66.3	69.3	UNDER	67.5	63.5
08:36:30	68.6	71.7	UNDER	70.5	65.5
08:37:00	61.8	65.4	UNDER	63.5	57.5
08:37:30	68.1	70.3	UNDER	69.5	59.5
08:38:00	65.0	67.4	UNDER	67.5	61.5
08:38:30	66.1	68.5	UNDER	67.5	62.5
08:39:00	65.4	67.8	UNDER	67.5	59.5
08:39:30	65.8	70.2	UNDER	68.5	58.5
08:40:00	63.9	67.7	UNDER	65.5	59.5
08:40:30	64.1	67.4	UNDER	66.5	60.5
08:41:00	64.0	66.9	UNDER	66.5	60.5
08:41:30	62.4	65.8	UNDER	65.5	58.5
08:42:00	67.3	71.8	UNDER	71.5	57.5
08:42:30	65.6	68.4	UNDER	67.5	61.5
08:43:00	62.3	65.3	UNDER	64.5	59.5
08:43:30	61.9	63.8	UNDER	63.5	59.5
08:44:00	63.9	68.2	UNDER	66.5	59.5
08:44:30	65.1	68.4	UNDER	67.5	61.5
08:45:00	65.3	69.0	UNDER	67.5	61.5
08:45:30	62.3	67.3	UNDER	64.5	56.5
08:46:00	66.8	70.3	UNDER	69.5	61.5
08:46:30	64.0	65.8	UNDER	65.5	62.5
08:47:00	63.7	65.6	UNDER	65.5	61.5
08:47:30	66.0	69.8	UNDER	69.5	57.5
08:48:00	65.6	68.2	UNDER	67.5	61.5
08:48:30	65.1	69.8	UNDER	69.5	59.5
08:49:00	66.9	70.8	UNDER	69.5	63.5
08:49:30	68.4	72.7	UNDER	71.5	63.5
08:50:00	66.2	71.4	UNDER	68.5	62.5
08:50:30	65.6	68.2	UNDER	67.5	60.5
08:51:00	66.1	67.8	UNDER	67.5	60.5
08:51:30	63.0	65.8	UNDER	65.5	57.5
08:52:00	64.3	67.0	UNDER	66.5	59.5
08:52:30	64.1	66.6	UNDER	66.5	60.5
08:53:00	63.1	64.5	UNDER	64.5	60.5
08:53:30	65.5	69.6	UNDER	68.5	60.5
08:54:00	63.8	66.1	UNDER	65.5	59.5
08:54:30	64.6	69.0	UNDER	67.5	59.5
08:55:00	68.5	72.6	UNDER	70.5	64.5
08:55:30	62.1	65.0	UNDER	63.5	58.5
08:56:00	60.9	65.0	UNDER	64.5	54.5
08:56:30	65.9	70.4	UNDER	69.5	63.5

```
**********************************************************************
Filename..............PTC-36A
Test Location.........1272 Nike Site Road
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3897
REPORT PRINTED ON 03/06/14 at 06:37:33

User ID: _____________________________




LOGGING STARTED......03/05/14 at 14:24:00
TOTAL LOGGING TIME...0 DAYS 00:21:01
LOGGING STOPPED......03/05/14 at 14:45:01
TOTAL INTERVALS......43
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:56:49
PRE-TEST CALIBRATION RANGE...40.1 TO 140.1 dB
POST-TEST CALIBRATION TIME...03/06/14 AT 06:29:06
POST-TEST CALIBRATION RANGE...40.1 TO 140.1
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS.................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  62.3dB
Lav ( 80)......  40.1dB
Lav ( 90)......  40.1dB
SEL.............  93.2dB

TWA.............  48.7dB
TWA ( 80)......  40.1dB
TWA ( 90)......  40.1dB

Lmax............  74.2dB  03/05/14 at 14:41:44
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
14:24:00	61.7	70.6	UNDER	67.1	50.1
14:24:30	60.9	66.7	UNDER	65.1	55.1
14:25:00	58.0	60.2	UNDER	59.1	52.1
14:25:30	55.4	59.0	UNDER	57.1	51.1
14:26:00	62.1	69.0	UNDER	65.1	53.1
14:26:30	64.6	71.5	UNDER	69.1	50.1
14:27:00	56.2	59.8	UNDER	59.1	50.1
14:27:30	61.0	65.8	UNDER	64.1	54.1
14:28:00	63.5	67.4	UNDER	66.1	54.1
14:28:30	62.6	69.8	UNDER	67.1	53.1
14:29:00	60.8	66.6	UNDER	65.1	52.1
14:29:30	63.5	70.2	UNDER	67.1	55.1
14:30:00	61.5	66.6	UNDER	65.1	54.1
14:30:30	62.3	66.8	UNDER	66.1	52.1
14:31:00	60.3	68.3	UNDER	65.1	52.1
14:31:30	54.4	58.3	UNDER	56.1	51.1
14:32:00	65.2	74.2	UNDER	71.1	55.1
14:32:30	56.4	61.4	UNDER	58.1	50.1
14:33:00	61.2	65.7	UNDER	64.1	51.1
14:33:30	61.0	67.0	UNDER	64.1	52.1
14:34:00	60.3	67.8	UNDER	66.1	50.1
14:34:30	62.9	68.2	UNDER	67.1	54.1
14:35:00	59.6	66.6	UNDER	65.1	50.1
14:35:30	64.9	68.2	UNDER	67.1	59.1
14:36:00	59.1	61.0	UNDER	60.1	55.1
14:36:30	60.2	67.4	UNDER	65.1	49.1
14:37:00	60.4	67.5	UNDER	66.1	51.1
14:37:30	60.4	67.0	UNDER	65.1	52.1
14:38:00	65.6	73.4	UNDER	71.1	51.1
14:38:30	62.4	67.8	UNDER	66.1	50.1
14:39:00	66.2	73.8	UNDER	72.1	53.1
14:39:30	59.2	63.4	UNDER	62.1	53.1
14:40:00	64.8	70.6	UNDER	69.1	53.1
14:40:30	60.4	66.2	UNDER	65.1	53.1
14:41:00	61.8	70.6	UNDER	65.1	52.1
14:41:30	66.3	74.2	UNDER	71.1	54.1
14:42:00	61.1	68.0	UNDER	65.1	50.1
14:42:30	63.2	71.7	UNDER	70.1	53.1
14:43:00	64.9	69.8	UNDER	68.1	56.1
14:43:30	64.1	69.0	UNDER	67.1	55.1
14:44:00	61.2	69.8	UNDER	64.1	54.1
14:44:30	59.5	68.4	UNDER	62.1	52.1
14:45:00	69.2	71.8	UNDER	71.1	58.1

****

Filename.....PTC-35
Test Location.....212 Durst Road
Employee Name.....AJD, KJP
Employee Number.....
Department.....ENV
Short-term noise measurem
ents for PTC MP 57 to 67
reconstruction project.

Calibrator Type.....Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14

****

METROSONICS db-3080 V1.20 SERIAL # 5093
REPORT PRINTED ON 03/06/14 at 06:37:27

User ID: _____

LOGGING STARTED.....03/05/14 at 14:08:30
TOTAL LOGGING TIME...0 DAYS 00:28:33
LOGGING STOPPED.....03/05/14 at 14:37:03
TOTAL INTERVALS.....58
INTERVAL LENGTH.....00:00:30

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:55:38
PRE-TEST CALIBRATION RANGE...39.3 TO 139.3 dB
POST-TEST CALIBRATION TIME...03/06/14 AT 06:24:14
POST-TEST CALIBRATION RANGE...39.1 TO 139.1
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 59.0dB
Lav (80)..... 39.3dB
Lav (90)..... 39.3dB
SEL..... 91.2dB

TWA..... 46.8dB
TWA (80)..... 39.3dB
TWA (90)..... 39.3dB

Lmax..... 73.9dB 03/05/14 at 14:37:02
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
14:08:30	58.5	63.3	UNDER	61.3	55.3
14:09:00	57.4	59.8	UNDER	59.3	54.3
14:09:30	58.5	61.2	UNDER	60.3	52.3
14:10:00	58.8	62.8	UNDER	61.3	54.3
14:10:30	57.3	60.5	UNDER	59.3	53.3
14:11:00	58.5	61.7	UNDER	61.3	53.3
14:11:30	58.5	61.1	UNDER	60.3	54.3
14:12:00	60.1	64.3	UNDER	63.3	55.3
14:12:30	59.8	64.8	UNDER	63.3	51.3
14:13:00	56.8	62.1	UNDER	60.3	50.3
14:13:30	58.4	60.2	UNDER	59.3	51.3
14:14:00	59.2	61.7	UNDER	61.3	54.3
14:14:30	59.9	63.2	UNDER	61.3	57.3
14:15:00	58.9	63.6	UNDER	62.3	51.3
14:15:30	61.5	65.5	UNDER	64.3	55.3
14:16:00	58.0	62.3	UNDER	59.3	55.3
14:16:30	61.9	65.6	UNDER	65.3	53.3
14:17:00	61.0	65.9	UNDER	64.3	53.3
14:17:30	59.5	63.5	UNDER	62.3	49.3
14:18:00	58.6	62.4	UNDER	61.3	48.3
14:18:30	58.7	61.4	UNDER	60.3	55.3
14:19:00	58.9	61.6	UNDER	61.3	55.3
14:19:30	61.7	66.7	UNDER	64.3	56.3
14:20:00	62.1	64.8	UNDER	64.3	58.3
14:20:30	57.6	62.4	UNDER	60.3	52.3
14:21:00	60.3	63.5	UNDER	62.3	55.3
14:21:30	60.4	63.5	UNDER	62.3	56.3
14:22:00	57.3	61.9	UNDER	59.3	53.3
14:22:30	57.0	61.1	UNDER	59.3	53.3
14:23:00	59.8	62.4	UNDER	61.3	55.3
14:23:30	58.0	60.7	UNDER	60.3	54.3
14:24:00	59.5	63.6	UNDER	62.3	51.3
14:24:30	59.2	62.1	UNDER	60.3	55.3
14:25:00	58.3	61.1	UNDER	60.3	55.3
14:25:30	58.4	60.4	UNDER	59.3	56.3
14:26:00	59.8	62.7	UNDER	61.3	56.3
14:26:30	60.1	61.7	UNDER	61.3	55.3
14:27:00	57.9	61.6	UNDER	61.3	54.3
14:27:30	56.7	60.3	UNDER	59.3	50.3
14:28:00	56.2	60.4	UNDER	59.3	51.3
14:28:30	59.9	63.9	UNDER	63.3	55.3
14:29:00	55.8	61.6	UNDER	59.3	51.3
14:29:30	59.3	62.1	UNDER	61.3	55.3
14:30:00	56.1	59.1	UNDER	58.3	51.3
14:30:30	59.5	62.2	UNDER	61.3	54.3
14:31:00	58.8	61.9	UNDER	61.3	55.3
14:31:30	55.1	58.4	UNDER	57.3	52.3
14:32:00	58.1	60.4	UNDER	59.3	54.3
14:32:30	59.2	60.6	UNDER	60.3	57.3
14:33:00	54.5	58.9	UNDER	57.3	45.3
14:33:30	59.4	63.9	UNDER	63.3	46.3

14:34:00	56.9	60.1	UNDER	59.3	51.3
14:34:30	57.7	61.3	UNDER	60.3	54.3
14:35:00	56.1	58.3	UNDER	57.3	53.3
14:35:30	60.1	62.7	UNDER	61.3	56.3
14:36:00	60.3	62.3	UNDER	61.3	57.3
14:36:30	59.1	62.4	UNDER	60.3	55.3
14:37:00	68.0	73.9	UNDER	72.3	58.3

```
**********************************************************************
Filename..............PTC-34
Test Location.........??? Nike Site Road
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 03/06/14 at 06:37:22

User ID: _____________________________




LOGGING STARTED......03/05/14 at 14:00:00
TOTAL LOGGING TIME...0 DAYS 00:38:18
LOGGING STOPPED......03/05/14 at 14:38:18
TOTAL INTERVALS......77
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:54:28
PRE-TEST CALIBRATION RANGE...40.3 TO 140.3 dB
POST-TEST CALIBRATION TIME...03/06/14 AT 06:00:47
POST-TEST CALIBRATION RANGE...40.3 TO 140.3
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS.................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  65.8dB
Lav ( 80)......  40.3dB
Lav ( 90)......  40.3dB
SEL.............  99.3dB

TWA.............  54.8dB
TWA ( 80)......  40.3dB
TWA ( 90)......  40.3dB

Lmax............  80.0dB  03/05/14 at 14:00:17
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
14:00:00	70.4	80.0	UNDER	73.3	60.3
14:00:30	61.0	63.6	UNDER	62.3	57.3
14:01:00	64.0	72.0	UNDER	68.3	57.3
14:01:30	66.8	73.6	UNDER	71.3	59.3
14:02:00	60.4	66.0	UNDER	63.3	55.3
14:02:30	67.8	76.1	UNDER	72.3	58.3
14:03:00	64.9	73.6	UNDER	69.3	57.3
14:03:30	63.7	72.8	UNDER	68.3	56.3
14:04:00	64.0	72.8	UNDER	69.3	56.3
14:04:30	64.0	71.7	UNDER	68.3	56.3
14:05:00	60.8	64.6	UNDER	63.3	55.3
14:05:30	61.3	64.0	UNDER	63.3	58.3
14:06:00	61.3	64.0	UNDER	63.3	58.3
14:06:30	66.3	73.6	UNDER	71.3	60.3
14:07:00	67.7	76.5	UNDER	72.3	56.3
14:07:30	61.7	63.6	UNDER	62.3	60.3
14:08:00	65.1	72.8	UNDER	68.3	60.3
14:08:30	66.8	74.8	UNDER	72.3	57.3
14:09:00	66.0	73.5	UNDER	70.3	56.3
14:09:30	67.3	76.4	UNDER	72.3	55.3
14:10:00	64.5	71.2	UNDER	69.3	56.3
14:10:30	64.4	72.2	UNDER	69.3	55.3
14:11:00	68.9	76.3	UNDER	74.3	60.3
14:11:30	61.9	68.4	UNDER	63.3	59.3
14:12:00	65.2	71.2	UNDER	67.3	58.3
14:12:30	61.2	65.2	UNDER	64.3	57.3
14:13:00	58.3	60.3	UNDER	59.3	55.3
14:13:30	64.7	70.8	UNDER	69.3	58.3
14:14:00	67.7	75.6	UNDER	73.3	54.3
14:14:30	69.0	76.0	UNDER	73.3	62.3
14:15:00	70.5	78.5	UNDER	73.3	58.3
14:15:30	64.0	68.9	UNDER	67.3	54.3
14:16:00	67.7	73.2	UNDER	72.3	55.3
14:16:30	66.8	73.9	UNDER	71.3	57.3
14:17:00	63.7	70.0	UNDER	66.3	58.3
14:17:30	65.9	72.0	UNDER	70.3	56.3
14:18:00	66.9	72.8	UNDER	70.3	59.3
14:18:30	65.0	72.4	UNDER	69.3	57.3
14:19:00	66.6	73.2	UNDER	71.3	57.3
14:19:30	65.6	72.4	UNDER	69.3	60.3
14:20:00	62.4	64.2	UNDER	63.3	59.3
14:20:30	65.2	74.1	UNDER	69.3	59.3
14:21:00	66.8	74.9	UNDER	71.3	58.3
14:21:30	70.1	75.2	UNDER	74.3	62.3
14:22:00	60.1	68.4	UNDER	61.3	54.3
14:22:30	67.7	72.8	UNDER	72.3	60.3
14:23:00	65.9	75.0	UNDER	70.3	59.3
14:23:30	67.0	73.2	UNDER	71.3	60.3
14:24:00	68.4	75.4	UNDER	71.3	60.3
14:24:30	65.1	71.6	UNDER	69.3	55.3
14:25:00	58.4	60.8	UNDER	60.3	53.3

14:25:30	62.3	65.1	UNDER	64.3	59.3
14:26:00	64.1	72.4	UNDER	68.3	57.3
14:26:30	66.7	74.0	UNDER	72.3	56.3
14:27:00	65.3	72.8	UNDER	70.3	58.3
14:27:30	58.1	62.9	UNDER	59.3	56.3
14:28:00	63.3	70.8	UNDER	68.3	53.3
14:28:30	67.9	73.4	UNDER	72.3	59.3
14:29:00	65.9	73.2	UNDER	71.3	58.3
14:29:30	64.8	72.7	UNDER	70.3	56.3
14:30:00	67.1	74.8	UNDER	72.3	56.3
14:30:30	64.3	72.4	UNDER	67.3	57.3
14:31:00	65.9	72.9	UNDER	70.3	53.3
14:31:30	63.3	71.1	UNDER	68.3	54.3
14:32:00	67.8	78.2	UNDER	72.3	59.3
14:32:30	62.0	64.4	UNDER	63.3	59.3
14:33:00	59.3	62.2	UNDER	61.3	55.3
14:33:30	62.9	71.6	UNDER	67.3	52.3
14:34:00	67.5	73.6	UNDER	70.3	57.3
14:34:30	62.6	70.4	UNDER	66.3	57.3
14:35:00	68.1	73.1	UNDER	71.3	57.3
14:35:30	62.4	67.9	UNDER	64.3	57.3
14:36:00	65.5	70.8	UNDER	68.3	63.3
14:36:30	66.6	72.4	UNDER	71.3	58.3
14:37:00	67.3	73.2	UNDER	71.3	60.3
14:37:30	67.0	75.6	UNDER	70.3	58.3
14:38:00	64.2	67.2	UNDER	65.3	62.3

```
**********************************************************************
Filename..............PTC-33
Test Location.........??? Lafayette Circle
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 5093
REPORT PRINTED ON 03/06/14 at 06:37:17

User ID: _____________________________




LOGGING STARTED......03/05/14 at 12:44:30
TOTAL LOGGING TIME...0 DAYS 00:35:50
LOGGING STOPPED......03/05/14 at 13:20:20
TOTAL INTERVALS......72
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:55:38
PRE-TEST CALIBRATION RANGE...39.3 TO 139.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  67.0dB
Lav ( 80)......  55.2dB
Lav ( 90)......  39.3dB
SEL............. 100.2dB

TWA.............  55.8dB
TWA ( 80)......  43.9dB
TWA ( 90)......  39.3dB

Lmax............  84.8dB  03/05/14 at 12:46:36
Lpk............. 115.6dB  03/05/14 at 12:46:36
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
12:44:30	66.6	72.7	UNDER	70.3	60.3
12:45:00	70.3	80.7	UNDER	74.3	57.3
12:45:30	68.4	75.1	UNDER	72.3	61.3
12:46:00	68.5	76.3	UNDER	72.3	59.3
12:46:30	74.6	84.8	115.6	77.3	64.3
12:47:00	69.6	77.9	UNDER	73.3	61.3
12:47:30	66.4	73.9	UNDER	70.3	58.3
12:48:00	66.4	74.8	UNDER	69.3	56.3
12:48:30	64.1	73.9	UNDER	68.3	53.3
12:49:00	62.8	71.5	UNDER	67.3	55.3
12:49:30	67.3	73.6	UNDER	72.3	58.3
12:50:00	63.3	71.7	UNDER	65.3	57.3
12:50:30	65.9	74.0	UNDER	68.3	58.3
12:51:00	66.9	76.2	UNDER	72.3	55.3
12:51:30	65.4	73.8	UNDER	69.3	56.3
12:52:00	60.7	65.1	UNDER	64.3	51.3
12:52:30	68.2	76.6	UNDER	73.3	57.3
12:53:00	64.6	72.9	UNDER	69.3	51.3
12:53:30	70.3	79.4	UNDER	74.3	59.3
12:54:00	66.7	73.2	UNDER	70.3	59.3
12:54:30	65.5	73.2	UNDER	69.3	58.3
12:55:00	62.3	64.4	UNDER	63.3	59.3
12:55:30	61.7	65.2	UNDER	64.3	57.3
12:56:00	64.1	68.9	UNDER	67.3	58.3
12:56:30	69.1	76.6	UNDER	73.3	57.3
12:57:00	69.6	77.0	UNDER	75.3	54.3
12:57:30	65.9	74.7	UNDER	70.3	56.3
12:58:00	72.4	82.4	UNDER	77.3	59.3
12:58:30	64.2	73.6	UNDER	66.3	57.3
12:59:00	67.3	75.6	UNDER	69.3	60.3
12:59:30	70.3	77.2	UNDER	74.3	57.3
13:00:00	65.1	74.4	UNDER	69.3	53.3
13:00:30	59.3	62.1	UNDER	61.3	52.3
13:01:00	68.4	75.6	UNDER	73.3	56.3
13:01:30	64.2	68.8	UNDER	67.3	56.3
13:02:00	60.0	65.2	UNDER	64.3	54.3
13:02:30	65.2	69.0	UNDER	67.3	59.3
13:03:00	65.8	75.6	UNDER	71.3	53.3
13:03:30	68.8	77.2	UNDER	73.3	59.3
13:04:00	63.4	72.3	UNDER	68.3	53.3
13:04:30	62.1	66.9	UNDER	66.3	54.3
13:05:00	63.3	68.0	UNDER	66.3	57.3
13:05:30	59.7	62.9	UNDER	62.3	55.3
13:06:00	65.3	72.3	UNDER	69.3	54.3
13:06:30	66.0	73.9	UNDER	69.3	55.3
13:07:00	66.3	75.2	UNDER	70.3	54.3
13:07:30	61.0	67.1	UNDER	64.3	56.3
13:08:00	63.9	73.7	UNDER	67.3	54.3
13:08:30	67.5	75.2	UNDER	72.3	55.3
13:09:00	67.1	73.6	UNDER	70.3	57.3
13:09:30	67.0	75.2	UNDER	72.3	54.3
13:10:00	68.4	77.1	UNDER	72.3	58.3

13:10:30	66.1	74.8	UNDER	70.3	56.3
13:11:00	69.6	76.9	UNDER	74.3	55.3
13:11:30	68.9	76.0	UNDER	73.3	59.3
13:12:00	65.4	74.3	UNDER	69.3	55.3
13:12:30	67.7	76.2	UNDER	72.3	56.3
13:13:00	64.8	73.2	UNDER	68.3	56.3
13:13:30	65.9	75.5	UNDER	70.3	52.3
13:14:00	67.5	74.8	UNDER	71.3	52.3
13:14:30	64.8	74.6	UNDER	69.3	53.3
13:15:00	68.9	76.4	UNDER	74.3	60.3
13:15:30	58.8	64.2	UNDER	63.3	49.3
13:16:00	60.8	68.3	UNDER	63.3	54.3
13:16:30	71.1	77.1	UNDER	76.3	56.3
13:17:00	66.1	74.2	UNDER	69.3	56.3
13:17:30	59.0	64.8	UNDER	63.3	50.3
13:18:00	65.4	72.4	UNDER	70.3	55.3
13:18:30	64.9	74.0	UNDER	69.3	51.3
13:19:00	64.2	68.6	UNDER	68.3	58.3
13:19:30	69.0	76.4	UNDER	73.3	57.3
13:20:00	66.9	74.7	UNDER	72.3	55.3

****

Filename.....PTC-32
Test Location.....4006 Route 130
Employee Name.....AJD, KJP
Employee Number.....
Department.....ENV
Short-term noise measurem
ents for PTC MP 57 to 67
reconstruction project.

Calibrator Type.....Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14

****

METROSONICS db-3080 V1.12 SERIAL # 3895
REPORT PRINTED ON 03/06/14 at 06:37:11

User ID: _____

LOGGING STARTED.....03/05/14 at 12:37:00
TOTAL LOGGING TIME...0 DAYS 00:47:30
LOGGING STOPPED.....03/05/14 at 13:24:30
TOTAL INTERVALS.....95
INTERVAL LENGTH.....00:00:30

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:54:28
PRE-TEST CALIBRATION RANGE...40.3 TO 140.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 62.4dB
Lav (80)..... 40.3dB
Lav (90)..... 40.3dB
SEL..... 96.8dB

TWA..... 52.4dB
TWA (80)..... 40.3dB
TWA (90)..... 40.3dB

Lmax..... 74.4dB 03/05/14 at 13:22:56
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
12:37:00	62.3	67.6	UNDER	65.3	56.3
12:37:30	61.0	63.8	UNDER	63.3	56.3
12:38:00	63.0	66.4	UNDER	65.3	57.3
12:38:30	63.1	66.7	UNDER	66.3	60.3
12:39:00	64.6	67.2	UNDER	66.3	59.3
12:39:30	61.7	64.0	UNDER	63.3	58.3
12:40:00	61.7	65.0	UNDER	63.3	57.3
12:40:30	61.0	62.8	UNDER	62.3	58.3
12:41:00	63.1	65.2	UNDER	64.3	60.3
12:41:30	63.1	66.0	UNDER	65.3	59.3
12:42:00	61.9	65.6	UNDER	64.3	56.3
12:42:30	61.1	63.6	UNDER	63.3	57.3
12:43:00	61.6	65.2	UNDER	64.3	57.3
12:43:30	62.6	66.4	UNDER	65.3	56.3
12:44:00	63.2	65.9	UNDER	65.3	59.3
12:44:30	63.8	66.5	UNDER	65.3	60.3
12:45:00	62.8	66.4	UNDER	65.3	60.3
12:45:30	62.1	64.0	UNDER	63.3	59.3
12:46:00	61.2	63.2	UNDER	62.3	58.3
12:46:30	63.6	66.0	UNDER	65.3	60.3
12:47:00	61.8	64.0	UNDER	63.3	57.3
12:47:30	63.1	65.9	UNDER	65.3	58.3
12:48:00	62.7	65.2	UNDER	64.3	60.3
12:48:30	60.1	63.2	UNDER	62.3	57.3
12:49:00	61.3	64.0	UNDER	63.3	58.3
12:49:30	62.0	64.5	UNDER	64.3	58.3
12:50:00	60.8	63.6	UNDER	62.3	56.3
12:50:30	62.4	65.6	UNDER	63.3	59.3
12:51:00	67.4	73.2	UNDER	72.3	57.3
12:51:30	59.8	63.2	UNDER	61.3	56.3
12:52:00	61.1	63.6	UNDER	63.3	58.3
12:52:30	59.7	62.5	UNDER	61.3	55.3
12:53:00	59.9	62.6	UNDER	61.3	57.3
12:53:30	62.0	64.8	UNDER	64.3	56.3
12:54:00	63.6	65.5	UNDER	65.3	59.3
12:54:30	61.6	64.2	UNDER	64.3	58.3
12:55:00	61.4	64.0	UNDER	63.3	58.3
12:55:30	62.1	64.4	UNDER	63.3	59.3
12:56:00	62.1	65.8	UNDER	65.3	58.3
12:56:30	62.3	64.8	UNDER	64.3	59.3
12:57:00	62.6	65.2	UNDER	64.3	60.3
12:57:30	62.1	65.6	UNDER	64.3	57.3
12:58:00	64.9	68.0	UNDER	67.3	61.3
12:58:30	62.8	66.8	UNDER	65.3	58.3
12:59:00	64.6	70.0	UNDER	68.3	57.3
12:59:30	60.8	64.4	UNDER	63.3	56.3
13:00:00	60.5	62.4	UNDER	62.3	56.3
13:00:30	60.1	63.1	UNDER	62.3	56.3
13:01:00	63.1	64.4	UNDER	64.3	60.3
13:01:30	63.5	65.6	UNDER	65.3	60.3
13:02:00	63.1	65.2	UNDER	64.3	60.3
13:02:30	62.5	66.0	UNDER	65.3	54.3

13:03:00	63.4	66.4	UNDER	65.3	55.3
13:03:30	59.9	61.6	UNDER	61.3	55.3
13:04:00	60.7	64.2	UNDER	63.3	58.3
13:04:30	60.3	64.8	UNDER	63.3	54.3
13:05:00	63.3	65.5	UNDER	64.3	60.3
13:05:30	60.6	64.4	UNDER	63.3	57.3
13:06:00	64.0	66.9	UNDER	66.3	57.3
13:06:30	61.4	64.5	UNDER	63.3	58.3
13:07:00	61.3	65.2	UNDER	63.3	56.3
13:07:30	63.8	65.7	UNDER	65.3	59.3
13:08:00	59.7	62.4	UNDER	62.3	54.3
13:08:30	61.2	64.4	UNDER	64.3	54.3
13:09:00	60.0	64.8	UNDER	63.3	54.3
13:09:30	60.7	64.6	UNDER	64.3	57.3
13:10:00	60.7	62.8	UNDER	62.3	56.3
13:10:30	62.3	65.5	UNDER	64.3	58.3
13:11:00	62.5	64.8	UNDER	64.3	58.3
13:11:30	60.7	65.2	UNDER	64.3	56.3
13:12:00	61.6	64.4	UNDER	62.3	58.3
13:12:30	61.4	65.2	UNDER	64.3	56.3
13:13:00	61.8	65.6	UNDER	64.3	57.3
13:13:30	58.4	61.2	UNDER	60.3	55.3
13:14:00	61.7	65.2	UNDER	64.3	55.3
13:14:30	61.0	65.2	UNDER	64.3	56.3
13:15:00	62.2	65.2	UNDER	64.3	58.3
13:15:30	58.4	61.6	UNDER	60.3	53.3
13:16:00	58.7	62.0	UNDER	62.3	54.3
13:16:30	62.7	65.6	UNDER	64.3	59.3
13:17:00	61.2	65.6	UNDER	64.3	55.3
13:17:30	60.7	63.1	UNDER	62.3	52.3
13:18:00	60.0	63.6	UNDER	62.3	52.3
13:18:30	61.3	66.0	UNDER	65.3	55.3
13:19:00	62.0	64.8	UNDER	64.3	59.3
13:19:30	63.6	65.9	UNDER	65.3	60.3
13:20:00	62.9	65.2	UNDER	64.3	57.3
13:20:30	60.4	63.6	UNDER	61.3	58.3
13:21:00	64.0	70.8	UNDER	65.3	59.3
13:21:30	65.5	73.2	UNDER	70.3	58.3
13:22:00	61.5	65.6	UNDER	64.3	59.3
13:22:30	66.3	74.4	UNDER	71.3	58.3
13:23:00	65.0	70.0	UNDER	68.3	60.3
13:23:30	63.3	68.0	UNDER	65.3	60.3
13:24:00	65.5	68.8	UNDER	68.3	59.3

****

Filename.....PTC-30
Test Location.....1034 Sandy Hill Road
Employee Name.....AJD, KJP
Employee Number.....
Department.....ENV
Short-term noise measurem
ents for PTC MP 57 to 67
reconstruction project.

Calibrator Type.....Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14

****

METROSONICS db-3080 V1.20 SERIAL # 4618
REPORT PRINTED ON 03/06/14 at 06:48:41

User ID: _____

LOGGING STARTED.....03/05/14 at 13:04:30
TOTAL LOGGING TIME...0 DAYS 00:27:41
LOGGING STOPPED.....03/05/14 at 13:32:11
TOTAL INTERVALS.....56
INTERVAL LENGTH.....00:00:30

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:57:55
PRE-TEST CALIBRATION RANGE...45.7 TO 145.7 dB
POST-TEST CALIBRATION TIME...03/06/14 AT 06:40:52
POST-TEST CALIBRATION RANGE...45.4 TO 145.4
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 65.4dB
Lav (80)..... 45.7dB
Lav (90)..... 45.7dB
SEL..... 97.5dB

TWA..... 53.1dB
TWA (80)..... 45.7dB
TWA (90)..... 45.7dB

Lmax..... 76.0dB 03/05/14 at 13:25:49
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
13:04:30	65.4	68.9	UNDER	67.7	61.7
13:05:00	67.4	71.4	UNDER	70.7	60.7
13:05:30	64.2	68.7	UNDER	65.7	61.7
13:06:00	66.4	69.7	UNDER	69.7	63.7
13:06:30	68.7	72.1	UNDER	71.7	60.7
13:07:00	62.4	65.0	UNDER	64.7	57.7
13:07:30	61.5	66.4	UNDER	65.7	54.7
13:08:00	64.8	70.0	UNDER	69.7	54.7
13:08:30	63.7	68.8	UNDER	68.7	55.7
13:09:00	63.1	66.2	UNDER	65.7	59.7
13:09:30	66.7	70.6	UNDER	69.7	59.7
13:10:00	66.3	70.0	UNDER	69.7	60.7
13:10:30	62.3	70.3	UNDER	65.7	56.7
13:11:00	66.6	71.2	UNDER	69.7	62.7
13:11:30	63.2	69.8	UNDER	69.7	56.7
13:12:00	65.0	69.8	UNDER	68.7	58.7
13:12:30	61.9	65.1	UNDER	64.7	56.7
13:13:00	65.1	69.7	UNDER	69.7	60.7
13:13:30	65.0	70.4	UNDER	69.7	58.7
13:14:00	62.8	67.5	UNDER	66.7	58.7
13:14:30	64.1	67.2	UNDER	66.7	59.7
13:15:00	61.1	65.5	UNDER	64.7	55.7
13:15:30	67.1	70.6	UNDER	70.7	59.7
13:16:00	67.1	72.5	UNDER	71.7	62.7
13:16:30	65.1	68.5	UNDER	68.7	53.7
13:17:00	64.0	67.5	UNDER	66.7	52.7
13:17:30	60.6	63.2	UNDER	62.7	56.7
13:18:00	62.6	66.7	UNDER	65.7	54.7
13:18:30	66.4	68.0	UNDER	67.7	64.7
13:19:00	66.8	71.4	UNDER	69.7	63.7
13:19:30	61.3	69.0	UNDER	63.7	54.7
13:20:00	60.6	64.0	UNDER	62.7	58.7
13:20:30	65.3	68.1	UNDER	67.7	58.7
13:21:00	65.1	69.7	UNDER	69.7	58.7
13:21:30	66.0	67.5	UNDER	67.7	63.7
13:22:00	67.5	71.0	UNDER	70.7	63.7
13:22:30	62.2	67.1	UNDER	64.7	55.7
13:23:00	68.6	71.6	UNDER	71.7	64.7
13:23:30	64.0	68.3	UNDER	66.7	61.7
13:24:00	65.0	71.4	UNDER	69.7	59.7
13:24:30	65.0	70.3	UNDER	68.7	56.7
13:25:00	66.1	71.0	UNDER	70.7	58.7
13:25:30	70.2	76.0	UNDER	75.7	60.7
13:26:00	60.8	63.4	UNDER	62.7	57.7
13:26:30	67.1	72.1	UNDER	70.7	61.7
13:27:00	68.5	72.9	UNDER	72.7	61.7
13:27:30	64.3	67.4	UNDER	66.7	59.7
13:28:00	66.2	70.6	UNDER	69.7	59.7
13:28:30	64.1	68.5	UNDER	67.7	57.7
13:29:00	65.1	68.6	UNDER	67.7	60.7
13:29:30	65.2	69.2	UNDER	68.7	61.7

13:30:00	65.1	69.2	UNDER	68.7	61.7
13:30:30	64.7	68.3	UNDER	67.7	56.7
13:31:00	65.5	69.1	UNDER	68.7	58.7
13:31:30	66.9	70.0	UNDER	69.7	62.7
13:32:00	65.7	67.7	UNDER	67.7	63.7

****

Filename.....PTC-29
Test Location.....1017 Sandy Hill Road
Employee Name.....AJD, KJP
Employee Number.....
Department.....ENV
Short-term noise measurem
ents for PTC MP 57 to 67
reconstruction project.

Calibrator Type.....Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14

****

METROSONICS db-3080 V1.12 SERIAL # 3897
REPORT PRINTED ON 03/06/14 at 06:36:58

User ID: _____

LOGGING STARTED.....03/05/14 at 12:56:30
TOTAL LOGGING TIME...0 DAYS 00:27:01
LOGGING STOPPED.....03/05/14 at 13:23:31
TOTAL INTERVALS.....55
INTERVAL LENGTH.....00:00:30

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:56:49
PRE-TEST CALIBRATION RANGE...40.1 TO 140.1 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 61.7dB
Lav (80)..... 40.1dB
Lav (90)..... 40.1dB
SEL..... 93.7dB

TWA..... 49.3dB
TWA (80)..... 40.1dB
TWA (90)..... 40.1dB

Lmax..... 75.8dB 03/05/14 at 13:14:14
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
12:56:30	63.3	69.3	UNDER	66.1	54.1
12:57:00	63.0	68.6	UNDER	66.1	56.1
12:57:30	63.3	68.6	UNDER	66.1	55.1
12:58:00	59.4	66.2	UNDER	61.1	55.1
12:58:30	60.3	65.4	UNDER	64.1	53.1
12:59:00	64.1	71.0	UNDER	67.1	54.1
12:59:30	59.8	65.8	UNDER	64.1	53.1
13:00:00	61.0	66.6	UNDER	65.1	52.1
13:00:30	59.7	66.2	UNDER	64.1	53.1
13:01:00	63.5	73.1	UNDER	67.1	53.1
13:01:30	61.4	67.1	UNDER	66.1	54.1
13:02:00	62.3	68.6	UNDER	66.1	56.1
13:02:30	61.3	68.2	UNDER	65.1	53.1
13:03:00	62.2	67.3	UNDER	66.1	53.1
13:03:30	60.2	67.2	UNDER	63.1	54.1
13:04:00	61.8	69.6	UNDER	67.1	52.1
13:04:30	56.7	59.6	UNDER	58.1	51.1
13:05:00	54.9	57.4	UNDER	56.1	53.1
13:05:30	64.2	70.6	UNDER	68.1	54.1
13:06:00	61.1	69.4	UNDER	66.1	54.1
13:06:30	55.2	58.2	UNDER	56.1	53.1
13:07:00	62.2	68.6	UNDER	66.1	55.1
13:07:30	56.4	65.2	UNDER	57.1	52.1
13:08:00	53.0	54.6	UNDER	54.1	51.1
13:08:30	58.4	64.0	UNDER	61.1	53.1
13:09:00	60.2	65.3	UNDER	64.1	53.1
13:09:30	68.1	71.0	UNDER	69.1	61.1
13:10:00	62.4	67.4	UNDER	65.1	54.1
13:10:30	60.7	67.8	UNDER	65.1	53.1
13:11:00	61.3	69.4	UNDER	67.1	52.1
13:11:30	61.6	67.1	UNDER	66.1	53.1
13:12:00	61.8	66.9	UNDER	65.1	52.1
13:12:30	56.5	63.8	UNDER	60.1	50.1
13:13:00	60.5	68.4	UNDER	65.1	49.1
13:13:30	59.8	67.0	UNDER	65.1	51.1
13:14:00	67.9	75.8	UNDER	73.1	55.1
13:14:30	63.9	69.4	UNDER	68.1	54.1
13:15:00	53.0	59.0	UNDER	54.1	50.1
13:15:30	62.9	67.5	UNDER	66.1	49.1
13:16:00	61.7	68.2	UNDER	65.1	54.1
13:16:30	61.4	68.0	UNDER	67.1	50.1
13:17:00	59.6	66.2	UNDER	64.1	51.1
13:17:30	52.6	56.2	UNDER	54.1	49.1
13:18:00	48.6	51.0	UNDER	49.1	47.1
13:18:30	51.0	52.9	UNDER	52.1	47.1
13:19:00	58.7	67.4	UNDER	63.1	52.1
13:19:30	57.0	62.6	UNDER	61.1	51.1
13:20:00	61.5	67.0	UNDER	65.1	50.1
13:20:30	54.8	63.0	UNDER	57.1	48.1
13:21:00	64.5	69.1	UNDER	68.1	56.1
13:21:30	65.5	70.0	UNDER	69.1	56.1
13:22:00	62.8	67.8	UNDER	66.1	52.1

13:22:30	62.3	71.5	UNDER	67.1	52.1
13:23:00	63.9	71.0	UNDER	66.1	54.1
13:23:30	68.1	72.2	UNDER	71.1	59.1

"File Name.....bin1
"Test Location.....PTC MP 57-67,PTC-28,38,47
"Employee Name.....AJD, KJP
"Employee Number...
"Department.....ENV
"Comment Field 1...Short-term sound level
"Comment Field 2...measurements (10 minute)
"Numeric Code #1... #2... #3... #4... #5...

"METROSONICS db-308 SN 2125 V2.3
"REPORT PRINTED 03/13/14 AT 14:57:04

"EXCHANGE RATE..... 3dB FILTER.....A WGHT
"DOSE CRITERION.... 90dB RESPONSE...SLOW
"PRE-TEST CALIBRATION TIME.... 3/05/14 AT 6:48:26
"PRE-TEST CALIBRATION RANGE... 43.1dB TO 139.1dB
"Calibrator Type & Serial #..._____

"Calibrator Calibration Date.._____

"-- OVERALL STATISTICS REPORT --

"TEST BEGAN.... 3/05/14 AT 12:38:36
"TEST LENGTH... 0 DAYS 2:56:03

"Lav.............. 61.0dB
"SEL..............101.1dB
"Lmax.............. 74.7dB ON 3/06/14 AT 13:32:19
"Lpk..............UNDER
"TIME OVER 115dB.. 0 DAYS 0:00:00.00

"8 HR DOSE (80dB CUTOFF)........ 0.00%
"8 HR PROJ. DOSE (80dB CUTOFF).. 0.00%
"8 HR DOSE (90dB CUTOFF)........ 0.00%
"8 HR PROJ. DOSE (90dB CUTOFF).. 0.00%

"-- TABULAR TIME HISTORY REPORT --

"# OF PERIODS: 354 MODE: CONTINUOUS
"PERIOD LENGTH: 0:00:30
"TIME HISTORY CUTOFF: NONE
"Ln(1): 10.0% Ln(2): 99.9%

"DATE: 3/05/14

"INT"	"TIME"	"Lav"	"Lmx"	"Lpk"	"L1"	"L2"
1	"12:38:36"	61.8	64.4	"UNR"	63	56
2	"12:39:06"	66.2	70.7	"UNR"	68	55
3	"12:39:36"	61.0	64.1	"UNR"	63	57
4	"12:40:06"	63.2	66.6	"UNR"	66	58
5	"12:40:36"	60.1	62.0	"UNR"	61	56
6	"12:41:06"	64.5	66.1	"UNR"	65	58
7	"12:41:36"	62.4	65.1	"UNR"	64	59
8	"12:42:06"	63.4	66.0	"UNR"	65	60
9	"12:42:36"	62.3	64.5	"UNR"	63	58
10	"12:43:06"	64.1	66.1	"UNR"	65	61
11	"12:43:36"	63.3	65.2	"UNR"	64	59
12	"12:44:06"	64.6	68.1	"UNR"	66	59
13	"12:44:36"	63.7	67.0	"UNR"	66	58
14	"12:45:06"	63.6	66.2	"UNR"	65	61
15	"12:45:36"	63.1	65.1	"UNR"	64	59

16	"12:46:06"	63.1	64.8	"UNR"	64	59
17	"12:46:36"	64.1	66.5	"UNR"	66	61
18	"12:47:06"	63.5	67.5	"UNR"	66	59
19	"12:47:36"	64.4	66.6	"UNR"	65	62
20	"12:48:06"	63.2	65.5	"UNR"	65	60
21	"12:48:36"	60.6	62.6	"UNR"	61	58
22	"12:49:06"	61.4	63.8	"UNR"	63	56
23	"12:49:36"	63.9	66.7	"UNR"	65	59
24	"12:50:06"	63.5	68.9	"UNR"	66	57
25	"12:50:36"	62.7	66.7	"UNR"	65	59
26	"12:51:06"	62.0	65.5	"UNR"	64	55
27	"12:51:36"	60.5	62.9	"UNR"	62	54
28	"12:52:06"	62.0	64.0	"UNR"	63	58
29	"12:52:36"	60.9	64.5	"UNR"	62	56
30	"12:53:06"	59.7	63.2	"UNR"	61	56
31	"12:53:36"	63.7	67.3	"UNR"	66	61
32	"12:54:06"	63.7	66.1	"UNR"	65	59
33	"12:54:36"	62.1	65.2	"UNR"	64	58
34	"12:55:06"	61.5	64.2	"UNR"	63	56
35	"12:55:36"	62.8	65.4	"UNR"	64	59
36	"12:56:06"	63.5	67.6	"UNR"	67	58
37	"12:56:36"	66.5	70.4	"UNR"	69	63
38	"12:57:06"	64.0	68.0	"UNR"	66	60
39	"12:57:36"	61.5	63.7	"UNR"	62	57
40	"12:58:06"	63.2	65.7	"UNR"	65	58
41	"12:58:36"	63.0	66.1	"UNR"	65	58
42	"12:59:06"	62.7	67.1	"UNR"	65	59
43	"12:59:36"	61.4	64.3	"UNR"	63	57
44	"13:00:06"	60.4	61.8	"UNR"	61	58
45	"13:00:36"	61.3	65.6	"UNR"	65	54
46	"13:01:06"	63.9	67.0	"UNR"	66	60
♀ 47	"13:01:36"	63.8	65.7	"UNR"	65	61
48	"13:02:06"	63.7	65.3	"UNR"	64	61
49	"13:02:36"	63.8	69.0	"UNR"	67	55
50	"13:03:06"	62.9	65.8	"UNR"	65	56
51	"13:03:36"	61.7	64.8	"UNR"	63	58
52	"13:04:06"	61.0	64.5	"UNR"	63	54
53	"13:04:36"	62.0	64.2	"UNR"	63	53
54	"13:05:06"	64.4	66.4	"UNR"	66	59
55	"13:05:36"	63.2	66.4	"UNR"	65	59
56	"13:06:06"	65.7	67.8	"UNR"	67	62
57	"13:06:36"	62.3	65.6	"UNR"	64	58
58	"13:07:06"	62.5	66.1	"UNR"	65	56
59	"13:07:36"	64.9	68.1	"UNR"	67	62
60	"13:08:06"	62.0	64.7	"UNR"	64	57
61	"13:08:36"	62.3	67.8	"UNR"	64	56
62	"13:09:06"	62.2	65.7	"UNR"	65	55
63	"13:09:36"	60.7	63.5	"UNR"	63	54
64	"13:10:06"	61.2	65.4	"UNR"	62	59
65	"13:10:36"	64.2	67.7	"UNR"	66	59
66	"13:11:06"	63.8	66.5	"UNR"	65	61
67	"13:11:36"	61.8	65.7	"UNR"	64	54
68	"13:12:06"	62.8	66.2	"UNR"	65	59
69	"13:12:36"	62.3	65.5	"UNR"	65	57
70	"13:13:06"	62.0	65.0	"UNR"	64	56
71	"13:13:36"	61.8	68.0	"UNR"	65	56
72	"13:14:06"	63.5	66.5	"UNR"	66	58
73	"13:14:36"	62.1	64.2	"UNR"	63	58
74	"13:15:06"	62.8	64.7	"UNR"	64	59
75	"13:15:36"	60.7	62.6	"UNR"	62	58
76	"13:16:06"	61.0	65.1	"UNR"	64	57
77	"13:16:36"	63.1	66.1	"UNR"	65	59
78	"13:17:06"	62.9	66.5	"UNR"	64	58

79	"13:17:36"	61.5	65.0	"UNR"	64	53
80	"13:18:06"	60.4	63.2	"UNR"	62	57
81	"13:18:36"	60.9	64.1	"UNR"	63	57
82	"13:19:06"	62.2	66.1	"UNR"	65	56
83	"13:19:36"	63.7	65.7	"UNR"	65	58
84	"13:20:06"	66.0	72.1	"UNR"	70	58
85	"13:20:36"	61.8	63.9	"UNR"	63	60
86	"13:21:06"	59.4	63.5	"UNR"	60	57
87	"13:21:36"	62.8	65.6	"UNR"	65	57
88	"13:22:06"	61.9	64.9	"UNR"	63	58
89	"13:22:36"	62.6	64.5	"UNR"	64	59
90	"13:23:06"	64.1	67.2	"UNR"	66	58
91	"13:23:36"	63.6	65.9	"UNR"	65	60
92	"13:24:06"	65.3	68.6	"UNR"	67	59
93	"13:24:36"	62.4	64.7	"UNR"	63	59
94	"13:25:06"	62.0	66.1	"UNR"	64	56
95	"13:25:36"	60.8	64.3	"UNR"	63	54
96	"13:26:06"	63.5	66.4	"UNR"	66	56
97	"13:26:36"	64.0	69.4	"UNR"	67	59
98	"13:27:06"	61.8	64.8	"UNR"	64	57
99	"13:27:36"	65.3	69.1	"UNR"	68	60
100	"13:28:06"	64.4	68.2	"UNR"	66	61
101	"13:28:36"	64.4	67.5	"UNR"	66	61
102	"13:29:06"	62.1	65.6	"UNR"	63	56
103	"13:29:36"	61.7	64.4	"UNR"	63	55
104	"13:30:06"	62.9	66.0	"UNR"	64	61
♀ 105	"13:30:36"	64.4	66.1	"UNR"	65	62
106	"13:31:06"	63.1	65.7	"UNR"	64	60
107	"13:31:36"	62.8	65.0	"UNR"	64	61
108	"13:32:06"	62.9	66.9	"UNR"	65	57
109	"13:32:36"	64.8	67.1	"UNR"	66	62
110	"13:33:06"	60.5	64.0	"UNR"	63	53
111	"13:33:36"	63.9	66.7	"UNR"	66	59
112	"13:34:06"	62.8	66.4	"UNR"	65	55
113	"13:34:36"	60.7	65.6	"UNR"	64	54
114	"13:35:06"	62.6	65.2	"UNR"	64	57
115	"13:35:36"	63.0	68.2	"UNR"	67	57
116	"13:36:06"	64.0	67.2	"UNR"	65	61
117	"13:36:36"	64.6	67.7	"UNR"	66	60
118	"13:37:06"	62.6	67.1	"UNR"	65	59
119	"13:37:36"	61.8	63.9	"UNR"	63	54
120	"13:38:06"	62.0	67.0	"UNR"	65	55
121	"13:38:36"	61.7	66.5	"UNR"	64	54
122	"13:39:06"	64.8	67.0	"UNR"	66	62
123	"13:39:36"	63.1	65.7	"UNR"	65	59
124	"13:40:06"	61.8	64.9	"UNR"	63	58
125	"13:40:36"	61.6	63.9	"UNR"	63	58
126	"13:41:06"	63.6	66.9	"UNR"	65	60
127	"13:41:36"	61.4	64.1	"UNR"	63	59

"DATE: 3/06/14

"INT"	"TIME"	"Lav"	"Lmx"	"Lpk"	"L1"	"L2"
128	" 8:35:28"	56.1	59.6	"UNR"	58	52
129	" 8:35:58"	56.6	59.4	"UNR"	58	53
130	" 8:36:28"	55.2	58.2	"UNR"	57	50
131	" 8:36:58"	53.6	58.9	"UNR"	57	49
132	" 8:37:28"	53.3	56.9	"UNR"	55	51
133	" 8:37:58"	55.6	58.6	"UNR"	57	51
134	" 8:38:28"	55.4	58.2	"UNR"	57	52
135	" 8:38:58"	54.8	58.2	"UNR"	57	50
136	" 8:39:28"	56.3	59.8	"UNR"	58	51
137	" 8:39:58"	53.0	56.7	"UNR"	55	50

138	" 8:40:28"	53.7	58.1	"UNR"	55	50
139	" 8:40:58"	55.3	59.2	"UNR"	58	48
140	" 8:41:28"	55.4	60.8	"UNR"	59	48
141	" 8:41:58"	54.4	59.4	"UNR"	58	47
142	" 8:42:28"	53.3	56.9	"UNR"	55	50
143	" 8:42:58"	53.3	56.2	"UNR"	55	51
144	" 8:43:28"	53.0	57.2	"UNR"	56	49
145	" 8:43:58"	55.2	58.8	"UNR"	57	51
146	" 8:44:28"	54.4	56.3	"UNR"	55	52
147	" 8:44:58"	55.2	58.3	"UNR"	57	51
148	" 8:45:28"	54.8	58.4	"UNR"	57	48
149	" 8:45:58"	53.5	55.9	"UNR"	55	48
150	" 8:46:28"	51.7	55.2	"UNR"	53	49
151	" 8:46:58"	56.1	61.5	"UNR"	60	50
152	" 8:47:28"	56.2	59.4	"UNR"	58	52
153	" 8:47:58"	51.6	53.8	"UNR"	53	50
154	" 8:48:28"	56.6	62.1	"UNR"	59	53
155	" 8:48:58"	56.2	59.2	"UNR"	58	52
156	" 8:49:28"	55.1	58.7	"UNR"	57	51
157	" 8:49:58"	53.6	56.9	"UNR"	55	48
158	" 8:50:28"	54.7	58.2	"UNR"	56	52
♀ 159	" 8:50:58"	54.0	56.8	"UNR"	55	50
160	" 8:51:28"	53.4	57.2	"UNR"	55	48
161	" 8:51:58"	55.4	57.7	"UNR"	57	51
162	" 8:52:28"	53.3	55.8	"UNR"	55	49
163	" 8:52:58"	54.4	57.9	"UNR"	57	50
164	" 8:53:28"	54.6	59.3	"UNR"	56	51
165	" 8:53:58"	55.0	59.0	"UNR"	57	49
166	" 8:54:28"	57.2	60.5	"UNR"	58	54
167	" 8:54:58"	52.9	58.3	"UNR"	56	46
168	" 8:55:28"	50.8	55.8	"UNR"	53	46
169	" 8:55:58"	55.1	59.4	"UNR"	58	49
170	" 8:56:28"	58.6	62.3	"UNR"	61	52
171	" 8:56:58"	56.5	57.4	"UNR"	57	55

"DATE: 3/06/14

"INT"	"TIME"	"Lav"	"Lmx"	"Lpk"	"L1"	"L2"
172	"12:18:51"	55.6	59.7	"UNR"	58	51
173	"12:19:21"	58.1	61.2	"UNR"	60	52
174	"12:19:51"	58.2	60.3	"UNR"	60	54
175	"12:20:21"	61.0	64.1	"UNR"	63	57
176	"12:20:51"	59.1	62.7	"UNR"	61	53
177	"12:21:21"	60.5	63.7	"UNR"	63	53
178	"12:21:51"	60.8	64.4	"UNR"	63	57
179	"12:22:21"	59.0	62.0	"UNR"	61	52
180	"12:22:51"	59.0	64.0	"UNR"	62	52
181	"12:23:21"	59.9	64.0	"UNR"	62	54
182	"12:23:51"	59.5	62.6	"UNR"	62	53
183	"12:24:21"	60.7	64.0	"UNR"	63	56
184	"12:24:51"	62.1	67.5	"UNR"	65	55
185	"12:25:21"	59.9	64.3	"UNR"	62	52
186	"12:25:51"	59.1	61.2	"UNR"	60	53
187	"12:26:21"	60.4	64.0	"UNR"	63	54
188	"12:26:51"	58.0	63.9	"UNR"	61	52
189	"12:27:21"	58.1	63.7	"UNR"	60	55
190	"12:27:51"	60.7	67.6	"UNR"	66	53
191	"12:28:21"	57.5	61.2	"UNR"	60	49
192	"12:28:51"	58.6	62.8	"UNR"	61	53
193	"12:29:21"	59.2	63.3	"UNR"	62	52
194	"12:29:51"	58.0	62.0	"UNR"	61	52
195	"12:30:21"	59.7	62.6	"UNR"	61	55
196	"12:30:51"	62.1	65.1	"UNR"	63	55

197	"12:31:21"	63.4	71.5	"UNR"	67	56
198	"12:31:51"	63.8	72.6	"UNR"	70	54
199	"12:32:21"	56.8	61.7	"UNR"	59	52
200	"12:32:51"	63.2	66.3	"UNR"	65	57
201	"12:33:21"	58.7	60.6	"UNR"	60	56
202	"12:33:51"	56.1	59.4	"UNR"	58	52
203	"12:34:21"	59.4	62.0	"UNR"	61	54
204	"12:34:51"	59.1	62.2	"UNR"	62	54
205	"12:35:21"	60.0	62.9	"UNR"	62	55
206	"12:35:51"	63.7	67.3	"UNR"	66	58
207	"12:36:21"	61.6	64.4	"UNR"	63	59
208	"12:36:51"	64.0	69.7	"UNR"	68	58
209	"12:37:21"	59.6	62.6	"UNR"	61	56
210	"12:37:51"	58.1	61.7	"UNR"	60	55
211	"12:38:21"	56.9	59.2	"UNR"	58	54
212	"12:38:51"	58.9	62.0	"UNR"	60	56
213	"12:39:21"	58.2	62.2	"UNR"	61	54
214	"12:39:51"	61.5	63.8	"UNR"	63	57
215	"12:40:21"	61.0	66.5	"UNR"	65	52
216	"12:40:51"	58.5	63.7	"UNR"	62	53
217	"12:41:21"	54.8	58.3	"UNR"	56	52
218	"12:41:51"	61.0	64.6	"UNR"	62	56
219	"12:42:21"	65.0	71.8	"UNR"	69	56
220	"12:42:51"	57.8	61.1	"UNR"	60	54
221	"12:43:21"	58.0	61.4	"UNR"	60	53
222	"12:43:51"	55.5	59.1	"UNR"	57	51
223	"12:44:21"	59.4	63.2	"UNR"	62	52
224	"12:44:51"	58.6	61.5	"UNR"	60	53
225	"12:45:21"	56.0	60.0	"UNR"	59	52
226	"12:45:51"	60.4	64.8	"UNR"	64	53
227	"12:46:21"	56.1	59.5	"UNR"	58	53
228	"12:46:51"	55.4	61.2	"UNR"	57	49
229	"12:47:21"	61.7	64.9	"UNR"	64	56
230	"12:47:51"	58.0	62.4	"UNR"	61	54
231	"12:48:21"	59.6	62.4	"UNR"	61	54
232	"12:48:51"	59.5	62.9	"UNR"	61	55
233	"12:49:21"	60.5	64.5	"UNR"	64	55
234	"12:49:51"	58.7	62.0	"UNR"	61	54
235	"12:50:21"	62.5	67.6	"UNR"	64	57
236	"12:50:51"	60.5	67.3	"UNR"	64	53
237	"12:51:21"	59.4	63.4	"UNR"	62	54
238	"12:51:51"	58.3	61.6	"UNR"	60	53
239	"12:52:21"	57.5	61.2	"UNR"	60	52
240	"12:52:51"	62.5	67.5	"UNR"	65	54
241	"12:53:21"	57.9	61.3	"UNR"	59	54
242	"12:53:51"	56.9	58.9	"UNR"	58	54
243	"12:54:21"	58.1	62.6	"UNR"	62	55
244	"12:54:51"	57.8	61.5	"UNR"	60	49
245	"12:55:21"	58.6	63.6	"UNR"	62	50
246	"12:55:51"	58.6	63.6	"UNR"	62	51
247	"12:56:21"	60.3	63.7	"UNR"	63	52
248	"12:56:51"	58.4	62.2	"UNR"	61	51
249	"12:57:21"	61.6	65.7	"UNR"	63	55
250	"12:57:51"	57.0	59.9	"UNR"	59	53
251	"12:58:21"	59.0	63.8	"UNR"	63	52
252	"12:58:51"	57.1	60.3	"UNR"	60	52
253	"12:59:21"	56.9	60.3	"UNR"	58	54
254	"12:59:51"	55.5	59.3	"UNR"	57	52
255	"13:00:21"	57.7	61.1	"UNR"	59	54
256	"13:00:51"	60.7	64.6	"UNR"	64	55
257	"13:01:21"	59.1	61.9	"UNR"	61	55
258	"13:01:51"	58.0	62.3	"UNR"	61	52
259	"13:02:21"	55.4	58.6	"UNR"	57	51

260	"13:02:51"	61.4	65.5	"UNR"	64	54
261	"13:03:21"	60.3	64.1	"UNR"	62	55
262	"13:03:51"	58.4	62.6	"UNR"	60	53
263	"13:04:21"	57.7	62.8	"UNR"	61	53
264	"13:04:51"	59.4	63.5	"UNR"	62	54
265	"13:05:21"	59.3	63.2	"UNR"	62	52
266	"13:05:51"	57.1	61.8	"UNR"	61	50
267	"13:06:21"	55.7	58.2	"UNR"	57	53
268	"13:06:51"	56.6	59.1	"UNR"	58	53
269	"13:07:21"	57.5	63.9	"UNR"	58	53
270	"13:07:51"	58.5	60.4	"UNR"	60	56
♀ 271	"13:08:21"	60.7	64.2	"UNR"	63	54
272	"13:08:51"	56.1	60.6	"UNR"	58	49
273	"13:09:21"	60.9	66.1	"UNR"	65	52
274	"13:09:51"	58.7	65.1	"UNR"	60	56
275	"13:10:21"	58.8	62.4	"UNR"	61	52
276	"13:10:51"	55.9	59.4	"UNR"	58	48
277	"13:11:21"	58.9	65.6	"UNR"	63	48
278	"13:11:51"	57.5	65.7	"UNR"	60	50
279	"13:12:21"	58.4	62.9	"UNR"	61	52
280	"13:12:51"	57.7	61.4	"UNR"	60	53
281	"13:13:21"	57.8	61.3	"UNR"	60	54
282	"13:13:51"	57.5	60.0	"UNR"	59	53
283	"13:14:21"	58.1	61.6	"UNR"	60	53
284	"13:14:51"	58.2	62.7	"UNR"	62	53
285	"13:15:21"	60.5	65.1	"UNR"	63	56
286	"13:15:51"	60.3	65.2	"UNR"	62	56
287	"13:16:21"	59.3	63.2	"UNR"	62	54
288	"13:16:51"	58.8	64.6	"UNR"	63	53
289	"13:17:21"	61.7	65.4	"UNR"	64	52
290	"13:17:51"	57.1	61.3	"UNR"	60	51
291	"13:18:21"	60.3	63.7	"UNR"	62	55
292	"13:18:51"	59.2	62.9	"UNR"	62	54
293	"13:19:21"	60.4	62.9	"UNR"	62	56
294	"13:19:51"	60.3	64.6	"UNR"	63	55
295	"13:20:21"	63.3	69.5	"UNR"	68	52
296	"13:20:51"	61.8	65.0	"UNR"	64	56
297	"13:21:21"	58.4	62.9	"UNR"	61	53
298	"13:21:51"	58.2	60.4	"UNR"	59	55
299	"13:22:21"	61.2	63.7	"UNR"	63	57
300	"13:22:51"	58.9	62.6	"UNR"	61	54
301	"13:23:21"	56.3	59.3	"UNR"	58	51
302	"13:23:51"	60.6	64.9	"UNR"	63	51
303	"13:24:21"	58.7	64.2	"UNR"	62	51
304	"13:24:51"	54.7	61.5	"UNR"	58	50
305	"13:25:21"	61.3	65.0	"UNR"	64	56
306	"13:25:51"	61.4	63.1	"UNR"	62	59
307	"13:26:21"	56.1	62.2	"UNR"	61	48
308	"13:26:51"	55.6	57.9	"UNR"	57	52
309	"13:27:21"	56.2	58.0	"UNR"	57	54
310	"13:27:51"	60.6	63.7	"UNR"	63	56
311	"13:28:21"	59.1	61.1	"UNR"	60	56
312	"13:28:51"	59.2	63.6	"UNR"	62	53
313	"13:29:21"	61.8	67.0	"UNR"	66	54
314	"13:29:51"	62.9	69.9	"UNR"	66	55
315	"13:30:21"	59.1	63.3	"UNR"	62	53
316	"13:30:51"	60.9	65.1	"UNR"	64	57
317	"13:31:21"	57.7	59.7	"UNR"	59	54
318	"13:31:51"	67.3	74.7	"UNR"	73	54
319	"13:32:21"	64.9	74.7	"UNR"	68	58
320	"13:32:51"	59.2	62.8	"UNR"	62	53
321	"13:33:21"	61.7	65.7	"UNR"	65	55
322	"13:33:51"	60.6	63.7	"UNR"	62	57

323	"13:34:21"	60.9	63.7	"UNR"	62	58
324	"13:34:51"	57.4	62.9	"UNR"	61	52
325	"13:35:21"	57.8	62.4	"UNR"	60	52
326	"13:35:51"	60.0	62.4	"UNR"	61	54
327	"13:36:21"	57.1	59.9	"UNR"	59	52
328	"13:36:51"	57.9	60.5	"UNR"	59	53
329	"13:37:21"	58.2	60.7	"UNR"	59	54
330	"13:37:51"	63.4	67.3	"UNR"	66	59
331	"13:38:21"	60.2	64.0	"UNR"	63	57
332	"13:38:51"	58.2	64.0	"UNR"	60	55
333	"13:39:21"	58.9	62.3	"UNR"	60	56
334	"13:39:51"	58.8	63.5	"UNR"	62	53
335	"13:40:21"	56.5	60.3	"UNR"	59	50
336	"13:40:51"	60.6	62.6	"UNR"	62	57
337	"13:41:21"	59.8	63.4	"UNR"	62	54
338	"13:41:51"	60.8	67.7	"UNR"	65	54
339	"13:42:21"	63.4	68.2	"UNR"	67	55
340	"13:42:51"	59.5	62.2	"UNR"	61	55
341	"13:43:21"	62.6	65.7	"UNR"	65	58
342	"13:43:51"	60.3	65.6	"UNR"	64	54
343	"13:44:21"	61.5	64.5	"UNR"	63	56
344	"13:44:51"	57.8	61.2	"UNR"	60	54
345	"13:45:21"	60.6	64.5	"UNR"	63	53
346	"13:45:51"	60.5	63.7	"UNR"	62	56
347	"13:46:21"	64.9	71.0	"UNR"	69	58
348	"13:46:51"	60.9	67.3	"UNR"	64	55
349	"13:47:21"	59.6	66.2	"UNR"	62	56
350	"13:47:51"	61.2	65.8	"UNR"	64	55
351	"13:48:21"	58.2	62.3	"UNR"	61	53
352	"13:48:51"	58.5	61.1	"UNR"	60	53
353	"13:49:21"	61.0	64.2	"UNR"	62	57
354	"13:49:51"	58.4	60.4	"UNR"	59	57

"-- AMPLITUDE DISTRIBUTION REPORT --

"TOTAL SAMPLES = 84508

"dB"	"SAMPLES"		"% OF TOTAL"
46	26	.	0.03
47	102	+	0.12
48	247	+	0.29
49	400	+	0.47
50	837	*	0.99
51	1610	**	1.91
52	2352	***	2.78
53	3087	****	3.65
54	4418	*****	5.23
55	5400	******	6.39
56	6367	********	7.53
57	6753	********	7.99
58	6047	*******	7.16
59	7420	*********	8.78
60	7722	*********	9.14
61	7649	*********	9.05
62	8077	**********	9.56
63	5935	*******	7.02
64	4622	*****	5.47
65	2883	***	3.41
66	1385	**	1.64
67	579	*	0.69
68	248	+	0.29

69	154	+	0.18
70	60	.	0.07
71	65	.	0.08
72	29	.	0.03
73	17	.	0.02
74	17	.	0.02

"Ln(0.0) = 74dB
"Ln(10.0) = 64dB
"Ln(50.0) = 59dB
"Ln(99.9) = 47dB

"	NO CUTOFF	80.0dB CUTOFF	90.0dB CUTOFF
"Leq	60.6dB	43.1dB	43.1dB
"Ldod	60.2dB	43.1dB	43.1dB
"Losha	59.9dB	43.1dB	43.1dB
"Leq(6)	59.7dB	43.1dB	43.1dB

♀

PTC-27 (30805).PRN

****

Filename.....30805
Test Location.....PTC 57-67 Meter #5093
Employee Name.....AJD-WCK
Employee Number.....
Department.....Env

Calibrator Type.....
Calibrator Cal. Date...

****

METROSONICS db-3080 V1.20 SERIAL # 5093
REPORT PRINTED ON 11/07/13 at 10:35:20

User ID: _____

LOGGING STARTED.....11/04/13 at 15:55:00
TOTAL LOGGING TIME...1 DAY 15:02:46
LOGGING STOPPED.....11/06/13 at 06:57:46
TOTAL INTERVALS.....469
INTERVAL LENGTH.....00:05:00

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....11/04/13 AT 15:48:43
PRE-TEST CALIBRATION RANGE...39.3 TO 139.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 62.4dB
Lav (80)..... 49.7dB
Lav (90)..... 44.4dB
SEL..... 113.7dB

TWA..... 69.3dB
TWA (80)..... 56.6dB
TWA (90)..... 51.2dB

Lmax..... 94.4dB 11/04/13 at 15:55:02
Lpk..... 128.7dB 11/04/13 at 15:55:01
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.04%
DOSE (90)........ 0.01%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
11/04/13					
15:55:00	72.7	94.4	128.7	66.3	54.3
16:00:00	62.3	69.2	UNDER	65.3	55.3
16:05:00	63.7	72.1	UNDER	66.3	54.3
16:10:00	63.0	67.9	UNDER	65.3	55.3
16:15:00	62.9	69.5	UNDER	65.3	53.3
16:20:00	63.1	76.3	UNDER	65.3	53.3
16:25:00	61.8	68.7	UNDER	64.3	53.3
16:30:00	62.7	68.9	UNDER	65.3	56.3
16:35:00	62.9	74.8	UNDER	64.3	53.3
16:40:00	63.8	71.2	UNDER	66.3	56.3
16:45:00	64.5	71.5	UNDER	67.3	58.3
16:50:00	63.2	70.4	UNDER	66.3	48.3
16:55:00	68.3	86.8	111.0	66.3	56.3
17:00:00	61.9	69.8	UNDER	64.3	54.3
17:05:00	62.7	68.8	UNDER	66.3	53.3
17:10:00	63.8	69.1	UNDER	66.3	57.3
17:15:00	62.2	69.8	UNDER	64.3	54.3
17:20:00	63.2	70.4	UNDER	66.3	54.3
17:25:00	63.3	72.8	UNDER	65.3	56.3
17:30:00	62.9	70.6	UNDER	65.3	56.3
17:35:00	63.4	70.4	UNDER	66.3	56.3
17:40:00	62.3	69.1	UNDER	64.3	56.3
17:45:00	63.7	75.9	UNDER	66.3	55.3
17:50:00	62.4	71.2	UNDER	65.3	54.3
17:55:00	61.6	67.9	UNDER	64.3	52.3
18:00:00	62.0	68.7	UNDER	64.3	52.3
18:05:00	62.0	69.7	UNDER	65.3	53.3
18:10:00	62.2	70.3	UNDER	65.3	54.3
18:15:00	62.3	71.4	UNDER	65.3	55.3
18:20:00	63.2	73.0	UNDER	66.3	52.3
18:25:00	62.7	74.8	UNDER	65.3	53.3
18:30:00	63.9	76.8	UNDER	66.3	53.3
18:35:00	62.2	69.4	UNDER	65.3	52.3
18:40:00	62.3	71.3	UNDER	65.3	52.3
18:45:00	63.2	76.4	UNDER	65.3	52.3
18:50:00	65.8	83.2	UNDER	66.3	50.3
18:55:00	61.5	70.0	UNDER	64.3	51.3
19:00:00	62.4	73.5	UNDER	66.3	52.3
19:05:00	68.1	86.7	UNDER	66.3	54.3
19:10:00	61.8	72.5	UNDER	65.3	49.3
19:15:00	60.0	67.6	UNDER	62.3	51.3
19:20:00	62.1	69.6	UNDER	66.3	52.3
19:25:00	62.7	71.9	UNDER	66.3	44.3
19:30:00	61.4	69.2	UNDER	65.3	52.3
19:35:00	60.9	70.8	UNDER	64.3	49.3
19:40:00	62.9	78.6	UNDER	64.3	50.3
19:45:00	61.1	68.8	UNDER	64.3	52.3
19:50:00	61.0	69.5	UNDER	64.3	52.3
19:55:00	63.2	74.1	UNDER	66.3	47.3
20:00:00	62.5	70.4	UNDER	65.3	47.3
20:05:00	61.0	70.3	UNDER	65.3	51.3
20:10:00	60.9	71.4	UNDER	64.3	48.3
20:15:00	62.6	79.4	UNDER	65.3	49.3
20:20:00	60.0	69.6	UNDER	63.3	44.3

20:25:00	59.2	67.1	UNDER	62.3	47.3
20:30:00	58.7	69.3	UNDER	61.3	46.3
20:35:00	59.8	70.8	UNDER	62.3	50.3
20:40:00	59.8	67.5	UNDER	64.3	48.3
20:45:00	59.9	67.6	UNDER	63.3	47.3
20:50:00	59.3	71.6	UNDER	62.3	49.3
20:55:00	59.8	67.7	UNDER	63.3	45.3
21:00:00	59.2	67.9	UNDER	63.3	47.3
21:05:00	58.4	67.9	UNDER	62.3	45.3
21:10:00	60.1	68.5	UNDER	64.3	49.3
21:15:00	60.6	70.0	UNDER	64.3	45.3
21:20:00	59.7	67.9	UNDER	63.3	47.3
21:25:00	59.7	71.1	UNDER	63.3	47.3
21:30:00	60.0	68.7	UNDER	63.3	45.3
21:35:00	59.8	68.9	UNDER	63.3	49.3
21:40:00	59.5	68.7	UNDER	63.3	44.3
21:45:00	58.9	68.4	UNDER	62.3	47.3
21:50:00	59.7	73.2	UNDER	63.3	45.3
21:55:00	58.0	67.2	UNDER	62.3	42.3
22:00:00	59.7	71.1	UNDER	63.3	48.3
22:05:00	59.7	68.8	UNDER	63.3	49.3
22:10:00	61.0	74.6	UNDER	65.3	42.3
22:15:00	60.2	71.9	UNDER	63.3	46.3
22:20:00	58.7	69.3	UNDER	61.3	46.3
22:25:00	58.9	68.0	UNDER	62.3	47.3
22:30:00	60.1	71.5	UNDER	64.3	49.3
22:35:00	58.8	67.4	UNDER	63.3	45.3
22:40:00	60.2	69.1	UNDER	64.3	43.3
22:45:00	59.8	70.4	UNDER	64.3	42.3
22:50:00	60.1	68.4	UNDER	64.3	45.3
22:55:00	60.0	67.9	UNDER	64.3	47.3
23:00:00	59.8	70.2	UNDER	64.3	43.3
23:05:00	59.5	71.6	UNDER	63.3	44.3
23:10:00	58.1	68.4	UNDER	62.3	43.3
23:15:00	57.6	68.4	UNDER	60.3	41.3
23:20:00	59.5	68.3	UNDER	64.3	42.3
23:25:00	55.9	66.7	UNDER	59.3	43.3
23:30:00	55.2	67.1	UNDER	58.3	42.3
23:35:00	56.5	70.3	UNDER	58.3	44.3
23:40:00	57.3	69.5	UNDER	59.3	43.3
23:45:00	60.0	69.9	UNDER	64.3	44.3
23:50:00	60.9	68.0	UNDER	65.3	44.3
23:55:00	58.7	69.9	UNDER	63.3	44.3
00:00:00	60.8	75.6	UNDER	64.3	42.3
00:05:00	57.9	69.1	UNDER	61.3	44.3
00:10:00	59.4	69.2	UNDER	64.3	41.3
00:15:00	58.2	67.3	UNDER	63.3	42.3
00:20:00	58.7	67.9	UNDER	63.3	42.3
00:25:00	57.8	71.1	UNDER	61.3	41.3
00:30:00	57.5	67.6	UNDER	62.3	43.3
00:35:00	59.3	67.9	UNDER	63.3	44.3
00:40:00	56.6	69.6	UNDER	61.3	41.3
00:45:00	56.9	66.8	UNDER	61.3	43.3
00:50:00	57.6	70.0	UNDER	62.3	41.3
00:55:00	56.2	68.8	UNDER	60.3	41.3
01:00:00	56.8	68.3	UNDER	61.3	41.3
01:05:00	57.8	68.0	UNDER	62.3	41.3
01:10:00	57.1	69.1	UNDER	61.3	40.3
01:15:00	56.1	66.8	UNDER	60.3	41.3
01:20:00	59.3	73.6	UNDER	63.3	41.3
01:25:00	55.9	68.8	UNDER	60.3	41.3
01:30:00	57.6	68.8	UNDER	62.3	43.3
01:35:00	57.5	70.0	UNDER	62.3	41.3

01:40:00	60.9	74.8	UNDER	64.3	41.3
01:45:00	56.6	67.6	UNDER	60.3	41.3
01:50:00	56.6	68.0	UNDER	60.3	42.3
01:55:00	58.6	69.5	UNDER	63.3	42.3
02:00:00	57.4	66.0	UNDER	63.3	43.3
02:05:00	65.9	85.6	109.9	62.3	42.3
02:10:00	56.1	68.0	UNDER	60.3	41.3
02:15:00	59.3	68.3	UNDER	64.3	44.3
02:20:00	59.5	72.4	UNDER	64.3	41.3
02:25:00	58.1	70.4	UNDER	63.3	40.3
02:30:00	58.5	72.6	UNDER	63.3	41.3
02:35:00	57.4	67.7	UNDER	63.3	41.3
02:40:00	56.3	69.3	UNDER	60.3	41.3
02:45:00	60.9	70.4	UNDER	65.3	42.3
02:50:00	60.8	71.0	UNDER	64.3	44.3
02:55:00	58.2	69.5	UNDER	63.3	41.3
03:00:00	54.0	66.3	UNDER	57.3	41.3
03:05:00	58.4	68.2	UNDER	63.3	41.3
03:10:00	57.7	67.5	UNDER	63.3	42.3
03:15:00	59.5	69.7	UNDER	64.3	42.3
03:20:00	60.5	76.9	UNDER	63.3	43.3
03:25:00	59.4	69.7	UNDER	64.3	42.3
03:30:00	57.9	70.5	UNDER	61.3	42.3
03:35:00	59.9	70.8	UNDER	64.3	44.3
03:40:00	58.0	68.4	UNDER	62.3	42.3
03:45:00	58.2	69.6	UNDER	62.3	45.3
03:50:00	59.0	68.8	UNDER	64.3	41.3
03:55:00	58.7	70.3	UNDER	62.3	44.3
04:00:00	59.9	68.0	UNDER	64.3	42.3
04:05:00	62.1	71.6	UNDER	66.3	43.3
04:10:00	61.8	77.7	UNDER	64.3	45.3
04:15:00	59.0	68.4	UNDER	63.3	45.3
04:20:00	60.7	69.6	UNDER	65.3	44.3
04:25:00	58.0	67.5	UNDER	63.3	42.3
04:30:00	60.6	68.7	UNDER	64.3	49.3
04:35:00	59.6	71.1	UNDER	63.3	44.3
04:40:00	60.6	70.5	UNDER	65.3	44.3
04:45:00	60.9	69.9	UNDER	64.3	49.3
04:50:00	62.9	71.2	UNDER	67.3	49.3
04:55:00	59.2	67.2	UNDER	62.3	42.3
05:00:00	61.9	72.3	UNDER	65.3	46.3
05:05:00	61.0	69.6	UNDER	64.3	51.3
05:10:00	62.2	71.2	UNDER	66.3	52.3
05:15:00	62.7	71.2	UNDER	65.3	51.3
05:20:00	62.0	71.6	UNDER	65.3	52.3
05:25:00	62.4	70.0	UNDER	65.3	53.3
05:30:00	63.2	69.7	UNDER	67.3	49.3
05:35:00	63.1	70.7	UNDER	66.3	52.3
05:40:00	64.8	76.0	UNDER	68.3	54.3
05:45:00	65.0	70.8	UNDER	68.3	55.3
05:50:00	64.5	73.2	UNDER	67.3	52.3
05:55:00	63.9	71.6	UNDER	67.3	56.3
06:00:00	63.8	70.8	UNDER	67.3	54.3
06:05:00	64.0	70.8	UNDER	66.3	56.3
06:10:00	63.8	71.0	UNDER	66.3	53.3
06:15:00	63.8	70.0	UNDER	66.3	55.3
06:20:00	64.9	77.3	UNDER	67.3	57.3
06:25:00	63.5	70.4	UNDER	66.3	55.3
06:30:00	66.0	80.0	UNDER	67.3	55.3
06:35:00	63.9	71.6	UNDER	66.3	56.3
06:40:00	64.5	71.6	UNDER	67.3	54.3
06:45:00	64.5	73.2	UNDER	66.3	55.3
06:50:00	64.6	73.2	UNDER	67.3	57.3

06:55:00	63.8	71.1	UNDER	65.3	56.3
07:00:00	63.8	72.4	UNDER	66.3	57.3
07:05:00	64.6	71.6	UNDER	68.3	55.3
07:10:00	66.1	81.1	UNDER	68.3	58.3
07:15:00	65.8	76.3	UNDER	68.3	58.3
07:20:00	64.2	71.6	UNDER	67.3	58.3
07:25:00	69.9	86.8	111.0	71.3	56.3
07:30:00	65.3	77.2	UNDER	67.3	58.3
07:35:00	63.9	69.6	UNDER	66.3	56.3
07:40:00	63.9	70.4	UNDER	66.3	54.3
07:45:00	65.5	74.8	UNDER	69.3	55.3
07:50:00	63.4	69.8	UNDER	66.3	56.3
07:55:00	64.5	71.4	UNDER	67.3	58.3
08:00:00	66.0	80.0	UNDER	68.3	57.3
08:05:00	66.2	80.3	UNDER	68.3	56.3
08:10:00	65.3	77.8	UNDER	67.3	55.3
08:15:00	63.3	68.8	UNDER	66.3	56.3
08:20:00	63.6	72.7	UNDER	66.3	57.3
08:25:00	64.0	74.4	UNDER	67.3	53.3
08:30:00	63.9	72.1	UNDER	67.3	49.3
08:35:00	63.1	71.2	UNDER	65.3	55.3
08:40:00	63.4	71.1	UNDER	67.3	53.3
08:45:00	64.2	71.4	UNDER	67.3	55.3
08:50:00	63.6	69.6	UNDER	66.3	53.3
08:55:00	64.7	80.1	UNDER	65.3	52.3
09:00:00	62.1	75.6	UNDER	64.3	53.3
09:05:00	62.1	69.2	UNDER	65.3	53.3
09:10:00	63.7	77.1	UNDER	66.3	51.3
09:15:00	63.1	69.1	UNDER	66.3	53.3
09:20:00	63.4	69.5	UNDER	66.3	53.3
09:25:00	62.4	70.4	UNDER	65.3	51.3
09:30:00	62.3	70.0	UNDER	65.3	53.3
09:35:00	62.6	70.9	UNDER	65.3	52.3
09:40:00	65.2	79.3	UNDER	66.3	54.3
09:45:00	62.3	69.5	UNDER	65.3	52.3
09:50:00	63.7	79.2	UNDER	65.3	51.3
09:55:00	62.0	71.0	UNDER	65.3	51.3
10:00:00	63.3	72.4	UNDER	66.3	49.3
10:05:00	63.9	78.8	UNDER	66.3	50.3
10:10:00	62.6	68.7	UNDER	66.3	52.3
10:15:00	61.6	70.0	UNDER	65.3	51.3
10:20:00	62.7	74.4	UNDER	66.3	50.3
10:25:00	63.3	70.3	UNDER	66.3	50.3
10:30:00	61.6	68.4	UNDER	64.3	51.3
10:35:00	61.4	68.4	UNDER	64.3	53.3
10:40:00	62.2	74.4	UNDER	65.3	52.3
10:45:00	62.3	71.4	UNDER	65.3	51.3
10:50:00	61.9	70.7	UNDER	65.3	54.3
10:55:00	62.3	70.7	UNDER	65.3	53.3
11:00:00	61.4	68.7	UNDER	64.3	50.3
11:05:00	61.2	71.1	UNDER	64.3	50.3
11:10:00	62.1	73.5	UNDER	65.3	49.3
11:15:00	68.3	86.4	110.6	67.3	52.3
11:20:00	62.4	75.2	UNDER	65.3	50.3
11:25:00	62.5	69.5	UNDER	65.3	50.3
11:30:00	61.2	69.2	UNDER	64.3	50.3
11:35:00	63.6	74.8	UNDER	66.3	53.3
11:40:00	61.8	69.5	UNDER	65.3	48.3
11:45:00	63.1	70.6	UNDER	66.3	53.3
11:50:00	62.7	76.6	UNDER	64.3	47.3
11:55:00	62.7	74.8	UNDER	65.3	51.3
12:00:00	62.0	70.7	UNDER	66.3	50.3
12:05:00	64.2	74.3	UNDER	67.3	51.3

12:10:00	62.6	71.6	UNDER	65.3	50.3
12:15:00	63.4	74.5	UNDER	66.3	51.3
12:20:00	63.8	77.4	UNDER	66.3	54.3
12:25:00	62.9	72.0	UNDER	66.3	51.3
12:30:00	63.0	71.2	UNDER	66.3	51.3
12:35:00	62.5	75.5	UNDER	66.3	50.3
12:40:00	63.2	75.5	UNDER	66.3	51.3
12:45:00	64.2	77.8	UNDER	67.3	51.3
12:50:00	63.0	70.4	UNDER	66.3	51.3
12:55:00	61.6	69.1	UNDER	65.3	52.3
13:00:00	63.8	74.3	UNDER	66.3	55.3
13:05:00	61.8	68.4	UNDER	64.3	52.3
13:10:00	63.0	72.8	UNDER	65.3	53.3
13:15:00	61.4	68.4	UNDER	65.3	51.3
13:20:00	61.3	70.0	UNDER	64.3	49.3
13:25:00	61.9	74.0	UNDER	64.3	53.3
13:30:00	63.0	73.2	UNDER	66.3	53.3
13:35:00	61.5	69.2	UNDER	65.3	51.3
13:40:00	62.5	73.5	UNDER	65.3	54.3
13:45:00	63.7	76.8	UNDER	66.3	52.3
13:50:00	63.3	70.0	UNDER	66.3	50.3
13:55:00	64.1	74.3	UNDER	67.3	55.3
14:00:00	63.1	70.4	UNDER	66.3	50.3
14:05:00	62.1	71.1	UNDER	64.3	53.3
14:10:00	62.3	69.0	UNDER	65.3	54.3
14:15:00	63.3	71.2	UNDER	66.3	54.3
14:20:00	63.4	70.8	UNDER	66.3	52.3
14:25:00	63.1	71.8	UNDER	65.3	55.3
14:30:00	62.6	68.8	UNDER	65.3	53.3
14:35:00	64.2	76.0	UNDER	66.3	54.3
14:40:00	63.4	69.1	UNDER	66.3	55.3
14:45:00	62.8	72.0	UNDER	65.3	54.3
14:50:00	63.5	71.5	UNDER	66.3	55.3
14:55:00	63.2	70.8	UNDER	66.3	54.3
15:00:00	63.4	74.0	UNDER	66.3	54.3
15:05:00	63.1	68.7	UNDER	65.3	54.3
15:10:00	64.2	72.7	UNDER	67.3	53.3
15:15:00	63.4	69.2	UNDER	66.3	53.3
15:20:00	64.4	72.9	UNDER	66.3	57.3
15:25:00	63.2	70.4	UNDER	66.3	55.3
15:30:00	63.8	69.9	UNDER	66.3	55.3
15:35:00	63.0	70.8	UNDER	66.3	54.3
15:40:00	63.3	70.8	UNDER	65.3	56.3
15:45:00	63.1	69.6	UNDER	66.3	57.3
15:50:00	64.1	75.6	UNDER	66.3	55.3
15:55:00	63.8	71.1	UNDER	67.3	56.3
16:00:00	63.2	68.8	UNDER	66.3	54.3
16:05:00	62.7	68.4	UNDER	65.3	55.3
16:10:00	63.6	71.5	UNDER	66.3	56.3
16:15:00	64.5	76.1	UNDER	67.3	55.3
16:20:00	63.3	68.8	UNDER	66.3	56.3
16:25:00	66.8	84.3	UNDER	67.3	56.3
16:30:00	64.4	74.4	UNDER	66.3	57.3
16:35:00	64.5	74.2	UNDER	67.3	56.3
16:40:00	65.6	77.8	UNDER	68.3	55.3
16:45:00	63.7	69.2	UNDER	66.3	56.3
16:50:00	62.1	69.1	UNDER	64.3	54.3
16:55:00	63.2	73.1	UNDER	65.3	53.3
17:00:00	63.7	69.6	UNDER	66.3	56.3
17:05:00	63.8	71.5	UNDER	67.3	56.3
17:10:00	64.5	70.3	UNDER	67.3	58.3
17:15:00	64.0	72.0	UNDER	66.3	57.3
17:20:00	62.9	70.8	UNDER	65.3	58.3

17:25:00	64.0	69.7	UNDER	66.3	58.3
17:30:00	63.4	69.5	UNDER	66.3	57.3
17:35:00	63.5	69.9	UNDER	66.3	52.3
17:40:00	63.5	69.5	UNDER	66.3	56.3
17:45:00	65.3	77.1	UNDER	67.3	57.3
17:50:00	63.6	70.3	UNDER	66.3	57.3
17:55:00	62.5	69.1	UNDER	65.3	54.3
18:00:00	63.3	74.3	UNDER	65.3	52.3
18:05:00	63.6	70.0	UNDER	66.3	56.3
18:10:00	62.3	69.5	UNDER	65.3	55.3
18:15:00	62.4	69.6	UNDER	65.3	55.3
18:20:00	62.9	69.1	UNDER	65.3	54.3
18:25:00	62.0	68.8	UNDER	65.3	55.3
18:30:00	63.5	72.7	UNDER	67.3	54.3
18:35:00	62.6	70.8	UNDER	65.3	53.3
18:40:00	63.5	71.4	UNDER	66.3	56.3
18:45:00	63.0	72.3	UNDER	66.3	53.3
18:50:00	62.2	73.5	UNDER	65.3	53.3
18:55:00	63.7	77.2	UNDER	66.3	53.3
19:00:00	62.1	71.6	UNDER	65.3	51.3
19:05:00	62.2	70.4	UNDER	65.3	53.3
19:10:00	63.8	75.5	UNDER	66.3	55.3
19:15:00	63.4	74.0	UNDER	67.3	51.3
19:20:00	63.6	75.1	UNDER	67.3	52.3
19:25:00	62.8	70.8	UNDER	65.3	54.3
19:30:00	63.3	74.3	UNDER	66.3	53.3
19:35:00	62.6	70.6	UNDER	65.3	55.3
19:40:00	61.8	72.0	UNDER	65.3	53.3
19:45:00	62.2	70.5	UNDER	66.3	50.3
19:50:00	64.5	80.7	UNDER	65.3	52.3
19:55:00	62.1	72.7	UNDER	65.3	53.3
20:00:00	61.7	72.3	UNDER	65.3	52.3
20:05:00	60.9	70.6	UNDER	64.3	50.3
20:10:00	63.4	70.8	UNDER	66.3	51.3
20:15:00	61.6	68.2	UNDER	65.3	49.3
20:20:00	61.8	73.5	UNDER	65.3	53.3
20:25:00	62.3	72.7	UNDER	66.3	51.3
20:30:00	62.3	68.8	UNDER	66.3	48.3
20:35:00	65.0	81.6	UNDER	65.3	50.3
20:40:00	61.7	69.7	UNDER	65.3	49.3
20:45:00	62.7	76.9	UNDER	65.3	53.3
20:50:00	61.9	73.5	UNDER	66.3	47.3
20:55:00	61.2	70.6	UNDER	65.3	46.3
21:00:00	61.0	71.6	UNDER	64.3	51.3
21:05:00	61.0	69.2	UNDER	65.3	49.3
21:10:00	60.8	68.3	UNDER	64.3	51.3
21:15:00	61.8	72.7	UNDER	65.3	48.3
21:20:00	59.1	68.4	UNDER	62.3	47.3
21:25:00	60.8	69.8	UNDER	64.3	48.3
21:30:00	61.3	73.9	UNDER	64.3	52.3
21:35:00	60.4	68.2	UNDER	64.3	48.3
21:40:00	60.9	67.9	UNDER	65.3	47.3
21:45:00	60.1	69.5	UNDER	64.3	49.3
21:50:00	60.4	72.4	UNDER	64.3	45.3
21:55:00	59.1	69.2	UNDER	62.3	49.3
22:00:00	60.8	69.6	UNDER	65.3	47.3
22:05:00	60.0	68.4	UNDER	64.3	46.3
22:10:00	61.3	72.3	UNDER	65.3	48.3
22:15:00	59.2	69.2	UNDER	62.3	48.3
22:20:00	61.2	72.3	UNDER	65.3	49.3
22:25:00	60.1	69.1	UNDER	63.3	48.3
22:30:00	60.9	70.8	UNDER	64.3	49.3
22:35:00	59.9	67.5	UNDER	64.3	45.3

22:40:00	60.5	70.4	UNDER	64.3	44.3
22:45:00	59.1	69.6	UNDER	63.3	47.3
22:50:00	60.4	74.2	UNDER	63.3	47.3
22:55:00	59.5	72.0	UNDER	62.3	45.3
23:00:00	59.3	69.2	UNDER	63.3	45.3
23:05:00	60.1	68.4	UNDER	63.3	44.3
23:10:00	60.7	72.0	UNDER	64.3	44.3
23:15:00	60.6	69.5	UNDER	64.3	49.3
23:20:00	60.2	70.4	UNDER	63.3	48.3
23:25:00	60.4	71.8	UNDER	64.3	45.3
23:30:00	59.4	69.1	UNDER	63.3	49.3
23:35:00	59.8	69.6	UNDER	63.3	46.3
23:40:00	59.9	69.6	UNDER	63.3	48.3
23:45:00	59.9	68.3	UNDER	63.3	49.3
23:50:00	59.9	69.7	UNDER	63.3	47.3
23:55:00	59.9	70.0	UNDER	63.3	44.3
00:00:00	59.4	67.6	UNDER	64.3	46.3
00:05:00	59.9	70.4	UNDER	63.3	45.3
00:10:00	58.8	69.4	UNDER	62.3	48.3
00:15:00	58.5	68.8	UNDER	62.3	45.3
00:20:00	62.4	80.7	UNDER	65.3	44.3
00:25:00	60.9	76.8	UNDER	64.3	44.3
00:30:00	60.3	72.7	UNDER	64.3	45.3
00:35:00	59.1	68.7	UNDER	63.3	45.3
00:40:00	59.9	69.6	UNDER	64.3	45.3
00:45:00	57.2	67.9	UNDER	60.3	44.3
00:50:00	59.2	70.3	UNDER	63.3	47.3
00:55:00	59.8	72.0	UNDER	63.3	47.3
01:00:00	57.7	66.8	UNDER	63.3	44.3
01:05:00	59.4	70.2	UNDER	64.3	44.3
01:10:00	61.9	74.8	UNDER	66.3	49.3
01:15:00	57.6	68.4	UNDER	61.3	44.3
01:20:00	57.8	71.1	UNDER	62.3	43.3
01:25:00	61.2	69.6	UNDER	65.3	45.3
01:30:00	56.1	65.6	UNDER	60.3	44.3
01:35:00	58.6	70.0	UNDER	63.3	45.3
01:40:00	60.5	71.6	UNDER	64.3	45.3
01:45:00	56.1	67.9	UNDER	59.3	45.3
01:50:00	59.0	74.6	UNDER	61.3	43.3
01:55:00	57.8	69.9	UNDER	62.3	44.3
02:00:00	58.7	68.3	UNDER	63.3	43.3
02:05:00	57.5	68.0	UNDER	61.3	47.3
02:10:00	58.3	73.5	UNDER	62.3	43.3
02:15:00	60.3	71.5	UNDER	64.3	47.3
02:20:00	57.7	70.0	UNDER	62.3	45.3
02:25:00	60.1	68.7	UNDER	65.3	47.3
02:30:00	57.0	70.0	UNDER	60.3	43.3
02:35:00	60.0	71.2	UNDER	64.3	45.3
02:40:00	56.0	69.6	UNDER	58.3	44.3
02:45:00	59.4	69.2	UNDER	63.3	45.3
02:50:00	62.2	76.7	UNDER	66.3	48.3
02:55:00	58.1	71.4	UNDER	61.3	42.3
03:00:00	60.7	69.1	UNDER	65.3	44.3
03:05:00	57.6	68.3	UNDER	61.3	43.3
03:10:00	61.0	69.9	UNDER	65.3	49.3
03:15:00	59.3	72.0	UNDER	63.3	46.3
03:20:00	62.2	71.2	UNDER	66.3	51.3
03:25:00	63.5	79.7	UNDER	66.3	46.3
03:30:00	59.7	70.8	UNDER	63.3	48.3
03:35:00	60.6	68.5	UNDER	65.3	46.3
03:40:00	61.3	73.3	UNDER	65.3	45.3
03:45:00	60.0	70.4	UNDER	64.3	48.3
03:50:00	58.5	69.5	UNDER	62.3	46.3

03:55:00	61.4	79.1	UNDER	64.3	45.3
04:00:00	61.3	68.1	UNDER	64.3	50.3
04:05:00	60.7	67.9	UNDER	64.3	47.3
04:10:00	61.5	72.7	UNDER	65.3	47.3
04:15:00	62.9	76.5	UNDER	65.3	48.3
04:20:00	61.1	69.3	UNDER	64.3	52.3
04:25:00	60.8	70.0	UNDER	65.3	48.3
04:30:00	61.7	71.2	UNDER	65.3	51.3
04:35:00	62.6	76.0	UNDER	65.3	49.3
04:40:00	60.7	71.1	UNDER	64.3	51.3
04:45:00	62.1	75.1	UNDER	66.3	50.3
04:50:00	62.5	71.6	UNDER	66.3	52.3
04:55:00	63.1	73.3	UNDER	67.3	53.3
05:00:00	61.1	72.0	UNDER	64.3	50.3
05:05:00	63.1	70.0	UNDER	66.3	54.3
05:10:00	62.2	70.3	UNDER	64.3	56.3
05:15:00	62.8	73.5	UNDER	64.3	56.3
05:20:00	65.0	81.5	UNDER	67.3	53.3
05:25:00	64.0	70.4	UNDER	67.3	56.3
05:30:00	63.4	69.6	UNDER	66.3	56.3
05:35:00	64.2	70.0	UNDER	67.3	57.3
05:40:00	66.4	74.3	UNDER	69.3	58.3
05:45:00	64.9	72.2	UNDER	68.3	57.3
05:50:00	64.8	75.9	UNDER	67.3	56.3
05:55:00	65.3	73.4	UNDER	68.3	56.3
06:00:00	65.5	72.1	UNDER	68.3	58.3
06:05:00	65.0	73.1	UNDER	67.3	58.3
06:10:00	66.6	79.2	UNDER	69.3	60.3
06:15:00	65.6	74.2	UNDER	68.3	60.3
06:20:00	65.5	71.5	UNDER	68.3	60.3
06:25:00	65.3	72.0	UNDER	67.3	59.3
06:30:00	65.8	76.3	UNDER	68.3	61.3
06:35:00	66.6	73.1	UNDER	69.3	60.3
06:40:00	65.6	71.1	UNDER	68.3	60.3
06:45:00	65.0	71.9	UNDER	67.3	59.3
06:50:00	67.7	79.5	UNDER	70.3	61.3
06:55:00	64.7	69.6	UNDER	67.3	60.3

```
**********************************************************************
Filename..............PTC-26A
Test Location..........1005 Pike View Lane
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 5093
REPORT PRINTED ON 03/06/14 at 07:17:23

User ID: _____________________________




LOGGING STARTED......03/05/14 at 11:17:30
TOTAL LOGGING TIME...0 DAYS 00:14:27
LOGGING STOPPED......03/05/14 at 11:31:57
TOTAL INTERVALS......29
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:55:38
PRE-TEST CALIBRATION RANGE...39.3 TO 139.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  63.1dB
Lav ( 80).......  39.3dB
Lav ( 90).......  39.3dB
SEL.............  92.4dB

TWA.............  48.0dB
TWA ( 80).......  39.3dB
TWA ( 90).......  39.3dB

Lmax............  71.6dB  03/05/14 at 11:24:53
Lpk.............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
11:17:30	62.5	65.5	UNDER	64.3	57.3
11:18:00	63.9	66.8	UNDER	66.3	57.3
11:18:30	62.9	67.3	UNDER	66.3	55.3
11:19:00	61.1	67.1	UNDER	64.3	53.3
11:19:30	62.4	65.1	UNDER	64.3	58.3
11:20:00	60.1	64.8	UNDER	63.3	55.3
11:20:30	64.8	69.9	UNDER	68.3	53.3
11:21:00	64.5	66.3	UNDER	65.3	60.3
11:21:30	63.0	67.5	UNDER	66.3	57.3
11:22:00	61.1	68.4	UNDER	64.3	54.3
11:22:30	62.2	67.8	UNDER	64.3	54.3
11:23:00	65.9	69.8	UNDER	68.3	61.3
11:23:30	62.6	65.2	UNDER	64.3	58.3
11:24:00	63.2	67.4	UNDER	66.3	56.3
11:24:30	64.9	71.6	UNDER	69.3	56.3
11:25:00	61.8	66.4	UNDER	64.3	55.3
11:25:30	61.3	67.1	UNDER	64.3	56.3
11:26:00	58.7	64.4	UNDER	62.3	55.3
11:26:30	64.2	68.4	UNDER	66.3	56.3
11:27:00	62.8	66.4	UNDER	65.3	57.3
11:27:30	62.8	67.1	UNDER	65.3	56.3
11:28:00	63.1	66.5	UNDER	65.3	54.3
11:28:30	64.7	67.2	UNDER	66.3	60.3
11:29:00	57.6	61.1	UNDER	60.3	51.3
11:29:30	60.6	64.3	UNDER	62.3	55.3
11:30:00	64.9	68.3	UNDER	66.3	58.3
11:30:30	62.2	68.8	UNDER	66.3	55.3
11:31:00	65.7	69.1	UNDER	68.3	59.3
11:31:30	64.1	68.4	UNDER	67.3	58.3

```
**********************************************************************
Filename..............PTC-25
Test Location..........118 Harvison Court
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 03/06/14 at 06:36:46

User ID: _____________________________




LOGGING STARTED......03/05/14 at 11:07:30
TOTAL LOGGING TIME...0 DAYS 00:21:57
LOGGING STOPPED......03/05/14 at 11:29:27
TOTAL INTERVALS......44
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:54:28
PRE-TEST CALIBRATION RANGE...40.3 TO 140.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  71.6dB
Lav ( 80)......  54.1dB
Lav ( 90)......  40.3dB
SEL............. 102.6dB

TWA.............  58.2dB
TWA ( 80)......  40.8dB
TWA ( 90)......  40.3dB

Lmax............  81.6dB  03/05/14 at 11:27:18
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
11:07:30	70.7	75.2	UNDER	74.3	58.3
11:08:00	69.6	73.6	UNDER	72.3	63.3
11:08:30	70.2	74.4	UNDER	73.3	64.3
11:09:00	70.2	76.4	UNDER	74.3	63.3
11:09:30	73.0	76.0	UNDER	75.3	63.3
11:10:00	71.2	75.6	UNDER	73.3	63.3
11:10:30	74.0	77.6	UNDER	76.3	63.3
11:11:00	72.3	76.8	UNDER	75.3	63.3
11:11:30	73.7	77.1	UNDER	76.3	67.3
11:12:00	71.0	76.0	UNDER	73.3	64.3
11:12:30	70.6	74.4	UNDER	73.3	65.3
11:13:00	72.2	77.2	UNDER	75.3	60.3
11:13:30	70.6	74.8	UNDER	73.3	66.3
11:14:00	69.6	73.6	UNDER	72.3	63.3
11:14:30	71.8	75.7	UNDER	74.3	65.3
11:15:00	68.4	74.0	UNDER	72.3	57.3
11:15:30	69.9	72.8	UNDER	72.3	65.3
11:16:00	71.4	79.0	UNDER	75.3	64.3
11:16:30	72.6	76.8	UNDER	75.3	64.3
11:17:00	73.6	78.4	UNDER	76.3	65.3
11:17:30	69.0	71.8	UNDER	71.3	63.3
11:18:00	68.0	71.6	UNDER	70.3	61.3
11:18:30	70.0	76.8	UNDER	74.3	64.3
11:19:00	72.4	78.0	UNDER	76.3	63.3
11:19:30	71.3	78.1	UNDER	75.3	62.3
11:20:00	70.4	76.7	UNDER	73.3	64.3
11:20:30	75.6	80.2	UNDER	79.3	67.3
11:21:00	70.3	77.4	UNDER	75.3	59.3
11:21:30	71.4	77.5	UNDER	73.3	65.3
11:22:00	74.2	78.8	UNDER	77.3	60.3
11:22:30	69.4	77.2	UNDER	72.3	60.3
11:23:00	73.3	77.2	UNDER	76.3	67.3
11:23:30	71.1	76.5	UNDER	74.3	64.3
11:24:00	69.4	71.1	UNDER	70.3	67.3
11:24:30	71.4	78.0	UNDER	74.3	65.3
11:25:00	73.0	77.6	UNDER	76.3	66.3
11:25:30	72.4	78.4	UNDER	76.3	64.3
11:26:00	66.9	76.8	UNDER	69.3	55.3
11:26:30	68.0	71.6	UNDER	70.3	61.3
11:27:00	73.9	81.6	UNDER	77.3	68.3
11:27:30	70.8	76.0	UNDER	73.3	62.3
11:28:00	68.0	74.8	UNDER	72.3	57.3
11:28:30	72.8	77.3	UNDER	74.3	66.3
11:29:00	71.2	76.4	UNDER	74.3	66.3

```
**********************************************************************
Filename..............PTC-24
Test Location..........459 Hemlock Road
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 4618
REPORT PRINTED ON 03/06/14 at 06:53:46

User ID: _____________________________




LOGGING STARTED......03/05/14 at 10:06:30
TOTAL LOGGING TIME...0 DAYS 00:27:54
LOGGING STOPPED......03/05/14 at 10:34:24
TOTAL INTERVALS......56
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:57:55
PRE-TEST CALIBRATION RANGE...45.7 TO 145.7 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  54.0dB
Lav ( 80)......  45.7dB
Lav ( 90)......  45.7dB
SEL.............  86.1dB

TWA.............  45.7dB
TWA ( 80)......  45.7dB
TWA ( 90)......  45.7dB

Lmax............  58.6dB  03/05/14 at 10:33:47
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
10:06:30	53.5	55.0	UNDER	54.7	52.7
10:07:00	54.6	57.0	UNDER	56.7	52.7
10:07:30	55.3	57.0	UNDER	56.7	51.7
10:08:00	52.9	54.6	UNDER	54.7	51.7
10:08:30	53.9	55.0	UNDER	54.7	53.7
10:09:00	51.8	53.4	UNDER	52.7	51.7
10:09:30	54.5	56.1	UNDER	55.7	51.7
10:10:00	53.2	55.0	UNDER	54.7	51.7
10:10:30	54.9	57.2	UNDER	56.7	53.7
10:11:00	54.2	56.2	UNDER	55.7	52.7
10:11:30	54.8	56.4	UNDER	56.7	51.7
10:12:00	53.9	55.6	UNDER	54.7	52.7
10:12:30	54.8	56.5	UNDER	56.7	52.7
10:13:00	51.8	54.1	UNDER	53.7	50.7
10:13:30	53.3	55.4	UNDER	55.7	50.7
10:14:00	53.8	55.4	UNDER	55.7	52.7
10:14:30	53.8	54.8	UNDER	54.7	52.7
10:15:00	52.6	55.2	UNDER	54.7	51.7
10:15:30	55.0	56.1	UNDER	55.7	53.7
10:16:00	54.8	56.6	UNDER	56.7	52.7
10:16:30	54.4	56.1	UNDER	55.7	52.7
10:17:00	53.0	54.6	UNDER	53.7	52.7
10:17:30	52.5	53.5	UNDER	52.7	51.7
10:18:00	53.3	54.7	UNDER	54.7	51.7
10:18:30	52.1	54.6	UNDER	54.7	50.7
10:19:00	54.2	55.6	UNDER	55.7	51.7
10:19:30	52.5	54.8	UNDER	54.7	50.7
10:20:00	53.9	55.6	UNDER	55.7	52.7
10:20:30	55.1	56.6	UNDER	56.7	53.7
10:21:00	54.7	55.9	UNDER	55.7	53.7
10:21:30	53.4	54.8	UNDER	54.7	52.7
10:22:00	53.7	55.2	UNDER	54.7	52.7
10:22:30	53.8	55.8	UNDER	55.7	53.7
10:23:00	55.5	56.4	UNDER	56.7	54.7
10:23:30	55.1	56.4	UNDER	56.7	53.7
10:24:00	54.3	55.7	UNDER	55.7	53.7
10:24:30	54.2	56.1	UNDER	55.7	51.7
10:25:00	53.2	55.5	UNDER	54.7	51.7
10:25:30	52.8	55.8	UNDER	54.7	51.7
10:26:00	54.7	56.6	UNDER	56.7	52.7
10:26:30	54.3	55.6	UNDER	55.7	51.7
10:27:00	52.3	54.0	UNDER	53.7	51.7
10:27:30	53.5	55.2	UNDER	54.7	51.7
10:28:00	54.3	55.8	UNDER	55.7	53.7
10:28:30	52.2	55.2	UNDER	53.7	50.7
10:29:00	53.8	55.5	UNDER	54.7	52.7
10:29:30	52.8	53.7	UNDER	53.7	52.7
10:30:00	53.9	55.6	UNDER	55.7	52.7
10:30:30	54.8	55.8	UNDER	55.7	53.7
10:31:00	53.7	54.9	UNDER	54.7	52.7
10:31:30	55.7	58.1	UNDER	57.7	52.7
10:32:00	54.5	56.7	UNDER	55.7	52.7

10:32:30	54.7	56.2	UNDER	55.7	52.7
10:33:00	54.4	55.6	UNDER	55.7	53.7
10:33:30	56.2	58.6	UNDER	58.7	52.7
10:34:00	53.9	56.8	UNDER	55.7	52.7

```
**********************************************************************
Filename..............PTC-22
Test Location..........449 Murrysville Road
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3897
REPORT PRINTED ON 03/06/14 at 06:36:40

User ID: _____________________________




LOGGING STARTED......03/05/14 at 09:51:30
TOTAL LOGGING TIME...0 DAYS 00:48:39
LOGGING STOPPED......03/05/14 at 10:40:09
TOTAL INTERVALS......98
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:56:49
PRE-TEST CALIBRATION RANGE...40.1 TO 140.1 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  62.9dB
Lav ( 80)......  40.1dB
Lav ( 90)......  40.1dB
SEL.............  97.5dB

TWA.............  53.0dB
TWA ( 80)......  40.1dB
TWA ( 90)......  40.1dB

Lmax............  70.2dB  03/05/14 at 10:36:32
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
09:51:30	64.6	68.6	UNDER	66.1	61.1
09:52:00	61.7	64.6	UNDER	63.1	57.1
09:52:30	63.1	66.2	UNDER	65.1	59.1
09:53:00	62.1	65.0	UNDER	64.1	57.1
09:53:30	60.1	64.2	UNDER	62.1	54.1
09:54:00	63.8	67.4	UNDER	65.1	57.1
09:54:30	63.4	66.2	UNDER	65.1	60.1
09:55:00	63.7	67.3	UNDER	66.1	58.1
09:55:30	63.0	66.8	UNDER	65.1	59.1
09:56:00	63.3	67.0	UNDER	66.1	58.1
09:56:30	60.1	65.8	UNDER	64.1	53.1
09:57:00	62.9	65.6	UNDER	65.1	58.1
09:57:30	63.1	69.8	UNDER	65.1	58.1
09:58:00	59.5	65.0	UNDER	63.1	53.1
09:58:30	60.5	65.8	UNDER	62.1	57.1
09:59:00	62.2	66.2	UNDER	64.1	56.1
09:59:30	63.9	69.0	UNDER	67.1	59.1
10:00:00	60.7	64.8	UNDER	62.1	55.1
10:00:30	65.4	68.6	UNDER	67.1	58.1
10:01:00	62.2	65.7	UNDER	64.1	56.1
10:01:30	62.8	66.8	UNDER	65.1	55.1
10:02:00	63.2	67.0	UNDER	64.1	60.1
10:02:30	64.1	67.4	UNDER	65.1	60.1
10:03:00	60.0	65.2	UNDER	63.1	55.1
10:03:30	62.3	66.5	UNDER	65.1	53.1
10:04:00	58.9	63.0	UNDER	61.1	55.1
10:04:30	63.1	66.3	UNDER	65.1	56.1
10:05:00	64.1	66.6	UNDER	65.1	60.1
10:05:30	65.2	69.0	UNDER	68.1	59.1
10:06:00	63.0	65.8	UNDER	64.1	59.1
10:06:30	61.5	67.0	UNDER	64.1	55.1
10:07:00	63.0	65.7	UNDER	65.1	58.1
10:07:30	62.7	66.2	UNDER	65.1	56.1
10:08:00	65.8	68.6	UNDER	67.1	61.1
10:08:30	62.6	67.4	UNDER	65.1	58.1
10:09:00	62.7	65.0	UNDER	64.1	59.1
10:09:30	60.4	64.8	UNDER	63.1	52.1
10:10:00	62.4	67.7	UNDER	65.1	51.1
10:10:30	64.1	65.8	UNDER	65.1	60.1
10:11:00	64.2	68.2	UNDER	66.1	60.1
10:11:30	62.7	65.4	UNDER	64.1	58.1
10:12:00	63.6	66.6	UNDER	65.1	60.1
10:12:30	61.9	67.0	UNDER	65.1	57.1
10:13:00	59.7	64.6	UNDER	63.1	53.1
10:13:30	61.6	65.5	UNDER	63.1	58.1
10:14:00	61.3	67.0	UNDER	63.1	57.1
10:14:30	61.6	67.5	UNDER	66.1	53.1
10:15:00	64.0	67.4	UNDER	66.1	59.1
10:15:30	62.5	65.0	UNDER	64.1	57.1
10:16:00	64.1	67.0	UNDER	66.1	60.1
10:16:30	63.8	66.5	UNDER	65.1	60.1
10:17:00	64.2	67.8	UNDER	66.1	59.1

10:17:30	61.5	66.4	UNDER	65.1	57.1
10:18:00	62.9	67.3	UNDER	65.1	58.1
10:18:30	61.4	66.2	UNDER	64.1	55.1
10:19:00	62.2	65.8	UNDER	65.1	56.1
10:19:30	62.9	67.1	UNDER	65.1	56.1
10:20:00	63.6	66.9	UNDER	65.1	55.1
10:20:30	60.9	65.0	UNDER	64.1	54.1
10:21:00	63.2	67.2	UNDER	66.1	58.1
10:21:30	65.3	67.9	UNDER	67.1	61.1
10:22:00	61.2	64.6	UNDER	63.1	57.1
10:22:30	63.1	66.2	UNDER	65.1	59.1
10:23:00	62.8	65.1	UNDER	64.1	59.1
10:23:30	64.9	68.6	UNDER	67.1	61.1
10:24:00	64.1	67.4	UNDER	66.1	57.1
10:24:30	62.0	66.5	UNDER	65.1	55.1
10:25:00	63.0	67.5	UNDER	65.1	55.1
10:25:30	61.8	64.3	UNDER	63.1	57.1
10:26:00	63.0	67.0	UNDER	64.1	60.1
10:26:30	61.9	65.4	UNDER	65.1	55.1
10:27:00	64.6	66.9	UNDER	66.1	60.1
10:27:30	59.5	62.6	UNDER	61.1	55.1
10:28:00	64.1	68.2	UNDER	66.1	59.1
10:28:30	63.6	67.8	UNDER	65.1	59.1
10:29:00	60.4	65.2	UNDER	62.1	55.1
10:29:30	62.4	65.4	UNDER	64.1	58.1
10:30:00	61.6	65.5	UNDER	64.1	57.1
10:30:30	62.9	68.4	UNDER	66.1	56.1
10:31:00	62.3	65.2	UNDER	64.1	58.1
10:31:30	63.6	65.8	UNDER	65.1	60.1
10:32:00	64.4	69.7	UNDER	67.1	59.1
10:32:30	64.0	67.4	UNDER	66.1	57.1
10:33:00	64.5	68.6	UNDER	66.1	61.1
10:33:30	62.7	65.8	UNDER	65.1	57.1
10:34:00	62.9	68.3	UNDER	66.1	57.1
10:34:30	63.5	68.6	UNDER	66.1	59.1
10:35:00	65.4	68.0	UNDER	67.1	60.1
10:35:30	63.5	66.2	UNDER	65.1	59.1
10:36:00	64.1	68.2	UNDER	66.1	59.1
10:36:30	64.2	70.2	UNDER	67.1	59.1
10:37:00	62.6	65.4	UNDER	64.1	59.1
10:37:30	59.6	66.6	UNDER	64.1	51.1
10:38:00	60.9	66.6	UNDER	64.1	54.1
10:38:30	63.6	66.3	UNDER	65.1	58.1
10:39:00	61.8	65.6	UNDER	64.1	58.1
10:39:30	61.1	64.5	UNDER	63.1	53.1
10:40:00	63.2	65.8	UNDER	65.1	60.1

****

Filename.............PTC-21
Test Location.........995 Lyons Run Road
Employee Name.........AJD, KJP
Employee Number........
Department............ENV
Short-term noise measurem
ents for PTC MP 57 to 67
reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14

****

METROSONICS db-3080 V1.12 SERIAL # 3895
REPORT PRINTED ON 03/06/14 at 06:36:33

User ID: _____

LOGGING STARTED......03/05/14 at 09:21:30
TOTAL LOGGING TIME...0 DAYS 01:29:36
LOGGING STOPPED......03/05/14 at 10:51:06
TOTAL INTERVALS......180
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:54:28
PRE-TEST CALIBRATION RANGE...40.3 TO 140.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB 90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav............. 63.1dB
Lav (80)...... 56.6dB
Lav (90)...... 40.3dB
SEL............. 100.2dB

TWA............. 55.8dB
TWA (80)...... 49.3dB
TWA (90)...... 40.3dB

Lmax............ 89.7dB 03/05/14 at 10:51:03
Lpk............. 115.6dB 03/05/14 at 10:51:03
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
09:21:30	74.4	81.2	UNDER	77.3	61.3
09:22:00	68.1	75.6	UNDER	72.3	60.3
09:22:30	61.4	64.4	UNDER	62.3	59.3
09:23:00	62.2	64.0	UNDER	63.3	60.3
09:23:30	61.3	64.3	UNDER	63.3	57.3
09:24:00	59.9	62.6	UNDER	62.3	55.3
09:24:30	58.1	63.2	UNDER	62.3	51.3
09:25:00	61.8	64.8	UNDER	64.3	56.3
09:25:30	55.9	57.0	UNDER	56.3	54.3
09:26:00	60.8	62.2	UNDER	62.3	56.3
09:26:30	62.6	64.8	UNDER	63.3	60.3
09:27:00	62.1	64.4	UNDER	64.3	59.3
09:27:30	63.2	66.8	UNDER	65.3	59.3
09:28:00	59.0	63.6	UNDER	62.3	52.3
09:28:30	62.9	64.0	UNDER	63.3	61.3
09:29:00	62.6	64.0	UNDER	63.3	59.3
09:29:30	58.4	59.6	UNDER	59.3	57.3
09:30:00	61.4	65.8	UNDER	63.3	57.3
09:30:30	62.7	66.0	UNDER	65.3	59.3
09:31:00	61.6	63.6	UNDER	62.3	59.3
09:31:30	60.8	62.4	UNDER	62.3	56.3
09:32:00	60.4	62.2	UNDER	61.3	56.3
09:32:30	61.1	63.3	UNDER	62.3	58.3
09:33:00	60.5	62.0	UNDER	61.3	58.3
09:33:30	62.5	63.6	UNDER	63.3	60.3
09:34:00	62.2	63.6	UNDER	63.3	60.3
09:34:30	62.4	63.4	UNDER	63.3	61.3
09:35:00	60.0	63.2	UNDER	62.3	56.3
09:35:30	59.9	62.0	UNDER	61.3	57.3
09:36:00	58.8	60.4	UNDER	60.3	56.3
09:36:30	62.4	65.2	UNDER	64.3	59.3
09:37:00	58.4	62.4	UNDER	61.3	52.3
09:37:30	60.1	63.4	UNDER	62.3	53.3
09:38:00	61.5	63.2	UNDER	62.3	58.3
09:38:30	60.2	62.2	UNDER	61.3	57.3
09:39:00	60.5	62.4	UNDER	62.3	58.3
09:39:30	61.2	64.4	UNDER	63.3	58.3
09:40:00	60.8	63.2	UNDER	62.3	57.3
09:40:30	61.9	63.6	UNDER	63.3	60.3
09:41:00	59.8	63.3	UNDER	62.3	57.3
09:41:30	58.8	61.2	UNDER	60.3	55.3
09:42:00	62.3	64.0	UNDER	63.3	59.3
09:42:30	64.1	65.7	UNDER	65.3	59.3
09:43:00	61.6	63.6	UNDER	63.3	58.3
09:43:30	61.1	63.5	UNDER	62.3	57.3
09:44:00	64.5	67.2	UNDER	66.3	59.3
09:44:30	60.3	62.4	UNDER	62.3	57.3
09:45:00	61.1	63.2	UNDER	62.3	57.3
09:45:30	59.6	62.4	UNDER	62.3	55.3
09:46:00	60.6	63.8	UNDER	62.3	58.3
09:46:30	61.0	63.5	UNDER	63.3	58.3
09:47:00	61.5	63.6	UNDER	63.3	56.3

09:47:30	60.1	63.2	UNDER	62.3	55.3
09:48:00	60.5	62.0	UNDER	61.3	59.3
09:48:30	60.2	61.6	UNDER	61.3	58.3
09:49:00	58.4	61.7	UNDER	61.3	54.3
09:49:30	63.3	65.2	UNDER	64.3	59.3
09:50:00	62.9	65.2	UNDER	64.3	59.3
09:50:30	59.9	61.6	UNDER	61.3	57.3
09:51:00	63.5	66.8	UNDER	66.3	58.3
09:51:30	60.1	61.4	UNDER	61.3	58.3
09:52:00	61.7	62.9	UNDER	62.3	60.3
09:52:30	61.4	62.5	UNDER	62.3	59.3
09:53:00	61.2	62.8	UNDER	62.3	56.3
09:53:30	60.5	63.6	UNDER	63.3	55.3
09:54:00	58.0	60.1	UNDER	59.3	54.3
09:54:30	61.5	63.6	UNDER	63.3	57.3
09:55:00	64.1	65.6	UNDER	64.3	62.3
09:55:30	61.7	63.2	UNDER	62.3	60.3
09:56:00	59.4	62.0	UNDER	61.3	55.3
09:56:30	61.0	64.4	UNDER	64.3	56.3
09:57:00	60.7	62.4	UNDER	62.3	57.3
09:57:30	59.7	62.1	UNDER	61.3	55.3
09:58:00	59.7	63.5	UNDER	62.3	55.3
09:58:30	60.2	63.4	UNDER	63.3	56.3
09:59:00	61.5	64.8	UNDER	63.3	58.3
09:59:30	58.3	60.5	UNDER	59.3	56.3
10:00:00	62.7	65.6	UNDER	64.3	59.3
10:00:30	63.8	65.6	UNDER	65.3	61.3
10:01:00	61.2	63.7	UNDER	63.3	58.3
10:01:30	62.0	64.8	UNDER	64.3	58.3
10:02:00	60.5	62.0	UNDER	61.3	58.3
10:02:30	61.5	63.9	UNDER	63.3	57.3
10:03:00	58.8	62.4	UNDER	60.3	57.3
10:03:30	60.6	62.6	UNDER	62.3	57.3
10:04:00	60.0	62.7	UNDER	62.3	55.3
10:04:30	59.8	63.3	UNDER	62.3	56.3
10:05:00	61.9	62.8	UNDER	62.3	60.3
10:05:30	65.1	67.6	UNDER	67.3	61.3
10:06:00	58.4	62.0	UNDER	59.3	55.3
10:06:30	61.8	66.4	UNDER	64.3	55.3
10:07:00	60.3	63.1	UNDER	62.3	57.3
10:07:30	63.5	65.4	UNDER	65.3	59.3
10:08:00	62.3	65.1	UNDER	64.3	58.3
10:08:30	62.3	64.4	UNDER	64.3	58.3
10:09:00	60.5	64.0	UNDER	63.3	56.3
10:09:30	58.9	61.0	UNDER	60.3	56.3
10:10:00	61.9	63.5	UNDER	63.3	58.3
10:10:30	61.7	65.7	UNDER	64.3	58.3
10:11:00	62.6	64.0	UNDER	63.3	59.3
10:11:30	62.8	65.4	UNDER	64.3	58.3
10:12:00	61.3	62.6	UNDER	62.3	58.3
10:12:30	60.4	62.0	UNDER	61.3	57.3
10:13:00	61.5	64.0	UNDER	63.3	58.3
10:13:30	56.3	59.6	UNDER	58.3	53.3
10:14:00	61.4	64.7	UNDER	64.3	57.3
10:14:30	61.4	64.0	UNDER	63.3	56.3
10:15:00	60.7	62.0	UNDER	62.3	58.3
10:15:30	61.0	62.4	UNDER	62.3	58.3
10:16:00	62.1	64.0	UNDER	63.3	59.3
10:16:30	63.1	65.6	UNDER	64.3	60.3
10:17:00	61.8	65.2	UNDER	64.3	58.3
10:17:30	59.3	61.2	UNDER	60.3	55.3
10:18:00	59.5	60.4	UNDER	60.3	58.3
10:18:30	61.4	62.9	UNDER	62.3	59.3

10:19:00	59.2	61.6	UNDER	61.3	55.3
10:19:30	62.2	63.3	UNDER	62.3	61.3
10:20:00	59.7	62.2	UNDER	61.3	56.3
10:20:30	62.0	64.3	UNDER	63.3	60.3
10:21:00	61.9	64.4	UNDER	63.3	59.3
10:21:30	62.9	65.2	UNDER	64.3	60.3
10:22:00	60.7	62.4	UNDER	62.3	58.3
10:22:30	59.2	61.6	UNDER	60.3	57.3
10:23:00	62.6	63.6	UNDER	63.3	61.3
10:23:30	62.1	64.8	UNDER	64.3	60.3
10:24:00	62.1	65.3	UNDER	65.3	58.3
10:24:30	61.9	63.9	UNDER	63.3	59.3
10:25:00	60.7	62.4	UNDER	62.3	57.3
10:25:30	61.0	63.1	UNDER	62.3	57.3
10:26:00	60.7	64.0	UNDER	63.3	56.3
10:26:30	61.3	64.4	UNDER	63.3	57.3
10:27:00	61.6	63.2	UNDER	63.3	57.3
10:27:30	60.8	63.2	UNDER	62.3	57.3
10:28:00	59.5	63.2	UNDER	60.3	57.3
10:28:30	62.1	64.3	UNDER	64.3	54.3
10:29:00	60.1	63.8	UNDER	63.3	54.3
10:29:30	59.7	62.0	UNDER	61.3	57.3
10:30:00	60.3	61.9	UNDER	61.3	57.3
10:30:30	61.2	63.2	UNDER	62.3	58.3
10:31:00	62.8	64.0	UNDER	63.3	60.3
10:31:30	60.4	61.8	UNDER	61.3	58.3
10:32:00	63.9	66.8	UNDER	65.3	59.3
10:32:30	62.9	65.2	UNDER	64.3	60.3
10:33:00	61.0	64.0	UNDER	63.3	57.3
10:33:30	62.2	64.4	UNDER	64.3	59.3
10:34:00	63.0	65.6	UNDER	65.3	60.3
10:34:30	60.9	63.6	UNDER	63.3	56.3
10:35:00	62.5	64.8	UNDER	64.3	57.3
10:35:30	62.6	65.6	UNDER	65.3	57.3
10:36:00	62.6	65.4	UNDER	64.3	59.3
10:36:30	61.5	64.0	UNDER	62.3	60.3
10:37:00	61.2	65.3	UNDER	64.3	57.3
10:37:30	57.6	60.4	UNDER	59.3	53.3
10:38:00	59.0	62.4	UNDER	61.3	53.3
10:38:30	62.0	64.1	UNDER	63.3	60.3
10:39:00	61.0	64.4	UNDER	64.3	53.3
10:39:30	58.5	61.2	UNDER	60.3	56.3
10:40:00	57.8	59.2	UNDER	58.3	55.3
10:40:30	60.5	68.4	UNDER	65.3	53.3
10:41:00	59.4	62.0	UNDER	61.3	54.3
10:41:30	61.0	62.6	UNDER	62.3	58.3
10:42:00	60.9	63.3	UNDER	62.3	58.3
10:42:30	60.3	63.6	UNDER	63.3	55.3
10:43:00	61.5	62.9	UNDER	62.3	60.3
10:43:30	62.7	64.3	UNDER	63.3	60.3
10:44:00	60.2	62.4	UNDER	62.3	57.3
10:44:30	62.7	64.4	UNDER	64.3	60.3
10:45:00	61.6	66.0	UNDER	64.3	56.3
10:45:30	61.9	63.9	UNDER	63.3	60.3
10:46:00	62.4	65.2	UNDER	64.3	59.3
10:46:30	61.8	64.4	UNDER	64.3	57.3
10:47:00	60.8	63.2	UNDER	62.3	57.3
10:47:30	60.7	63.2	UNDER	63.3	56.3
10:48:00	58.0	62.8	UNDER	61.3	52.3
10:48:30	60.8	62.4	UNDER	62.3	58.3
10:49:00	59.7	64.0	UNDER	63.3	55.3
10:49:30	64.2	66.8	UNDER	66.3	61.3
10:50:00	63.9	66.0	UNDER	65.3	61.3

10:50:30	68.1	77.6	111.6	73.3	60.3
10:51:00	86.0	89.7	115.6	88.3	74.3

```
**********************************************************************
Filename..............PTC-20
Test Location..........1433 Lyons Chase Circle
Employee Name..........AJD, KJP
Employee Number........
Department.............ENV
          Short-term noise measurem
          ents for PTC MP 57 to 67
          reconstruction project.

Calibrator Type........Metrosonics CL304 SN 3616
Calibrator Cal. Date...01-16-14
**********************************************************************

METROSONICS db-3080  V1.20  SERIAL # 5093
REPORT PRINTED ON 03/06/14 at 06:36:28

User ID: _____________________________




LOGGING STARTED......03/05/14 at 09:37:30
TOTAL LOGGING TIME...0 DAYS 01:15:16
LOGGING STOPPED......03/05/14 at 10:52:46
TOTAL INTERVALS......151
INTERVAL LENGTH......00:00:30

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....03/05/14 AT 06:55:38
PRE-TEST CALIBRATION RANGE...39.3 TO 139.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  59.5dB
Lav ( 80)......  39.3dB
Lav ( 90)......  39.3dB
SEL.............  96.0dB

TWA.............  51.5dB
TWA ( 80)......  39.3dB
TWA ( 90)......  39.3dB

Lmax............  74.0dB  03/05/14 at 09:38:18
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
03/05/14					
09:37:30	62.7	68.9	UNDER	66.3	57.3
09:38:00	68.2	74.0	UNDER	70.3	57.3
09:38:30	60.8	67.9	UNDER	62.3	58.3
09:39:00	60.3	61.9	UNDER	61.3	58.3
09:39:30	56.7	58.7	UNDER	57.3	55.3
09:40:00	60.7	63.9	UNDER	63.3	57.3
09:40:30	56.8	57.7	UNDER	57.3	55.3
09:41:00	59.5	62.2	UNDER	61.3	56.3
09:41:30	56.3	59.2	UNDER	58.3	54.3
09:42:00	62.6	64.8	UNDER	63.3	59.3
09:42:30	61.6	63.9	UNDER	63.3	59.3
09:43:00	58.3	61.2	UNDER	59.3	56.3
09:43:30	60.7	63.6	UNDER	63.3	58.3
09:44:00	59.4	62.3	UNDER	60.3	57.3
09:44:30	62.3	65.2	UNDER	64.3	58.3
09:45:00	59.0	60.7	UNDER	60.3	57.3
09:45:30	56.5	60.2	UNDER	58.3	52.3
09:46:00	57.3	60.7	UNDER	59.3	53.3
09:46:30	60.4	62.4	UNDER	62.3	56.3
09:47:00	58.3	62.1	UNDER	60.3	54.3
09:47:30	58.6	61.5	UNDER	60.3	56.3
09:48:00	58.2	60.7	UNDER	59.3	56.3
09:48:30	59.0	61.5	UNDER	60.3	56.3
09:49:00	58.8	61.2	UNDER	60.3	57.3
09:49:30	61.6	63.6	UNDER	62.3	60.3
09:50:00	61.1	63.2	UNDER	62.3	59.3
09:50:30	57.4	63.2	UNDER	60.3	54.3
09:51:00	59.4	63.1	UNDER	61.3	55.3
09:51:30	61.9	64.3	UNDER	63.3	60.3
09:52:00	59.5	62.3	UNDER	61.3	55.3
09:52:30	58.8	61.1	UNDER	60.3	55.3
09:53:00	58.3	60.3	UNDER	59.3	56.3
09:53:30	57.3	59.6	UNDER	59.3	54.3
09:54:00	60.0	61.2	UNDER	60.3	57.3
09:54:30	60.7	62.3	UNDER	61.3	58.3
09:55:00	60.7	62.4	UNDER	62.3	58.3
09:55:30	60.5	63.2	UNDER	62.3	57.3
09:56:00	59.8	62.7	UNDER	62.3	57.3
09:56:30	56.1	58.0	UNDER	57.3	54.3
09:57:00	57.8	60.4	UNDER	59.3	54.3
09:57:30	59.9	63.5	UNDER	62.3	55.3
09:58:00	55.7	58.7	UNDER	58.3	51.3
09:58:30	54.2	56.2	UNDER	55.3	52.3
09:59:00	58.4	60.4	UNDER	59.3	55.3
09:59:30	60.7	62.3	UNDER	61.3	58.3
10:00:00	57.9	60.9	UNDER	60.3	54.3
10:00:30	62.4	64.0	UNDER	63.3	58.3
10:01:00	59.0	61.0	UNDER	60.3	57.3
10:01:30	57.8	59.9	UNDER	59.3	55.3
10:02:00	58.8	62.1	UNDER	60.3	56.3
10:02:30	59.9	62.3	UNDER	61.3	57.3
10:03:00	55.5	59.4	UNDER	57.3	52.3

10:03:30	58.2	60.9	UNDER	59.3	55.3
10:04:00	57.1	59.2	UNDER	59.3	54.3
10:04:30	57.9	59.3	UNDER	59.3	54.3
10:05:00	59.1	60.3	UNDER	59.3	57.3
10:05:30	61.5	65.6	UNDER	63.3	58.3
10:06:00	60.9	65.6	UNDER	64.3	57.3
10:06:30	57.8	60.3	UNDER	59.3	54.3
10:07:00	59.2	62.7	UNDER	62.3	55.3
10:07:30	59.8	61.2	UNDER	60.3	58.3
10:08:00	61.0	63.3	UNDER	62.3	58.3
10:08:30	60.9	63.2	UNDER	62.3	58.3
10:09:00	58.4	61.1	UNDER	59.3	56.3
10:09:30	57.3	60.3	UNDER	59.3	53.3
10:10:00	56.9	62.3	UNDER	61.3	50.3
10:10:30	61.0	62.2	UNDER	61.3	59.3
10:11:00	60.1	62.1	UNDER	61.3	58.3
10:11:30	58.9	62.3	UNDER	60.3	55.3
10:12:00	60.3	61.5	UNDER	61.3	58.3
10:12:30	59.4	62.4	UNDER	61.3	56.3
10:13:00	55.5	59.6	UNDER	58.3	51.3
10:13:30	58.0	60.1	UNDER	59.3	55.3
10:14:00	57.8	59.7	UNDER	59.3	55.3
10:14:30	58.3	60.7	UNDER	60.3	55.3
10:15:00	60.5	62.0	UNDER	61.3	57.3
10:15:30	58.7	61.2	UNDER	60.3	56.3
10:16:00	60.2	63.2	UNDER	62.3	56.3
10:16:30	59.8	61.6	UNDER	61.3	57.3
10:17:00	60.9	62.8	UNDER	62.3	57.3
10:17:30	55.9	57.6	UNDER	57.3	53.3
10:18:00	58.3	60.3	UNDER	59.3	55.3
10:18:30	55.8	58.4	UNDER	57.3	53.3
10:19:00	59.1	61.6	UNDER	61.3	56.3
10:19:30	56.7	59.9	UNDER	58.3	54.3
10:20:00	59.3	61.3	UNDER	60.3	56.3
10:20:30	59.0	61.1	UNDER	60.3	57.3
10:21:00	58.6	60.6	UNDER	60.3	56.3
10:21:30	61.1	62.7	UNDER	62.3	59.3
10:22:00	59.4	62.7	UNDER	61.3	54.3
10:22:30	57.8	61.0	UNDER	60.3	53.3
10:23:00	59.8	61.6	UNDER	61.3	57.3
10:23:30	59.2	60.7	UNDER	60.3	56.3
10:24:00	61.5	64.3	UNDER	63.3	59.3
10:24:30	60.1	61.9	UNDER	61.3	56.3
10:25:00	59.1	62.4	UNDER	61.3	54.3
10:25:30	58.7	63.6	UNDER	60.3	56.3
10:26:00	59.1	60.5	UNDER	60.3	57.3
10:26:30	59.1	62.0	UNDER	61.3	54.3
10:27:00	60.2	63.5	UNDER	62.3	53.3
10:27:30	58.0	61.9	UNDER	61.3	52.3
10:28:00	58.6	61.2	UNDER	60.3	51.3
10:28:30	58.7	61.1	UNDER	60.3	57.3
10:29:00	59.4	62.8	UNDER	61.3	55.3
10:29:30	57.8	61.2	UNDER	60.3	55.3
10:30:00	57.7	61.6	UNDER	60.3	54.3
10:30:30	60.0	62.0	UNDER	61.3	57.3
10:31:00	58.8	60.8	UNDER	60.3	57.3
10:31:30	59.9	62.0	UNDER	61.3	57.3
10:32:00	59.6	62.0	UNDER	61.3	57.3
10:32:30	62.2	64.3	UNDER	63.3	58.3
10:33:00	59.6	61.2	UNDER	60.3	57.3
10:33:30	58.8	61.2	UNDER	60.3	57.3
10:34:00	57.8	60.8	UNDER	59.3	54.3
10:34:30	60.3	63.9	UNDER	62.3	57.3

10:35:00	61.6	64.3	UNDER	63.3	59.3
10:35:30	59.8	63.1	UNDER	61.3	55.3
10:36:00	60.6	62.9	UNDER	62.3	58.3
10:36:30	61.5	64.8	UNDER	63.3	57.3
10:37:00	56.8	59.1	UNDER	57.3	54.3
10:37:30	60.2	64.8	UNDER	63.3	51.3
10:38:00	54.7	57.2	UNDER	56.3	49.3
10:38:30	60.6	63.5	UNDER	62.3	56.3
10:39:00	59.1	62.2	UNDER	60.3	56.3
10:39:30	54.2	56.7	UNDER	55.3	51.3
10:40:00	55.9	57.3	UNDER	57.3	54.3
10:40:30	55.5	58.0	UNDER	56.3	53.3
10:41:00	57.0	59.1	UNDER	58.3	54.3
10:41:30	58.3	60.0	UNDER	59.3	56.3
10:42:00	58.0	61.4	UNDER	60.3	54.3
10:42:30	55.3	57.5	UNDER	56.3	53.3
10:43:00	59.5	61.2	UNDER	61.3	55.3
10:43:30	60.0	62.1	UNDER	61.3	56.3
10:44:00	59.3	61.5	UNDER	60.3	56.3
10:44:30	59.6	61.0	UNDER	60.3	58.3
10:45:00	59.9	63.9	UNDER	62.3	57.3
10:45:30	58.6	60.7	UNDER	60.3	55.3
10:46:00	60.7	63.6	UNDER	63.3	58.3
10:46:30	59.1	61.5	UNDER	60.3	56.3
10:47:00	58.1	61.5	UNDER	60.3	55.3
10:47:30	59.0	61.5	UNDER	61.3	54.3
10:48:00	57.7	60.4	UNDER	59.3	56.3
10:48:30	58.7	60.7	UNDER	60.3	56.3
10:49:00	60.2	63.6	UNDER	62.3	57.3
10:49:30	61.5	65.1	UNDER	64.3	56.3
10:50:00	63.2	65.2	UNDER	64.3	61.3
10:50:30	58.2	61.9	UNDER	61.3	53.3
10:51:00	59.2	60.7	UNDER	60.3	57.3
10:51:30	56.4	58.3	UNDER	57.3	54.3
10:52:00	59.3	61.2	UNDER	60.3	55.3
10:52:30	59.9	64.7	UNDER	61.3	57.3

```
**********************************************************************
Filename..............308014
Test Location..........PTC MP 57-67
Employee Name..........KJP/WCK
Employee Number........
Department.............ENV
          PTC Meter 3895



Calibrator Type........CL 304 2616
Calibrator Cal. Date...12-03-12 - 12-03-13
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 12/17/13 at 10:47:00

User ID: _____________________________




LOGGING STARTED......11/20/13 at 13:24:00
TOTAL LOGGING TIME...0 DAYS 00:12:25
LOGGING STOPPED......11/20/13 at 13:36:25
TOTAL INTERVALS......13
INTERVAL LENGTH......00:01:00

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....11/04/13 AT 16:14:49
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 5 OF 5 >>>

EXCHANGE RATE..........3dB
CUTOFFS.................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  61.1dB
Lav ( 80)......  40.5dB
Lav ( 90)......  40.5dB
SEL.............  89.7dB

TWA.............  45.3dB
TWA ( 80)......  40.5dB
TWA ( 90)......  40.5dB

Lmax............  70.2dB  11/20/13 at 13:33:01
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 5 OF 5 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
11/20/13					
13:24:00	59.5	61.4	UNDER	60.5	58.5
13:24:58	61.9	65.7	UNDER	64.5	55.5
13:25:56	59.4	63.0	UNDER	62.5	53.5
13:26:54	60.8	62.9	UNDER	62.5	58.5
13:27:52	61.9	65.0	UNDER	63.5	59.5
13:28:50	61.1	63.8	UNDER	63.5	55.5
13:29:48	60.3	63.7	UNDER	63.5	56.5
13:30:46	58.5	60.6	UNDER	60.5	54.5
13:31:44	64.9	69.8	UNDER	68.5	59.5
13:32:42	62.3	70.2	UNDER	66.5	55.5
13:33:40	60.5	63.1	UNDER	61.5	59.5
13:34:38	57.9	60.2	UNDER	59.5	54.5
13:35:36	59.0	61.8	UNDER	60.5	56.5

****

Filename.....308013
Test Location.....PTC MP 57-67
Employee Name.....KJP/WCK
Employee Number.....
Department.....ENV
PTC Meter 5093

Calibrator Type.....CL 304 2616
Calibrator Cal. Date...12-03-12 - 12-03-13

****

METROSONICS db-3080 V1.20 SERIAL # 5093
REPORT PRINTED ON 12/17/13 at 10:45:39

User ID: _____

LOGGING STARTED.....11/20/13 at 13:56:00
TOTAL LOGGING TIME...0 DAYS 00:10:13
LOGGING STOPPED.....11/20/13 at 14:06:13
TOTAL INTERVALS.....11
INTERVAL LENGTH.....00:01:00

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....11/04/13 AT 15:48:43
PRE-TEST CALIBRATION RANGE...39.3 TO 139.3 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 7 OF 7 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 59.7dB
Lav (80)..... 39.3dB
Lav (90)..... 39.3dB
SEL..... 87.5dB

TWA..... 43.1dB
TWA (80)..... 39.3dB
TWA (90)..... 39.3dB

Lmax..... 64.4dB 11/20/13 at 14:05:53
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 7 OF 7 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
11/20/13					
13:56:00	58.9	61.5	UNDER	60.3	53.3
13:56:56	60.1	63.1	UNDER	61.3	56.3
13:57:52	61.8	63.6	UNDER	63.3	58.3
13:58:48	58.7	63.0	UNDER	60.3	54.3
13:59:44	58.8	60.4	UNDER	60.3	55.3
14:00:40	60.3	63.5	UNDER	61.3	56.3
14:01:36	58.6	61.6	UNDER	59.3	56.3
14:02:32	58.8	62.7	UNDER	60.3	53.3
14:03:28	58.5	61.6	UNDER	60.3	54.3
14:04:24	60.5	64.4	UNDER	63.3	57.3
14:05:20	63.0	64.3	UNDER	63.3	61.3

****

Filename.....308014
Test Location.....PTC MP 57-67
Employee Name.....KJP/WCK
Employee Number.....
Department.....ENV
PTC Meter 3895

Calibrator Type.....CL 304 2616
Calibrator Cal. Date...12-03-12 - 12-03-13

****

METROSONICS db-3080 V1.12 SERIAL # 3895
REPORT PRINTED ON 12/17/13 at 10:46:53

User ID: _____

LOGGING STARTED.....11/20/13 at 11:55:00
TOTAL LOGGING TIME...0 DAYS 00:13:24
LOGGING STOPPED.....11/20/13 at 12:08:24
TOTAL INTERVALS.....14
INTERVAL LENGTH.....00:01:00

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....11/04/13 AT 16:14:49
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 4 OF 5 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 61.9dB
Lav (80)..... 40.5dB
Lav (90)..... 40.5dB
SEL..... 90.8dB

TWA..... 46.4dB
TWA (80)..... 40.5dB
TWA (90)..... 40.5dB

Lmax..... 71.1dB 11/20/13 at 12:08:16
Lpk.....UNDER RANGE
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 4 OF 5 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
11/20/13					
11:55:00	63.7	65.8	UNDER	65.5	59.5
11:55:58	62.3	65.7	UNDER	64.5	56.5
11:56:56	62.4	66.2	UNDER	64.5	55.5
11:57:54	60.6	64.5	UNDER	63.5	54.5
11:58:52	60.5	64.1	UNDER	62.5	52.5
11:59:50	60.0	63.0	UNDER	61.5	53.5
12:00:48	61.4	63.4	UNDER	62.5	56.5
12:01:46	58.9	61.3	UNDER	60.5	55.5
12:02:44	62.2	65.4	UNDER	64.5	58.5
12:03:42	60.2	63.7	UNDER	62.5	57.5
12:04:40	62.1	65.6	UNDER	64.5	56.5
12:05:38	63.8	71.0	UNDER	67.5	54.5
12:06:36	62.2	67.4	UNDER	64.5	58.5
12:07:34	64.4	71.1	UNDER	66.5	60.5

PTC-12 (30804).PRN

****

Filename.....30804
Test Location.....PTC 57-67 Meter 1 #3895
Employee Name.....AJD-WCK
Employee Number.....
Department.....Env

Calibrator Type.....
Calibrator Cal. Date...

****

METROSONICS db-3080 V1.12 SERIAL # 3895
REPORT PRINTED ON 11/07/13 at 10:35:38

User ID: _____

LOGGING STARTED.....11/04/13 at 16:20:00
TOTAL LOGGING TIME...1 DAY 14:58:18
LOGGING STOPPED.....11/06/13 at 07:18:18
TOTAL INTERVALS.....468
INTERVAL LENGTH.....00:05:00

AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.

PRE-TEST CALIBRATION TIME....11/04/13 AT 16:14:49
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE.....3dB
CUTOFFS..... 80dB 90dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav..... 69.8dB
Lav (80)..... 52.5dB
Lav (90)..... 44.3dB
SEL..... 121.1dB

TWA..... 76.7dB
TWA (80)..... 59.4dB
TWA (90)..... 51.1dB

Lmax..... 92.6dB 11/05/13 at 16:33:22
Lpk..... 111.8dB 11/04/13 at 23:02:20
TIME OVER 115dB...00:00:00.00

DOSE (80)........ 0.08%
DOSE (90)........ 0.01%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
11/04/13					
16:20:00	71.7	78.2	UNDER	74.5	65.5
16:25:00	70.6	78.2	UNDER	73.5	60.5
16:30:00	71.3	77.4	UNDER	73.5	65.5
16:35:00	70.7	76.2	UNDER	73.5	59.5
16:40:00	71.4	77.8	UNDER	73.5	63.5
16:45:00	71.9	78.6	UNDER	74.5	64.5
16:50:00	72.3	79.0	UNDER	74.5	65.5
16:55:00	71.2	77.2	UNDER	73.5	65.5
17:00:00	71.0	77.4	UNDER	73.5	63.5
17:05:00	70.7	76.2	UNDER	73.5	61.5
17:10:00	71.6	78.2	UNDER	73.5	62.5
17:15:00	70.8	76.7	UNDER	73.5	59.5
17:20:00	72.2	86.2	UNDER	74.5	61.5
17:25:00	71.4	78.2	UNDER	73.5	64.5
17:30:00	71.2	78.2	UNDER	73.5	59.5
17:35:00	71.3	78.7	UNDER	74.5	61.5
17:40:00	71.3	76.6	UNDER	74.5	61.5
17:45:00	70.6	78.6	UNDER	72.5	61.5
17:50:00	70.7	77.9	UNDER	73.5	62.5
17:55:00	70.2	76.2	UNDER	73.5	59.5
18:00:00	70.0	81.0	UNDER	73.5	61.5
18:05:00	70.4	77.8	UNDER	73.5	63.5
18:10:00	69.6	77.0	UNDER	73.5	54.5
18:15:00	70.2	75.8	UNDER	72.5	61.5
18:20:00	69.6	77.4	UNDER	72.5	59.5
18:25:00	71.3	80.2	UNDER	74.5	60.5
18:30:00	70.7	77.9	UNDER	73.5	62.5
18:35:00	70.0	76.1	UNDER	72.5	59.5
18:40:00	69.4	76.7	UNDER	73.5	59.5
18:45:00	69.3	76.2	UNDER	72.5	60.5
18:50:00	70.1	77.7	UNDER	73.5	57.5
18:55:00	69.4	78.2	UNDER	72.5	59.5
19:00:00	69.1	77.1	UNDER	72.5	58.5
19:05:00	69.4	76.6	UNDER	72.5	60.5
19:10:00	69.1	77.4	UNDER	72.5	58.5
19:15:00	68.6	78.2	UNDER	70.5	55.5
19:20:00	69.6	77.8	UNDER	73.5	52.5
19:25:00	68.7	75.8	UNDER	71.5	54.5
19:30:00	69.2	75.8	UNDER	72.5	57.5
19:35:00	69.0	77.4	UNDER	73.5	54.5
19:40:00	68.2	79.0	UNDER	71.5	54.5
19:45:00	68.5	77.0	UNDER	71.5	57.5
19:50:00	67.5	75.0	UNDER	70.5	57.5
19:55:00	69.5	78.4	UNDER	73.5	53.5
20:00:00	68.7	78.3	UNDER	71.5	51.5
20:05:00	69.2	77.7	UNDER	73.5	56.5
20:10:00	68.5	78.0	UNDER	71.5	57.5
20:15:00	67.9	77.4	UNDER	71.5	53.5
20:20:00	67.5	76.2	UNDER	70.5	55.5
20:25:00	67.8	76.3	UNDER	72.5	52.5
20:30:00	68.2	75.8	UNDER	71.5	55.5
20:35:00	69.3	78.2	UNDER	73.5	58.5
20:40:00	67.4	77.8	UNDER	70.5	52.5
20:45:00	69.3	78.2	UNDER	73.5	50.5

20:50:00	68.1	75.8	UNDER	71.5	55.5
20:55:00	68.2	76.0	UNDER	71.5	51.5
21:00:00	68.0	76.6	UNDER	71.5	46.5
21:05:00	68.0	75.8	UNDER	71.5	56.5
21:10:00	68.1	78.1	UNDER	72.5	53.5
21:15:00	68.8	76.9	UNDER	71.5	59.5
21:20:00	67.8	78.3	UNDER	71.5	53.5
21:25:00	69.3	78.2	UNDER	72.5	55.5
21:30:00	67.8	78.2	UNDER	71.5	55.5
21:35:00	68.3	78.0	UNDER	71.5	50.5
21:40:00	68.0	77.8	UNDER	72.5	54.5
21:45:00	67.1	75.0	UNDER	70.5	49.5
21:50:00	68.3	77.8	UNDER	72.5	52.5
21:55:00	67.3	75.8	UNDER	71.5	48.5
22:00:00	68.5	77.7	UNDER	72.5	50.5
22:05:00	67.9	79.3	UNDER	71.5	55.5
22:10:00	68.9	76.6	UNDER	72.5	54.5
22:15:00	68.1	76.6	UNDER	72.5	48.5
22:20:00	68.8	77.4	UNDER	73.5	53.5
22:25:00	65.5	76.3	UNDER	69.5	47.5
22:30:00	67.5	77.5	UNDER	71.5	52.5
22:35:00	67.0	80.0	UNDER	69.5	51.5
22:40:00	66.0	77.5	UNDER	69.5	51.5
22:45:00	67.5	79.3	UNDER	71.5	50.5
22:50:00	66.6	75.4	UNDER	71.5	48.5
22:55:00	66.5	76.2	UNDER	70.5	50.5
23:00:00	67.2	83.8	111.8	70.5	49.5
23:05:00	66.6	75.3	UNDER	70.5	50.5
23:10:00	68.0	76.6	UNDER	73.5	49.5
23:15:00	66.5	76.2	UNDER	71.5	45.5
23:20:00	66.3	76.8	UNDER	70.5	50.5
23:25:00	67.2	77.8	UNDER	71.5	49.5
23:30:00	67.4	76.6	UNDER	72.5	46.5
23:35:00	64.8	77.0	UNDER	69.5	46.5
23:40:00	63.7	75.8	UNDER	67.5	47.5
23:45:00	66.8	76.6	UNDER	70.5	49.5
23:50:00	69.4	79.2	UNDER	73.5	51.5
23:55:00	68.2	79.4	UNDER	72.5	47.5
00:00:00	65.4	76.2	UNDER	69.5	49.5
00:05:00	68.9	81.0	UNDER	73.5	54.5
00:10:00	66.5	75.5	UNDER	71.5	46.5
00:15:00	68.0	77.5	UNDER	73.5	47.5
00:20:00	65.3	75.3	UNDER	69.5	45.5
00:25:00	67.4	76.8	UNDER	72.5	46.5
00:30:00	66.8	76.2	UNDER	71.5	46.5
00:35:00	66.3	77.8	UNDER	70.5	47.5
00:40:00	66.7	78.2	UNDER	71.5	46.5
00:45:00	65.8	77.8	UNDER	69.5	49.5
00:50:00	66.8	75.9	UNDER	71.5	46.5
00:55:00	64.9	76.2	UNDER	69.5	43.5
01:00:00	62.8	74.2	UNDER	67.5	43.5
01:05:00	66.2	77.8	UNDER	70.5	48.5
01:10:00	65.5	75.8	UNDER	70.5	46.5
01:15:00	63.1	75.4	UNDER	68.5	43.5
01:20:00	64.7	76.7	UNDER	68.5	46.5
01:25:00	65.5	75.2	UNDER	69.5	46.5
01:30:00	64.9	77.8	UNDER	69.5	44.5
01:35:00	65.3	75.7	UNDER	69.5	43.5
01:40:00	66.5	76.6	UNDER	70.5	49.5
01:45:00	64.6	76.2	UNDER	68.5	46.5
01:50:00	66.3	81.0	UNDER	69.5	48.5
01:55:00	65.4	75.9	UNDER	69.5	45.5
02:00:00	65.3	76.2	UNDER	69.5	45.5

02:05:00	65.7	75.8	UNDER	69.5	47.5
02:10:00	68.2	78.1	UNDER	72.5	51.5
02:15:00	63.1	74.2	UNDER	68.5	43.5
02:20:00	66.0	77.4	UNDER	70.5	46.5
02:25:00	65.2	76.2	UNDER	69.5	47.5
02:30:00	65.9	76.2	UNDER	70.5	45.5
02:35:00	64.0	76.0	UNDER	67.5	44.5
02:40:00	65.1	76.2	UNDER	69.5	45.5
02:45:00	66.0	76.2	UNDER	70.5	45.5
02:50:00	67.0	76.2	UNDER	71.5	52.5
02:55:00	67.7	79.4	UNDER	72.5	47.5
03:00:00	64.6	76.0	UNDER	69.5	43.5
03:05:00	66.1	77.0	UNDER	71.5	44.5
03:10:00	65.1	77.0	UNDER	69.5	43.5
03:15:00	65.5	78.2	UNDER	69.5	49.5
03:20:00	66.2	76.2	UNDER	70.5	46.5
03:25:00	68.1	83.6	UNDER	71.5	46.5
03:30:00	65.4	75.4	UNDER	70.5	43.5
03:35:00	67.4	77.0	UNDER	72.5	49.5
03:40:00	65.7	74.8	UNDER	69.5	46.5
03:45:00	66.2	76.8	UNDER	70.5	47.5
03:50:00	65.9	78.2	UNDER	70.5	47.5
03:55:00	66.0	76.6	UNDER	69.5	48.5
04:00:00	67.4	77.8	UNDER	71.5	47.5
04:05:00	67.1	76.2	UNDER	71.5	48.5
04:10:00	69.3	79.4	UNDER	72.5	54.5
04:15:00	67.4	78.6	UNDER	71.5	52.5
04:20:00	66.3	76.6	UNDER	70.5	49.5
04:25:00	67.6	76.6	UNDER	71.5	47.5
04:30:00	67.5	77.0	UNDER	71.5	52.5
04:35:00	67.6	77.0	UNDER	71.5	53.5
04:40:00	67.9	80.6	UNDER	71.5	49.5
04:45:00	66.8	78.6	UNDER	70.5	47.5
04:50:00	68.2	77.4	UNDER	72.5	51.5
04:55:00	68.4	77.4	UNDER	72.5	53.5
05:00:00	66.9	76.2	UNDER	70.5	50.5
05:05:00	68.3	77.0	UNDER	71.5	51.5
05:10:00	69.3	78.2	UNDER	73.5	52.5
05:15:00	68.7	77.0	UNDER	72.5	54.5
05:20:00	69.3	82.2	UNDER	72.5	56.5
05:25:00	69.5	80.2	UNDER	72.5	58.5
05:30:00	69.5	78.3	UNDER	73.5	58.5
05:35:00	70.7	80.3	UNDER	73.5	61.5
05:40:00	70.1	77.4	UNDER	73.5	57.5
05:45:00	71.1	80.1	UNDER	74.5	61.5
05:50:00	70.6	76.2	UNDER	74.5	58.5
05:55:00	71.5	81.4	UNDER	75.5	60.5
06:00:00	70.6	78.7	UNDER	73.5	62.5
06:05:00	70.8	77.0	UNDER	73.5	63.5
06:10:00	71.8	81.1	UNDER	75.5	61.5
06:15:00	71.8	79.4	UNDER	75.5	62.5
06:20:00	70.5	78.6	UNDER	73.5	61.5
06:25:00	71.6	78.7	UNDER	74.5	60.5
06:30:00	70.7	79.4	UNDER	73.5	64.5
06:35:00	71.6	80.6	UNDER	74.5	59.5
06:40:00	71.8	78.6	UNDER	74.5	64.5
06:45:00	72.0	77.8	UNDER	75.5	65.5
06:50:00	72.0	80.4	UNDER	74.5	64.5
06:55:00	71.8	81.2	UNDER	74.5	61.5
07:00:00	71.6	78.2	UNDER	74.5	64.5
07:05:00	71.6	77.8	UNDER	74.5	64.5
07:10:00	71.5	77.9	UNDER	74.5	65.5
07:15:00	71.9	79.0	UNDER	74.5	63.5

07:20:00	72.7	79.0	UNDER	75.5	63.5
07:25:00	71.9	78.8	UNDER	74.5	62.5
07:30:00	73.3	79.8	UNDER	76.5	64.5
07:35:00	71.9	81.0	UNDER	74.5	64.5
07:40:00	71.9	77.8	UNDER	74.5	64.5
07:45:00	72.1	80.1	UNDER	74.5	62.5
07:50:00	72.1	78.2	UNDER	75.5	63.5
07:55:00	72.2	78.2	UNDER	75.5	65.5
08:00:00	72.7	79.4	UNDER	76.5	62.5
08:05:00	72.1	78.7	UNDER	74.5	65.5
08:10:00	71.7	77.8	UNDER	74.5	60.5
08:15:00	73.0	81.8	UNDER	75.5	63.5
08:20:00	71.7	81.6	UNDER	74.5	60.5
08:25:00	70.6	79.4	UNDER	73.5	62.5
08:30:00	72.2	80.0	UNDER	75.5	59.5
08:35:00	71.8	78.9	UNDER	75.5	62.5
08:40:00	71.6	79.0	UNDER	74.5	61.5
08:45:00	72.1	78.2	UNDER	75.5	63.5
08:50:00	71.0	77.8	UNDER	73.5	62.5
08:55:00	72.2	81.0	UNDER	74.5	64.5
09:00:00	71.5	78.7	UNDER	74.5	63.5
09:05:00	71.1	79.3	UNDER	74.5	61.5
09:10:00	71.2	81.0	UNDER	74.5	60.5
09:15:00	71.8	81.4	UNDER	74.5	62.5
09:20:00	71.8	81.0	UNDER	74.5	63.5
09:25:00	71.5	79.0	UNDER	73.5	60.5
09:30:00	72.2	82.2	UNDER	75.5	60.5
09:35:00	71.1	77.8	UNDER	74.5	60.5
09:40:00	71.7	79.4	UNDER	75.5	63.5
09:45:00	71.8	79.0	UNDER	75.5	59.5
09:50:00	71.2	78.6	UNDER	74.5	58.5
09:55:00	72.0	79.8	UNDER	75.5	57.5
10:00:00	71.1	79.8	UNDER	73.5	61.5
10:05:00	71.9	78.2	UNDER	74.5	60.5
10:10:00	70.8	78.5	UNDER	74.5	62.5
10:15:00	70.4	76.4	UNDER	73.5	63.5
10:20:00	71.6	80.2	UNDER	75.5	61.5
10:25:00	72.1	86.0	UNDER	74.5	60.5
10:30:00	71.2	77.4	UNDER	74.5	63.5
10:35:00	70.8	78.2	UNDER	74.5	59.5
10:40:00	70.7	77.4	UNDER	74.5	62.5
10:45:00	71.6	79.4	UNDER	75.5	60.5
10:50:00	71.2	80.7	UNDER	74.5	58.5
10:55:00	70.3	76.6	UNDER	73.5	61.5
11:00:00	70.7	77.8	UNDER	74.5	58.5
11:05:00	71.4	83.8	UNDER	74.5	58.5
11:10:00	71.2	80.6	UNDER	74.5	59.5
11:15:00	70.6	76.6	UNDER	74.5	59.5
11:20:00	71.5	80.7	UNDER	74.5	56.5
11:25:00	71.3	80.6	UNDER	74.5	58.5
11:30:00	70.9	77.4	UNDER	74.5	59.5
11:35:00	70.7	79.1	UNDER	74.5	59.5
11:40:00	72.4	83.5	UNDER	75.5	59.5
11:45:00	70.7	79.2	UNDER	74.5	54.5
11:50:00	71.3	78.2	UNDER	74.5	60.5
11:55:00	72.6	88.3	UNDER	75.5	61.5
12:00:00	72.2	81.0	UNDER	75.5	61.5
12:05:00	70.9	78.0	UNDER	74.5	61.5
12:10:00	71.7	80.2	UNDER	74.5	62.5
12:15:00	70.6	77.8	UNDER	74.5	61.5
12:20:00	71.0	78.6	UNDER	74.5	62.5
12:25:00	72.1	79.4	UNDER	75.5	62.5
12:30:00	69.8	78.2	UNDER	73.5	56.5

12:35:00	72.1	81.4	UNDER	75.5	61.5
12:40:00	70.4	77.8	UNDER	73.5	61.5
12:45:00	70.7	79.9	UNDER	73.5	61.5
12:50:00	70.6	76.6	UNDER	73.5	58.5
12:55:00	71.8	78.6	UNDER	75.5	59.5
13:00:00	70.5	77.8	UNDER	73.5	61.5
13:05:00	70.7	78.3	UNDER	73.5	59.5
13:10:00	71.0	79.7	UNDER	74.5	62.5
13:15:00	71.1	77.2	UNDER	74.5	62.5
13:20:00	70.9	77.4	UNDER	74.5	59.5
13:25:00	71.0	79.4	UNDER	74.5	59.5
13:30:00	70.3	76.2	UNDER	73.5	53.5
13:35:00	70.9	79.4	UNDER	74.5	58.5
13:40:00	71.4	80.6	UNDER	75.5	61.5
13:45:00	70.5	77.8	UNDER	73.5	59.5
13:50:00	72.5	80.6	UNDER	75.5	61.5
13:55:00	71.8	80.6	UNDER	74.5	64.5
14:00:00	71.9	78.6	UNDER	75.5	61.5
14:05:00	71.4	79.8	UNDER	75.5	61.5
14:10:00	71.0	77.8	UNDER	74.5	61.5
14:15:00	71.2	79.4	UNDER	73.5	62.5
14:20:00	71.5	80.2	UNDER	74.5	63.5
14:25:00	71.5	81.0	UNDER	74.5	62.5
14:30:00	71.9	81.0	UNDER	74.5	61.5
14:35:00	71.3	77.8	UNDER	73.5	62.5
14:40:00	72.8	82.6	UNDER	75.5	64.5
14:45:00	72.0	79.7	UNDER	75.5	63.5
14:50:00	71.3	77.4	UNDER	74.5	60.5
14:55:00	70.6	75.8	UNDER	73.5	63.5
15:00:00	71.6	80.9	UNDER	74.5	63.5
15:05:00	71.3	78.2	UNDER	74.5	55.5
15:10:00	71.6	78.6	UNDER	74.5	61.5
15:15:00	72.5	82.6	UNDER	75.5	61.5
15:20:00	71.8	81.4	UNDER	74.5	64.5
15:25:00	71.4	81.0	UNDER	73.5	60.5
15:30:00	71.1	77.0	UNDER	73.5	62.5
15:35:00	72.0	82.2	UNDER	74.5	63.5
15:40:00	71.7	80.2	UNDER	74.5	61.5
15:45:00	72.1	79.0	UNDER	75.5	63.5
15:50:00	71.8	78.6	UNDER	74.5	60.5
15:55:00	71.4	77.0	UNDER	74.5	61.5
16:00:00	71.2	77.8	UNDER	73.5	61.5
16:05:00	71.5	77.8	UNDER	73.5	62.5
16:10:00	71.7	79.0	UNDER	74.5	62.5
16:15:00	72.1	79.8	UNDER	75.5	61.5
16:20:00	72.0	80.6	UNDER	74.5	62.5
16:25:00	71.5	77.8	UNDER	74.5	64.5
16:30:00	75.5	92.6	UNDER	75.5	61.5
16:35:00	72.1	79.0	UNDER	75.5	63.5
16:40:00	71.9	78.6	UNDER	74.5	61.5
16:45:00	73.1	79.0	UNDER	76.5	64.5
16:50:00	71.6	79.8	UNDER	73.5	63.5
16:55:00	72.0	79.0	UNDER	74.5	62.5
17:00:00	71.6	78.5	UNDER	74.5	62.5
17:05:00	71.9	79.8	UNDER	74.5	61.5
17:10:00	71.8	79.4	UNDER	74.5	63.5
17:15:00	71.9	78.6	UNDER	74.5	65.5
17:20:00	71.7	79.1	UNDER	74.5	59.5
17:25:00	70.8	78.1	UNDER	73.5	61.5
17:30:00	71.2	77.0	UNDER	73.5	63.5
17:35:00	72.3	78.6	UNDER	75.5	64.5
17:40:00	71.4	79.4	UNDER	74.5	63.5
17:45:00	71.0	77.0	UNDER	73.5	63.5

17:50:00	71.5	78.4	UNDER	74.5	63.5
17:55:00	70.7	78.2	UNDER	73.5	62.5
18:00:00	71.7	78.2	UNDER	74.5	64.5
18:05:00	70.9	76.3	UNDER	73.5	59.5
18:10:00	70.4	77.4	UNDER	73.5	59.5
18:15:00	69.7	75.7	UNDER	72.5	58.5
18:20:00	70.2	79.6	UNDER	73.5	59.5
18:25:00	70.2	78.2	UNDER	72.5	58.5
18:30:00	70.3	80.1	UNDER	73.5	59.5
18:35:00	70.3	79.0	UNDER	73.5	61.5
18:40:00	70.8	77.8	UNDER	74.5	62.5
18:45:00	70.1	79.2	UNDER	73.5	57.5
18:50:00	69.6	76.2	UNDER	72.5	58.5
18:55:00	69.5	76.6	UNDER	72.5	57.5
19:00:00	70.0	77.4	UNDER	73.5	60.5
19:05:00	70.0	78.0	UNDER	73.5	59.5
19:10:00	69.7	77.4	UNDER	73.5	56.5
19:15:00	69.9	77.3	UNDER	73.5	58.5
19:20:00	70.9	79.4	UNDER	74.5	56.5
19:25:00	70.8	83.0	UNDER	74.5	58.5
19:30:00	71.0	85.0	UNDER	73.5	61.5
19:35:00	69.1	77.4	UNDER	72.5	54.5
19:40:00	69.4	76.4	UNDER	73.5	55.5
19:45:00	69.5	77.4	UNDER	72.5	57.5
19:50:00	71.8	88.6	UNDER	73.5	57.5
19:55:00	69.9	79.4	UNDER	73.5	58.5
20:00:00	68.7	77.4	UNDER	71.5	57.5
20:05:00	68.9	78.6	UNDER	72.5	57.5
20:10:00	68.9	77.0	UNDER	72.5	56.5
20:15:00	70.0	79.8	UNDER	73.5	59.5
20:20:00	69.9	81.8	UNDER	73.5	54.5
20:25:00	67.8	74.8	UNDER	71.5	53.5
20:30:00	68.3	78.2	UNDER	71.5	57.5
20:35:00	69.5	77.8	UNDER	73.5	59.5
20:40:00	70.0	78.4	UNDER	73.5	57.5
20:45:00	68.8	75.4	UNDER	72.5	55.5
20:50:00	69.5	77.0	UNDER	73.5	55.5
20:55:00	68.0	77.0	UNDER	71.5	54.5
21:00:00	68.1	77.0	UNDER	71.5	56.5
21:05:00	68.2	76.7	UNDER	71.5	56.5
21:10:00	68.8	79.0	UNDER	72.5	57.5
21:15:00	69.8	79.0	UNDER	73.5	55.5
21:20:00	68.3	77.4	UNDER	72.5	51.5
21:25:00	68.7	78.6	UNDER	72.5	56.5
21:30:00	68.2	76.6	UNDER	72.5	54.5
21:35:00	68.8	79.0	UNDER	72.5	58.5
21:40:00	68.0	77.3	UNDER	72.5	52.5
21:45:00	69.3	78.6	UNDER	73.5	50.5
21:50:00	68.2	78.0	UNDER	72.5	55.5
21:55:00	69.1	79.8	UNDER	73.5	55.5
22:00:00	67.8	77.0	UNDER	71.5	52.5
22:05:00	67.3	77.4	UNDER	70.5	53.5
22:10:00	68.2	77.4	UNDER	72.5	51.5
22:15:00	69.2	78.2	UNDER	73.5	54.5
22:20:00	69.2	79.0	UNDER	73.5	49.5
22:25:00	68.0	76.2	UNDER	72.5	54.5
22:30:00	67.3	77.5	UNDER	71.5	53.5
22:35:00	68.1	77.4	UNDER	72.5	48.5
22:40:00	68.7	78.5	UNDER	72.5	51.5
22:45:00	67.7	78.2	UNDER	72.5	50.5
22:50:00	67.9	77.4	UNDER	72.5	50.5
22:55:00	67.0	79.0	UNDER	71.5	48.5
23:00:00	68.2	79.0	UNDER	72.5	45.5

23:05:00	65.5	77.6	UNDER	68.5	49.5
23:10:00	69.1	83.4	UNDER	72.5	49.5
23:15:00	69.1	78.3	UNDER	73.5	53.5
23:20:00	67.2	77.0	UNDER	71.5	51.5
23:25:00	68.6	79.8	UNDER	72.5	50.5
23:30:00	67.6	78.6	UNDER	71.5	51.5
23:35:00	68.0	76.6	UNDER	73.5	49.5
23:40:00	68.1	76.2	UNDER	72.5	53.5
23:45:00	68.1	77.2	UNDER	72.5	52.5
23:50:00	66.6	77.5	UNDER	69.5	52.5
23:55:00	67.8	77.4	UNDER	72.5	49.5
00:00:00	66.7	76.8	UNDER	71.5	46.5
00:05:00	68.6	79.6	UNDER	73.5	51.5
00:10:00	67.5	79.0	UNDER	71.5	52.5
00:15:00	66.3	76.2	UNDER	70.5	51.5
00:20:00	66.0	77.0	UNDER	70.5	49.5
00:25:00	67.7	77.4	UNDER	72.5	49.5
00:30:00	65.0	74.2	UNDER	69.5	47.5
00:35:00	66.6	77.4	UNDER	71.5	49.5
00:40:00	67.5	78.2	UNDER	71.5	49.5
00:45:00	66.9	77.4	UNDER	71.5	48.5
00:50:00	67.3	76.8	UNDER	72.5	50.5
00:55:00	64.1	75.9	UNDER	68.5	46.5
01:00:00	66.6	80.2	UNDER	69.5	50.5
01:05:00	64.9	74.6	UNDER	69.5	50.5
01:10:00	68.0	77.4	UNDER	72.5	48.5
01:15:00	65.4	76.6	UNDER	69.5	47.5
01:20:00	65.3	76.6	UNDER	69.5	48.5
01:25:00	64.1	76.6	UNDER	67.5	46.5
01:30:00	67.3	77.4	UNDER	71.5	50.5
01:35:00	63.2	75.0	UNDER	67.5	44.5
01:40:00	66.1	77.7	UNDER	70.5	47.5
01:45:00	66.8	78.2	UNDER	71.5	50.5
01:50:00	64.4	77.7	UNDER	68.5	45.5
01:55:00	67.1	78.6	UNDER	72.5	47.5
02:00:00	65.8	76.0	UNDER	70.5	46.5
02:05:00	64.5	77.0	UNDER	68.5	46.5
02:10:00	65.4	74.6	UNDER	69.5	50.5
02:15:00	65.9	77.5	UNDER	70.5	46.5
02:20:00	67.4	77.4	UNDER	71.5	50.5
02:25:00	65.6	77.8	UNDER	70.5	49.5
02:30:00	66.7	77.4	UNDER	71.5	45.5
02:35:00	65.2	81.4	UNDER	68.5	47.5
02:40:00	66.0	75.4	UNDER	70.5	47.5
02:45:00	69.1	80.2	UNDER	73.5	47.5
02:50:00	66.4	77.4	UNDER	71.5	46.5
02:55:00	65.4	75.9	UNDER	70.5	46.5
03:00:00	65.7	75.7	UNDER	70.5	47.5
03:05:00	67.7	77.0	UNDER	71.5	48.5
03:10:00	68.4	84.2	UNDER	71.5	50.5
03:15:00	68.8	79.5	UNDER	72.5	49.5
03:20:00	67.5	77.0	UNDER	71.5	49.5
03:25:00	66.8	75.6	UNDER	71.5	50.5
03:30:00	67.7	77.4	UNDER	71.5	51.5
03:35:00	67.4	76.2	UNDER	71.5	51.5
03:40:00	67.9	79.0	UNDER	71.5	49.5
03:45:00	67.9	83.4	UNDER	71.5	51.5
03:50:00	65.9	76.6	UNDER	71.5	48.5
03:55:00	67.3	76.2	UNDER	71.5	51.5
04:00:00	68.4	81.3	UNDER	72.5	50.5
04:05:00	67.0	76.7	UNDER	70.5	53.5
04:10:00	68.1	76.6	UNDER	73.5	51.5
04:15:00	68.0	79.0	UNDER	71.5	53.5

04:20:00	66.7	76.2	UNDER	71.5	51.5
04:25:00	68.2	77.0	UNDER	71.5	52.5
04:30:00	67.8	77.4	UNDER	71.5	53.5
04:35:00	68.6	78.6	UNDER	73.5	52.5
04:40:00	67.7	77.0	UNDER	72.5	55.5
04:45:00	68.3	79.4	UNDER	72.5	52.5
04:50:00	68.8	78.6	UNDER	73.5	54.5
04:55:00	69.2	79.8	UNDER	72.5	56.5
05:00:00	69.1	77.8	UNDER	73.5	56.5
05:05:00	67.8	78.1	UNDER	71.5	55.5
05:10:00	70.0	81.0	UNDER	73.5	57.5
05:15:00	70.2	82.2	UNDER	73.5	55.5
05:20:00	69.6	77.4	UNDER	72.5	58.5
05:25:00	70.3	81.0	UNDER	73.5	58.5
05:30:00	69.9	76.4	UNDER	73.5	61.5
05:35:00	69.4	76.6	UNDER	73.5	60.5
05:40:00	71.2	79.8	UNDER	74.5	62.5
05:45:00	71.2	79.4	UNDER	74.5	60.5
05:50:00	69.8	79.0	UNDER	72.5	61.5
05:55:00	70.8	77.8	UNDER	74.5	62.5
06:00:00	71.5	78.2	UNDER	74.5	61.5
06:05:00	71.3	78.2	UNDER	73.5	63.5
06:10:00	72.4	80.2	UNDER	75.5	62.5
06:15:00	72.3	82.6	UNDER	75.5	63.5
06:20:00	71.1	78.2	UNDER	73.5	62.5
06:25:00	71.8	77.9	UNDER	74.5	65.5
06:30:00	71.8	79.5	UNDER	74.5	63.5
06:35:00	72.5	79.8	UNDER	75.5	62.5
06:40:00	72.5	78.3	UNDER	75.5	64.5
06:45:00	71.2	77.2	UNDER	73.5	65.5
06:50:00	72.5	81.0	UNDER	75.5	63.5
06:55:00	72.4	78.3	UNDER	75.5	63.5
07:00:00	71.4	77.6	UNDER	74.5	61.5
07:05:00	71.5	78.6	UNDER	74.5	61.5
07:10:00	72.6	79.8	UNDER	75.5	63.5
07:15:00	72.8	78.9	UNDER	75.5	65.5

PTC-05 (3895_3).PRN

```
**********************************************************************
Filename..............308014
Test Location..........PTC MP 57-67
Employee Name..........KJP/WCK
Employee Number........
Department.............ENV
          PTC Meter 3895



Calibrator Type........CL 304 2616
Calibrator Cal. Date...12-03-12 - 12-03-13
**********************************************************************

METROSONICS db-3080  V1.12  SERIAL # 3895
REPORT PRINTED ON 12/17/13 at 10:46:45

User ID: _____________________________




LOGGING STARTED......11/20/13 at 11:06:00
TOTAL LOGGING TIME...0 DAYS 00:20:25
LOGGING STOPPED......11/20/13 at 11:26:25
TOTAL INTERVALS......21
INTERVAL LENGTH......00:01:00

AUTO STOP............NO
CLOCK SYNCH..........YES
RESPONSE RATE........SLOW
FILTER...............A WT.

PRE-TEST CALIBRATION TIME....11/04/13 AT 16:14:49
PRE-TEST CALIBRATION RANGE...40.5 TO 140.5 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav...NONE


<<< SUMMARY REPORT FOR TEST NUMBER 3 OF 5 >>>

EXCHANGE RATE..........3dB
CUTOFFS................. 80dB  90dB
CEILING................115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS

Lav.............  61.9dB
Lav ( 80).......  40.5dB
Lav ( 90).......  40.5dB
SEL.............  92.6dB

TWA.............  48.2dB
TWA ( 80).......  40.5dB
TWA ( 90).......  40.5dB

Lmax............  67.4dB  11/20/13 at 11:16:06
Lpk............UNDER RANGE
TIME OVER 115dB...00:00:00.00
```

DOSE (80)........ 0.00%
PROJ. DOSE (80).. 0.00%
DOSE (90)........ 0.00%
PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REPORT FOR TEST NUMBER 3 OF 5 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
11/20/13					
11:06:00	60.9	64.9	UNDER	62.5	57.5
11:06:59	62.5	66.0	UNDER	64.5	57.5
11:07:58	60.9	64.6	UNDER	63.5	55.5
11:08:57	61.1	63.5	UNDER	62.5	56.5
11:09:56	60.7	63.4	UNDER	62.5	57.5
11:10:55	61.3	64.2	UNDER	63.5	57.5
11:11:54	61.8	64.9	UNDER	63.5	57.5
11:12:53	63.9	66.2	UNDER	65.5	61.5
11:13:52	62.7	65.9	UNDER	64.5	58.5
11:14:51	60.2	63.8	UNDER	61.5	58.5
11:15:50	63.5	67.4	UNDER	66.5	57.5
11:16:49	60.8	65.8	UNDER	65.5	52.5
11:17:48	59.8	62.1	UNDER	61.5	56.5
11:18:47	64.0	67.0	UNDER	65.5	57.5
11:19:46	62.6	65.5	UNDER	64.5	59.5
11:20:45	60.8	64.2	UNDER	62.5	59.5
11:21:44	61.8	64.8	UNDER	63.5	58.5
11:22:43	60.3	63.0	UNDER	61.5	57.5
11:23:42	62.4	65.1	UNDER	63.5	59.5
11:24:41	61.9	65.8	UNDER	64.5	58.5
11:25:40	61.6	62.9	UNDER	62.5	60.5

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISIBLE SOUND LEVEL METER

Manufactured by:	METROSONICS
Model No:	db-3080
Serial No:	3895
Calibration Recall No:	22507

Submitted By:

Customer:	ALAN J. DUNAY
Company:	SKELLY & LOY, INC.
Address:	449 EISENHOWER BLVD., STE. 300
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db-3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Calibration Date: 28-Nov-12

Certificate No: 22507 - 1

Felix Christopher (QA Mgr.)
ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

ACCREDITED
Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

Model No.: db-3080 **Serial No.: 3895**

Company : Skelly & Loy, Inc **I. D. No: 1**

Calibration results:

Before data: ..... **After data:** .....

Before & after data same: ✓

All tested parameters: **Pass**

For details see "Calibration Data Record"

Laboratory Environment:

Ambient Temperature:	21.2	°C
Ambient Humidity:	32.3	% RH
Ambient Pressure:	99.895	kPa
Calibration Date:	28-Nov-2012	
Re-calibration Due:	28-Nov-2013	
Report Number:	22507 -1	
Control Number:	22507	

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers listed below.

The absolute uncertainty of calibration: 0.008dB at 95% confidence level. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 5.0 Sept. 10, 2010 Doc. # 1038 DB3080METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2205493	5-Oct-2012	683/281764-12	6-Oct-2013
Brüel & Kjær	4226	S/N 2220624	5-Oct-2012	683/281764-12	6-Oct-2013

Cal. Date: 28-Nov-2012

Measurements performed by: **Alfred Suganthan**

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Metrologger Sound Analyzer — Model No.: db-3080 — S/N: 3895

Submitted by, — Company: Skelly & Loy,Inc

Test	Function	Tolerance Min	Tolerance Max		Measured values Before	Out	After	Out
,0.	SPL Reading with 102.0dB SPL	101.5	102.5		102.0		102.0	
,1.	Level Accuracy	93.5	94.5	94dB	93.9		93.9	
		103.5	104.5	104dB	104.0		104.0	
		113.5	114.5	114dB	113.6		113.6	
,2.	Frequency Response A Weighting	87.9	97.9	8kHz	93.6		93.6	
		92.0	98.0	4kHz	94.1		94.1	
		93.2	97.2	2kHz	94.8		94.8	
		92.5	95.5	1kHz	93.9		93.9	
		89.3	92.3	500Hz	90.8		90.8	
		83.9	86.9	250Hz	85.2		85.2	
		76.4	79.4	125Hz	77.3		77.3	
		65.8	69.8	63Hz	66.3		66.3	
		51.6	57.6	31.5Hz	52.0		52.0	
	C Weighting	86.0	96.0	8kHz	91.7		91.7	
		90.2	96.2	4kHz	92.4		92.4	
		91.8	95.8	2kHz	93.6		93.6	
		92.5	95.5	1kHz	94.0		94.0	
		92.5	95.5	500Hz	94.0		94.0	
		92.5	95.5	250Hz	94.2		94.2	
		92.3	95.3	125Hz	94.0		94.0	
		91.2	95.2	63Hz	92.8		92.8	
		88.0	94.0	31.5Hz	88.8		88.8	
,3								
	SLM	113.5	114.5		113.9		113.9	
	L avg. / Leq	113.5	114.5		113.8		113.8	
	L max.	113.5	114.5		114.0		114.0	
	L pk	116.0	118.0		116.6		116.6	
	Dose %							
	0.18% @ 94 dB 1kHz	0.14%	0.22%		0.17%		0.17%	
	0.73% @ 104 dB 1kHz	0.58%	0.88%		0.75%		0.75%	
*	2.90% @ 114 dB 1kHz	2.32%	3.48%		2.89%		2.89%	
4	Inherent noise level				Pass		Pass	

Measurements performed by:

Calibration Date: 28-Nov-2012

Alfred Suganthan

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

SOUND ANALYZER

Manufactured by:	METROSONICS
Model No:	db-3080
Serial No:	5093
Calibration Recall No:	23414

Submitted By:

Customer:	ALAN J. DUNAY
Company:	SKELLY & LOY, INC.
Address:	449 EISENHOWER BLVD., STE. 300
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db-3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Calibration Date: 18-Sep-13

Certificate No: 23414 - 2

Approved by:

FC

Felix Christopher (QA Mgr.)
ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

ACCREDITED

Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

Model No.: db-3080 **Serial No.: 5093**

Company : Skelly & Loy, Inc. **I. D. No: XXXX**

Calibration results: **Before data: ...✓..... After data: ...✓.....**

Before & after data same: .....

All tested parameters: Pass

For details see "Calibration Data Record"

Laboratory Environment:

Ambient Temperature:	21.5	°C
Ambient Humidity:	45.4	% RH
Ambient Pressure:	100.177	kPa
Calibration Date:	18-Sep-2013	
Re-calibration Due:	18-Sep-2014	
Report Number:	23414 -2	
Control Number:	23414	

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers listed below.

The absolute uncertainty of calibration: 0.50dB at 95% confidence level. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 5.0 Sept. 10, 2010 Doc. # 1038 DB3080METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2308998	31-Jul-2013	822/275722-13	31-Jul-2014
Brüel & Kjær	4226	S/N 2141941	5-Apr-2013	822/275722-13	5-Apr-2014

Cal. Date: 18-Sep-2013

Measurements performed by: .....✓.....

Stephen Johnson

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Metrologger Sound Analyzer — Model No.: db-3080 — S/N: 5093

Submitted by, — Company: Skelly & Loy, Inc.

Test	Function	Tolerance Min	Tolerance Max		Measured values Before	Out	After	Out
,0.	SPL Reading with 102.0dB SPL	101.4	102.6		101.7		102.0	
,1.	Level Accuracy	93.3	94.7	94dB	93.6		93.9	
		103.3	104.7	104dB	103.7		104.0	
		113.3	114.7	114dB	113.6		113.9	
,2.	Frequency Response	88.1	97.7	8kHz	94.0		94.6	
	A Weighting	92.2	97.8	4kHz	95.4		95.2	
		93.4	97.0	2kHz	95.3		95.5	
		92.7	95.3	1kHz	93.6		93.9	
		89.5	92.1	500Hz	90.5		90.7	
		84.1	86.7	250Hz	84.9		85.1	
		76.6	79.2	125Hz	77.4		77.6	
		66.0	69.6	63Hz	67.2		67.4	
		51.8	57.4	31.5Hz	54.1		54.3	
	C Weighting	86.2	95.8	8kHz	92.1		93.1	
		90.4	96.0	4kHz	93.8		93.8	
		92.0	95.6	2kHz	94.1		94.3	
		92.7	95.3	1kHz	93.9		94.2	
		92.7	95.3	500Hz	93.8		94.2	
		92.7	95.3	250Hz	94.0		94.2	
		92.5	95.1	125Hz	93.8		94.0	
		91.4	95.0	63Hz	93.2		93.4	
		88.2	93.8	31.5Hz	90.8		91.0	
,3								
	SLM	113.4	114.6		113.7		113.9	
	L avg. / Leq	113.4	114.6		113.7		113.9	
	L max.	113.4	114.6		113.7		114.0	
	L pk	116.1	117.9		117.0		117.2	
	Dose %							
	0.18% @ 94 dB 1kHz	0.14%	0.22%		0.18%		0.18%	
	0.73% @ 104 dB 1kHz	0.58%	0.88%		0.74%		0.76%	
	2.90% @ 114 dB 1kHz	2.32%	3.48%		2.90%		3.00%	
*								
4	Inherent noise level				Pass		Pass	

Measurements performed by:

Calibration Date: 18-Sep-2013

Stephen Johnson

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISIBLE SOUND LEVEL METER

Manufactured by:	**METROSONICS**
Model No:	**db-3080**
Serial No:	**3895**
Calibration Recall No:	**23727**

Submitted By:

Customer:	**ALAN J. DUNAY**
Company:	**SKELLY & LOY, INC.**
Address:	**449 EISENHOWER BLVD., STE. 300**
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db-3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

FC

Calibration Date: 16-Jan-14

Certificate No: 23727 - 1

Felix Christopher (QA Mgr.)

ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

ACCREDITED

Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

Model No.: db-3080 **Serial No.: 3895**

Company : Skelly & Loy, Inc. **I. D. No: #1**

Calibration results:

Before data: ..... **After data:** .....

Before & after data same: .....

All tested parameters: **Pass**

For details see "Calibration Data Record"

Laboratory Environment:

Ambient Temperature:	20.2	°C
Ambient Humidity:	35.2	% RH
Ambient Pressure:	99.101	kPa
Calibration Date:	16-Jan-2014	
Re-calibration Due:	16-Jan-2015	
Report Number:	23727 -1	
Control Number:	23727	

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers listed below.

The absolute uncertainty of calibration: 0.50dB at 95% confidence level. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 6.0 Dec. 12, 2013 Doc. # 1038 DB3080METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2308998	31-Jul-2013	822/275722-13	31-Jul-2014
Brüel & Kjær	4226	S/N 2141941	5-Apr-2013	822/275722-13	5-Apr-2014

Cal. Date: 16-Jan-2014

Measurements performed by: .....

Stephen Johnson

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Metrologger Sound Analyzer — Model No.: db-3080 — S/N: 3895

Submitted by, — Company: Skelly & Loy, Inc.

Test	Function	Tolerance Min	Tolerance Max		Measured values Before	Out	After	Out
,0.	SPL Reading with 102.0dB SPL	101.4	102.6		102.0		102.0	
,1.	Level Accuracy	93.4	94.6	94dB	93.9		93.9	
		103.4	104.6	104dB	104.1		104.1	
		113.4	114.6	114dB	113.8		113.8	
,2.	Frequency Response	88.1	97.7	8kHz	94.9		94.9	
	A Weighting	92.2	97.8	4kHz	93.8		93.8	
		93.4	97.0	2kHz	94.6		94.6	
		92.7	95.3	1kHz	93.9		93.9	
		89.5	92.1	500Hz	91.0		91.0	
		84.1	86.7	250Hz	85.4		85.4	
		76.6	79.2	125Hz	77.4		77.4	
		66.0	69.6	63Hz	66.2		66.2	
		51.8	57.4	31.5Hz	51.9		51.9	
	C Weighting	86.2	95.8	8kHz	93.4		93.4	
		90.4	96.0	4kHz	92.3		92.3	
		92.0	95.6	2kHz	93.7		93.7	
		92.7	95.3	1kHz	94.2		94.2	
		92.7	95.3	500Hz	94.2		94.2	
		92.7	95.3	250Hz	94.3		94.3	
		92.5	95.1	125Hz	94.2		94.2	
		91.4	95.0	63Hz	93.0		93.0	
		88.2	93.8	31.5Hz	89.0		89.0	
,3								
	SLM	113.4	114.6		113.8		113.8	
	L avg. / Leq	113.4	114.6		113.8		113.8	
	L max.	113.4	114.6		113.8		113.8	
	L pk	116.1	117.9		116.8		116.8	
	Dose %							
	0.18% @ 94 dB 1kHz	0.14%	0.22%		0.18%		0.18%	
	0.73% @ 104 dB 1kHz	0.58%	0.88%		0.77%		0.77%	
	2.90% @ 114 dB 1kHz	2.32%	3.48%		2.97%		2.97%	
*								
4	Inherent noise level				Pass		Pass	

Measurements performed by:

Calibration Date: 16-Jan-2014

Stephen Johnson

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISSIBLE SOUND LEVEL METER

Manufactured by:	**METROSONICS**
Model No:	**db-3080**
Serial No:	**3897**
Calibration Recall No:	**23727**

Submitted By:

Customer:	**ALAN J. DUNAY**
Company:	**SKELLY & LOY, INC.**
Address:	**449 EISENHOWER BLVD., STE. 300**
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db-3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Calibration Date: 16-Jan-14

Certificate No: 23727 - 2

Approved by:

FC

Felix Christopher (QA Mgr.)

ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

ACCREDITED

Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

Model No.: db-3080 **Serial No.: 3897**

Company : Skelly & Loy, Inc. **I. D. No: #3**

Calibration results:

Before data: ..... **After data:** .....

Before & after data same: .....

All tested parameters: **Pass**

For details see "Calibration Data Record"

Laboratory Environment:

Ambient Temperature:	20.2	°C
Ambient Humidity:	35.2	% RH
Ambient Pressure:	99.101	kPa
Calibration Date:	16-Jan-2014	
Re-calibration Due:	16-Jan-2015	
Report Number:	23727 -2	
Control Number:	23727	

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers listed below.

The absolute uncertainty of calibration: 0.50dB at 95% confidence level. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 6.0 Dec. 12, 2013 Doc. # 1038 DB3080METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2308998	31-Jul-2013	822/275722-13	31-Jul-2014
Brüel & Kjær	4226	S/N 2141941	5-Apr-2013	822/275722-13	5-Apr-2014

Cal. Date: 16-Jan-2014

Measurements performed by: .....

Stephen Johnson

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Metrologger Sound Analyzer — Model No.: db-3080 — S/N: 3897

Submitted by, — Company: Skelly & Loy, Inc.

Test	Function	Tolerance Min	Tolerance Max		Measured values Before	Out	After	Out
,0.	SPL Reading with 102.0dB SPL	101.4	102.6		102.0		102.0	
,1.	Level Accuracy	93.4	94.6	94dB	94.0		94.0	
		103.4	104.6	104dB	104.0		104.0	
		113.4	114.6	114dB	114.0		114.0	
,2.	Frequency Response	88.1	97.7	8kHz	94.0		94.0	
	A Weighting	92.2	97.8	4kHz	94.4		94.4	
		93.4	97.0	2kHz	95.1		95.1	
		92.7	95.3	1kHz	94.0		94.0	
		89.5	92.1	500Hz	91.1		91.1	
		84.1	86.7	250Hz	85.2		85.2	
		76.6	79.2	125Hz	77.6		77.6	
		66.0	69.6	63Hz	66.8		66.8	
		51.8	57.4	31.5Hz	53.2		53.2	
	C Weighting	86.2	95.8	8kHz	92.0		92.0	
		90.4	96.0	4kHz	92.4		92.4	
		92.0	95.6	2kHz	93.6		93.6	
		92.7	95.3	1kHz	94.0		94.0	
		92.7	95.3	500Hz	94.0		94.0	
		92.7	95.3	250Hz	94.1		94.1	
		92.5	95.1	125Hz	94.0		94.0	
		91.4	95.0	63Hz	93.3		93.3	
		88.2	93.8	31.5Hz	90.6		90.6	
,3								
	SLM	113.4	114.6		114.0		114.0	
	L avg. / Leq	113.4	114.6		114.0		114.0	
	L max.	113.4	114.6		114.0		114.0	
	L pk	116.1	117.9		117.3		117.3	
	Dose %							
	0.18% @ 94 dB 1kHz	0.14%	0.22%		0.19%		0.19%	
	0.73% @ 104 dB 1kHz	0.58%	0.88%		0.77%		0.77%	
*	2.90% @ 114 dB 1kHz	2.32%	3.48%		3.03%		3.03%	
4	Inherent noise level				Pass		Pass	

Measurements performed by:

Calibration Date: 16-Jan-2014

Stephen Johnson

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISSIBLE SOUND LEVEL METER

Manufactured by:	METROSONICS
Model No:	db-3080
Serial No:	4618
Calibration Recall No:	23727

Submitted By:

Customer:	ALAN J. DUNAY
Company:	SKELLY & LOY, INC.
Address:	449 EISENHOWER BLVD., STE. 300
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db-3080 METR

Upon receipt for Calibration, the instrument was found to be:

Outside (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Calibration Date: 16-Jan-14

FC

Certificate No: 23727 - 3

Felix Christopher (QA Mgr.)

ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

ACCREDITED

Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

Model No.: db-3080 **Serial No.: 4618**

Company : Skelly & Loy, Inc. **I. D. No: #6**

Calibration results: **After data: X**

All tested parameters after repair: Pass

For details see "Calibration Data Record"

Laboratory Environment:

Ambient Temperature:	20.2	°C
Ambient Humidity:	35.2	% RH
Ambient Pressure:	99.101	kPa
Calibration Date:	16-Jan-2014	5:04 PM
Re-calibration Due:	16-Jan-2015	
Report Number:	23727	-3
Control Number:	23727	

Fault: Initial sensitivity out of tolerance.

Corrective action: Sensitivity adjusted. Unit is within tolerance.

The above listed instrument meets or exceeds the tested manufacturer's specifications after adjustments or repair.

This Calibration is traceable through NIST test numbers listed below.

The absolute uncertainty of calibration: 0.50dB at 95% confidence level. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 6.0 Dec. 12, 2013 Doc. # 1038 DB3080METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2308998	31-Jul-2013	822/275722-13	31-Jul-2014
Brüel & Kjær	4226	S/N 2141941	5-Apr-2013	822/275722-13	5-Apr-2014

Cal. Date: 16-Jan-2014 5:04 PM

Measurements performed by: .....

Stephen Johnson

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Metrologger Sound Analyzer — Model No.: db-3080 — S/N: 4618

Submitted by, — Company: Skelly & Loy, Inc.

Test	Function	Tolerance Min	Tolerance Max		Measured values Before	Out	After	Out
,0.	SPL Reading with 102.0dB SPL	101.4	102.6		100.0	X	102.0	
,1.	Level Accuracy	93.4	94.6	94dB	92.3	X	94.4	
		103.4	104.6	104dB	102.1	X	104.2	
		113.4	114.6	114dB	112.1	X	114.2	
,2.	Frequency Response	88.1	97.7	8kHz	87.7	X	89.7	
	A Weighting	92.2	97.8	4kHz	92.5		94.6	
		93.4	97.0	2kHz	93.5		95.6	
		92.7	95.3	1kHz	92.3	X	94.5	
		89.5	92.1	500Hz	88.9	X	91.1	
		84.1	86.7	250Hz	83.7	X	85.9	
		76.6	79.2	125Hz	76.5	X	78.7	
		66.0	69.6	63Hz	66.5		69.1	
		51.8	57.4	31.5Hz	53.9		56.7	
	C Weighting	86.2	95.8	8kHz	85.7	X	87.7	
		90.4	96.0	4kHz	90.7		92.8	
		92.0	95.6	2kHz	92.1		94.3	
		92.7	95.3	1kHz	92.3	X	94.5	
		92.7	95.3	500Hz	92.4	X	94.7	
		92.7	95.3	250Hz	92.6	X	94.9	
		92.5	95.1	125Hz	92.6		94.9	
		91.4	95.0	63Hz	92.1		94.5	
		88.2	93.8	31.5Hz	89.5		92.3	
,3	SLM	113.4	114.6		112.1	X	114.2	
	L avg. / Leq	113.4	114.6		112.1	X	114.2	
	L max.	113.4	114.6		112.2	X	114.2	
	L pk	116.1	117.9		115.8	X	117.6	
	Dose %							
	0.18% @ 94 dB 1kHz	0.14%	0.22%		0.15%		0.20%	
	0.73% @ 104 dB 1kHz	0.58%	0.88%		0.58%	X	0.78%	
*	2.90% @ 114 dB 1kHz	2.32%	3.48%		2.35%		3.14%	
4	Inherent noise level				Pass		Pass	

Measurements performed by:

Calibration Date: 16-Jan-2014

Stephen Johnson

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

SOUND ANALYZER

Manufactured by:	METROSONICS
Model No:	db-308
Serial No:	002125
Calibration Recall No:	23727

Submitted By:

Customer:	ALAN J. DUNAY
Company:	SKELLY & LOY, INC.
Address:	449 EISENHOWER BLVD., STE. 300
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db-308 METR

Upon receipt for Calibration, the instrument was found to be:

Outside (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Calibration Date: 17-Jan-14

Certificate No: 23727 - 4

Approved by:

FC

Felix Christopher (QA Mgr.)

ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

ACCREDITED

Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Sound Analyzer

Model No.: db-308 **Serial No.: 002125**

Company : Skelly & Loy, Inc. **I. D. No: XXXX**

Calibration results: **After data: X**

All tested parameters after repair: Pass

For details see "Calibration Data Record"

Laboratory Environment:

Ambient Temperature:	20.7	°C
Ambient Humidity:	34.1	% RH
Ambient Pressure:	98.619	kPa
Calibration Date:	17-Jan-2014	12:00 PM
Re-calibration Due:	17-Jan-2015	
Report Number:	23727	-4
Control Number:	23727	

Fault: Functions out of tolerance due to sensitivity error.

Corrective action: Sensitivity adjusted. Unit is within tolerance.

The above listed instrument meets or exceeds the tested manufacturer's specifications after adjustments or repair.

This Calibration is traceable through NIST test numbers listed below.

The absolute uncertainty of calibration: 0.50dB at 95% confidence level. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 6.0 Dec. 12, 2013 Doc. # 1038 DB308METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2308998	31-Jul-2013	822/275722-13	31-Jul-2014
Brüel & Kjær	4226	S/N 2141941	5-Apr-2013	822/275722-13	5-Apr-2014

Cal. Date: 17-Jan-2014 12:00 PM

Measurements performed by: .....

Stephen Johnson

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for
Manufacturer: Metrosonics

Sound Analyzer Model No.: db-308 S/N: 002125

Submitted by, Company: Skelly & Loy, Inc.

Test	Function	Tolerance Min	Tolerance Max		Measured values Before	Out	After	Out
,0.	SPL Reading with 102.0dB SPL	101.6	102.4		102.3		102.0	
,1.	Level Accuracy	93.6	94.4	94dB	94.5	X	94.2	
		103.6	104.4	104dB	104.5	X	104.1	
		113.6	114.4	114dB	114.5	X	114.2	
,2.	Frequency Response	88.1	97.7	8kHz	90.4		89.5	
	A Weighting	92.2	97.8	4kHz	93.8		93.5	
		93.4	97.0	2kHz	95.3		95.0	
		92.7	95.3	1kHz	94.5		94.2	
		89.5	92.1	500Hz	91.2		90.9	
		84.1	86.7	250Hz	85.9		85.6	
		76.6	79.2	125Hz	78.5		78.2	
		66.0	69.6	63Hz	67.8		67.5	
		51.8	57.4	31.5Hz	52.9		52.6	
	C Weighting	86.2	95.8	8kHz	88.5		87.6	
		90.4	96.0	4kHz	92.1		91.8	
		92.0	95.6	2kHz	93.9		93.8	
		92.7	95.3	1kHz	94.5		94.2	
		92.7	95.3	500Hz	94.7		94.4	
		92.7	95.3	250Hz	94.8		94.5	
		92.5	95.1	125Hz	94.5		94.3	
		91.4	95.0	63Hz	93.3		93.0	
		88.2	93.8	31.5Hz	89.2		88.9	
,6								
	SLM	113.6	114.4		114.5	X	114.2	
	L avg. / Leq	113.6	114.4		114.5	X	114.2	
	L max.	113.6	114.4		114.6	X	114.3	
	SEL	123.5	124.3		124.6	X	124.1	
	L pk				Pass		Pass	
	Dose %							
	0.18% @ 94 dB 1kHz	0.14%	0.22%		0.20%		0.19%	
	0.73% @ 104 dB 1kHz	0.58%	0.88%		0.80%		0.76%	
	2.90% @ 114 dB 1kHz	2.32%	3.48%		3.27%		3.14%	
*								

Measurements performed by:

Calibration Date: 17-Jan-2014 Stephen Johnson

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

ACOUSTICAL CALIBRATOR

Manufactured by:	METROSONICS
Model No:	CL304
Serial No:	3616
Calibration Recall No:	22507

Submitted By:

Customer:	ALAN J. DUNAY
Company:	SKELLY & LOY, INC.
Address:	449 EISENHOWER BLVD., STE. 300
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. CL304 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

FC

Calibration Date: 03-Dec-12

Certificate No: 22507 - 7

Felix Christopher (QA Mgr.)
ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

ACCREDITED
Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Acoustical Calibrator **Model No.: CL304** **Serial No.: 3616**

Company : Skelly & Loy, Inc. **I. D. No: 21360**

Calibration results:

Sound Pressure Level at 999.88 Hz and pressure of 1013 hPa (mbar) was 101.94 dB re 20uPa

Sound Pressure Level:	**Pass**
Frequency:	**Pass**
Distortion:	**Pass**
Stability:	**Pass**
All tested parameters:	**Pass**

Before data: ..... After data: .....
Before & after data same: ✓
Laboratory Environment:

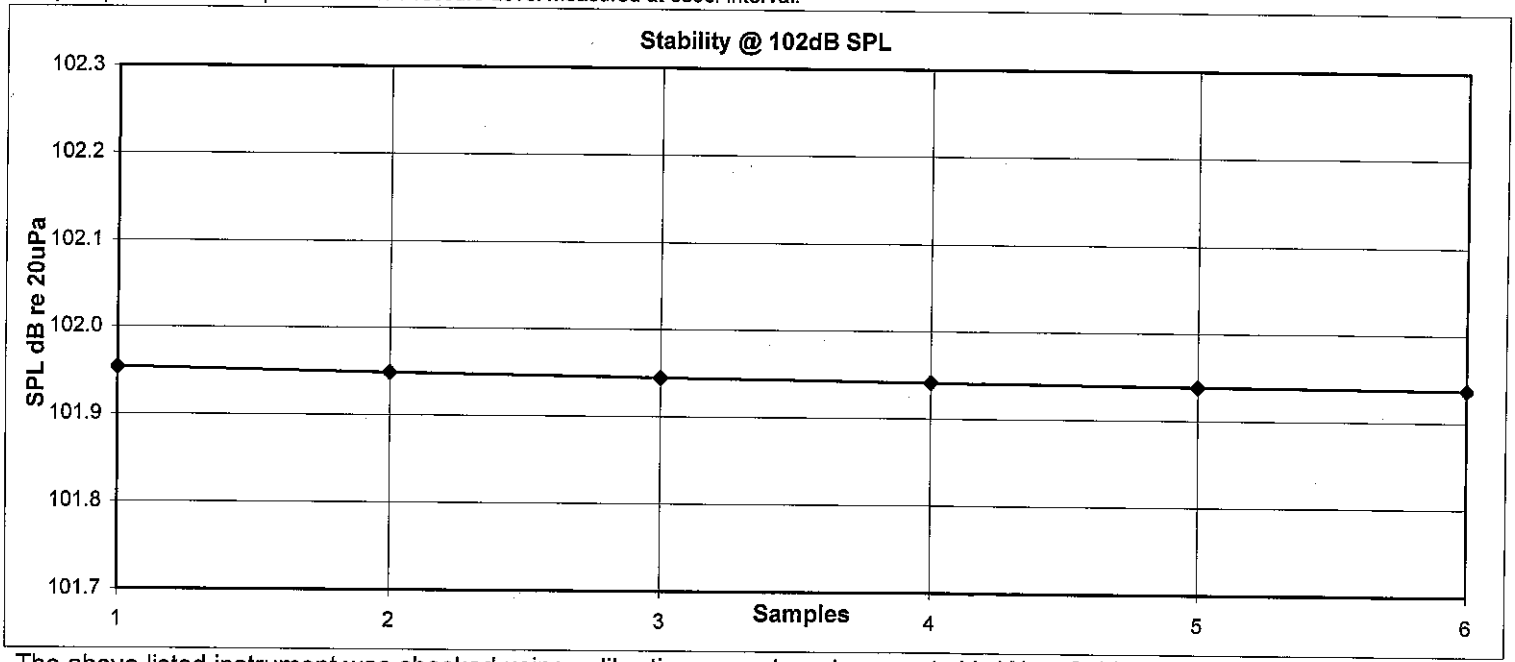
Ambient Temperature:	20.8	°C
Ambient Humidity:	40.3	% RH
Ambient Pressure:	100.051	kPa
Calibration Date:	3-Dec-2012	5:05 PM
Re-calibration Due:	3-Dec-2013	
Report Number:	22507 -7	
Control Number:	22507	

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers: 683/281764-12

The expanded uncertainty of calibration: 0.09dB at 95% confidence level with a coverage factor of k=2.

Graph represents six samples of Sound Pressure Level measured at 5sec. interval.



The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 5.0 Sept. 10, 2010 Doc. # 1038 CL304METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

Cal. Date: 3-Dec-2012 5:05 PM

Measurements performed by: G. A. Suganthan

Alfred Suganthan

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Metrosonics Acoustical Calibrator **Model No.: CL304** **Serial No.: 3616**

Company : Skelly & Loy, Inc.

All tested parameters: Pass

Measured Sound Pressure Level (Six samples measured at 5 sec. interval)

Sample	1	101.95 dB re 20uPa	
	2	101.95	
	3	101.94	
	4	101.94	
	5	101.94	
	6	101.94	
	Average	**101.9**	Spec. 102dB + - 0.3dB

Frequency measured (Three samples at 30 sec. Interval)

Sample	1	999.87 Hz	
	2	999.90	
	3	999.87	
	Average	**999.88**	Spec. 1000Hz + - 2.0%

Distortion measured -37.8 dB Spec. <-34dB

Instruments used for calibration:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2205492	3-Dec-2012	683/281764-12	3-Dec-2013
Brüel & Kjær	4134	S/N 1534449	3-Dec-2012	683/281764-12	3-Dec-2013
Brüel & Kjær	2669	S/N 1835082	26-Oct-2012	683/281764-12	27-Oct-2013
HP	34401A	S/N US360641	8-Oct-2012	,287708	8-Oct-2013
Brüel & Kjær	2636	S/N 1324082	8-Oct-2012	683/281764-12	9-Oct-2013

Cal. Date: 3-Dec-2012 5:05 PM **Tested by: Alfred Suganthan**

Calibrated on WCCL system type 9700

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

ACOUSTICAL CALIBRATOR

Manufactured by:	METROSONICS
Model No:	CL304
Serial No:	3616
Calibration Recall No:	23727

Submitted By:

Customer:	ALAN J. DUNAY
Company:	SKELLY & LOY, INC.
Address:	449 EISENHOWER BLVD., STE. 300
	HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. CL304 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X) see attached Report of Calibration.

the tolerance of the indicated specification.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Calibration Date: 16-Jan-14

FC

Certificate No: 23727 - 6

Felix Christopher (QA Mgr.)

ISO/IEC 17025:2005

ACCREDITED

Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005
ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Acoustical Calibrator **Model No.: CL304** **Serial No.: 3616**

Company : Skelly & Loy, Inc. **I. D. No: 000212**

Calibration results:

Sound Pressure Level at 999.86 Hz and pressure of 1013 hPa (mbar) was 101.98 dB re 20µPa

Sound Pressure Level:	**Pass**
Frequency:	**Pass**
Distortion:	**Pass**
Stability:	**Pass**
All tested parameters:	**Pass**

Before data: ..... After data: .....
Before & after data same: ..1.....
Laboratory Environment:

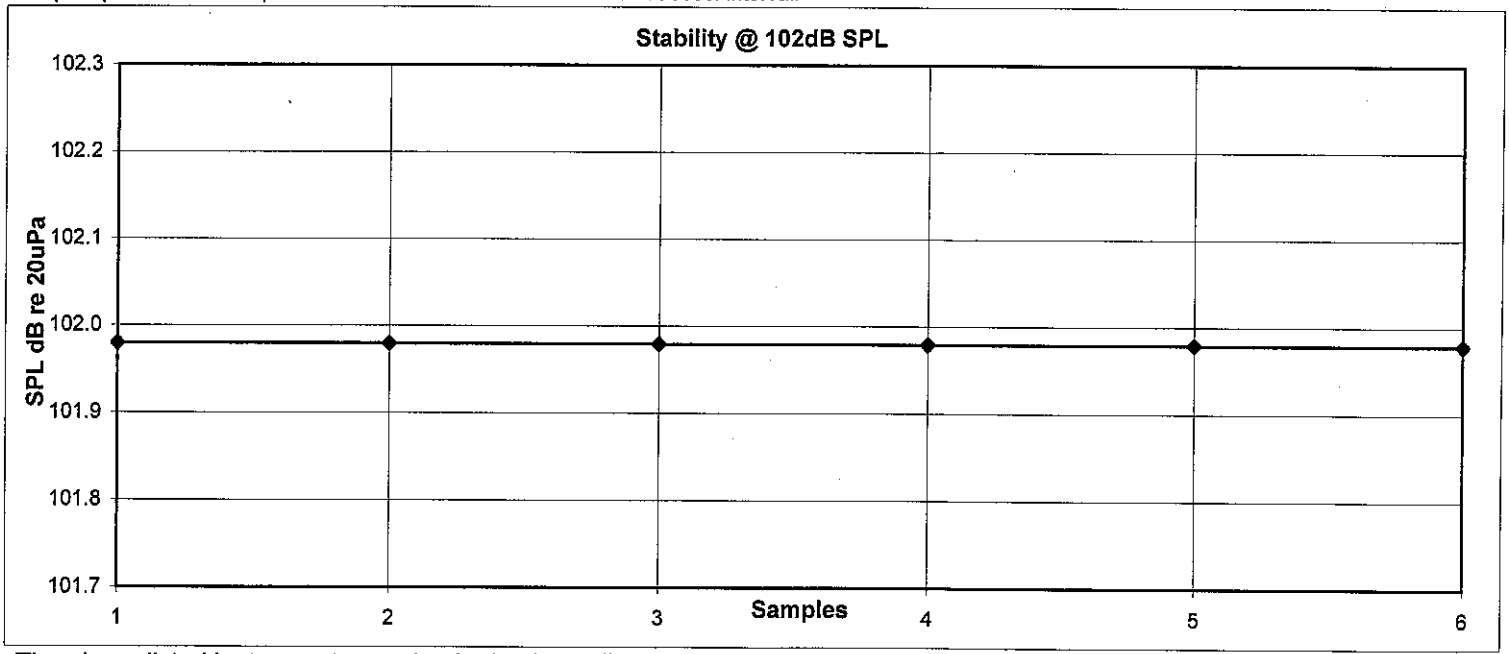
Ambient Temperature:	20.2	°C
Ambient Humidity:	35.2	% RH
Ambient Pressure:	99.101	kPa
Calibration Date:	16-Jan-2014	2:27 PM
Re-calibration Due:	16-Jan-2015	
Report Number:	23727	-6
Control Number:	23727	

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers: 822/275722-13

The expanded uncertainty of calibration: 0.09dB at 95% confidence level with a coverage factor of k=2.

Graph represents six samples of Sound Pressure Level measured at 5sec. interval.



The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 6.0 Dec. 12, 2013 Doc. # 1038 CL304METR**

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

Cal. Date: 16-Jan-2014 2:27 PM

Measurements performed by: .....
Stephen Johnson

Calibrated on WCCL system type 9700

Rev. 6.0 Dec. 12, 2013 Doc. # 1038 CL304METR

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Metrosonics Acoustical Calibrator **Model No.: CL304** **Serial No.: 3616**

Company : Skelly & Loy, Inc.

All tested parameters: Pass

Measured Sound Pressure Level (Six samples measured at 5 sec. interval)

Sample	1	101.98 dB re 20µPa	
	2	101.98	
	3	101.98	
	4	101.98	
	5	101.98	
	6	101.98	
	Average	**102.0**	Spec. 102dB ± 0.3dB

Frequency measured (Three samples at 30 sec. Interval)

Sample	1	999.86 Hz	
	2	999.85	
	3	999.85	
	Average	**999.86**	Spec. 1000Hz ± 2.0%

Distortion measured	-38.7 dB	Spec. ≤-34dB

Instruments used for calibration:			Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær	4231	S/N 2308998	31-Jul-2013	822/275722-13	31-Jul-2014
Brüel & Kjær	4134	S/N 173494	13-May-2013	822/275722-13	13-May-2014
Brüel & Kjær	2669	S/N 1835084	8-Nov-2013	683/281764-13	8-Nov-2014
Hewlett Packard	34401A	S/N 3146A223	29-Jul-2013	,205342	29-Jul-2014
Brüel & Kjær	2636	S/N 1107902	29-Jul-2013	822/275722-13	29-Jul-2014
Hewlett Packard	33120A	S/N 36045845	24-Jul-2013	,205342	24-Jul-2014

Cal. Date: 16-Jan-2014 2:27 PM **Tested by: Stephen Johnson**

Calibrated on WCCL system type 9700

Rev. 6.0 Dec. 12, 2013 Doc. # 1038 CL304METR

APPENDIX B -
TRAFFIC DATA

Noise Monitoring Traffic Data

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
1, 2	11/20/2013	9:22 to 9:32	cars	158	132	290
			medium trucks	11	9	20
			heavy trucks	32	39	71

Turnpike WB (per lane)	Turnpike EB (per lane)
474	396
33	27
96	117

3	11/20/2013	9:43 to 9:53	cars	153	146	299
			medium trucks	10	9	19
			heavy trucks	33	30	63

459	438
30	27
99	90

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
4	11/20/2013	10:32 to 10:42	cars	163	115	278
			medium trucks	12	7	19
			heavy trucks	35	24	59

Turnpike WB (per lane)	Turnpike EB (per lane)
489	345
36	21
105	72

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
5	11/20/2013	11:12 to 11:22	cars	128	107	235
			medium trucks	6	10	16
			heavy trucks	35	34	69

Turnpike WB (per lane)	Turnpike EB (per lane)
384	321
18	30
105	102

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
15	11/20/2013	11:56 to 12:06	cars	117	127	244
			medium trucks	16	14	30
			heavy trucks	25	28	53

Turnpike WB (per lane)	Turnpike EB (per lane)
351	381
48	42
75	84

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
16	11/20/2013	13:57 to 14:07	cars	139	186	325
			medium trucks	9	8	17
			heavy trucks	29	37	66

Turnpike WB (per lane)	Turnpike EB (per lane)
417	558
27	24
87	111

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
19	11/20/2013	1:25 to 13:35	cars	139	189	328
			medium trucks	8	18	26
			heavy trucks	26	41	67

Turnpike WB (per lane)	Turnpike EB (per lane)
417	567
24	54
78	123

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
20, 21, 22, 24	3/5/2014	10:23 to 10:33	cars	112	117	229
			medium trucks	3	7	10
			heavy trucks	41	39	80

Turnpike WB (per lane)	Turnpike EB (per lane)
336	351
9	21
123	117

Sites	Date	Time Period		Turnpike WB	Turnpike EB		Pleasant Valley Rd WB	Pleasant Valley Rd EB
25, 26	3/5/2014	11:18 to 11:28	cars	114	132	246		
			medium trucks	5	5	10		
			heavy trucks	40	33	73		

Turnpike WB (per lane)	Turnpike EB (per lane)
342	396
15	15
120	99

Sites	Date	Time Period		Turnpike WB	Turnpike EB		Nike Site Rd WB	Nike Site Rd EB	Sandy Hill Rd WB	Sandy Hill Rd EB
28, 29, 30, 32, 33	3/5/2014	13:10 to 13:20	cars	132	133	265	9	18	15	20
			medium trucks	4	4	8	1	1	0	2
			heavy trucks	17	30	47	0	0	0	1

Turnpike WB (per lane)	Turnpike EB (per lane)
396	399
12	12
51	90

Sites	Date	Time Period		Turnpike WB	Turnpike EB		Nike Site Rd WB	Nike Site Rd EB
34, 35, 36a	3/5/2014	14:25 to 14:35	cars	125	160	285	13	15
			medium trucks	4	6	10	0	0
			heavy trucks	34	27	61	0	2

Turnpike WB (per lane)	Turnpike EB (per lane)
375	480
12	18
102	81

TRAFFIC FOR R-34, 35, 36

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
36, 37, 38	3/6/2014	8:45 to 8:55	cars	173	133	306
			medium trucks	18	7	25
			heavy trucks	31	30	61

Turnpike WB (per lane)	Turnpike EB (per lane)
519	399
54	21
93	90

TRAFFIC FOR R-37, 38, 39

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
39, 39a	3/6/2014	9:28 to 9:38	cars	129	138	267
			medium trucks	8	8	16
			heavy trucks	44	21	65

Turnpike WB (per lane)	Turnpike EB (per lane)
387	414
24	24
132	63

Noise Monitoring Traffic Data

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
41, 42, 43, 44	3/6/2014	10:37 to 10:47	cars	132	138	270
			medium trucks	2	4	6
			heavy trucks	45	27	72

Turnpike WB (per lane)	Turnpike EB (per lane)
396	414
6	12
135	81

Sites	Date	Time Period		Turnpike WB	Turnpike EB	
47, 48, 49, 51, 52	3/6/2014	12:33 to 12:43	cars	141	168	309
			medium trucks	8	7	15
			heavy trucks	37	42	79

Turnpike WB (per lane)	Turnpike EB (per lane)
423	504
24	21
111	126

Sites	Date	Time Period		Turnpike WB	Turnpike EB
50, 54, 56, 60	4/1/2014	10:17 to 10:27	cars	136	125
			medium trucks	6	5
			heavy trucks	8	31

US 30 WB	US 30 EB
120	135
5	4
2	5

US 30 WB to TP	US 30 EB to TP
42	34
3	2
1	3

TP to US 30 WB	TP to US 30 EB
25	
2	
6	

per lane

Turnpike WB	Turnpike EB
408	375
18	15
24	93

US 30 WB	US 30 EB
720	810
30	24
12	30

US 30 WB to TP	US 30 EB to TP
252	204
18	12
6	18

TP to US 30 WB	TP to US 30 EB
150	252
12	18
36	6

Sites	Date	Time Period		Turnpike WB	Turnpike EB
57, 58, 59, 61	4/1/2014	12:33 to 12:43	cars	139	134
			medium trucks	10	11
			heavy trucks	46	26

US 30 WB	US 30 EB
136	162
5	3
3	5

US 30 WB to TP	US 30 EB to TP
38	33
2	2
4	5

TP to US 30 WB	TP to US 30 EB
27	
1	
3	

per lane

Turnpike WB	Turnpike EB
417	402
30	33
138	78

US 30 WB	US 30 EB
816	972
30	18
18	30

US 30 WB to TP	US 30 EB to TP
228	198
12	12
24	30

TP to US 30 WB	TP to US 30 EB
162	228
6	12
18	24

Turnpike WB	Turnpike EB
139	134
10	11
20	26

Turnpike WB	Turnpike EB
417	402
30	33
60	78

Existing and Design Year Traffic Volumes

		Base Case Data				2014 Existing						2034 Design Year						
	Roadway	**2013 AADT**	**Directional Split**	**Kfactor**	**Truck %**	**2014 AADT**	**Peak Hour**	**Total Trucks**	**Cars**	**MT**	**HT**	**2034 AADT**	**Peak Hour**	**Total Trucks**	**Cars**	**MT**	**HT**	
	ABERS CREEK ROAD , BETWEEN TURNPIKE AND	1565	50%	12%	5%	1586	190	23	168	8	15	2083	250	12	237	4	8	
	SAUNDERS STATION ROAD , BETWEEN URICK LANE	4606	50%	12%	5%	4669	560	67	493	24	44	6129	736	37	699	13	24	
	LYONS RUN ROAD, BETWEEN SR 4033 (TRAFFORD	84	50%	12%	0%	85	10	1	9	0	1	112	13	0	13	0	0	
	SR 4033 (TRAFFORD ROAD), BETWEEN LYONS RUN	2877	55%	10%	5%	2916	292	29	262	10	19	3829	383	19	364	7	12	
	HARVISON ROAD, BETWEEN HARVISON COURT AND	612	50%	12%	5%	620	74	9	66	3	6	814	98	5	93	2	3	
	PENNSYLVANIA AVENUE, BETWEEN GREGG DRIVE	7219	55%	11%	5%	7318	805	89	716	31	58	9607	1057	53	1004	18	34	
	SR 30 (LINCOLN HIGWAY), BETWEEN RONDA	22286	--	9%	3%	22591	2033	183	1850	64	119	29657	2669	80	2589	28	52	
	SR 30 (LINCOLN HIGWAY), BETWEEN RONDA	21543	--	9%	3%	21838	1965	177	1789	62	115	28668	2580	77	2503	27	50	
	SR 30 (LINCOLN HIGWAY), BETWEEN I-76 (PA	22595	--	9%	3%	22905	2061	186	1876	65	121	30068	2706	81	2625	28	53	
	SR 30 (LINCOLN HIGWAY), BETWEEN I-76 (PA	21874	--	9%	3%	22174	1996	180	1816	63	117	29109	2620	79	2541	28	51	
	RAMP 1 (I-76 PA TURNPIKE OFF TO SR 30 EB ON),	6062	50%	12%	16%	6145	737	88	649	31	58	8067	968	155	813	54	101	
	RAMP 3 (I-76 PA TURNPIKE OFF TO SR 30 WB ON),	4841	50%	12%	16%	4907	589	71	518	25	46	6442	773	124	649	43	80	
	RAMP 3A (SR 30 WB OFF TO I-76 PA TURNPIKE ON),	6420	50%	12%	16%	6508	781	94	687	33	61	8543	1025	164	861	57	107	
	RAMP 4 (SR 30 EB OFF TO I-76 PA TURNPIKE ON),	4463	50%	12%	16%	4524	543	65	478	23	42	5939	713	114	599	40	74	
	Roadway	**2011 AADT**	**Directional Split**	**Kfactor**	**Truck %**	**2014 AADT**	**Peak Hour**	**Total Trucks**	**Cars**	**MT**	**HT**	**2034 AADT**	**Peak Hour**	**Total Trucks**	**Cars**	**MT**	**HT**	
	Snyder Rd 4047	176	55%	10%	9%	183	18	2	17	1	1	241	24	2	22	1	1	
	Arona route 3071	9471	55%	11%	7%	9866	1085	76	1009	27	49	12951	1425	100	1325	35	65	
	Northern Pike 2054	12138	55%	11%	3%	12644	1391	42	1349	15	27	16598	1826	55	1771	19	36	
	Bridge Street H624	2023	55%	12%	5%	2107	253	13	240	4	8	2766	332	17	315	6	11	
	Pleasant Valley H617	7247	65%	9%	6%	7549	679	41	639	14	26	9910	892	54	838	19	35	
	Brush Hill 4017	6365	55%	11%	4%	6630	729	29	700	10	19	8704	957	38	919	13	25	
	Nike Site 4025	2810	65%	11%	8%	2927	322	26	296	9	17	3843	423	34	389	12	22	
	SR 130 Seg 122	9771	55%	10%	7%	10178	1018	71	947	25	46	13362	1336	94	1243	33	61	
	SR 130 Seg 132	11442	65%	9%	6%	11919	1073	64	1008	23	42	15647	1408	84	1324	30	55	
	Broadway 993	3439	55%	10%	2%	3582	358	7	351	3	5	4703	470	9	461	3	6	
	Roadway	**2012 AADT**	**Directional Split**	**Kfactor**	**Truck %**	**2014 AADT**	**Peak Hour**	**Total Trucks**	**Cars**	**MT**	**HT**	**2034 AADT**	**Peak Hour**	**Total Trucks**	**Cars**	**MT**	**HT**	
AUGUST AVG	Eastbound Mainline Turnpike	27028	-	9%	15%	27774	2500	375	2125	131	244	36460	3281	492	2789	172	320	
	Westbound Mainline Turnpike	25325	-	7%	15%	26024	1744	262	1482	92	170	34163	2289	343	1946	120	223	
Avg Annual	Eastbound Mainline Turnpike	23204	-	9%	16%	23844	2218	355	1863	124	231	31302	2911	466	2445	163	303	EB
	Westbound Mainline Turnpike	21735	-	9%	16%	22335	1965	314	1651	110	204	29320	2580	413	2167	144	268	WB

SAI Consulting Engineers

INDEX NO. _____

SHEET NO. 1 OF 1

PROJECT PTC MP 57-67 COMP. BY LEJ DATE 11-21-13

Traffic Data PROPOSAL OR JOB NO. 11044-01 CHK'D. BY KDF DATE 11/21/13

PA TURNPIKE I-76

$AADT_{(2012)} = 44,939$ Growth Rate = 1.37 %

Trucks = 16 %

EB/NB AADT = 23,204

WB/SB AADT = 21,735

D-Factor = $\frac{23,204}{44,939}$ = 51.6 % say 50 %

$AADT_{(2014)} = 44,939\ (1+0.0137)^2 = 46,179$

$AADT_{(2034)} = 46,179\ (1+0.0137)^{20} = 60,623$

SAI Consulting Engineers

INDEX NO. _____

SHEET NO. 1 OF 1

PROJECT PTC MP 57-67 COMP. BY LEJ DATE 11-21-13

Traffic Data PROPOSAL OR JOB NO. 11044-01 CHK'D. BY KDF DATE 11/21/13

PA TURNPIKE I-76 INTERCHANGE T67 - IRWIN

$AADT_{(2012)} = 19,278$ Growth Rate = 1.37 %

Trucks = 9 %

Entry $AADT_{(2012)} = 9,465$

Exit $AADT_{(2012)} = 9,813$

D-Factor $= \frac{9813}{19278} = 50.9\%$ say 50 %

$AADT_{(2014)} = 19,278 (1+0.0137)^2 = 19,810$

$AADT_{(2034)} = 19,810 (1+0.0137)^{20} = 26,006$

Growth Factors for September 2012 to July 2013				
County	Urban Interstate	Rural Interstate	Urban Non-Interstate	Rural Non-Interstate
ADAMS	*	*	1.87	0.94
ALLEGHENY	1.29	*	0.18	0.53
ARMSTRONG	1.37	*	0.21	0.54
BEAVER	1.27	2.25	0.20	0.52
BEDFORD	*	2.33	*	0.59
BERKS	1.48	2.36	0.71	0.65
BLAIR	0.81	1.82	0.00	0.36
BRADFORD	1.32	*	0.33	0.50
BUCKS	2.04	2.55	1.43	0.81
BUTLER	1.95	2.79	1.08	0.83
CAMBRIA	0.44	*	0.00	0.24
CAMERON	*	*	*	0.32
CARBON	1.93	2.76	1.26	0.84
CENTRE	1.99	2.60	1.32	0.83
CHESTER	2.54	2.99	1.91	1.03
CLARION	1.35	2.22	0.45	0.55
CLEARFIELD	*	2.48	0.18	0.57
CLINTON	1.40	2.06	0.65	0.54
COLUMBIA	1.78	2.18	1.25	0.68
CRAWFORD	1.06	2.13	0.03	0.47
CUMBERLAND	1.72	2.04	1.37	0.68
DAUPHIN	1.46	2.24	0.75	0.62
DELAWARE	1.38	*	0.51	*
ELK	*	*	0.10	0.42
ERIE	0.97	1.78	0.15	0.41
FAYETTE	1.14	*	0.12	0.49
FOREST	*	*	*	0.70
FRANKLIN	2.49	2.72	2.00	0.98
FULTON	*	2.52	*	0.79
GREENE	1.05	2.06	0.04	0.45
HUNTINGDON	*	2.14	0.33	0.51
INDIANA	1.63	*	0.59	0.64
JEFFERSON	*	2.55	0.23	0.61
JUNIATA	*	*	*	0.70
LACKAWANNA	1.30	2.30	0.19	0.52
LANCASTER	2.02	2.47	1.42	0.81
LAWRENCE	1.24	2.21	0.17	0.50
LEBANON	*	2.35	1.09	0.70
LEHIGH	1.93	2.86	1.13	0.85
LUZERNE	1.30	2.32	0.18	0.53
LYCOMING	1.06	1.65	0.29	0.39
MCKEAN	1.10	*	0.11	0.45
MERCER	1.06	1.86	0.20	0.42
MIFFLIN	1.29	*	0.20	0.54
MONROE	2.33	2.80	1.90	0.99
MONTGOMERY	1.51	2.34	0.73	0.64
MONTOUR	*	2.96	1.46	0.92
NORTHAMPTON	2.19	*	1.57	0.94
NORTHUMBERLAND	1.22	1.88	0.24	0.42
PERRY	*	*	1.91	0.81
PHILADELPHIA	1.12	*	0.00	*
PIKE	*	3.08	*	1.16
POTTER	*	*	*	0.44
SCHUYLKILL	*	1.98	0.15	0.44
SNYDER	1.58	*	0.99	0.60
SOMERSET	1.05	2.00	0.12	0.45
SULLIVAN	*	*	*	0.51
SUSQUEHANNA	1.53	2.44	0.64	0.64
TIOGA	*	*	*	0.46
UNION	*	2.31	1.50	0.75
VENANGO	1.10	1.84	0.20	0.42
WARREN	*	*	0.09	0.53
WASHINGTON	1.50	2.73	0.30	0.66
WAYNE	*	2.43	1.20	0.76
WESTMORELAND	1.37	2.39	0.33	0.57
WYOMING	*	*	0.51	0.46
YORK	1.96	2.40	1.52	0.80

* = Functional Class Doesn't Exist in County

Questions? Please contact Andrew O'Neill at the Bureau of Planning and Research, 717-346-3250 or andoneill@pa.gov

NOTE: The projected growth factors are derived using historical VMT (Vehicle Miles Traveled) data (1994 to 2011), as well as Woods and Poole demographic and economic data. The factors should not be used to project traffic beyond a 20-year period. Please be aware that these factors are estimates, and unforeseen events (opening of shopping centers, fast food franchises, gas stations, etc) could cause growth to change over time.

pennsylvania
DEPARTMENT OF TRANSPORTATION

PENNSYLVANIA TURNPIKE COMMISSION
2012 MAINLINE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)
BETWEEN INTERCHANGES

Interchange	EB / NB AADT	WB / SB AADT	Total AADT	Percent Trucks	August EB / NB ADT	August WB / SB ADT	August ADT	Percent Trucks
T2 - T10	11,276	N/A	11,276	22%	13,796	N/A	13,796	19%
T10 - T13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T13 - T30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T 30 - T 39	16,059	14,616	30,675	20%	19,149	17,485	36,633	19%
T 39 - T 48	17,953	16,499	34,452	18%	21,194	19,624	40,818	17%
T 48 - T 57	20,022	18,960	38,982	17%	23,432	22,416	45,848	16%
T 57 - T 67	23,204	21,735	44,939	16%	27,028	25,325	52,353	15%
T 67 - T 75	18,202	17,086	35,288	19%	21,793	20,598	42,391	18%
T 75 - T 91	17,923	16,795	34,718	29%	21,685	20,658	42,343	26%
T 91 - T 110	16,644	15,563	32,206	31%	20,282	19,367	39,648	28%
T 110 - T 146	15,669	14,622	30,291	31%	19,041	18,299	37,341	27%
T 146 - T 161	17,579	16,580	34,159	30%	21,394	20,892	42,287	26%
T 161 - T 180	10,961	9,970	20,931	32%	12,882	12,204	25,086	29%
T 180 - T 189	11,248	10,301	21,549	31%	13,177	12,620	25,797	28%
T 189 - T 201	11,336	10,403	21,739	31%	13,261	12,738	25,998	28%
T 201 - T 226	11,095	10,183	21,278	32%	12,998	12,489	25,486	28%
T 226 - T 236	10,601	9,995	20,597	25%	12,423	12,205	24,628	23%
T 236 - T 242	13,127	13,030	26,157	21%	15,155	15,475	30,630	20%
T 242 - T 247	15,849	15,012	30,861	18%	18,127	17,586	35,713	17%

PENNSYLVANIA TURNPIKE COMMISSION
2012 MAINLINE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)
BETWEEN INTERCHANGES

Interchange	EB / NB AADT	WB / SB AADT	Total AADT	Percent Trucks	August EB / NB ADT	August WB / SB ADT	August ADT	Percent Trucks
T 247 - T 266	13,253	12,426	25,679	20%	15,202	14,831	30,034	19%
T 266 - T 286	13,501	12,691	26,192	19%	15,767	15,498	31,265	18%
T 286 - T 298	17,615	16,845	34,460	18%	20,045	19,950	39,995	17%
T 298 - T 312	22,400	21,482	43,882	17%	24,973	24,754	49,727	16%
T 312 - T 320	22,328	21,572	43,901	16%	24,570 *	24,292 *	48,862 *	15% *
T 320 - T 326	22,362	21,622	43,985	16%	24,570 *	24,292 *	48,862 *	15% *
T 326 - T 333	32,278	31,639	63,917	11%	34,073	33,595	67,668	12%
T 333 - A 20	38,524	37,568	76,092	10%	40,464	39,605	80,069	11%
A 20 - T 339	57,971	58,554	116,525	10%	60,137	61,245	121,382	10%
T 339 - T 340	51,736	53,020	104,756	11%	53,897	55,557	109,454	11%
T 340 - T 343	51,736	50,738	102,474	11%	53,897	53,336	107,233	11%
T 343 - T 351	44,888	44,835	89,722	12%	47,213	47,415	94,629	12%
T 351 - T 352	22,251	20,576	42,827	14%	24,384	22,480	46,864	13%
T 352 - T 358	20,732	20,576	41,308	14%	22,844	22,480	45,324	14%
T 358 - T 359	18,952	18,668	37,620	17%	21,124	20,517	41,641	16%
A 20 - A 31	31,145	31,453	62,598	14%	35,619	35,810	71,430	13%
A 31 - A 44	24,418	24,596	49,014	15%	29,062	28,872	57,934	14%
A 44 - A 56	21,879	22,058	43,936	17%	26,480	26,188	52,668	16%
A 56 - A 74	14,177	14,550	28,728	16%	17,802	17,747	35,549	15%

* Note: August data is for T 312 to T 326 since T 320 opened on December 11, 2012.

PENNSYLVANIA TURNPIKE COMMISSION
2012 MAINLINE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)
BETWEEN INTERCHANGES

Interchange	EB / NB AADT	WB / SB AADT	Total AADT	Percent Trucks	August EB / NB ADT	August WB / SB ADT	August ADT	Percent Trucks
A 74 - A 95	11,390	11,752	23,143	20%	14,507	14,510	29,017	18%
A 95 - A 105	7,969	8,457	16,425	17%	9,998	10,408	20,406	16%
A 105 - A 115	4,930	5,297	10,228	23%	6,459	6,850	13,309	20%
A 115 - A 122	4,230	4,262	8,492	18%	5,403	5,475	10,878	16%
A 122 - A 131	3,955	3,975	7,930	15%	5,140	5,191	10,331	14%

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES
(RAMPS)

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
T2-Gateway	11,276	N/A	11,276	22%	13,796	N/A	13,796	19%
T10-New Castle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T13-Beaver Valley	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T30-Warrendale	16,395	15,131	31,526	20%	19,625	18,236	37,862	19%
T39-Butler Valley	5,978	5,976	11,953	9%	6,567	6,635	13,202	10%
T48-Allegheny Valley	9,404	9,806	19,211	11%	10,078	10,626	20,705	12%
T57-Pittsburgh	19,172	18,753	37,926	9%	21,246	20,521	41,767	9%
T67-Irwin	9,465	9,813	19,278	9%	10,455	10,949	21,404	9%
T75-New Stanton	12,345	12,369	24,714	31%	13,963	14,176	28,139	30%
T91-Donegal	2,641	2,665	5,306	12%	3,149	3,227	6,376	12%
T110-Somerset	2,814	2,847	5,661	25%	3,293	3,459	6,752	24%
T146-Bedford	3,760	3,814	7,574	27%	4,509	4,759	9,268	24%
T161-Breezewood	8,454	8,404	16,858	28%	10,904	10,600	21,505	24%
T180-Ft. Littleton	777	820	1,597	25%	875	994	1,869	25%
T189-Willow Hill	494	500	994	22%	516	545	1,061	21%
T201-Blue Mountain	860	919	1,779	31%	998	1,067	2,066	32%
T226-Carlisle	7,044	7,367	14,410	39%	8,087	8,385	16,472	36%
T236-Gettysburg Pike	4,929	5,445	10,374	14%	5,494	6,038	11,532	14%
T242-Harrisburg West	6,917	6,162	13,078	17%	7,739	6,844	14,583	17%

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
T247-Harrisburg East	11,622	11,654	23,276	15%	12,916	13,098	26,014	15%
T266-Lebanon-Lancaster	3,984	4,000	7,984	12%	4,827	4,921	9,748	11%
T286-Reading	8,048	8,086	16,134	17%	8,693	8,873	17,565	16%
T298-Morgantown	7,673	7,593	15,266	13%	8,228	8,213	16,441	14%
T312-Downingtown	11,099	11,295	22,394	8%	11,941	11,910	23,851	9%
T320- PA Route 29	104 *	120 *	224 *	5% *	N/A	N/A	N/A	N/A
T326-Valley Forge	31,624	31,773	63,397	9%	33,511	33,325	66,836	10%
T333-Norristown	12,742	12,490	25,231	5%	13,052	12,739	25,791	5%
A20-Mid-County	38,490	40,268	78,758	10%	42,061	44,142	86,203	10%
T339-Ft. Washington	24,154	25,019	49,173	6%	24,384	25,126	49,510	6%
T340-Virginia Drive **	3,760	1,433	5,194	2%	3,676	1,403	5,079	2%
T343-Willow Grove	26,989	27,960	54,949	8%	27,638	28,381	56,019	8%
T351-Bensalem	32,190	30,616	62,806	10%	33,350	31,260	64,609	11%
T352-Street Road	685	2,214	2,899	3%	741	2,288	3,029	3%
T358-Delaware Valley	6,887	6,828	13,715	20%	7,128	6,959	14,087	20%
T359-Dela. River Bridge	19,024	19,395	38,418	17%	20,942	21,654	42,596	16%
A31-Lansdale	14,284	14,172	28,456	10%	15,102	14,725	29,828	10%
A44-Quakertown	8,966	8,998	17,965	11%	10,015	9,959	19,974	11%
A56-Lehigh Valley	17,840	18,164	36,005	18%	20,159	20,538	40,697	17%

* Note: 2012 data represents a partial year due to opening day of December 11, 2012.

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
A74-Mahoning Valley	5,001	5,014	10,015	10%	5,749	5,824	11,573	10%
A95-Pocono	5,859	5,976	11,835	22%	7,033	7,440	14,473	20%
A105-Wilkes-Barre	3,472	3,357	6,828	8%	3,926	3,927	7,852	8%
A115-Wyoming Valley	5,413	5,114	10,527	24%	7,005	6,714	13,719	21%
A122-Keyser Avenue	4,230	4,262	8,492	18%	5,403	5,475	10,878	16%
A131-Clarks Summit	3,955	3,975	7,930	15%	5,140	5,191	10,331	14%
PA TURNPIKE 43								
Ramp M4	143	163	306	2%	157	178	335	2%
Main M5	2,703	2,759	5,462	10%	3,146	3,212	6,358	10%
Ramp M15	70	23	93	8%	82	25	107	6%
Ramp M18	146	154	300	6%	172	176	348	6%
Main M19	2,509	2,465	4,974	9%	3,069	2,951	6,020	9%
Ramp M22	54 *	57 *	111 *	7% *	139	145	284	6%
Ramp M26	138 *	158 *	296 *	2% *	275	353	628	3%
California (M35)	5,777	5,521	11,298	6%	6,324	6,020	12,345	7%
Coyle CTN Rd. (M39)	555	545	1,101	4%	565	554	1,119	5%
Ramp M44	351	346	698	7%	368	362	730	6%
Ramp M48	1,823	1,811	3,634	3%	1,956	1,963	3,919	3%
Main M52	3,873	3,764	7,637	2%	4,160	4,016	8,176	2%

* Note: 2012 data represents a partial year due to opening day of July 16, 2012.

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
PA TURNPIKE 376								
Rt. 108 Mt. Jackson (B17)	577	681	1,258	13%	558	723	1,281	14%
West Toll 376 (B18)	4,401	4,255	8,655	14%	4,883	4,836	9,718	15%
Rt. 168 Moravia (B20)	434	427	861	10%	470	447	917	10%
Rt. 551 Beaver Falls (B29)	266	230	496	12%	311	270	581	19%
East Toll 376 (B30)	5,639	5,738	11,377	15%	6,250	6,405	12,654	15%
PA TURNPIKE 66								
Rt. 136 (G4)	462	454	916	19%	519	502	1,021	20%
Mainline A.K.H (G5)	7,013	7,178	14,191	17%	7,605	7,794	15,399	17%
Rt. 30 (G6)	2,515	2,486	5,001	6%	2,685	2,597	5,282	7%
Rt. 130 (G8)	692	669	1,362	2%	706	690	1,396	2%
Rt. 66 (G9)	399	377	776	3%	405	383	788	4%
PA TURNPIKE 576								
Rt. 30 (S2)	292	300	593	6%	192	220	412	8%
Westport Rd (S4)	115	113	227	16%	135	133	268	22%
Rt. 22 (S6)	2,233	2,298	4,531	7%	2,416	2,494	4,911	7%

Irwin
I/C T 67

ENTERING TURNPIKE

ON	OFF	2001	2002	2003	2004	2005	2006	2007
I/C T 67	I/C T 2 to I/C T 57	2,803,966	2,810,780	2,919,838	2,917,056	2,806,520	2,864,562	2,858,044
I/C T 67	I/C T 75 to I/C A 115	858,048	896,483	895,119	886,540	846,613	850,387	871,633
	TOTALS	3,662,014	3,707,263	3,814,957	3,803,596	3,653,133	3,714,949	3,729,677

ON	OFF	2008	2009	2010	2011	10 YEAR GROWTH	5 YEAR GROWTH	*3 YEAR GROWTH
I/C T 67	I/C T 2 to I/C T 57	2,743,729	2,621,367	2,561,925	2,552,414	-0.94%	-2.28%	-2.38%
I/C T 67	I/C T 75 to I/C A 115	853,433	812,698	839,781	792,105	-0.80%	-1.41%	-2.46%
	TOTALS	3,597,162	3,434,065	3,401,706	3,344,519	-0.90%	-2.08%	-2.40%

EXITING TURNPIKE

ON	OFF	2001	2002	2003	2004	2005	2006	2007
I/C T 2 to I/C T 57	I/C T 67	2,979,198	2,991,071	3,152,686	3,042,550	2,910,030	2,965,574	2,981,174
I/C T 75 to I/C A 115	I/C T 67	817,385	865,494	871,794	854,318	807,150	804,127	813,178
	TOTALS	3,796,583	3,856,565	4,024,480	3,896,868	3,717,180	3,769,701	3,794,352

ON	OFF	2008	2009	2010	2011	10 YEAR GROWTH	5 YEAR GROWTH	*3 YEAR GROWTH
I/C T 2 to I/C T 57	I/C T 67	2,850,102	2,753,520	2,691,093	2,684,235	-1.04%	-1.97%	-1.98%
I/C T 75 to I/C A 115	I/C T 67	806,683	771,015	772,602	746,483	-0.90%	-1.48%	-2.55%
	TOTALS	3,656,785	3,524,535	3,463,695	3,430,718	-1.01%	-1.87%	-2.10%

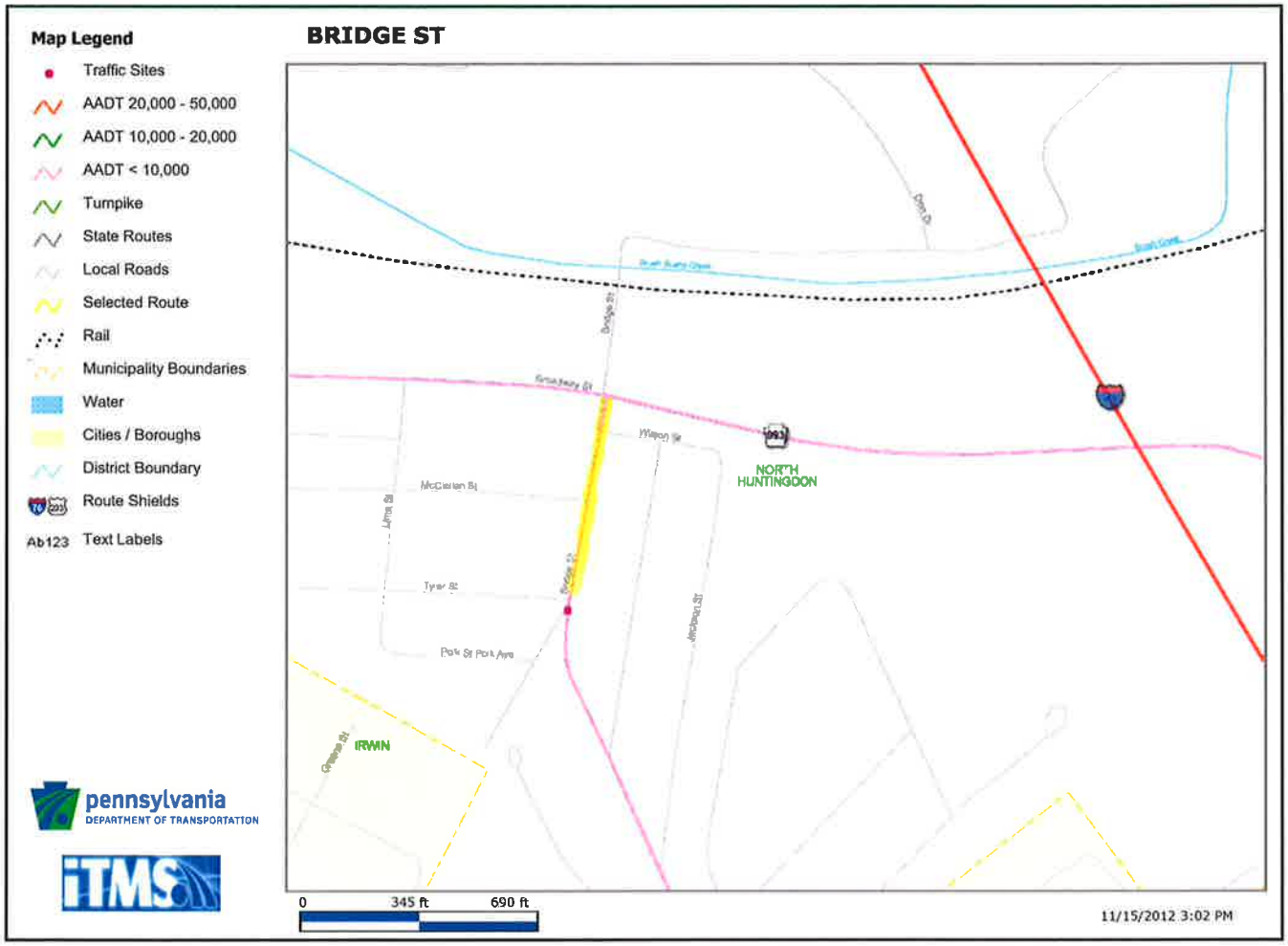
* 3 YEAR GROWTH BASED ON ANNUAL GROWTH FROM 2008 TO 2011

$G = \{(V/(V-t))^{(1/t)}\} - 1$ WHERE:

t = 3
V = Volume 2011
V-t = Volume 2008
G = % growth

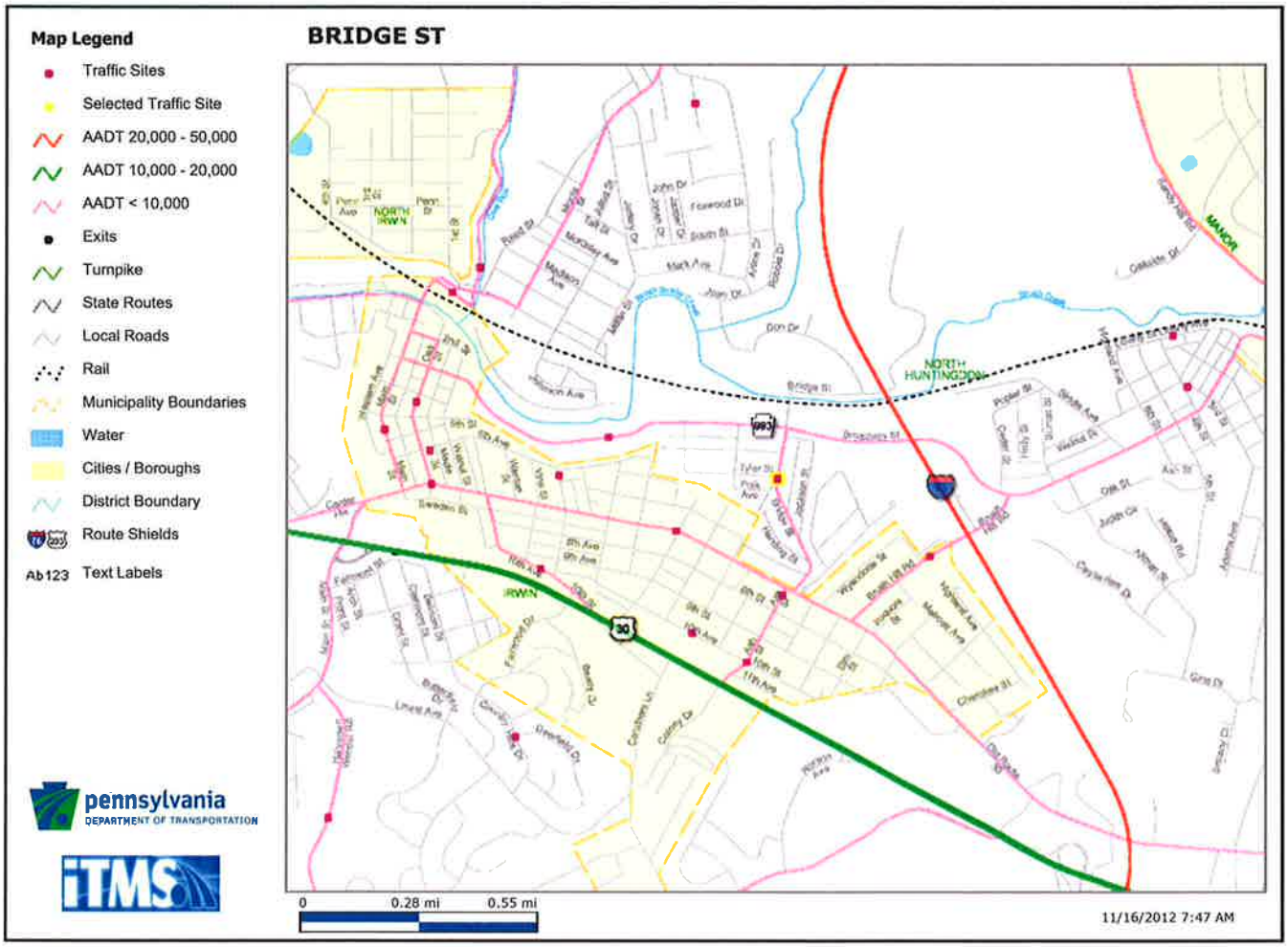
BRIDGE ST.

SITE NO: 29848	
County	WESTMORELAND (64)
Route	H624
Segment	0070
Dir	B
Current Avg Daily Traffic	2023
Current Avg Daily Truck Volume	101
K Factor	12
D Factor	55
T Factor	3
Truck Percent	5
Base Traffic Year	2008
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
BRIDGE ST
NORTH HUNTINGDON
IRWIN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
345 ft
690 ft
11/15/2012 3:02 PM

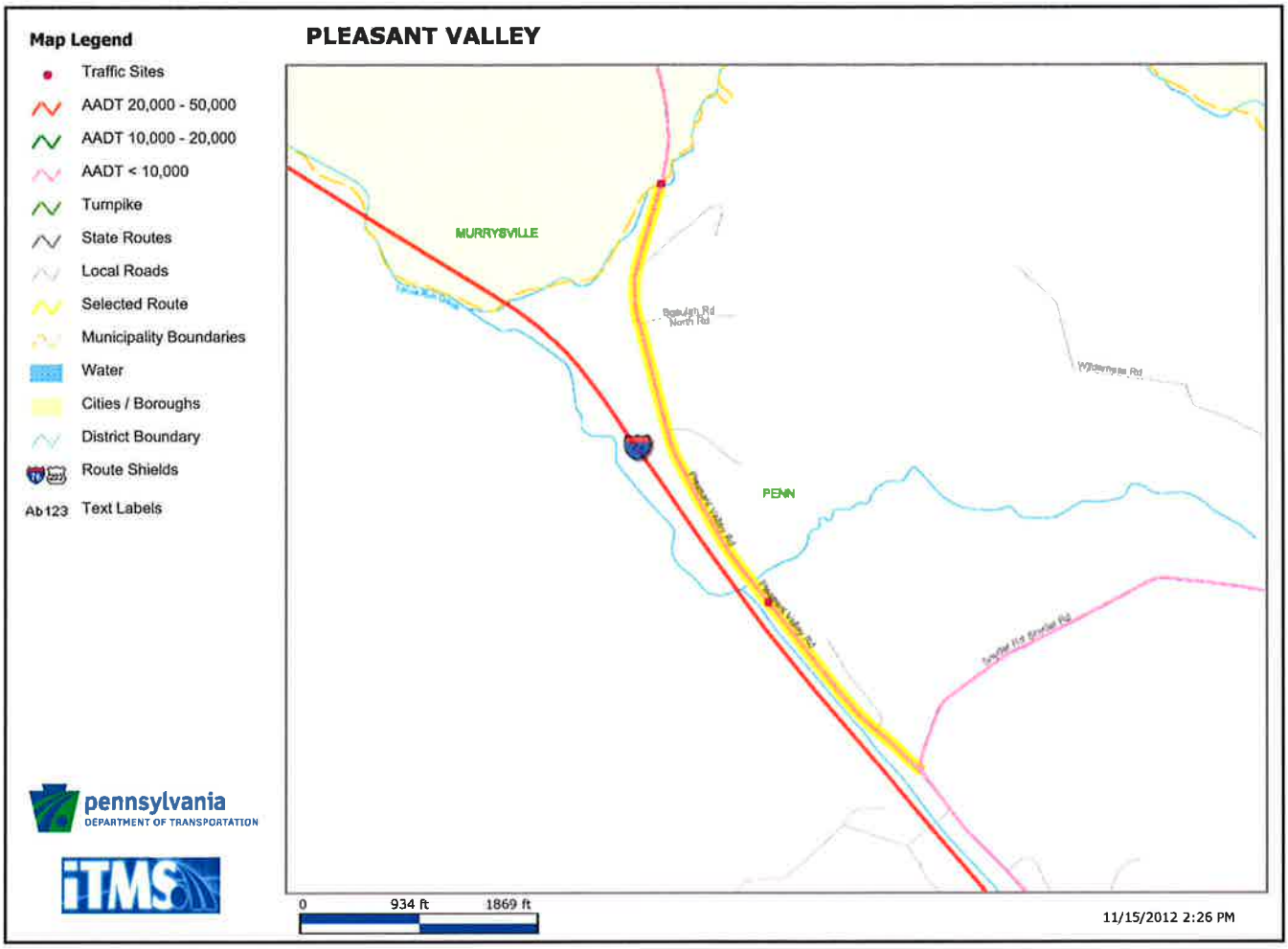
BRIDGE ST.

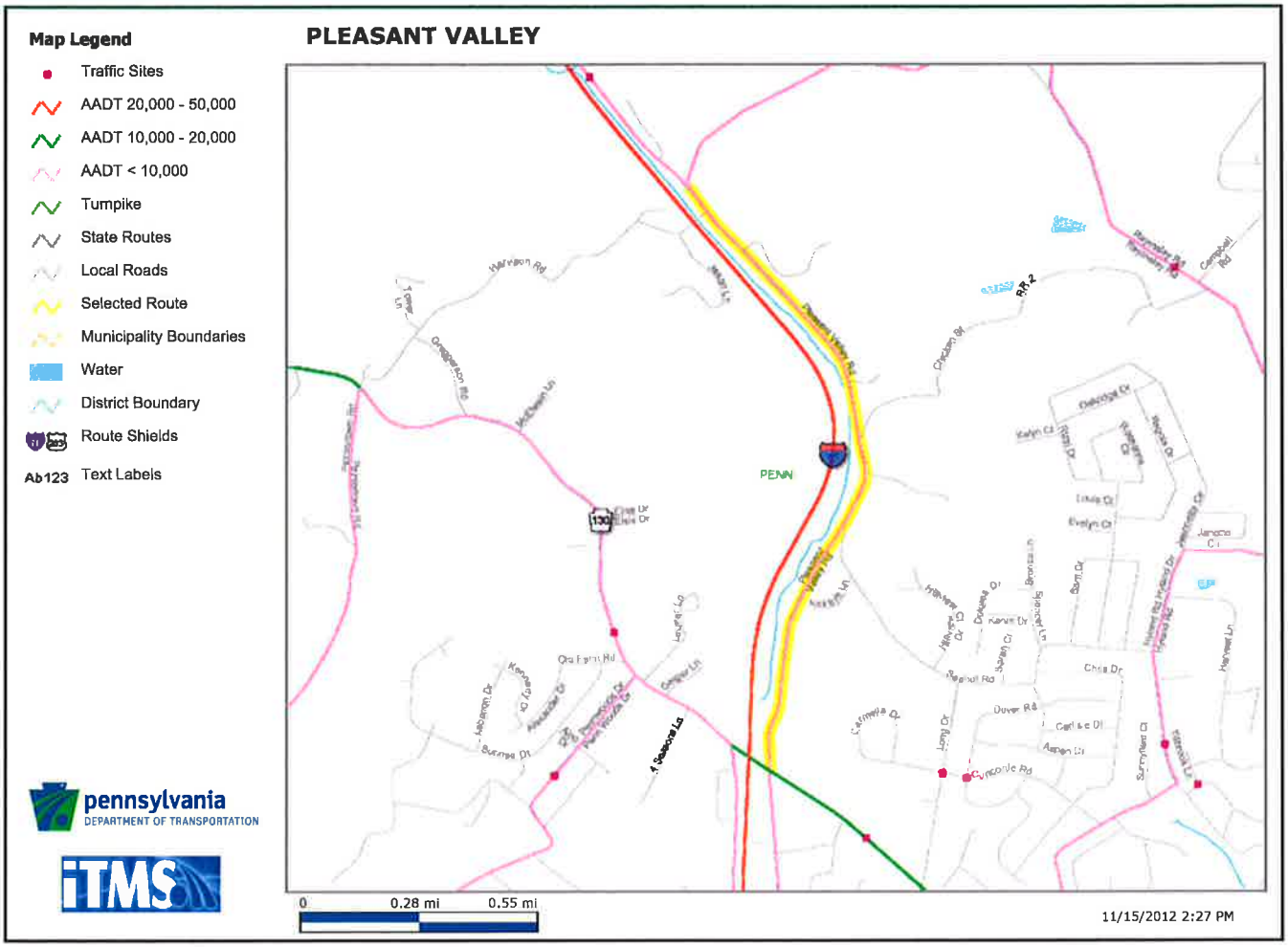
SITE NO: 29848	
County	WESTMORELAND (64)
Route	H624
Segment	0070
Offset	606
Current Avg Daily Traffic	2023
Agency	VL
Cycle Year	05
Freq Cycle	05
Site Status	E
Program Indicator	08
Year of Last Count	2008
Year of Next Scheduled Count	2013 - 5TH YEAR IN 5 YEAR CYC
Latitude	40.329108528366
Longitude	-79.69394498284


Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Exits
Turnpike
State Routes
Local Roads
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
BRIDGE ST
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 mi
0.55 mi
11/16/2012 7:47 AM

PLEASANT VALLEY

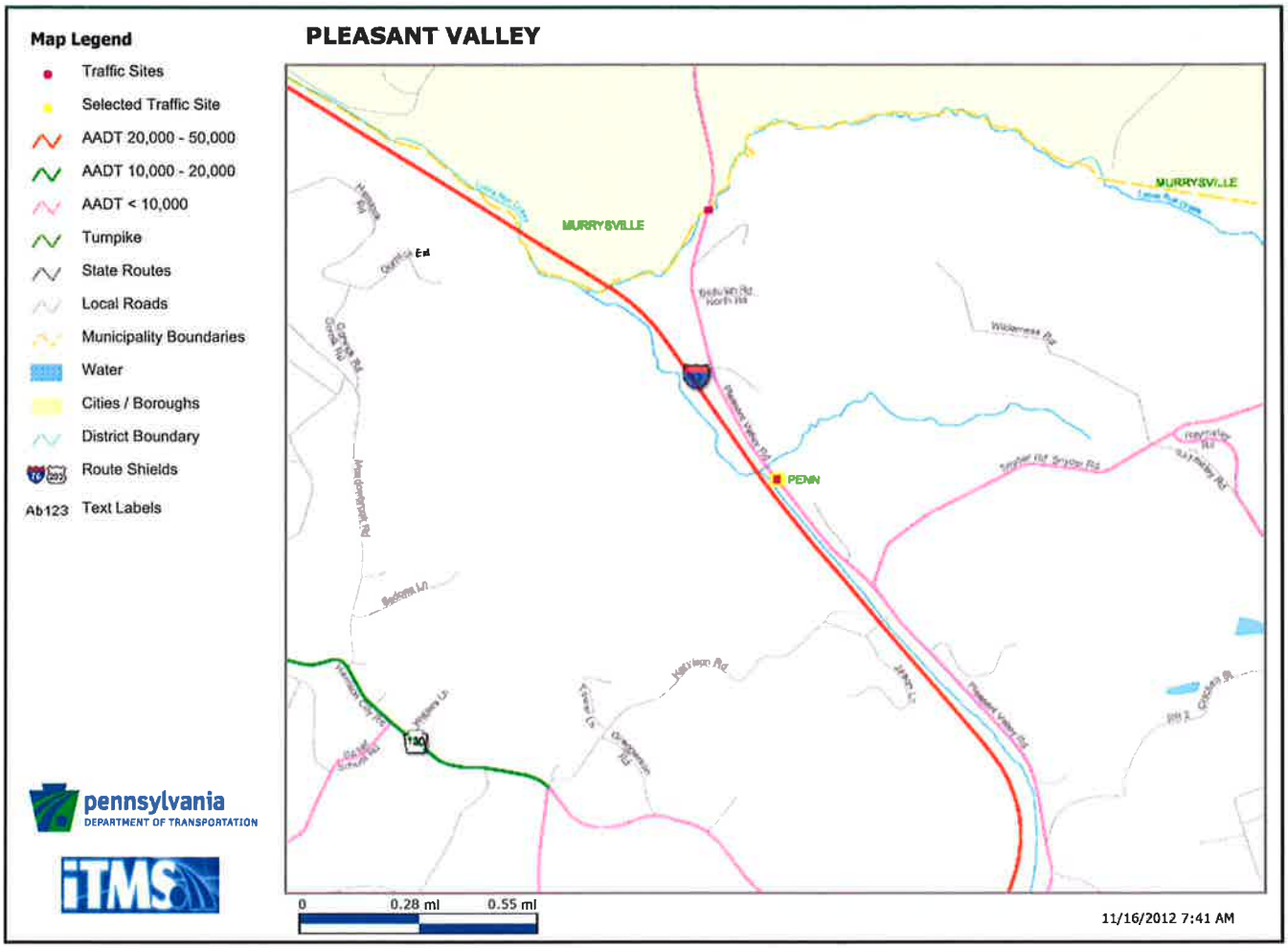
SITE NO: 29846	
County	WESTMORELAND (64)
Route	H617
Segment	0030
Dir	B
Current Avg Daily Traffic	7247
Current Avg Daily Truck Volume	434
K Factor	9
D Factor	65
T Factor	7
Truck Percent	6
Base Traffic Year	2010
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
PLEASANT VALLEY
MURRYSVILLE
PENN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
934 ft
1869 ft
11/15/2012 2:26 PM


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
District Boundary
Route Shields
Ab123 Text Labels
PLEASANT VALLEY
PENN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 mi
0.55 mi
11/15/2012 2:27 PM

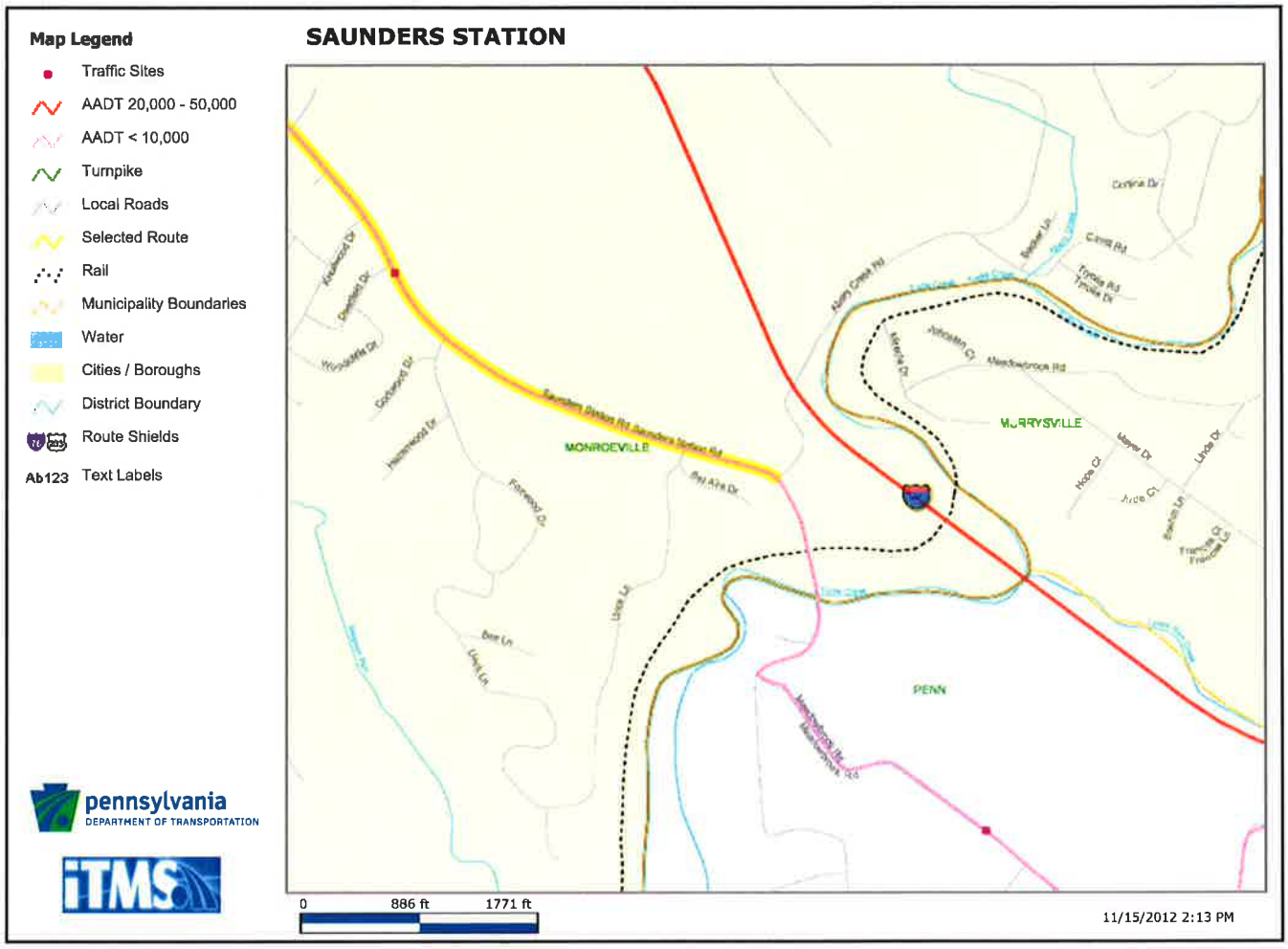
PLEASANT VALLEY

SITE NO: 29846	
County	WESTMORELAND (64)
Route	H617
Segment	0030
Offset	1826
Current Avg Daily Traffic	7247
Agency	VL
Cycle Year	02
Freq Cycle	05
Site Status	E
Program Indicator	08
Year of Last Count	2010
Year of Next Scheduled Count	2015 - 2ND YEAR IN 5 YEAR CYC
Latitude	40.390804330663
Longitude	-79.68620168262


Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
PLEASANT VALLEY
MURRYSVILLE
PENN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 ml
0.55 ml
11/16/2012 7:41 AM

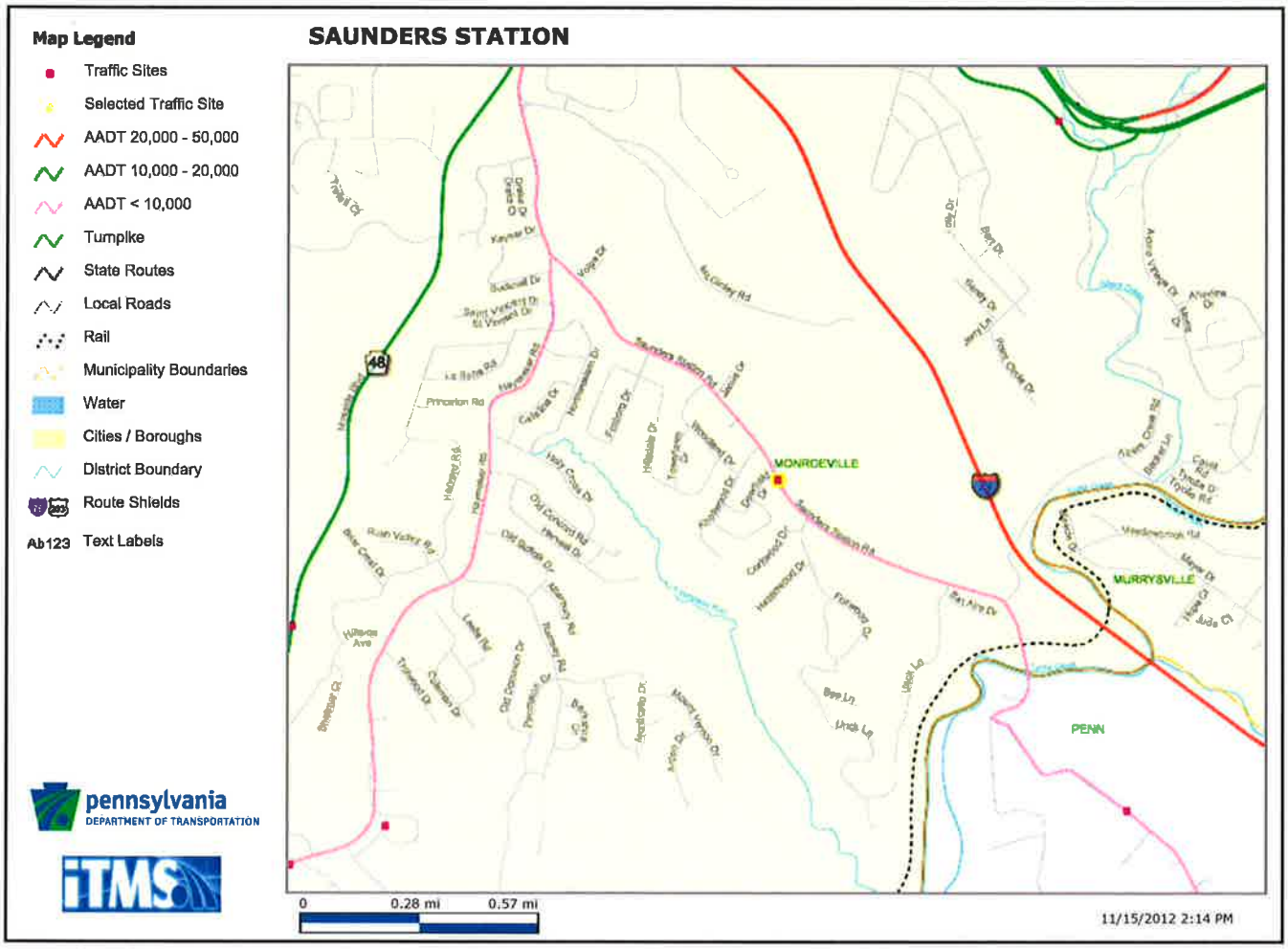
SAUNDERS STATION

SITE NO: 27820	
County	ALLEGHENY (02)
Route	H834
Segment	0010
Dir	B
Current Avg Daily Traffic	5926
Current Avg Daily Truck Volume	297
K Factor	12
D Factor	55
T Factor	3
Truck Percent	5
Base Traffic Year	2008
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT < 10,000
Turnpike
Local Roads
Selected Route
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
SAUNDERS STATION
MONROEVILLE
MURRYSVILLE
PENN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
886 ft
1771 ft
11/15/2012 2:13 PM

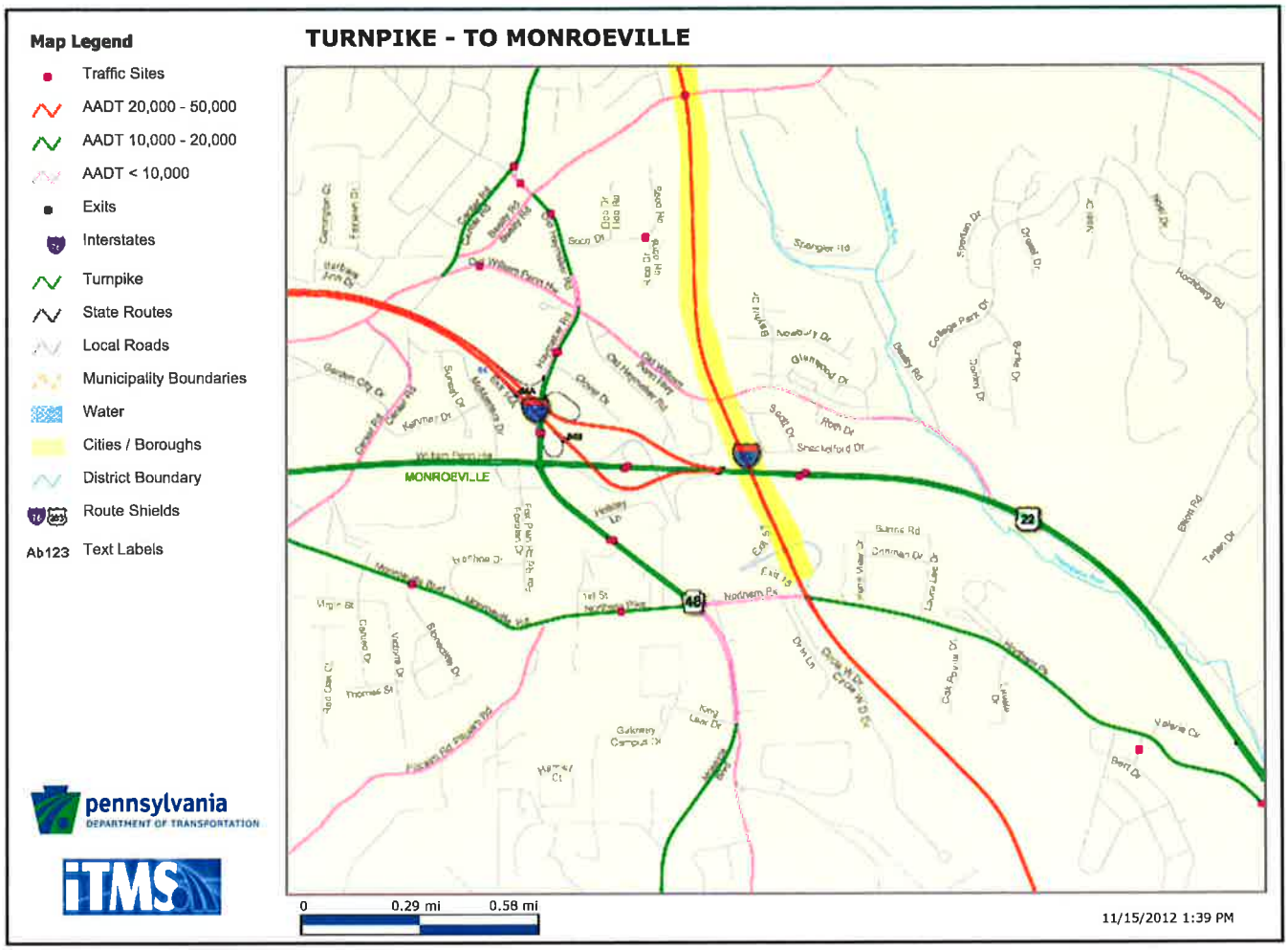
SAUNDERS STATION

SITE NO: 27820	
County	ALLEGHENY (02)
Route	H834
Segment	0010
Offset	4065
Current Avg Daily Traffic	5926
Agency	VK
Cycle Year	05
Freq Cycle	05
Site Status	E
Program Indicator	08
Year of Last Count	2008
Year of Next Scheduled Count	2013 - 5TH YEAR IN 5 YEAR CYC
Latitude	40.414788520349
Longitude	-79.73919390648


Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
SAUNDERS STATION
MONROEVILLE
MURRYSVILLE
PENN
48
0
0.28 mi
0.57 mi
11/15/2012 2:14 PM
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS

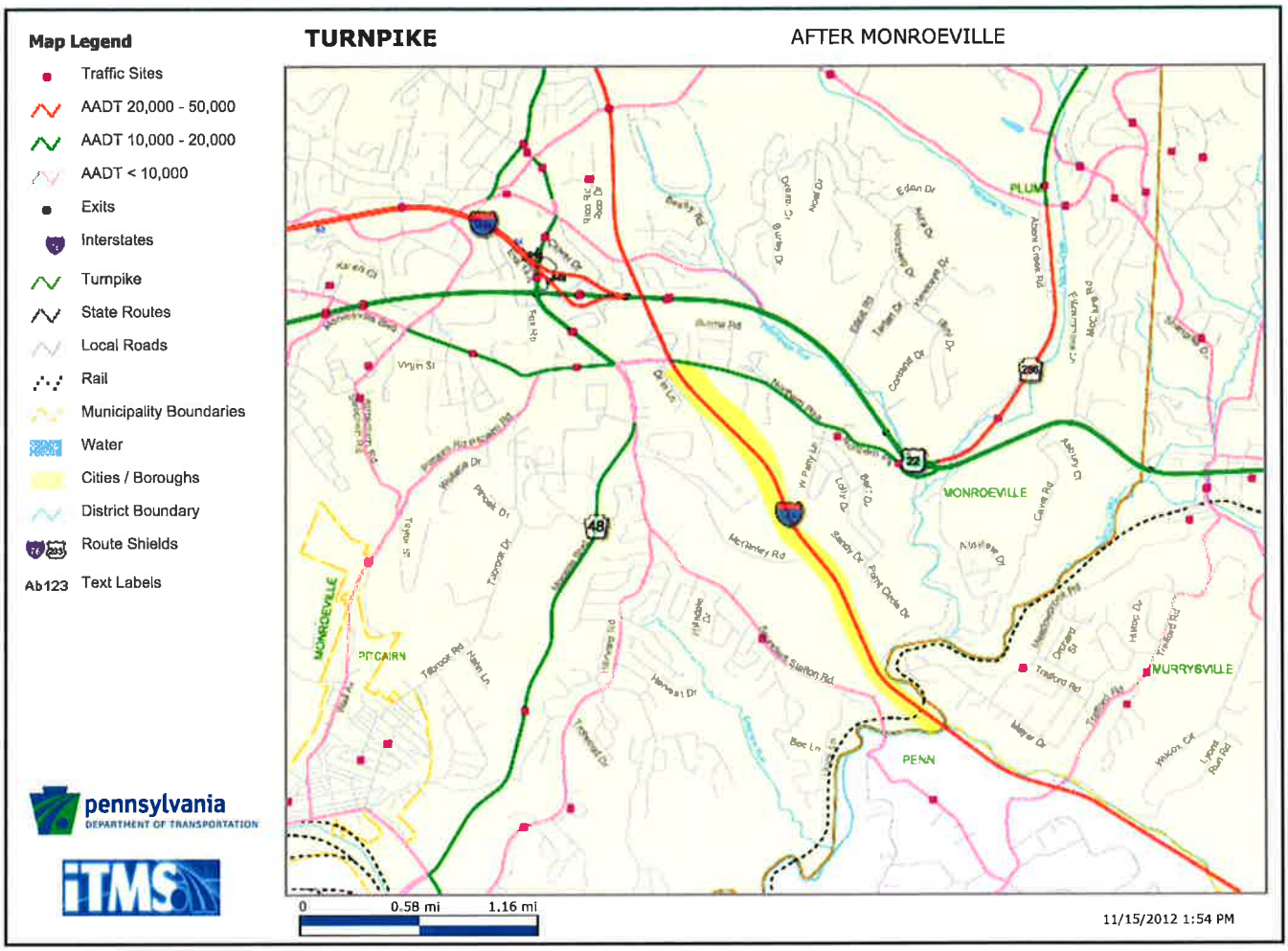
TURNPIKE - TO MONROEVILLE

SITE NO: A Count Site could not be identified.	
County	ALLEGHENY (02)
Route	7076
Segment	
Dir	B
Current Avg Daily Traffic	38843
Current Avg Daily Truck Volume	6215
K Factor	0
D Factor	0
T Factor	0
Truck Percent	16
Base Traffic Year	2011
Traffic Pattern Group	URBAN - INTERSTATE


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Exits
Interstates
Turnpike
State Routes
Local Roads
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
TURNPIKE - TO MONROEVILLE
MONROEVILLE
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.29 mi
0.58 mi
11/15/2012 1:39 PM

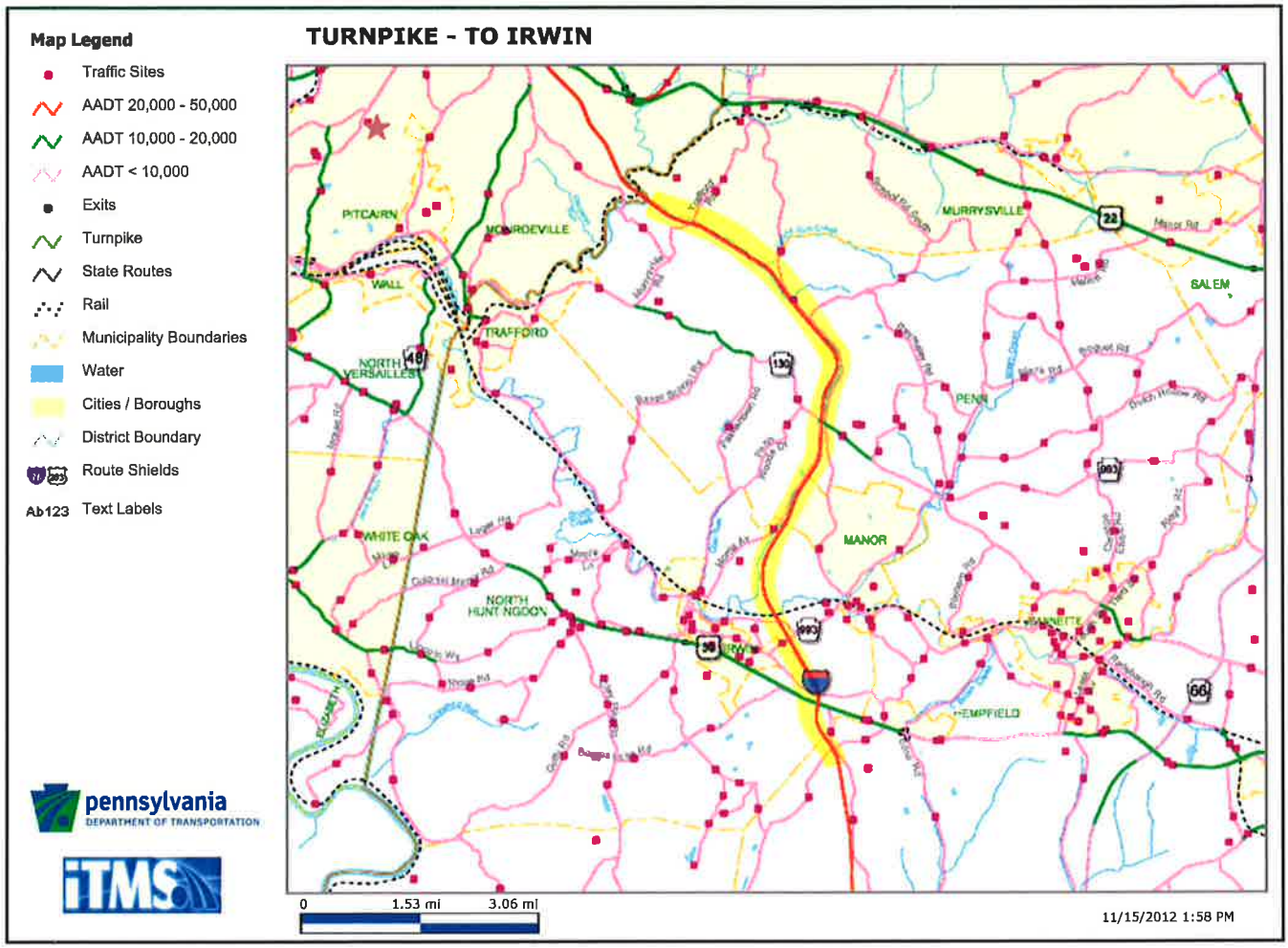
TURNPIKE - AFTER MONROEVILLE

SITE NO: A Count Site could not be identified.	
County	ALLEGHENY (02)
Route	7076
Segment	
Dir	B
Current Avg Daily Traffic	44899
Current Avg Daily Truck Volume	6735
K Factor	0
D Factor	0
T Factor	0
Truck Percent	15
Base Traffic Year	2011
Traffic Pattern Group	URBAN - INTERSTATE


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Exits
Interstates
Turnpike
State Routes
Local Roads
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
TURNPIKE
AFTER MONROEVILLE
MONROEVILLE
PLUM
PITCAIRN
MURRYSVILLE
PENN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.58 mi
1.16 mi
11/15/2012 1:54 PM

TURNPIKE - TO IRWIN

SITE NO: A Count Site could not be identified.	
County	WESTMORELAND (64)
Route	7076
Segment	
Dir	B
Current Avg Daily Traffic	44899
Current Avg Daily Truck Volume	6735
K Factor	0
D Factor	0
T Factor	0
Truck Percent	15
Base Traffic Year	2011
Traffic Pattern Group	URBAN - INTERSTATE


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Exits
Turnpike
State Routes
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
TURNPIKE - TO IRWIN
PITCAIRN
MONROEVILLE
WALL
TRAFFORD
NORTH VERSAILLES
MURRYSVILLE
SALEM
PENN
MANOR
WHITE OAK
NORTH HUNTINGDON
EMPFIELD
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
1.53 mi
3.06 mi
11/15/2012 1:58 PM

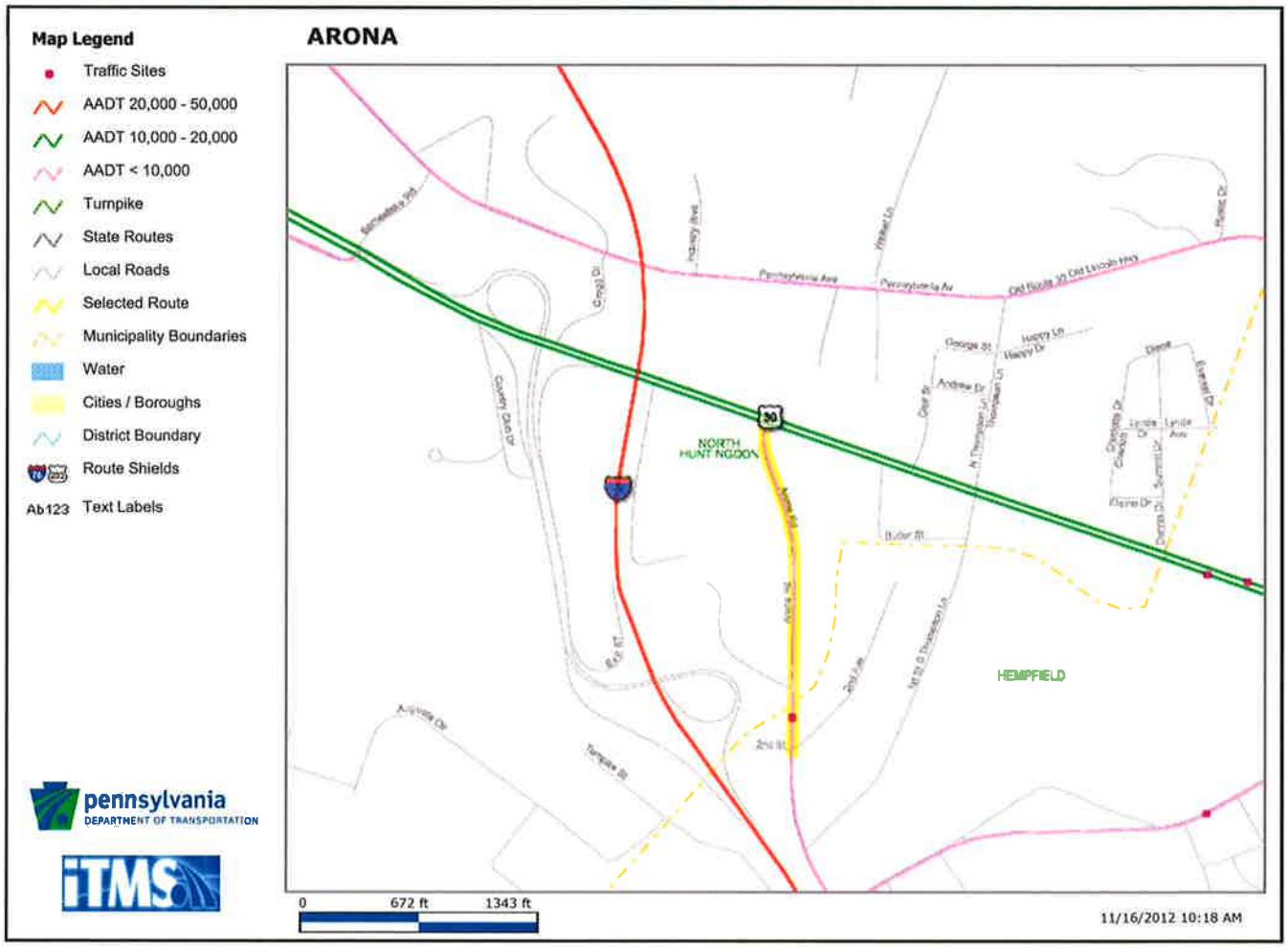
NORTHERN PIKE

SITE NO: 31986	
County	ALLEGHENY (02)
Route	2054
Segment	0050
Dir	B
Current Avg Daily Traffic	12138
Current Avg Daily Truck Volume	364
K Factor	11
D Factor	55
T Factor	2
Truck Percent	3
Base Traffic Year	2008
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
NORTHERN PIKE
MONROEVILLE
0
457 ft
914 ft
11/15/2012 2:10 PM
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS

ARONA

SITE NO: 6740	
County	WESTMORELAND (64)
Route	3071
Segment	0160
Dir	B
Current Avg Daily Traffic	9471
Current Avg Daily Truck Volume	663
K Factor	11
D Factor	55
T Factor	4
Truck Percent	7
Base Traffic Year	2012
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
ARONA
NORTH HUNTINGDON
HEMPFIELD
30
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
672 ft
1343 ft
11/16/2012 10:18 AM

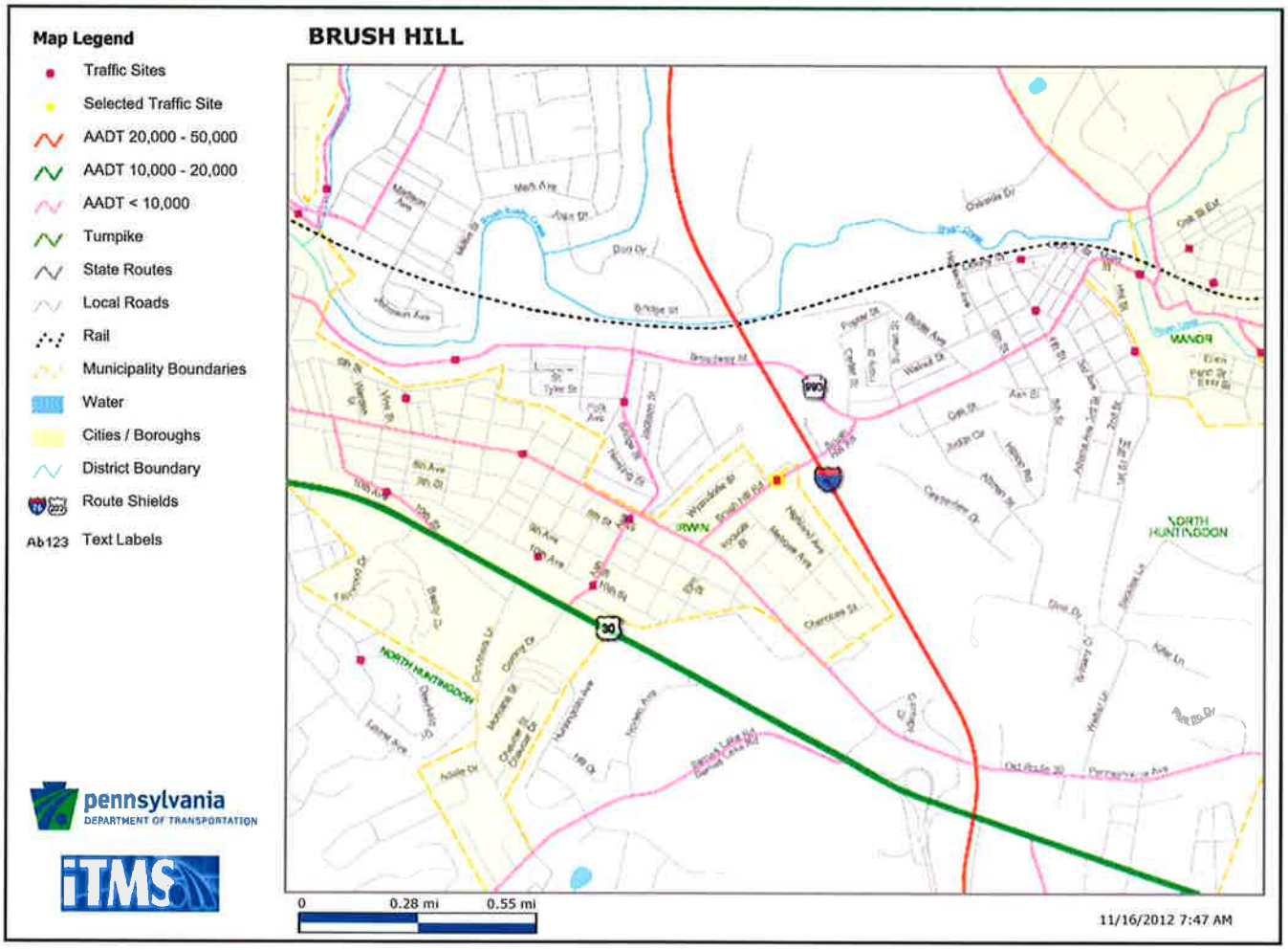
BRUSH HILL

SITE NO: 22918	
County	WESTMORELAND (64)
Route	4017
Segment	0010
Dir	B
Current Avg Daily Traffic	6365
Current Avg Daily Truck Volume	255
K Factor	11
D Factor	55
T Factor	2
Truck Percent	4
Base Traffic Year	2012
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
BRUSH HILL
NORTH HUNTINGDON
IRWIN
0
317 ft
634 ft
11/15/2012 3:17 PM

BRUSH HILL

SITE NO: 22918	
County	WESTMORELAND (64)
Route	4017
Segment	0010
Offset	1266
Current Avg Daily Traffic	6365
Agency	VL
Cycle Year	04
Freq Cycle	05
Site Status	E
Program Indicator	08
Year of Last Count	2012
Year of Next Scheduled Count	2012 - 4TH YEAR IN 5 YEAR CYC
Latitude	40.326594964205
Longitude	-79.68716334751


Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
BRUSH HILL
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 mi
0.55 mi
11/16/2012 7:47 AM

NIKE SITE

SITE NO: 23260	
County	WESTMORELAND (64)
Route	4025
Segment	0030
Dir	B
Current Avg Daily Traffic	2810
Current Avg Daily Truck Volume	238
K Factor	11
D Factor	65
T Factor	9
Truck Percent	8
Base Traffic Year	2009
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS

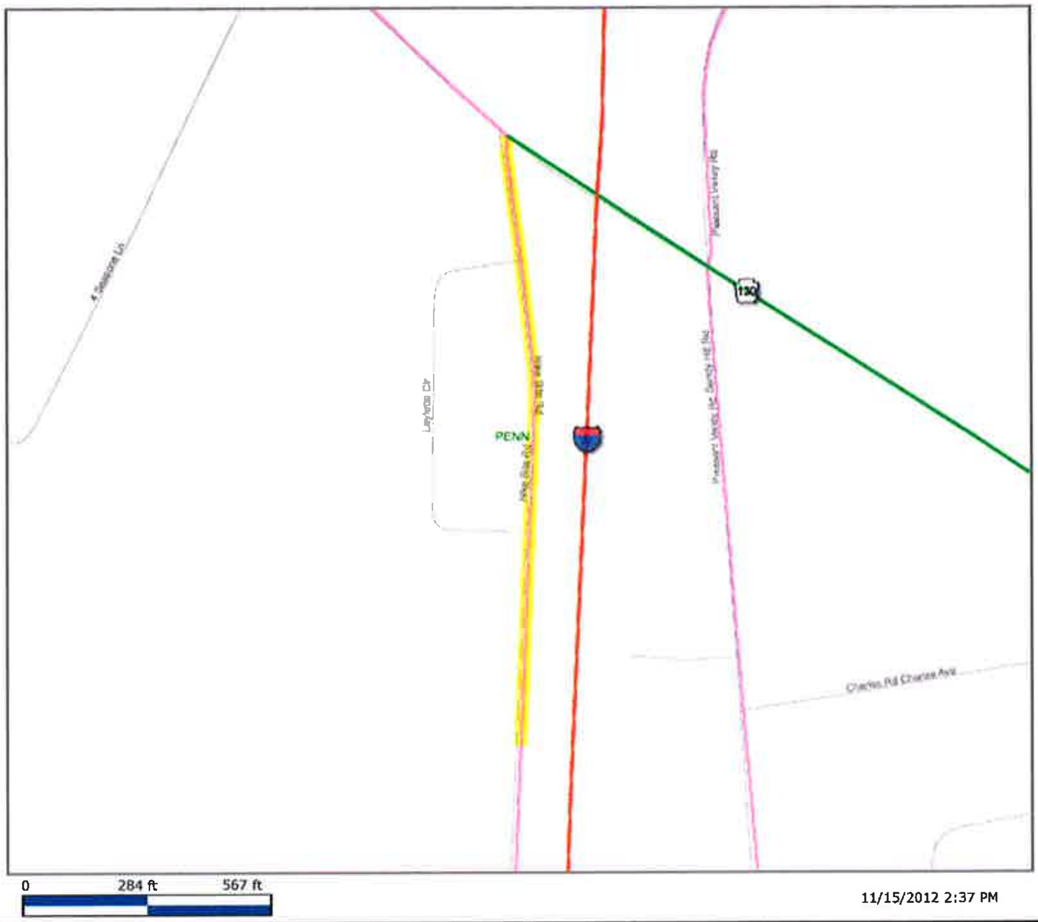
Map Legend

- AADT 20,000 - 50,000
- AADT 10,000 - 20,000
- AADT < 10,000
- Turnpike
- State Routes
- Local Roads
- Selected Route
- Municipality Boundaries
- Water
- District Boundary
- Route Shields
- Ab123 Text Labels

pennsylvania
DEPARTMENT OF TRANSPORTATION

iTMS

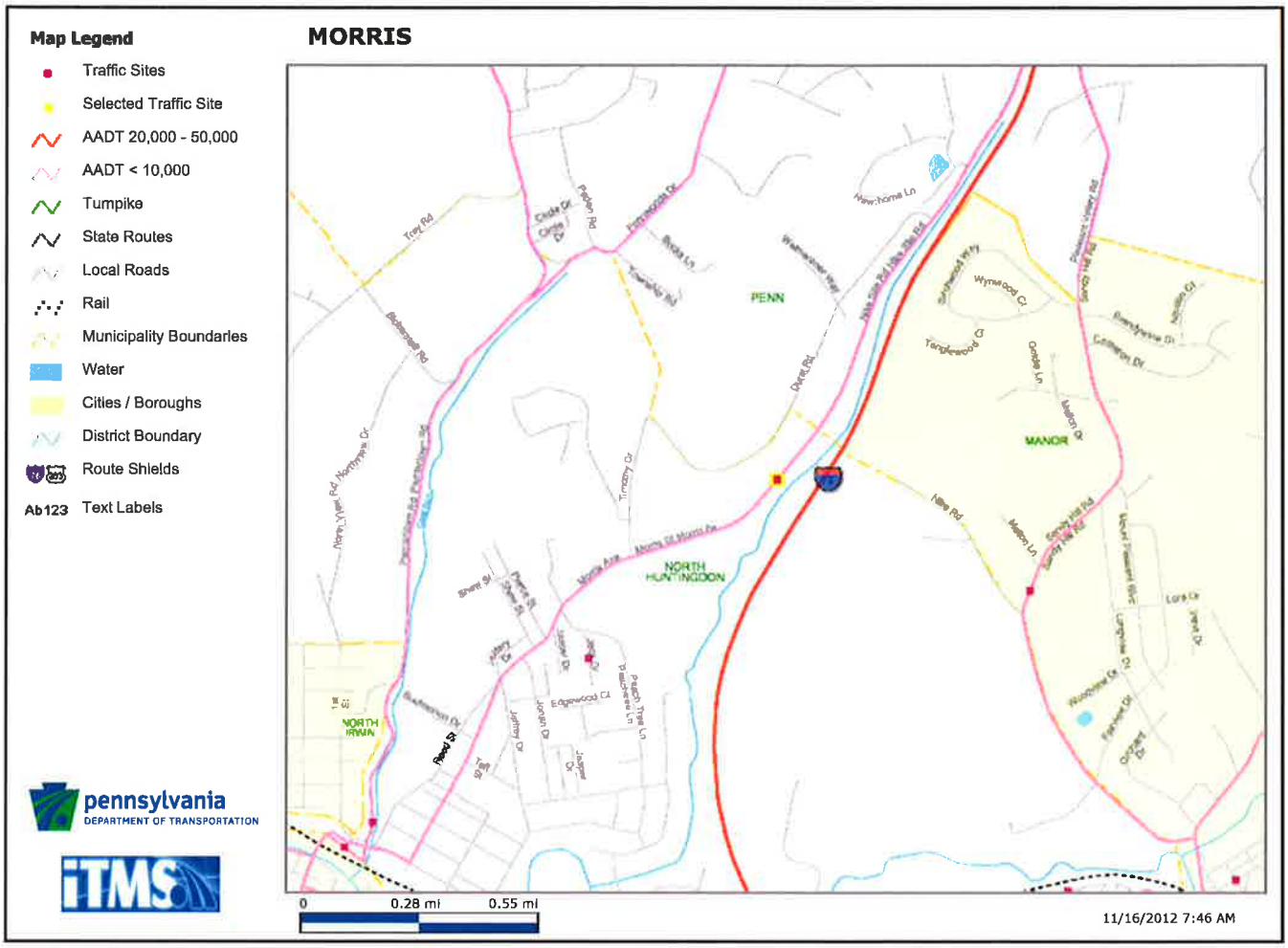
NIKE SITE



11/15/2012 2:37 PM

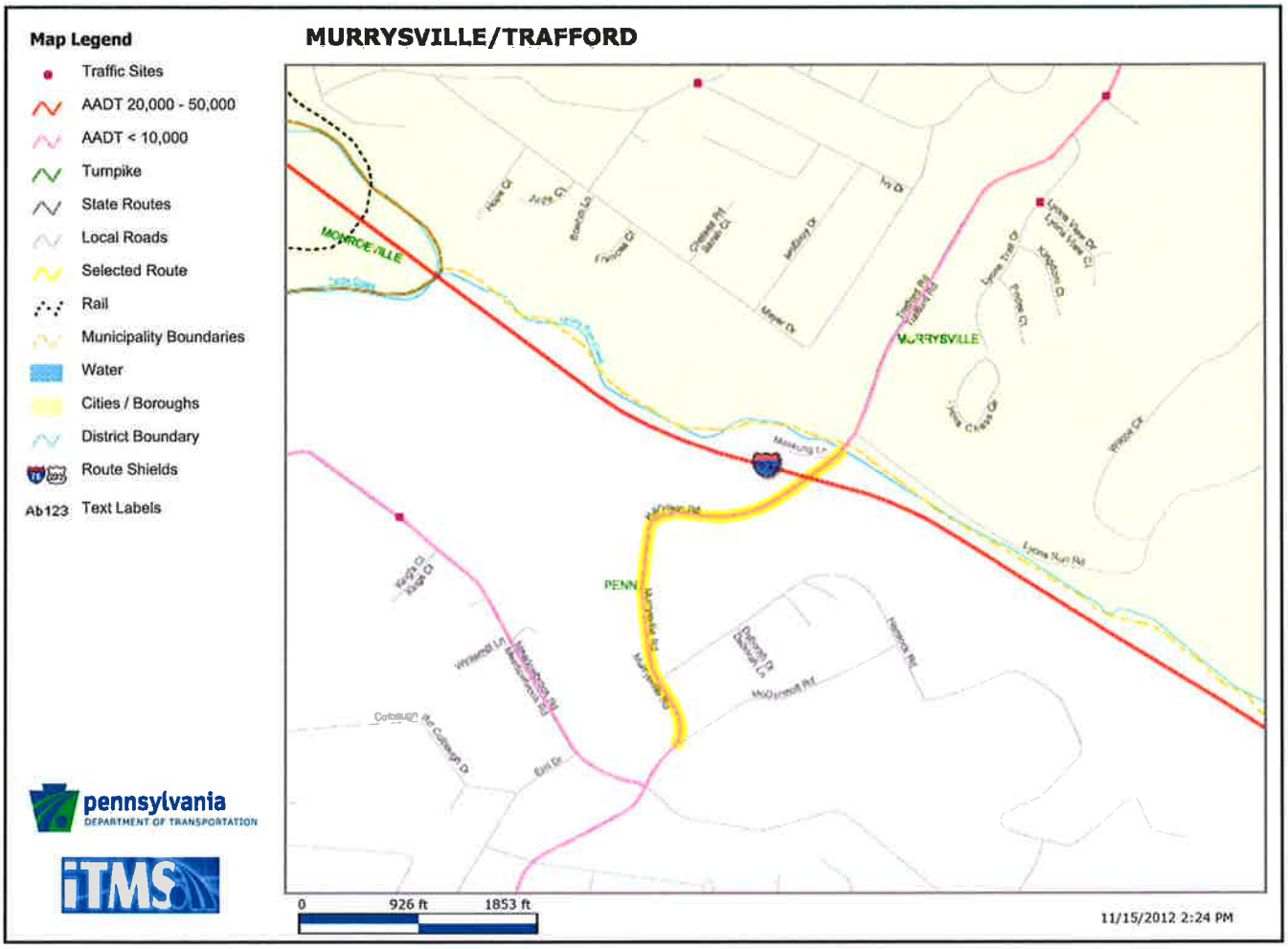
MORRIS

SITE NO: 23260	
County	WESTMORELAND (64)
Route	4025
Segment	0030
Offset	2137
Current Avg Daily Traffic	2810
Agency	VL
Cycle Year	01
Freq Cycle	05
Site Status	E
Program Indicator	08
Year of Last Count	2009
Year of Next Scheduled Count	2014 - 1ST YEAR IN 5 YEAR CYC
Latitude	40.347881082110
Longitude	-79.68984377022


Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT < 10,000
Tumpike
State Routes
Local Roads
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
MORRIS
PENN
NORTH HUNTINGDON
MANOR
NORTH IRWIN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 mi
0.55 mi
11/16/2012 7:46 AM

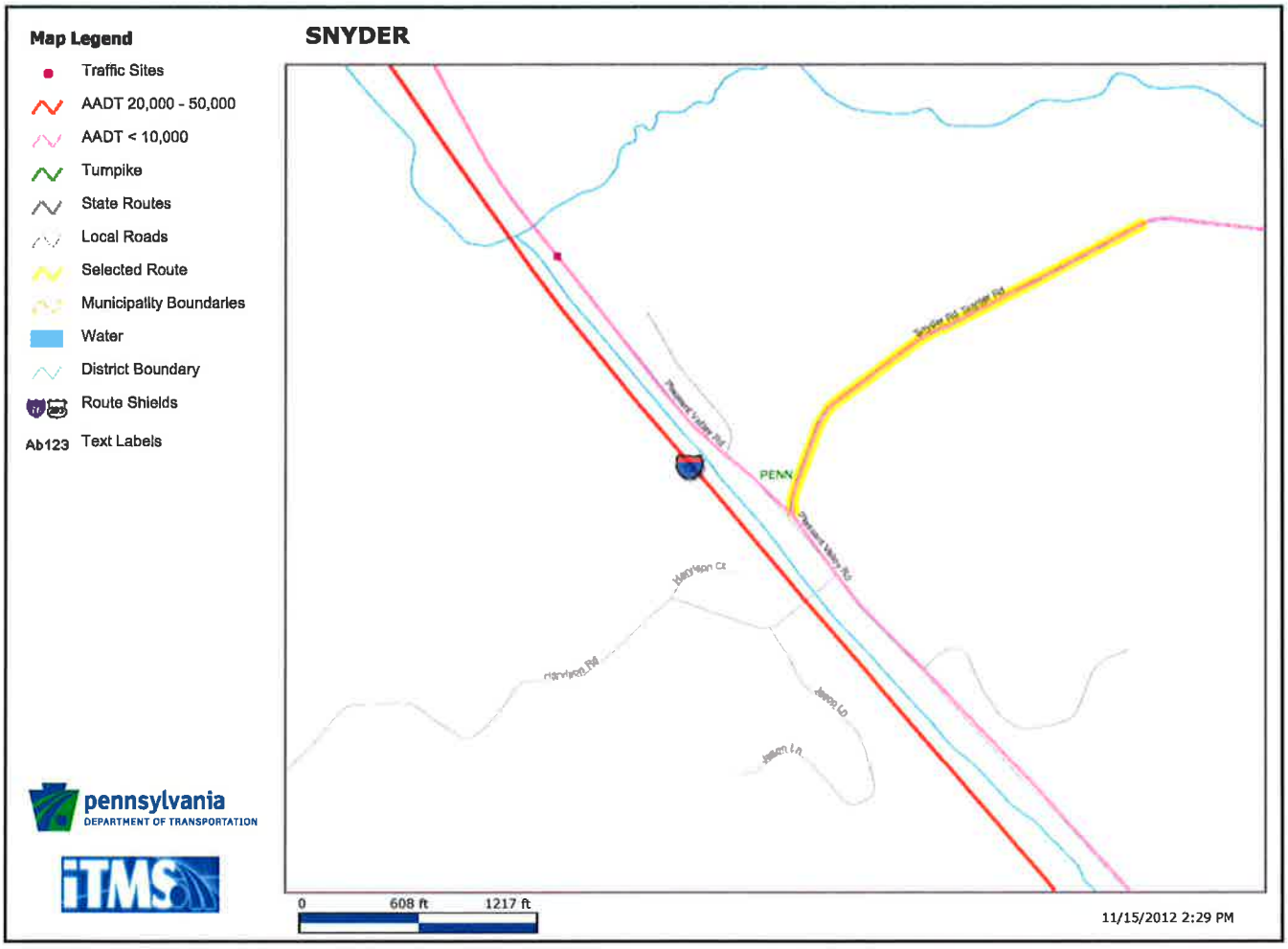
MURRYSVILLE/TRAFFORD

SITE NO: 4702	
County	WESTMORELAND (64)
Route	4033
Segment	0050
Dir	B
Current Avg Daily Traffic	2640
Current Avg Daily Truck Volume	132
K Factor	10
D Factor	55
T Factor	3
Truck Percent	5
Base Traffic Year	2010
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
MURRYSVILLE/TRAFFORD
MONROEVILLE
MURRYSVILLE
PENN
0
926 ft
1853 ft
11/15/2012 2:24 PM
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS

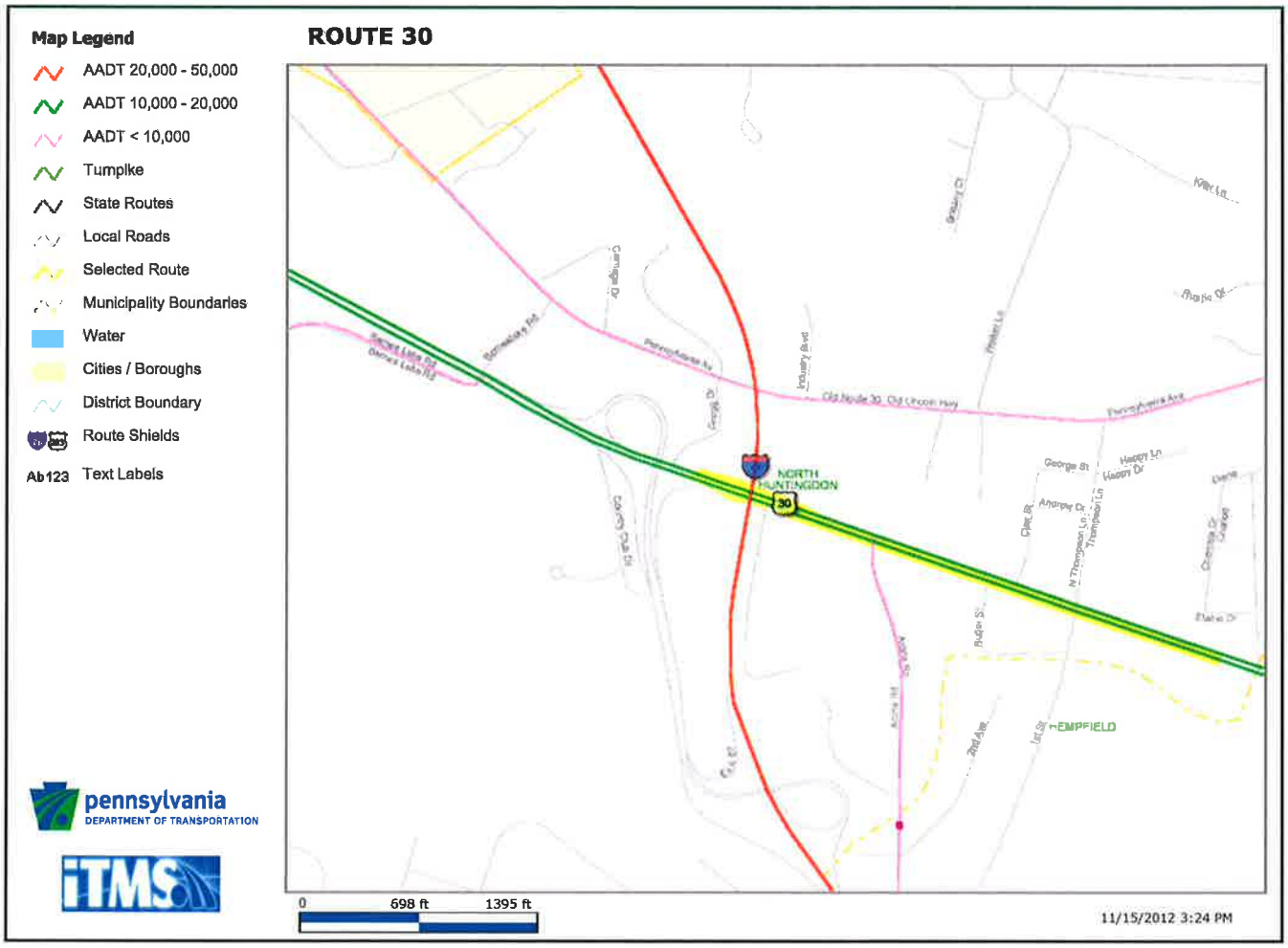
SNYDER

SITE NO: 23693	
County	WESTMORELAND (64)
Route	4047
Segment	0030
Dir	B
Current Avg Daily Traffic	176
Current Avg Daily Truck Volume	16
K Factor	10
D Factor	55
T Factor	5
Truck Percent	9
Base Traffic Year	2010
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS

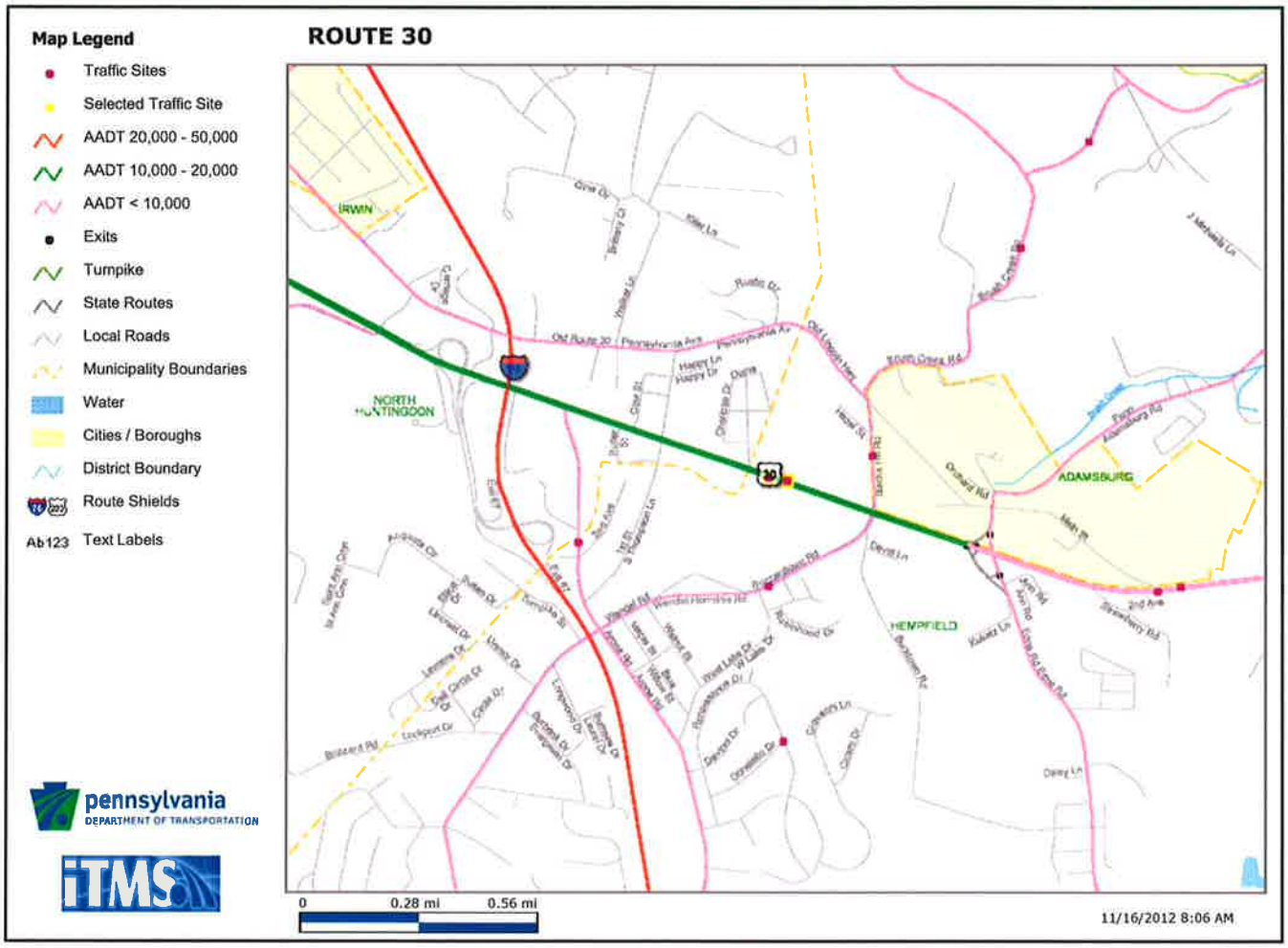

Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
District Boundary
Route Shields
Ab123 Text Labels
SNYDER
PENN
0
608 ft
1217 ft
11/15/2012 2:29 PM
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS

SITE NO: 6560	
County	WESTMORELAND (64)
Route	0030
Segment	0161
Dir	W
Current Avg Daily Traffic	13775
Current Avg Daily Truck Volume	414
K Factor	9
D Factor	55
T Factor	2
Truck Percent	3
Base Traffic Year	2010
Traffic Pattern Group	URBAN - OTHER PRINCIPAL ARTERIALS

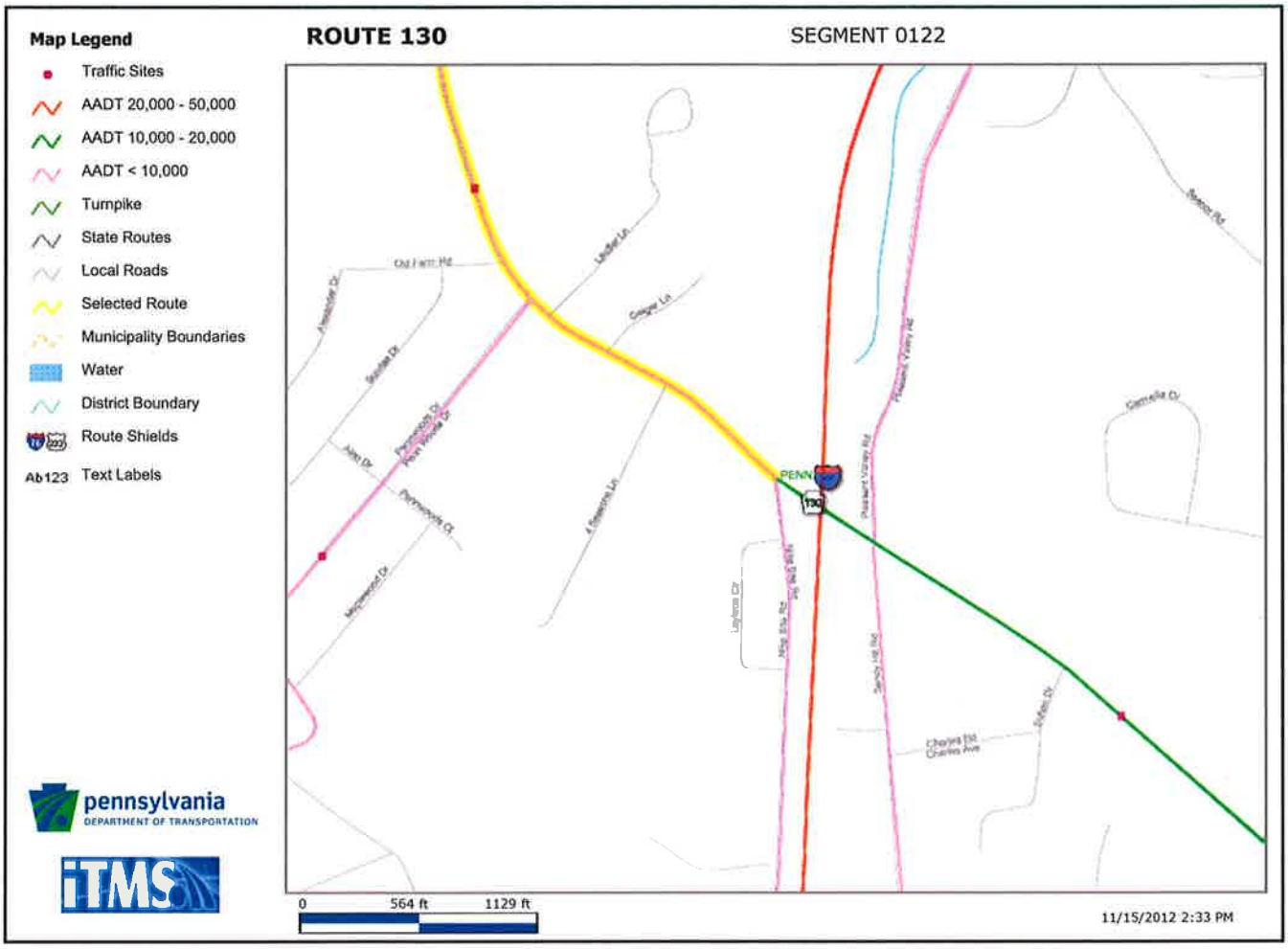
SITE NO: 6560	
County	WESTMORELAND (64)
Route	0030
Segment	0160
Dir	E
Current Avg Daily Traffic	14114
Current Avg Daily Truck Volume	423
K Factor	9
D Factor	55
T Factor	2
Truck Percent	3
Base Traffic Year	2010
Traffic Pattern Group	URBAN - OTHER PRINCIPAL ARTERIALS


Map Legend
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 30
NORTH HUNTINGDON
30
HEMPFIELD
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
698 ft
1395 ft
11/15/2012 3:24 PM

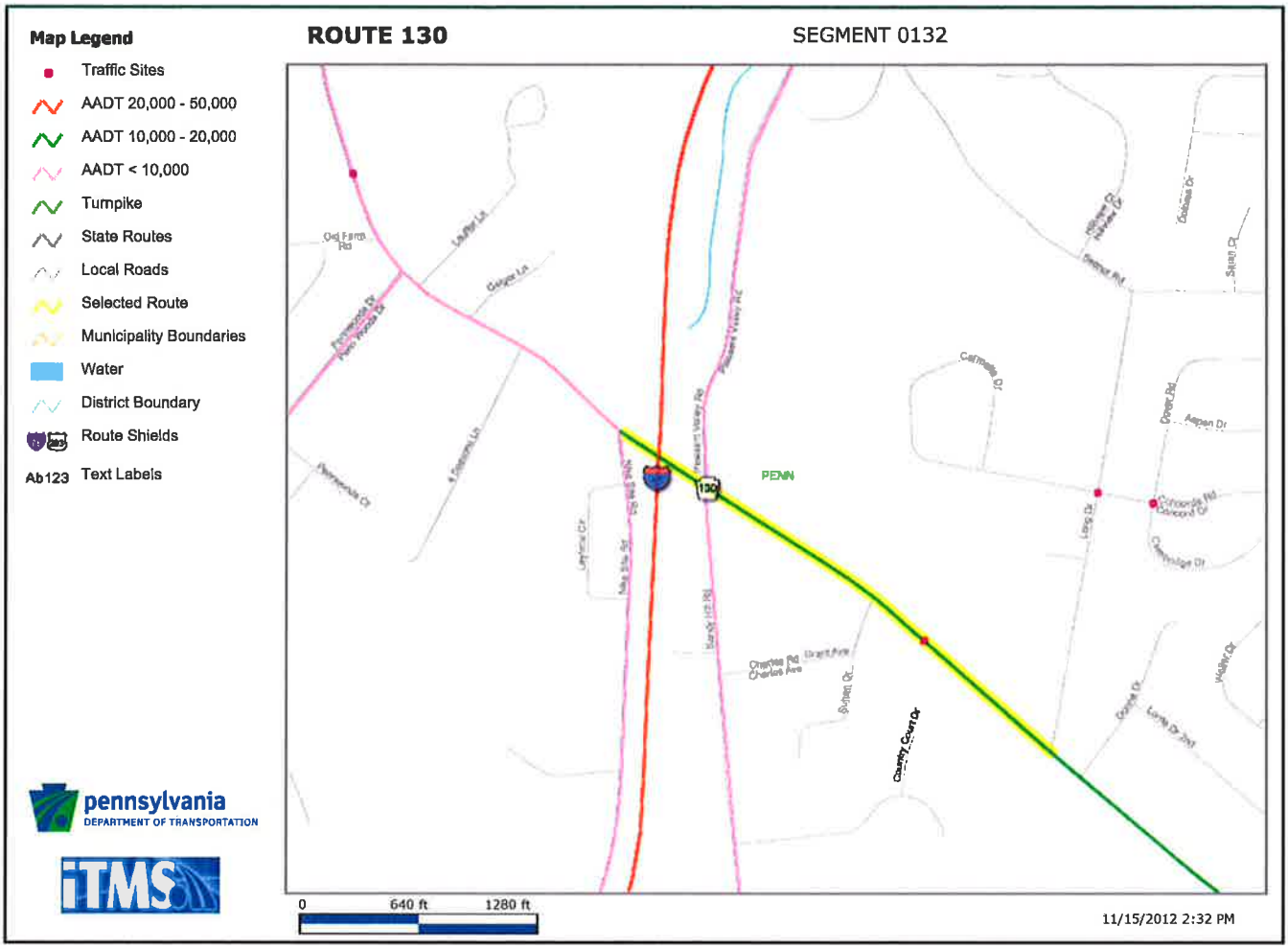
SITE NO: 6560	
County	WESTMORELAND (64)
Route	0030
Segment	0160
Offset	500
Current Avg Daily Traffic	14114
Agency	PB
Cycle Year	02
Freq Cycle	03
Site Status	E
Program Indicator	04
Year of Last Count	2010
Year of Next Scheduled Count	2013 - 2ND YEAR IN 3 YEAR CYC
Latitude	40.312539790632
Longitude	-79.66656932455


Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Exits
Turnpike
State Routes
Local Roads
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 30
IRWIN
NORTH HUNTINGDON
ADAMSBURG
HEMPFIELD
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 mi
0.56 mi
11/16/2012 8:06 AM

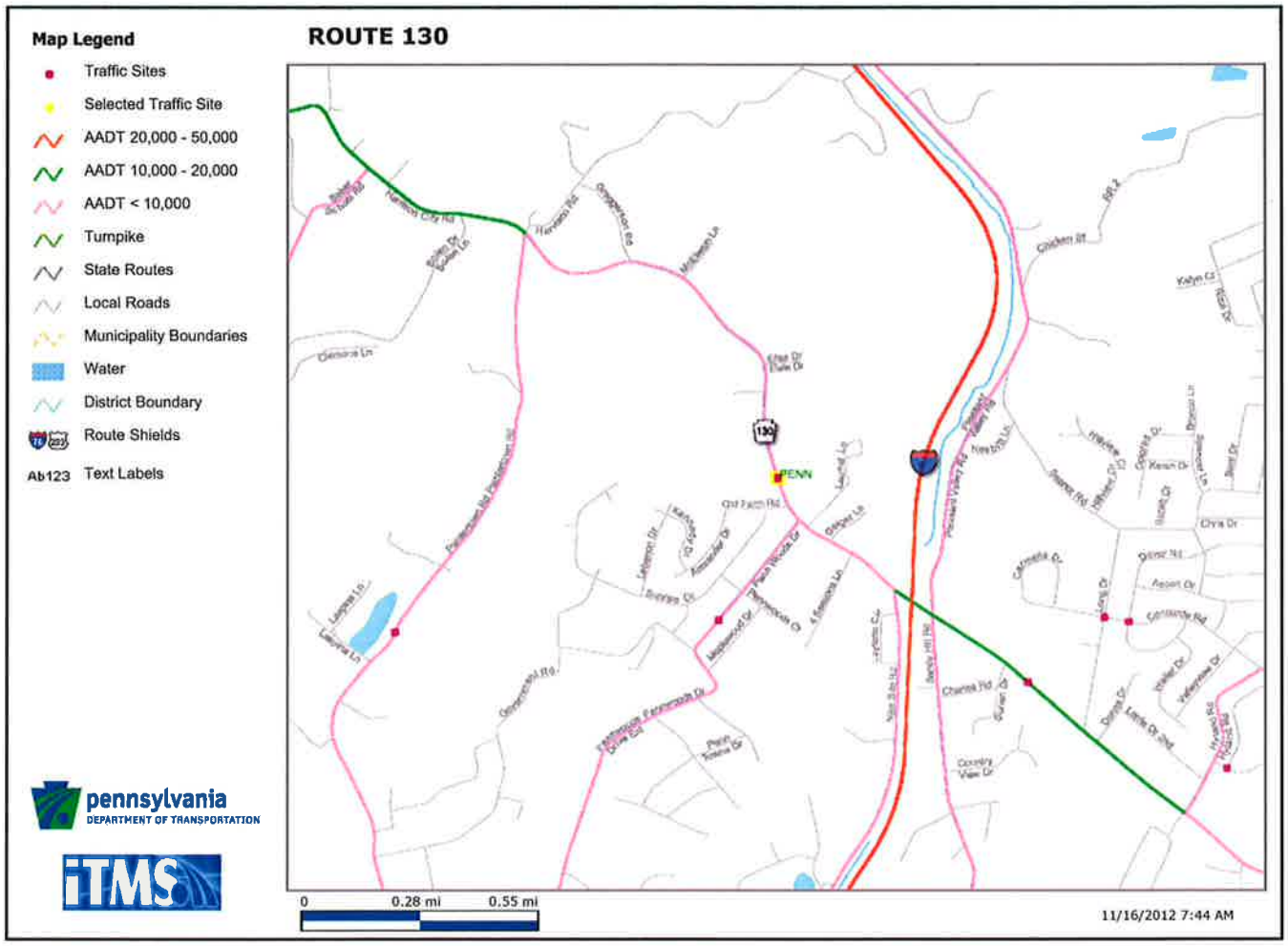
SITE NO: 32781	
County	WESTMORELAND (64)
Route	0130
Segment	0122
Dir	B
Current Avg Daily Traffic	9771
Current Avg Daily Truck Volume	664
K Factor	10
D Factor	55
T Factor	8
Truck Percent	7
Base Traffic Year	2012
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 130
SEGMENT 0122
PENN
130
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
564 ft
1129 ft
11/15/2012 2:33 PM

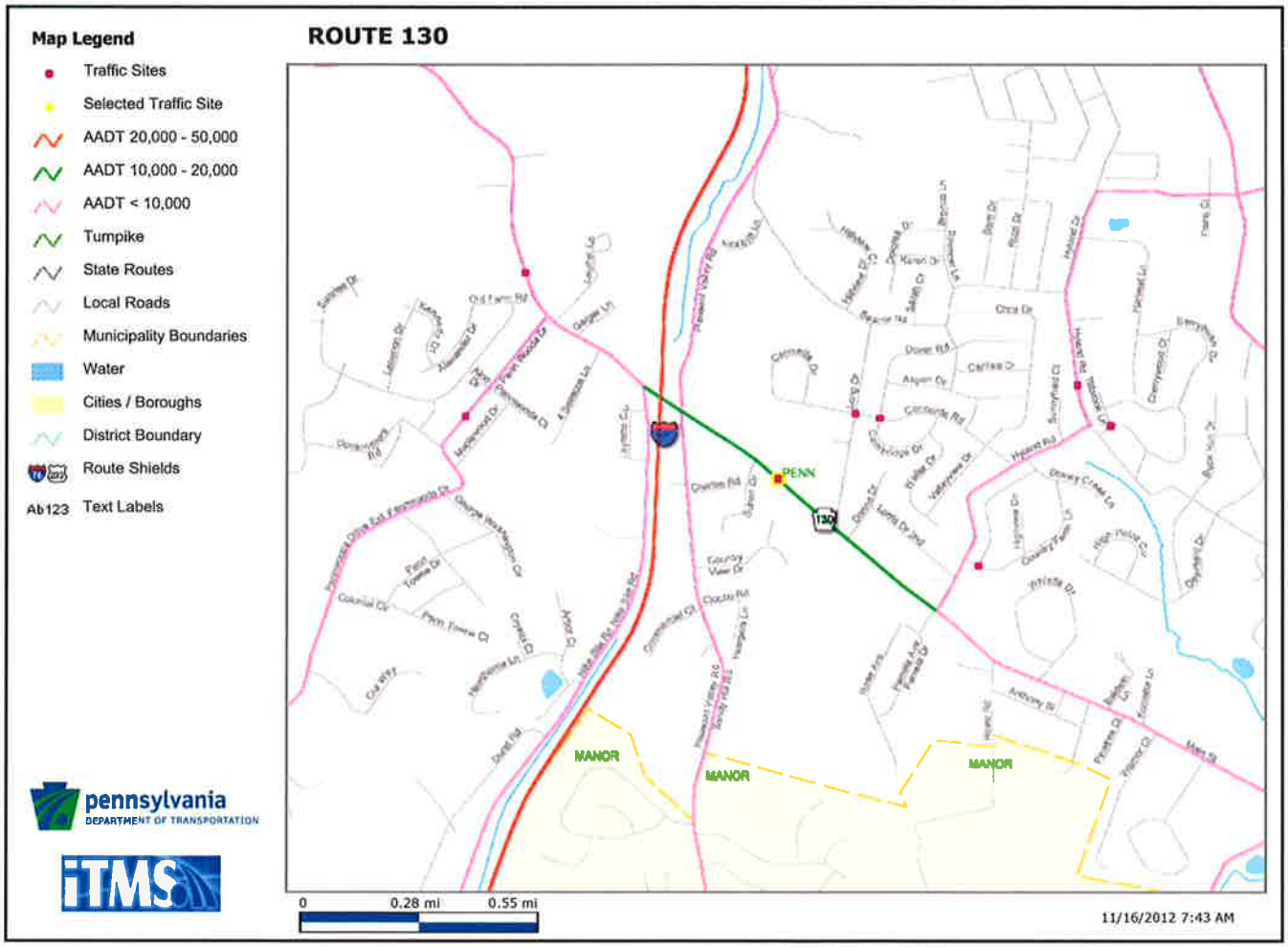
SITE NO: 32782	
County	WESTMORELAND (64)
Route	0130
Segment	0132
Dir	B
Current Avg Daily Traffic	11442
Current Avg Daily Truck Volume	712
K Factor	9
D Factor	65
T Factor	8
Truck Percent	6
Base Traffic Year	2010
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 130
SEGMENT 0132
PENN
130
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
640 ft
1280 ft
11/15/2012 2:32 PM

SITE NO: 32781	
County	WESTMORELAND (64)
Route	0130
Segment	0122
Offset	1425
Current Avg Daily Traffic	9771
Agency	VL
Cycle Year	04
Freq Cycle	05
Site Status	E
Program Indicator	08
Year of Last Count	2012
Year of Next Scheduled Count	2012 - 4TH YEAR IN 5 YEAR CYC
Latitude	40.372248650528
Longitude	-79.68464170991

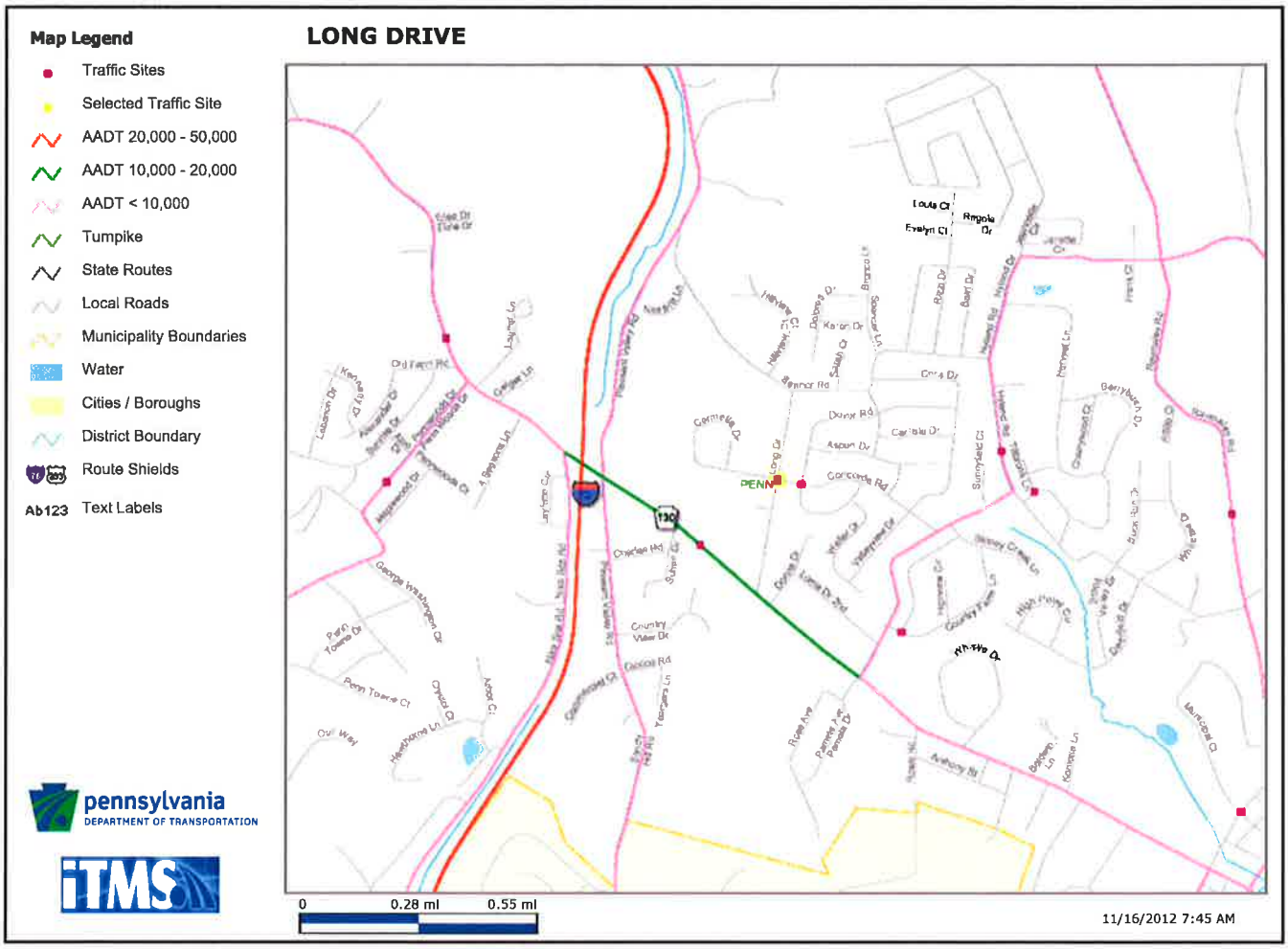

Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Municipality Boundaries
Water
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 130
PENN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 mi
0.55 mi
11/16/2012 7:44 AM

SITE NO: 32782	
County	WESTMORELAND (64)
Route	0130
Segment	0132
Offset	2000
Current Avg Daily Traffic	11442
Agency	VL
Cycle Year	02
Freq Cycle	05
Site Status	E
Program Indicator	08
Year of Last Count	2010
Year of Next Scheduled Count	2015 - 2ND YEAR IN 5 YEAR CYC
Latitude	40.365545418505
Longitude	-79.67348361359

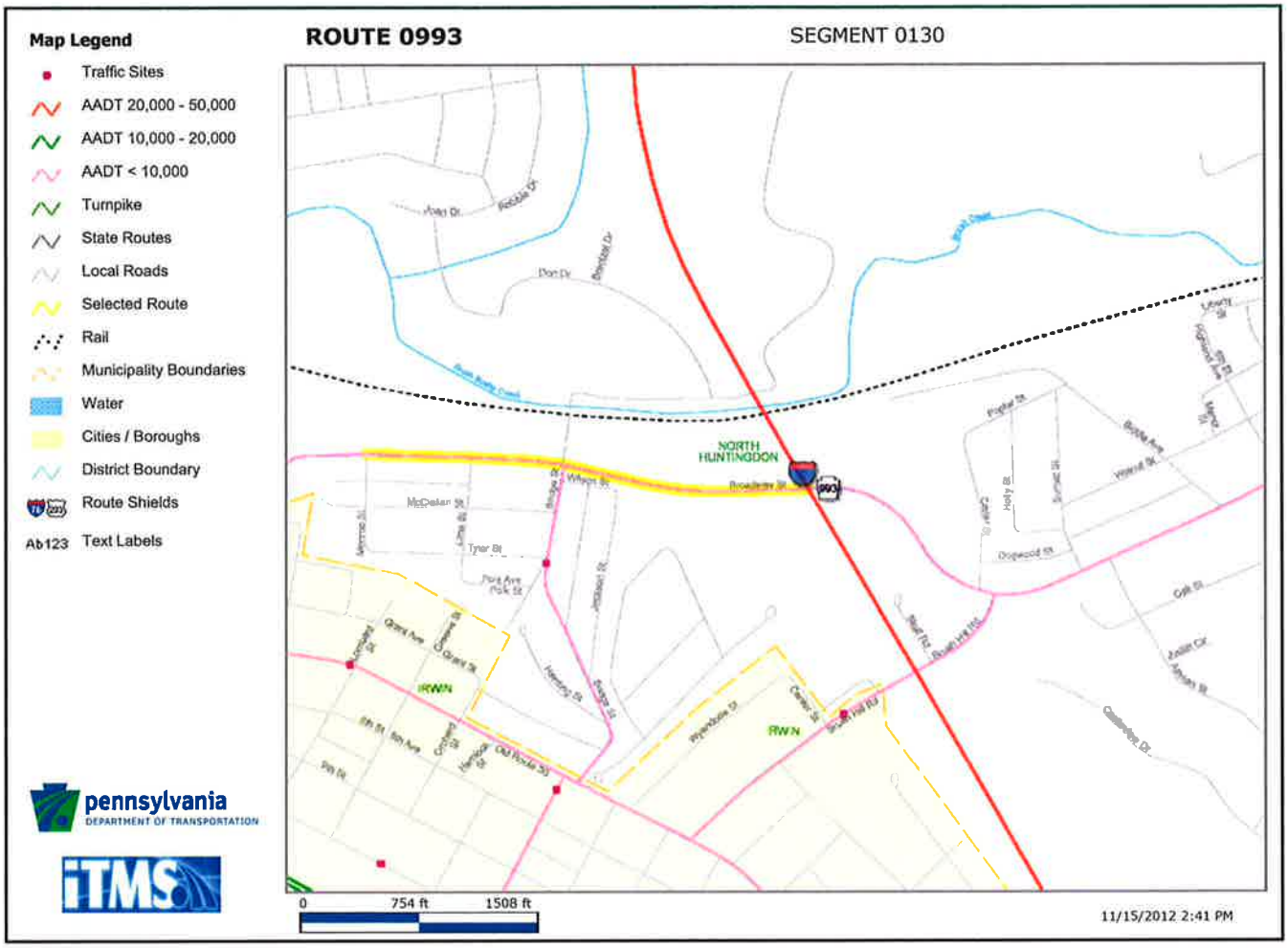

Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 130
PENN
MANOR
MANOR
MANOR
0
0.28 mi
0.55 mi
11/16/2012 7:43 AM
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS

LONG DRIVE

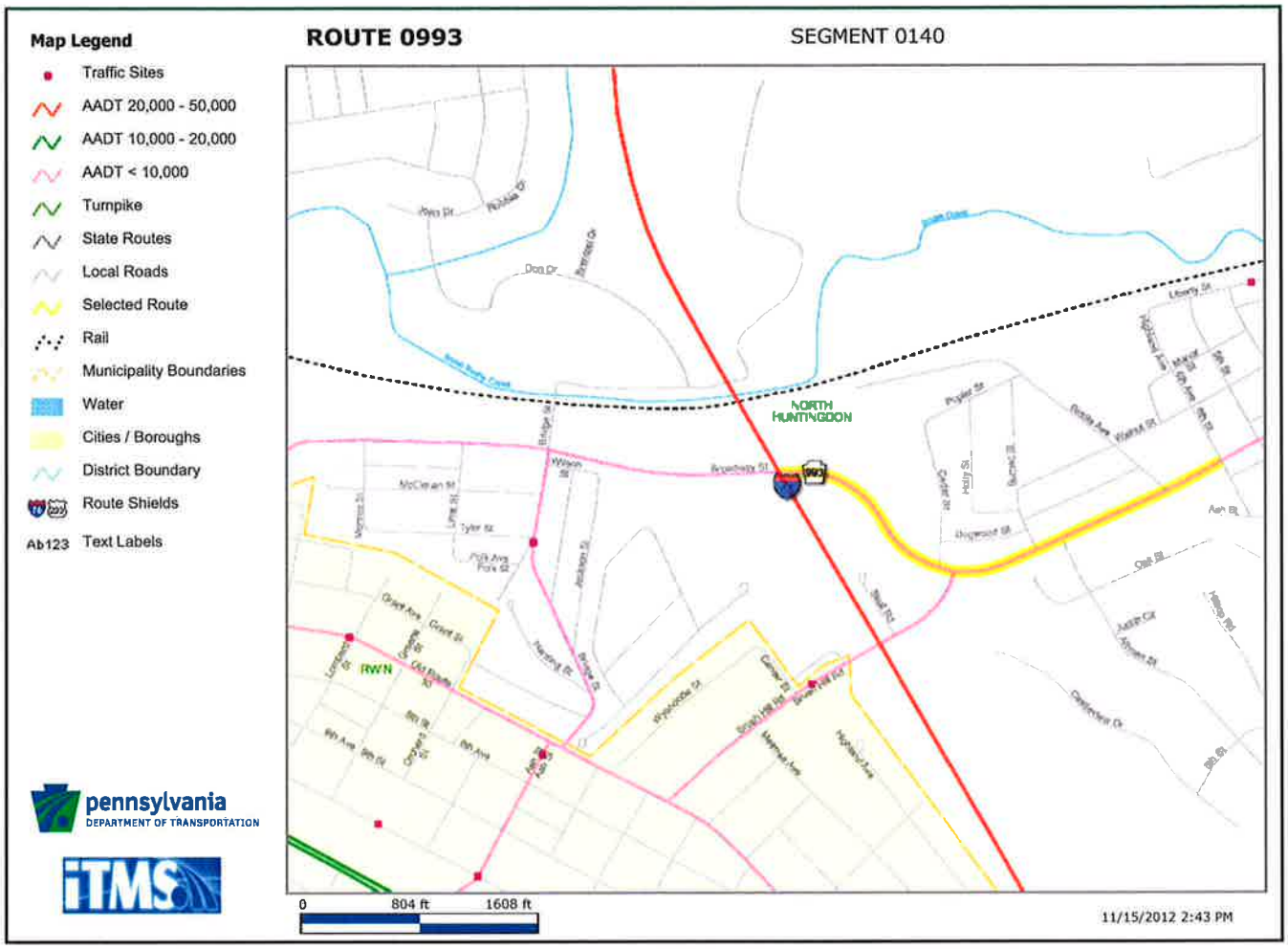
SITE NO: 45884	
County	WESTMORELAND (64)
Route	Q052
Segment	0010
Offset	50
Current Avg Daily Traffic	260
Agency	VL
Cycle Year	04
Freq Cycle	10
Site Status	E
Program Indicator	10
Year of Last Count	2009
Year of Next Scheduled Count	2012 - 4TH YEAR IN 10 YEAR CYC
Latitude	40.367787000098
Longitude	-79.67020100000


Map Legend
Traffic Sites
Selected Traffic Site
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Tumpike
State Routes
Local Roads
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
LONG DRIVE
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
0.28 mi
0.55 mi
11/16/2012 7:45 AM

SITE NO: 4675	
County	WESTMORELAND (64)
Route	0993
Segment	0120
Dir	B
Current Avg Daily Traffic	3439
Current Avg Daily Truck Volume	63
K Factor	10
D Factor	55
T Factor	1
Truck Percent	2
Base Traffic Year	2011
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 0993
SEGMENT 0130
NORTH HUNTINGDON
IRWIN
0
754 ft
1508 ft
11/15/2012 2:41 PM

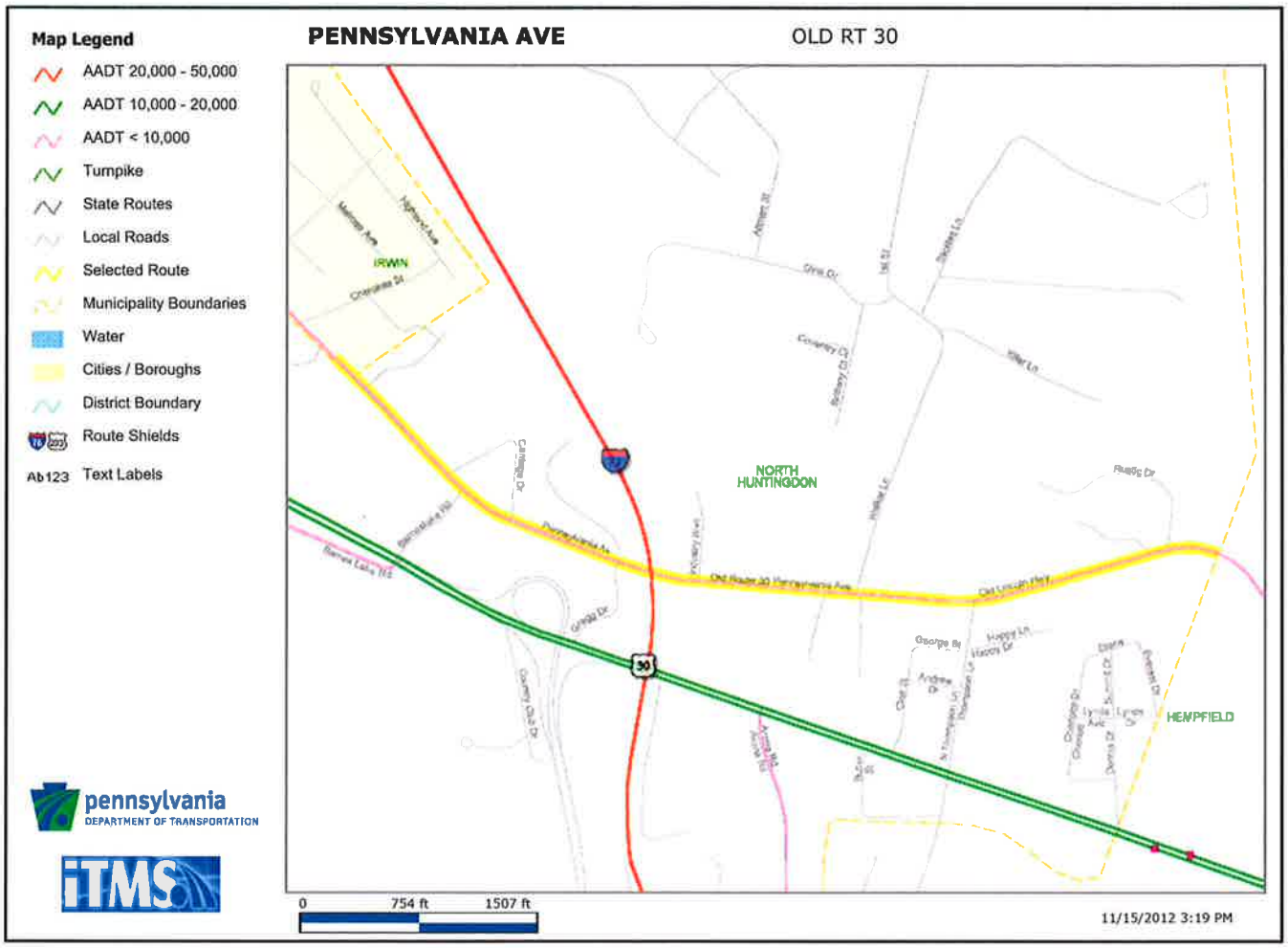
SITE NO: 14558	
County	WESTMORELAND (64)
Route	0993
Segment	0150
Dir	B
Current Avg Daily Traffic	8718
Current Avg Daily Truck Volume	620
K Factor	10
D Factor	60
T Factor	10
Truck Percent	7
Base Traffic Year	2008
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
Traffic Sites
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Rail
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
ROUTE 0993
SEGMENT 0140
NORTH HUNTINGDON
IRWIN
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
804 ft
1608 ft
11/15/2012 2:43 PM

PENNSYLVANIA AVE

OLD 30

SITE NO: 29837	
County	WESTMORELAND (64)
Route	H582
Segment	0030
Dir	B
Current Avg Daily Traffic	6485
Current Avg Daily Truck Volume	324
K Factor	11
D Factor	55
T Factor	3
Truck Percent	5
Base Traffic Year	2011
Traffic Pattern Group	URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS


Map Legend
AADT 20,000 - 50,000
AADT 10,000 - 20,000
AADT < 10,000
Turnpike
State Routes
Local Roads
Selected Route
Municipality Boundaries
Water
Cities / Boroughs
District Boundary
Route Shields
Ab123 Text Labels
PENNSYLVANIA AVE
OLD RT 30
IRWIN
NORTH HUNTINGDON
HEMPFIELD
30
pennsylvania
DEPARTMENT OF TRANSPORTATION
iTMS
0
754 ft
1507 ft
11/15/2012 3:19 PM

PENNSYLVANIA TURNPIKE COMMISSION (PTC)
MAINLINE MP 57 to MP 67
TRAFFIC DATA COLLECTION INFORMATION

ROADWAY / OWNER	TYPE OF COUNT	PURPOSE FOR COUNT	LOCATION OF COUNT
Abers Creek Road / Township	Automatic Traffic Recorder (ATR). Turning Movement Count (Manual). No traffic data available for this roadway.	Roadway re-alignment and/or intersection adjustment	Movements at Intersection
Saunders Station Road / County	Automatic Traffic Recorder (ATR). Turning Movement Count (Manual). Traffic data availble from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2008.	Roadway re-alignment and/or intersection adjustment	Movements at Intersection
SR 4033 (Trafford Rd) / PennDOT	Automatic Traffic Recorder (ATR). Turning Movement Count (Manual). Traffic data availble from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2010.	Roadway re-alignment and/or intersection adjustment	Movements at Intersection
Lyons Run Road / Township	Automatic Traffic Recorder (ATR). Turning Movement Count (Manual). No traffic data available for this roadway.	Roadway re-alignment and/or intersection adjustment	Movements at Intersection
Pleasant Valley Road / County	No Counts Anticipated. Traffic data available from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2010.		
Harvison Road / Township	Automatic Traffic Recorder (ATR). No traffic data availble for this roadway.	Assessment of WB-504 (overhead structure) - to rebuild or eliminate	Near WB-504. Need both directions on Harvison Road.
SR 4025 (Nike Site Rd) / PennDOT	No Counts Anticipated. Traffic data availble from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2009.		
SR 0993 (Broadway St) / PennDOT	No Counts Anticipated. Traffic data available from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2008/2011.		
Bridge Street / County	No Counts Anticipated. Traffic data available from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2008.		

PENNSYLVANIA TURNPIKE COMMISSION (PTC)
MAINLINE MP 57 to MP 67
TRAFFIC DATA COLLECTION INFORMATION

ROADWAY	TYPE OF COUNT	PURPOSE FOR COUNT	LOCATION OF COUNT
SR 4017 (Brush Hill Road) / PennDOT	No Counts Anticipated. Traffic data available from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2012.		
Pennsylvania Avenue / County	Automatic Traffic Recorder (ATR). Traffic data available from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2011.	Potential New Interchange	Near WB-511. Need both directions on Pennsylvania Avenue.
SR 0030 (Lincoln Hwy) / PennDOT	Automatic Traffic Recorder (ATR). Traffic data available from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2010.	Potential New Interchange	Between Rocky Rd/Ronda Ct Intersection and the Interchange Ramps. Also, between the Interchange Ramps and Arona Rd intersection.
SR 0030 / Rocky Rd / Ronda Ct Intersection	Turning Movement Count (Manual). No traffic data available for Rocky Rd and Ronda Ct.	Potential New Interchange	Movements at Intersection
SR 0030 /Barnes Lake Rd Intersection	Turning Movement Count (Manual). Traffic data available for Barnes Lake Road (SR 3020) from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2008.	Potential New Interchange	Movements at Intersection
SR 0030 / Arona Rd Intersection	Turning Movement Count (Manual). Traffic data available for Arona Road (SR 3071) from PennDOT's Internet Traffic Monitoring System (iTMS). Base Year of count is 2012.	Potential New Interchange	Movements at Intersection
SR 0030 / N Thompson Ln / S Thompson Ln Intersection	Turning Movement Count (Manual). No traffic data available for N Thompson Lane and S Thompson Lane.	Potential New Interchange	Movements at Intersection
The Existing Irwin Interchange Ramps	Automatic Traffic Recorder (ATR)	Potential New Interchange	Each Ramp

SAI Consulting Engineers

INDEX NO. _____

SHEET NO. 1 OF _____

PROJECT PTC MP 57-67 COMP. BY AJH DATE 11-15-12

TRAFFIC DATA SUMMARY PROPOSAL OR JOB NO. 11044 CHK'D. BY _____ DATE _____

1. MP 56.68 - LR 02175 SR 2054 - NORTHERN PIKE
   - OBTAINED ITMS DATA FOR SEGMENTS (2008)

→ 2. MP 58.53 - TWP ROAD - ABERS CREEK RD
   - NO DATA (WB 464)

2A MP 58.53 – LR 02186 H834 - SAUNDERS STATION RD
(TIES TO ABERS CK, PARALLEL TO TURNPIKE
   - OBTAINED ITMS DATA FOR SEGMENTS (2008)

3 MP 59.58 - LR 64086 SR 4033 - TRAFFORD ROAD
(WB 500)
   - OBTAINED ITMS DATA FOR SEGMENTS (2010)

→ 3A MP 59.5± - TWP ROAD T-464 - LYONS RUN ROAD
(TIES TO TRAFFORD RD, PARALLEL TO TPK
   - NO DATA

4 MP 61+00 TO 63.06 LR 64089 - H 617 - PLEASANT VALLEY RD
(PARALLEL TO TPK
   - OBTAINED ITMS DATA FOR SEGMENTS (2010)
   - OBTAINED ITMS DATA FOR SITE (2010)

→ 5 MP 61.68 - TWP ROAD T-869 - HARVISON ROAD
(WB-504)
   - NO DATA

6. MP 61.68 - - SR 4047 - SNYDER ROAD
(TIES TO PLEASANT VALLEY RD NEAR HARVISON RD
   - OBTAINED ITMS DATA FOR SEGMENTS (2010)

7. MP 63.06 - LR 64232 SR 130 -
(WB 506)
   - OBTAINED ITMS DATA FOR SEGMENTS (2010/2012)
   - OBTAINED ITMS DATA FOR SITES (2010/2012)

SAI Consulting Engineers

INDEX NO. _____

SHEET NO. 2 OF _____

PROJECT PTC MP 57-67 COMP. BY AJH DATE 11-15-12

TRAFFIC DATA SUMMARY PROPOSAL OR JOB NO. 11044 CHK'D. BY _____ DATE _____

8. MP 63.06 TO 65.00 LR 64082 - SR 4025 - NIKE SITE ROAD/MORRIS (PARALLEL TO TKP @ TKP ACCESS)

- OBTAINED ITMS DATA FOR SEGMENTS (2009)
- OBTAINED ITMS DATA FOR SITES (2009)

9. MP 65.80 LR 639 - SR 993 - (WB 509)

- OBTAINED ITMS DATA FOR SEGMENTS (2008/2011)

10 MP 65.80 H624 - BRIDGE ST (WB 509)

- OBTAINED ITMS DATA FOR SEGMENTS (2008)
- OBTAINED ITMS DATA FOR SITES (2008)

11. MP 66.13 LR 64193 SR 4017 - BRUSH HILL RD (WB 510)

- OBTAINED ITMS DATA FOR SEGMENTS (2012)
- OBTAINED ITMS DATA FOR SITES (2012)

12 MP 66.94 TWP RD 755 ; H582 - PENNSYLVANIA AVE (WB 511)

- OBTAINED ITMS DATA FOR SEGMENTS (2011)

13 MP 67.06 LR 120 SR 0030 - LINCOLN HIGHWAY (WB - 512)

- OBTAINED ITMS DATA FOR SEGMENTS (2010)

14 MP 67.06 TO 67.71 LR 64182 SR 3071 - ARONA ROAD (PARALLEL TO TPK

- OBTAINED ITMS DATA FOR SEGMENTS (2012)

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
T2-Gateway	11,276	N/A	11,276	22%	13,796	N/A	13,796	19%
T10-New Castle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T13-Beaver Valley	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T30-Warrendale	16,395	15,131	31,526	20%	19,625	18,236	37,862	19%
T39-Butler Valley	5,978	5,976	11,953	9%	6,567	6,635	13,202	10%
T48-Allegheny Valley	9,404	9,806	19,211	11%	10,078	10,626	20,705	12%
T57-Pittsburgh	19,172	18,753	37,926	9%	21,246	20,521	41,767	9%
T67-Irwin	9,465	9,813	19,278	9%	10,455	10,949	21,404	9%
T75-New Stanton	12,345	12,369	24,714	31%	13,963	14,176	28,139	30%
T91-Donegal	2,641	2,665	5,306	12%	3,149	3,227	6,376	12%
T110-Somerset	2,814	2,847	5,661	25%	3,293	3,459	6,752	24%
T146-Bedford	3,760	3,814	7,574	27%	4,509	4,759	9,268	24%
T161-Breezewood	8,454	8,404	16,858	28%	10,904	10,600	21,505	24%
T180-Ft. Littleton	777	820	1,597	25%	875	994	1,869	25%
T189-Willow Hill	494	500	994	22%	516	545	1,061	21%
T201-Blue Mountain	860	919	1,779	31%	998	1,067	2,066	32%
T226-Carlisle	7,044	7,367	14,410	39%	8,087	8,385	16,472	36%
T236-Gettysburg Pike	4,929	5,445	10,374	14%	5,494	6,038	11,532	14%
T242-Harrisburg West	6,917	6,162	13,078	17%	7,739	6,844	14,583	17%

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
T247-Harrisburg East	11,622	11,654	23,276	15%	12,916	13,098	26,014	15%
T266-Lebanon-Lancaster	3,984	4,000	7,984	12%	4,827	4,921	9,748	11%
T286-Reading	8,048	8,086	16,134	17%	8,693	8,873	17,565	16%
T298-Morgantown	7,673	7,593	15,266	13%	8,228	8,213	16,441	14%
T312-Downingtown	11,099	11,295	22,394	8%	11,941	11,910	23,851	9%
T320- PA Route 29	104 *	120 *	224 *	5% *	N/A	N/A	N/A	N/A
T326-Valley Forge	31,624	31,773	63,397	9%	33,511	33,325	66,836	10%
T333-Norristown	12,742	12,490	25,231	5%	13,052	12,739	25,791	5%
A20-Mid-County	38,490	40,268	78,758	10%	42,061	44,142	86,203	10%
T339-Ft. Washington	24,154	25,019	49,173	6%	24,384	25,126	49,510	6%
T340-Virginia Drive **	3,760	1,433	5,194	2%	3,676	1,403	5,079	2%
T343-Willow Grove	26,989	27,960	54,949	8%	27,638	28,381	56,019	8%
T351-Bensalem	32,190	30,616	62,806	10%	33,350	31,260	64,609	11%
T352-Street Road	685	2,214	2,899	3%	741	2,288	3,029	3%
T358-Delaware Valley	6,887	6,828	13,715	20%	7,128	6,959	14,087	20%
T359-Dela. River Bridge	19,024	19,395	38,418	17%	20,942	21,654	42,596	16%
A31-Lansdale	14,284	14,172	28,456	10%	15,102	14,725	29,828	10%
A44-Quakertown	8,966	8,998	17,965	11%	10,015	9,959	19,974	11%
A56-Lehigh Valley	17,840	18,164	36,005	18%	20,159	20,538	40,697	17%

* **Note: 2012 data represents a partial year due to opening day of December 11, 2012.**

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
A74-Mahoning Valley	5,001	5,014	10,015	10%	5,749	5,824	11,573	10%
A95-Pocono	5,859	5,976	11,835	22%	7,033	7,440	14,473	20%
A105-Wilkes-Barre	3,472	3,357	6,828	8%	3,926	3,927	7,852	8%
A115-Wyoming Valley	5,413	5,114	10,527	24%	7,005	6,714	13,719	21%
A122-Keyser Avenue	4,230	4,262	8,492	18%	5,403	5,475	10,878	16%
A131-Clarks Summit	3,955	3,975	7,930	15%	5,140	5,191	10,331	14%
PA TURNPIKE 43								
Ramp M4	143	163	306	2%	157	178	335	2%
Main M5	2,703	2,759	5,462	10%	3,146	3,212	6,358	10%
Ramp M15	70	23	93	8%	82	25	107	6%
Ramp M18	146	154	300	6%	172	176	348	6%
Main M19	2,509	2,465	4,974	9%	3,069	2,951	6,020	9%
Ramp M22	54 *	57 *	111 *	7% *	139	145	284	6%
Ramp M26	138 *	158 *	296 *	2% *	275	353	628	3%
California (M35)	5,777	5,521	11,298	6%	6,324	6,020	12,345	7%
Coyle CTN Rd. (M39)	555	545	1,101	4%	565	554	1,119	5%
Ramp M44	351	346	698	7%	368	362	730	6%
Ramp M48	1,823	1,811	3,634	3%	1,956	1,963	3,919	3%
Main M52	3,873	3,764	7,637	2%	4,160	4,016	8,176	2%

* **Note: 2012 data represents a partial year due to opening day of July 16, 2012.**

PENNSYLVANIA TURNPIKE COMMISSION
2012 INTERCHANGE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

TOTAL ENTERING AND DEPARTING FIGURES

Interchange	Entry AADT	Exit AADT	Total AADT	Percent Trucks	August Entry ADT	August Exit ADT	August ADT	Percent Trucks
PA TURNPIKE 376								
Rt. 108 Mt. Jackson (B17)	577	681	1,258	13%	558	723	1,281	14%
West Toll 376 (B18)	4,401	4,255	8,655	14%	4,883	4,836	9,718	15%
Rt. 168 Moravia (B20)	434	427	861	10%	470	447	917	10%
Rt. 551 Beaver Falls (B29)	266	230	496	12%	311	270	581	19%
East Toll 376 (B30)	5,639	5,738	11,377	15%	6,250	6,405	12,654	15%
PA TURNPIKE 66								
Rt. 136 (G4)	462	454	916	19%	519	502	1,021	20%
Mainline A.K.H (G5)	7,013	7,178	14,191	17%	7,605	7,794	15,399	17%
Rt. 30 (G6)	2,515	2,486	5,001	6%	2,685	2,597	5,282	7%
Rt. 130 (G8)	692	669	1,362	2%	706	690	1,396	2%
Rt. 66 (G9)	399	377	776	3%	405	383	788	4%
PA TURNPIKE 576								
Rt. 30 (S2)	292	300	593	6%	192	220	412	8%
Westport Rd (S4)	115	113	227	16%	135	133	268	22%
Rt. 22 (S6)	2,233	2,298	4,531	7%	2,416	2,494	4,911	7%

PENNSYLVANIA TURNPIKE COMMISSION
2012 MAINLINE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

BETWEEN INTERCHANGES

Interchange	EB / NB AADT	WB / SB AADT	Total AADT	Percent Trucks	August EB / NB ADT	August WB / SB ADT	August ADT	Percent Trucks
T2 - T10	11,276	N/A	11,276	22%	13,796	N/A	13,796	19%
T10 - T13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T13 - T30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T 30 - T 39	16,059	14,616	30,675	20%	19,149	17,485	36,633	19%
T 39 - T 48	17,953	16,499	34,452	18%	21,194	19,624	40,818	17%
T 48 - T 57	20,022	18,960	38,982	17%	23,432	22,416	45,848	16%
T 57 - T 67	23,204	21,735	44,939	16%	27,028	25,325	52,353	15%
T 67 - T 75	18,202	17,086	35,288	19%	21,793	20,598	42,391	18%
T 75 - T 91	17,923	16,795	34,718	29%	21,685	20,658	42,343	26%
T 91 - T 110	16,644	15,563	32,206	31%	20,282	19,367	39,648	28%
T 110 - T 146	15,669	14,622	30,291	31%	19,041	18,299	37,341	27%
T 146 - T 161	17,579	16,580	34,159	30%	21,394	20,892	42,287	26%
T 161 - T 180	10,961	9,970	20,931	32%	12,882	12,204	25,086	29%
T 180 - T 189	11,248	10,301	21,549	31%	13,177	12,620	25,797	28%
T 189 - T 201	11,336	10,403	21,739	31%	13,261	12,738	25,998	28%
T 201 - T 226	11,095	10,183	21,278	32%	12,998	12,489	25,486	28%
T 226 - T 236	10,601	9,995	20,597	25%	12,423	12,205	24,628	23%
T 236 - T 242	13,127	13,030	26,157	21%	15,155	15,475	30,630	20%
T 242 - T 247	15,849	15,012	30,861	18%	18,127	17,586	35,713	17%

PENNSYLVANIA TURNPIKE COMMISSION
2012 MAINLINE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

BETWEEN INTERCHANGES

Interchange	EB / NB AADT	WB / SB AADT	Total AADT	Percent Trucks	August EB / NB ADT	August WB / SB ADT	August ADT	Percent Trucks
T 247 - T 266	13,253	12,426	25,679	20%	15,202	14,831	30,034	19%
T 266 - T 286	13,501	12,691	26,192	19%	15,767	15,498	31,265	18%
T 286 - T 298	17,615	16,845	34,460	18%	20,045	19,950	39,995	17%
T 298 - T 312	22,400	21,482	43,882	17%	24,973	24,754	49,727	16%
T 312 - T 320	22,328	21,572	43,901	16%	24,570 *	24,292 *	48,862 *	15% *
T 320 - T 326	22,362	21,622	43,985	16%	24,570 *	24,292 *	48,862 *	15% *
T 326 - T 333	32,278	31,639	63,917	11%	34,073	33,595	67,668	12%
T 333 - A 20	38,524	37,568	76,092	10%	40,464	39,605	80,069	11%
A 20 - T 339	57,971	58,554	116,525	10%	60,137	61,245	121,382	10%
T 339 - T 340	51,736	53,020	104,756	11%	53,897	55,557	109,454	11%
T 340 - T 343	51,736	50,738	102,474	11%	53,897	53,336	107,233	11%
T 343 - T 351	44,888	44,835	89,722	12%	47,213	47,415	94,629	12%
T 351 - T 352	22,251	20,576	42,827	14%	24,384	22,480	46,864	13%
T 352 - T 358	20,732	20,576	41,308	14%	22,844	22,480	45,324	14%
T 358 - T 359	18,952	18,668	37,620	17%	21,124	20,517	41,641	16%
A 20 - A 31	31,145	31,453	62,598	14%	35,619	35,810	71,430	13%
A 31 - A 44	24,418	24,596	49,014	15%	29,062	28,872	57,934	14%
A 44 - A 56	21,879	22,058	43,936	17%	26,480	26,188	52,668	16%
A 56 - A 74	14,177	14,550	28,728	16%	17,802	17,747	35,549	15%

*** Note: August data is for T 312 to T 326 since T 320 opened on December 11, 2012.**

PENNSYLVANIA TURNPIKE COMMISSION
2012 MAINLINE AVERAGE ANNUAL DAILY TRAFFIC (AADT)
AND AUGUST AVERAGE DAILY TRAFFIC (ADT)

BETWEEN INTERCHANGES

Interchange	EB / NB AADT	WB / SB AADT	Total AADT	Percent Trucks	August EB / NB ADT	August WB / SB ADT	August ADT	Percent Trucks
A 74 - A 95	11,390	11,752	23,143	20%	14,507	14,510	29,017	18%
A 95 - A 105	7,969	8,457	16,425	17%	9,998	10,408	20,406	16%
A 105 - A 115	4,930	5,297	10,228	23%	6,459	6,850	13,309	20%
A 115 - A 122	4,230	4,262	8,492	18%	5,403	5,475	10,878	16%
A 122 - A 131	3,955	3,975	7,930	15%	5,140	5,191	10,331	14%

APPENDIX C -
TNM MODELING RESULTS SUMMARY

NSA	Site ID #	Dwelling Units	Measured Noise Level	Verification Noise Level	Difference	Existing Year (2014) Noise Level	Design Year (2034) Noise Level
2	5	4	62.3	64.0	1.7	66	69
	5a	2	-	-	-	66	69
	5b	2	-	-	-	57	60
	5c	3	-	-	-	58	61
	5d	2	-	-	-	59	62
	5e	1	-	-	-	56	58
	5f	2	-	-	-	59	64
	5g	3	-	-	-	58	63
	5h	2	-	-	-	57	61
3	12	0	71.2	69.9	-1.3	72	**DISPLACEMENT**
	12a	1	-	-	-	61	64
4	15	1	61.2	63.9	2.7	66	68
	16	1	60.2	61.3	1.1	63	66
	16a	1	-	-	-	58	61
	16b	1	-	-	-	55	57
	16c	1	-	-	-	50	52
	16d	2	-	-	-	54	57
	19	1	61.5	64.5	3.0	66	69
	19a	1	-	-	-	47	50
	19b	1	-	-	-	48	51
	19c	1	-	-	-	50	52
5	20	3	59.5	57.7	-1.8	59	62
	20a	2	-	-	-	53	56
	20b	2	-	-	-	53	55
6	21	1	61.5	61.7	0.2	63	66
	21a	1	-	-	-	48	50
	21b	1	-	-	-	47	49
7	22d	1	-	-	-	68	72
	22e	1	-	-	-	65	69
	22f	1	-	-	-	65	68
	22g	1	-	-	-	62	64
	22h	1	-	-	-	64	65
8	22	1	63.0	65.2	2.2	67	77
	22a	1	-	-	-	64	69
	22b	1	-	-	-	62	68
	22c	1	-	-	-	61	66
	22i	0	-	-	-	-	66
	24	1	54.1	55.9	1.8	56	64
	24a	1	-	-	-	58	64
	24b	1	-	-	-	49	52
	24c	1	-	-	-	52	57
	24d	1	-	-	-	53	56
	24e	1	-	-	-	56	60
9	25	1	71.7	71.0	-0.7	73	78
	25b	2	-	-	-	-	68
	25c	1	-	-	-	57	58
	25d	1	-	-	-	62	65
	25e	1	-	-	-		61
10	25a	1	-	-	-	73	76
	26	1	63.0	65.3	2.3	67	68
	26a	1	-	-	-	67	70
	26b	1	-	-	-	71	73
	26c	1	-	-	-	67	69
	26d	2	-	-	-	66	67
	26e	1	-	-	-	64	64
	26f	1	-	-	-	66	67
	27	1	62.7	61.6	-1.1	65	67
	27a	1	-	-	-	65	64
	27b	2	-	-	-	63	63
	27c	1	-	-	-	65	65
	27d	3	-	-	-	65	68
	27e	4	-	-	-	67	72
	27f	1	-	-	-	67	70
	28	1	62.4	64.5	2.1	67	71
	28a	3	-	-	-	67	69

	28b	2	-	-	-	65	69
	28c	1	-	-	-	66	68
	28d	1	-	-	-	65	67
	28e	1	-	-	-	67	74
	29	2	61.1	60.1	-1.0	63	67
	29a	1	-	-	-	60	61
	29b	1	-	-	-	60	60
	29c	1	-	-	-	62	66
	29d	1	-	-	-	63	67
	29e	2	-	-	-	62	66
11	30	1	64.7	63.3	-1.4	66	69
	30a	1	-	-	-	64	65
	30b	1	-	-	-	65	66
	30c	1	-	-	-	61	62
	30d	1	-	-	-	57	58
	30e	1	-	-	-	57	57
	30f	1	-	-	-	58	59
	32	1	61.3	64.3	3.0	67	73
	32a	1	-	-	-	63	65
	32b	1	-	-	-	60	61
	33	1	66.9	67.7	0.8	70	72
	33a	2	-	-	-	57	57
	33b	2	-	-	-	62	62
12	33c	2	-	-	-	58	59
	33d	2	-	-	-	62	64
	33e	2	-	-	-	59	61
	33f	2	-	-	-	63	67
	33g	2	-	-	-	64	66
	33h	1	-	-	-	67	70
	34	1	64.8	65.9	1.1	68	71
	34a	1	-	-	-	58	61
	34b	1	-	-	-	58	61
	34c	1	-	-	-	58	60
	34d	1	-	-	-	56	58
	34e	2	-	-	-	57	58
	34f	2	-	-	-	59	62
	34g	1	-	-	-	66	70
	34h	1	-	-	-	61	62
	34i	1	-	-	-	64	67
	35	1	58.2	58.7	0.5	61	64
	35a	1	-	-	-	63	65
	35b	1	-	-	-	63	65
	35c	1	-	-	-	65	67
13	35d	2	-	-	-	64	66
	35e	2	-	-	-	66	68
	36	1	61.5	63.0	1.5	65	67
	36a	2	-	-	-	65	67
	36b	1	-	-	-	66	67
	36c	1	-	-	-	67	69
	36d	1	-	-	-	68	69
	36e	1	-	-	-	65	68
	36f	1	-	-	-	66	67
	36g	1	-	-	-	64	67
	36h	2	-	-	-	67	68
	36i	1	-	-	-	66	68
	36j	1	-	-	-	64	66
	36k	1	-	-	-	67	69
	36l	1	-	-	-	65	67
	37	1	65.3	64.9	-0.4	67	70
	37a	1	-	-	-	63	66
	37b	2	-	-	-	68	72
	37c	2	-	-	-	60	63
	37d	1	-	-	-	62	65
	37e	2	-	-	-	67	72
	37f	2	-	-	-	57	59
	38	1	49.4	53.9	4.5	56	57
	38a	2	-	-	-	64	71
14	38b	2	-	-	-	57	59

14	38c	2	-	-	-	63	71
	38d	2	-	-	-	56	59
	38e	2	-	-	-	62	70
	38f	1	-	-	-	55	57
	38g	2	-	-	-	57	59
	39	1	54.9	57.5	2.6	59	61
	39a	1	-	-	-	59	65
	39b	1	-	-	-	60	65
	39c	1	-	-	-	64	67
	39d	2	-	-	-	60	63
15	40	1	51.2	50.9	-0.3	52	56
	40a	1	-	-	-	62	65
	40b	2	-	-	-	57	60
	40c	1				47	50
	41	1	57.2	58.2	1.0	60	65
	41a	1	-	-	-	57	61
	41b	2	-	-	-	46	48
	41c	1	-	-	-	51	55
16	42	1	60.3	62.9	2.6	65	66
	42a	1	-	-	-	66	66
	42b	1	-	-	-	65	67
	42c	1	-	-	-	65	67
	42d	2	-	-	-	67	67
	43	1	61.0	63.2	2.2	65	66
	43a	2	-	-	-	64	66
	43b	2	-	-	-	66	66
	43c	2	-	-	-	63	64
	43d	2	-	-	-	63	64
	43e	1	-	-	-	61	61
	43f	2	-	-	-	61	62
	43g	1	-	-	-	60	61
	44	1	59.4	60.9	1.5	63	64
	44a	1	-	-	-	57	58
	44b	1	-	-	-	57	58
	44c	2	-	-	-	55	56
	44d	2	-	-	-	62	63
	44e	1	-	-	-	56	58
	44f	1	-	-	-	58	59
	44g	1	-	-	-	61	62
	44h	1	-	-	-	62	63
	44i	1	-	-	-	62	63
	45	1	72.1	70.2	-1.9	72	73
	45a	1	-	-	-	59	58
	45b	0	-	-	-	59	59
	45c	0	-	-	-	60	60
	45d	0	-	-	-	61	61
17	47	2	60.8	58.5	-2.3	59	60
	47a	1	-	-	-	61	64
	47b	0	-	-	-	60	63
	47c	1	-	-	-	57	60
	47d	0	-	-	-	60	63
	47e	1	-	-	-	59	61
	47f	1	-	-	-	58	59
	47g	1	-	-	-	58	60
	47h	1	-	-	-	58	60
	47i	1	-	-	-	61	62
	47j	3	-	-	-	58	60
	47k	2	-	-	-	63	65
	48	3	63.7	65.9	2.2	66	68
	48a	2	-	-	-	64	66
	48b	2	-	-	-	59	60
	48c	1	-	-	-	64	66
	48d	1	-	-	-	59	60
	48e	1	-	-	-	60	61
	48f	2	-	-	-	60	62
	48g	1	-	-	-	67	68
	48h	2	-	-	-	66	68
	49	1	66.0	67.3	1.3	68	68

	49a	2	-	-	-	61	62
	49b	2	-	-	-	67	68
	49c	2	-	-	-	61	62
	49d	2	-	-	-	66	68
	49e	1	-	-	-	62	64
	49f	2	-	-	-	68	69
	49g	1	-	-	-	62	64
	49h	1	-	-	-	63	64
	50	12	57.3	57.5	0.2	58	62
	50a	1				61	64
	50b	0				56	59
	51	1	62.3	63.7	1.4	64	**DISPLACEMENT**
	51a	1	-	-	-	55	59
	51b	1	-	-	-	65	**DISPLACEMENT**
	51c	1	-	-	-	58	61
	51d	2	-	-	-	60	63
18	52	1	58.5	57.4	-1.1	58	63
	52a	1	-	-	-	60	63
	52b	1	-	-	-	59	63
	52c	1	-	-	-	57	61
	52d	2	-	-	-	56	60
	52e	1	-	-	-	49	54
19	54	1	57.9	56.2	-1.7	59	62

APPENDIX D -
TNM OUTPUT TABLES

			20' wall along edge of shoulder	
Receptor	Units	Pre Wall Leq	Post Wall Leq	Insertion Loss
5	4	69.4	66.6	3
5a	2	69.1	65.8	4
5b	2	60.2	58.5	2
5c	3	61.2	58.7	3
5d	2	62.2		
5e	1	58.4		
5f	2	63.5		
5g	3	62.5		
5h	2	61.1		
impacts			benefits	
6			0	

	height	length	area
min	20	2000	39999
avg	20	0	
max	20	0	
		2000	39999

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	20' wall along edge of shoulder	
			Post Wall Leq	Insertion Loss
15	1	67.7	58.0	10
16	1	65.5	63.3	2
16a	1	60.6	58.1	3
16b	1	56.5	54.8	2
16c	1	51.5	48.8	3
16d	2	57.1	55.2	2
19	1	69.0	67.7	1
19a	1	49.5	48.1	1
19b	1	51.0	50.3	1
19c	1	52.0	50.4	2
impacts			benefits	
3			1	

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

	height	length	area
min	20	5726	114517
avg	20	0	
max	20	0	
		5726	114517

Receptor	Units	Pre Wall Leq	20' wall along edge of shoulder	
			Post Wall Leq	Insertion Loss
21	1	66.0	63.9	2
21a	1	50.4	50.2	0
21b	1	49.1	48.9	0

impacts	benefits
1	0

	height	length	area
min	20	2101	42012
avg	20	0	
max	20	0	
		2101	42012

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	12' to 16' wall along edge of shoulder	
			Post Wall Leq	Insertion Loss
22d	1	72.0	63.8	1
22e	1	69.0	61.6	2
22f	1	67.8	60.3	8
22g	1	64.0	63.2	4
22h	1	65.4	63.2	8
impacts				benefits
3				2

	height	length	area
min	12	900	13999
avg	15.56	0	
max	16	0	
		900	13999

cost effectiveness = 13,999/ 2 benefitted units = 7000

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	20' 2-barrier system	
			Post Wall Leq	Insertion Loss
22	1	76.8	58.9	18
22a	1	69.3	64.5	5
22b	1	67.7	61.6	6
22c	1	66.5	63.0	3
22i	0	65.2	60.5	5
24	1	63.5		
24a	1	63.6		
24b	1	52.3		
24c	1	56.8		
24d	1	56.2		
24e	1	59.6		
impacts			benefits	
4			3	

	height	length	area
min	20	353	7065
avg	20	1148	22968
max	20	0	
		1501	30033

cost effectiveness = 30,033/ 3 benefitted units = 10011

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	15' wall along edge of shoulder	
			Post Wall Leq	Insertion Loss
25	1	78.4	65.6	13
25b	2	68.3	61.4	7
25c	1	58.2	57.7	1
25d	1	64.9	64.7	0
25e	1	61.3	56.1	5
impacts				benefits
3				4

	height	length	area
min	15	862	12936
avg	15	0	
max	15	0	
		862	12936

cost effectiveness = 12,936 / 4 benefitted units = 3234

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	10' to 14' wall along edge of shoulder	
			Post Wall Leq	Insertion Loss
25a	1	75.6	75.6	0
26	1	67.7	59.2	9
26a	1	69.8	66.7	3
26b	1	73.3	68.4	5
26c	1	68.6	62.0	7
26d	2	67.4	60.0	7
26e	1	64.1	56.4	8
26f	1	67.4	62.2	5
27	1	66.7	59.6	7
27a	1	64.4	57.7	7
27b	2	63.0	56.4	7
27c	1	65.4	58.1	7
27d	3	67.7	60.1	8
27e	4	71.5	61.7	10
27f	1	70.3	65.3	5
28	1	70.6	63.7	7
28a	3	69.4	64.8	5
28b	2	68.7	61.1	8
28c	1	68.3	62.7	6
28d	1	67.1	61.9	5
28e	1	74.4	64.2	10
impacts			benefits	meeting > 7 dBA goal
26			29	21

	height	length	area
min	10	702	7112
avg	12	3387	40547
max	14	2311	32357
		6400	80016

cost effectiveness = 80,016 / 29 benefitted units = 2759

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

			both walls at 13 feet		both walls at 14 feet		both walls at 15 feet		both walls at 16 feet		both walls at 17 feet		both walls at 18 feet		both walls at 19 feet		both walls at 20 feet	
Receptor	Units	Pre Wall Leq	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss
29	2	67.2	64.3	3	64.2	3	64.1	3	64.0	3	63.9	3	63.8	3	63.8	3	63.7	4
29a	1	60.9	56.0	5	55.4	6	55.1	6	54.9	6	54.6	6	54.4	7	54.2	7	54.0	7
29b	1	59.5	55.3	4	54.8	5	54.4	5	54.1	5	53.8	6	53.4	6	53.1	6	52.9	7
29c	1	66.1	63.4	3	63.2	3	63.1	3	63.0	3	63.0	3	62.9	3	62.8	3	62.8	3
29d	1	67.3	63.0	4	62.7	5	62.5	5	62.3	5	62.2	5	62.1	5	62.0	5	61.9	5
29e	2	65.9	61.9	4	60.9	5	60.6	5	60.5	5	60.3	6	60.1	6	60.0	6	59.8	6
30	1	69.3	62.4	7	61.7	8	61.2	8	60.8	9	60.4	9	60.1	9	59.7	10	59.4	10
30a	1	64.9	61.3	4	60.8	4	60.3	5	59.7	5	59.4	6	59.2	6	58.9	6	58.7	6
30b	1	66.4	63.5	3	62.9	4	62.3	4	61.8	5	61.3	5	60.6	6	59.9	7	59.5	7
30c	1	62.4	60.5	2	59.9	3	59.2	3	58.4	4	57.6	5	57.1	5	56.7	6	56.3	6
30d	1	57.9	55.9	2	55.4	3	54.9	3	54.9	3	55.2	3	55.0	3	55.0	3	55.0	3
30e	1	57.2	55.8	1	55.6	2	55.4	2	55.3	2	55.2	2	55.1	2	55.0	2	55.1	2
30f	1	59.4	57.2	2	57.1	2	57.0	2	56.9	3	56.8	3	56.8	3	56.7	3	56.7	3
impacts				benefits		benefits		benefits		benefits		benefits		benefits		benefits		benefits
8				2		6		7		8		9		9		9		9
			total area =	26,975	total area =	29,050	total area =	31,125	total area =	33,200	total area =	35,275	total area =	37,350	total area =	39,425	total area =	41,500
			benefits =	2	benefits =	6	benefits =	7	benefits =	8	benefits =	9	benefits =	9	benefits =	9	benefits =	9
			SFPBR =	13,488	SFPBR =	4,842	SFPBR =	4,446	SFPBR =	4,150	SFPBR =	3,919	SFPBR =	4,150	SFPBR =	4,381	SFPBR =	4,611

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

meeting > 7 dBA goal

1

Length 1 = 1,552

Length 2 = 523

Total Length = 2,075

			5.4' to 17.6' wall including wall atop earth mound section	
Receptor	Units	Pre Wall Leq	Post Wall Leq	Insertion Loss
32	1	72.9	73.0	0
32a	1	65.2	65.1	0
32b	1	60.9	58.9	2
33	1	72.4	61.2	11
33a	2	56.7	54.3	2
33b	2	62.0	58.6	3
33c	2	59.1	55.3	4
33d	2	64.2	58.7	6
33e	2	60.5	56.0	5
33f	2	66.5	59.4	7
33g	2	65.7	60.1	6
33h	1	69.5	61.3	8
impacts			benefits	meeting > 7 dBA goal
7			10	4

	height	length	area
min	5.4	1880	19950
avg	10.61	0	
max	17.6	0	
		1880	19950

cost effectiveness = 19,950 / 10 benefitted units = 1995

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	both walls at 14 feet		wall 1 at 15', wall 2 at 14'		both walls at 15 feet		wall 1 at 16', wall 2 at 15'		both walls at 16 feet	
			Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss
34	1	71.3	64.9	6	64.6	7	64.5	7	64.2	7	64	7
34a	1	61.3	61.3	0	61.3	0	61.3	0	61.3	0	61.3	0
34b	1	60.6	59.8	1	59.8	1	59.7	1	59.7	1	59.6	1
34c	1	60.0	58.2	2	58.2	2	57.9	2	57.9	2	57.7	2
34d	1	58.4	54.9	4	54.9	4	54.1	4	54.1	4	53.3	5
34e	2	57.5	53.1	4	53.1	4	51.3	6	51.4	6	50.5	7
34f	2	61.5	57.8	4	57.8	4	56.9	5	56.9	5	56.2	5
34g	1	69.7	63.6	6	63.3	6	63.2	7	62.9	7	62.9	7
34h	1	62.4	54.6	8	54.5	8	53.9	9	53.9	9	53.6	9
34i	1	66.8	60.7	6	60.7	6	59.8	7	59.8	7	59.5	7
35	1	63.9	58.8	5	58.8	5	57.7	6	57.7	6	57	7
35a	1	64.5	57.2	7	57.2	7	56.1	8	56.1	8	55.7	9
35b	1	65.0	60.3	5	60.2	5	59.3	6	59.3	6	58.8	6
35c	1	67.1	62	5	62	5	61.3	6	61.3	6	60.5	7
35d	2	66.2	61.1	5	61.1	5	60.3	6	60.3	6	59.6	7
35e	2	68.0	59.6	8	59.6	8	58.9	9	58.9	9	58.5	10
36	1	66.9	60.4	7	60.4	7	60.3	7	60.3	7	60.3	7
36a	2	66.9	61.8	5	61.8	5	61.1	6	61.1	6	60.6	6
36b	1	67.1	58.7	8	58.7	8	58.3	9	58.3	9	58	9
36c	1	68.8	60.1	9	60.1	9	59.7	9	59.7	9	59.4	9
36d	1	68.9	60.5	8	60.5	8	60.2	9	60.2	9	59.9	9
36e	1	67.5	60.8	7	60.8	7	60.3	7	60.3	7	60	8
36f	1	67.3	60.1	7	60.1	7	59.8	8	59.8	8	59.6	8
36g	1	66.7	61	6	61	6	60.8	6	60.8	6	60.6	6
36h	2	68.2	61.2	7	61.2	7	61	7	61	7	60.9	7
36i	1	67.5	62.3	5	62.3	5	62.2	5	62.2	5	62.1	5
36j	1	66.4	65.2	1	65.2	1	65.2	1	65.2	1	65.1	1
36k	1	69.4	69.3	0	69.3	0	69.3	0	69.3	0	69.3	0
36l	1	66.5	66.4	0	66.4	0	66.4	0	66.4	0	66.4	0
impacts												
23			total area =	44,144	total area =	45,280	total area =	47,297	total area =	48,433	total area =	50,450
			benefits =	24	benefits =	24	benefits =	28	benefits =	28	benefits =	29
			SFPBR =	1,839	SFPBR =	1,887	SFPBR =	1,689	SFPBR =	1,730	SFPBR =	1,740

	height	length	area
min	15	1136	17041
avg	15	2017	30256
max	15	0	
		3153	47297

cost effectiveness = 47,297 / 28 benefitted units = 1689

meeting > 7 dBA goal
15

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)
denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	20' wall along edge of shoulder		20' wall on hill behind properties	
			Post Wall Leq	Insertion Loss	Post Wall Leq	Insertion Loss
37	1	69.9	65.2	5	69.2	1
37a	1	66.2	62.9	3	66.1	0
37b	2	71.6	67.7	4	69.9	2
37c	2	62.7	60.5	2	62.7	0
37d	1	64.6	61.8	3	64.6	0
37e	2	71.6	68.8	3	67.8	4
37f	2	59.0	57.3	2	58.8	0
38	1	57.1	55.2	2	54.9	2
38a	2	71.3	69.0	2	65.3	6
38b	2	59.2	58.1	1	58.7	1
38c	2	71.4	69.3	2	63.8	8
38d	2	58.7	57.7	1	57.8	1
38e	2	70.3	67.6	3	61.0	9
38f	1	56.5	55.8	1	55.7	1
38g	2	58.5	56.5	2	57.9	1
39	1	61.1	59.0	2	60.6	1
39a	1	65.0	56.9	8	55.3	10
39b	1	64.8	62.1	3	61.2	4
39c	1	67.4	62.3	5	65.6	2
39d	2	63.0	58.8	4	62.4	1
impacts						
13						

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	14 foot noise barrier	
			Post Wall Leq	Insertion Loss
42	1	66.1	56.1	10
42a	1	65.9	65.2	1
42b	1	66.9	62.9	4
42c	1	66.5	61.8	5
42d	2	67.1	60.8	6
43	1	65.8	60.2	6
43a	2	65.5	60.8	5
43b	2	65.8	60.2	6
43c	2	63.7	58.7	5
43d	2	63.6	58.5	5
43e	1	61.3	55.3	6
43f	2	62.2	57.1	5
43g	1	61.2	56.3	5
44	1	64.2	60.1	4
44a	1	57.5	54.7	3
44b	1	57.6	55.0	3
44c	2	55.8	54.1	2
44d	2	63.3	60.7	3
44e	1	57.5	55.5	2
44f	1	59.1	57.4	2
44g	1	61.6	60.0	2
44h	1	62.6	60.8	2
44i	1	63.3	61.1	2
45	1	73.0	64.6	8
45a	1	58.1	57.7	0
45b	0	59.1	58.2	1
45c	0	60.2	59.5	1
45d	0	60.5	60.5	0
impacts			benefits	meeting > 7 dBA goal
12			18	2

	height	length	area
min	15	787	11808
avg	15	0	
max	15	0	
		787	11808

cost effectiveness = 11,808/ 18 benefitted units = 656

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

Receptor	Units	Pre Wall Leq	14 foot noise barrier	
			Post Wall Leq	Insertion Loss
47	2	60.0	56.3	4
47a	1	64.0	64.0	0
47b	0	63.2	63.1	0
47c	1	60.1	60.0	0
47d	0	63.1	63.1	0
47e	1	60.8	60.4	0
47f	1	59.2	57.2	2
47g	1	59.6	57.0	3
47h	1	59.6	56.8	3
47i	1	62.4	57.4	5
47j	3	60.3	56.9	3
47k	2	64.5	58.1	6
48	3	68.0	60.3	8
48a	2	66.3	59.8	6
48b	2	60.0	55.9	4
48c	1	65.9	59.3	7
48d	1	60.0	55.4	5
48e	1	60.8	55.8	5
48f	2	61.6	56.4	5
48g	1	68.0	60.3	8
48h	2	67.9	60.6	7
49	1	68.0	61.3	7
49a	2	62.4	57.5	5
49b	2	67.9	61.2	7
49c	2	62.4	57.8	5
49d	2	67.7	61.2	7
49e	1	63.5	58.6	5
49f	2	68.9	61.8	7
49g	1	63.9	59.1	5
49h	1	64.2	59.7	5
50	12	61.7		
50a	1	64.2		
50b	0	58.9		
impacts	benefits			benefits
16	30			30

	height	length	area
min	14	1700	23800
max	14	0	
avg	14	0	
		1700	23800

cost effectiveness = 23,800/ 30 benefitted units = 793

denotes noise impact (Category B residential noise level predicted to equal or exceed 66 dBA)

denotes benefit from effective noise abatement (noise reduction >/= 5 dBA)

APPENDIX E - WARRANTED, FEASIBLE, AND REASONABLE WORKSHEETS

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 2
Noise Wall Identification (i.e., Wall 1)	NSA 2

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening
2. Total number of impacted receptor units in community	
Category A units impacted	
Category B units impacted	6
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."	X	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?	X	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	X	No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 6
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 0.00%
   c. Is the percentage 50 or greater? ____ Yes X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)
   c. SF/BR = 2a/2b
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? _____ Yes X No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 4
Noise Wall Identification (i.e., Wall 1)	NSA 4

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening
2. Total number of impacted receptor units in community	
Category A units impacted	
Category B units impacted	3
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."	X	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?	X	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	X	No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 3
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 33.30%
   c. Is the percentage 50 or greater? ____ Yes X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)
   c. SF/BR = 2a/2b
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? _____ Yes X No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 6
Noise Wall Identification (i.e., Wall 1)	NSA 6

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening
2. Total number of impacted receptor units in community	
Category A units impacted	
Category B units impacted	1
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."	X	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?	X	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	X	No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 1
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 0.00%
   c. Is the percentage 50 or greater? ____ Yes X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)
   c. SF/BR = 2a/2b
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? _____ Yes X No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 7
Noise Wall Identification (i.e., Wall 1)	NSA 7

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	3
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."	X 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?	X 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	X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 3
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 33.30%
   c. Is the percentage 50 or greater? ____ Yes X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)
   c. SF/BR = 2a/2b
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? _____ Yes X No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 8
Noise Wall Identification (i.e., Wall 1)	NSA 8

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	4
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."

X 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?

X 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 X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 4
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 75.00%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 30,033
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 3
   c. SF/BR = 2a/2b 10,001
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes X No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? X Yes _____ No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 9
Noise Wall Identification (i.e., Wall 1)	NSA 9

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening
2. Total number of impacted receptor units in community	
Category A units impacted	
Category B units impacted	3
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."	X	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?	X	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	X	No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 3
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 100.00%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 12,396
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 4
   c. SF/BR = 2a/2b 3,234
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes X No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? X Yes _____ No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 10
Noise Wall Identification (i.e., Wall 1)	NSA 10

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	26
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."

X 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?

X 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 X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 26
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 92.30%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 80,016
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 29
   c. SF/BR = 2a/2b 2,759
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes X No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? X Yes _____ No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 11
Noise Wall Identification (i.e., Wall 1)	NSA 11

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	8
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."

X 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? X 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 X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 8
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 62.50%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 35,275
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 9
   c. SF/BR = 2a/2b 3,919
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes X No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? X Yes _____ No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 12
Noise Wall Identification (i.e., Wall 1)	NSA 12

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	7
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."

X 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?

X 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 X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 7
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 85.70%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 19,950
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 10
   c. SF/BR = 2a/2b 1,995
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? X Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? X Yes ____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? X Yes ____ No

e. Does the noise wall reduce design year noise levels back to existing levels? X Yes ____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? ____ Yes ____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum ____ Yes ____ No

Decision

Is the Noise Wall WARRANTED? X Yes ____ No

Is the Noise Wall FEASIBLE? X Yes ____ No

Is the Noise Wall REASONABLE? X Yes ____ No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 13
Noise Wall Identification (i.e., Wall 1)	NSA 13

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	23
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."

X 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?

X 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 X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 23
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 87.00%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 47,297
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 28
   c. SF/BR = 2a/2b 1,689
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? X Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? X Yes ____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? X Yes ____ No

e. Does the noise wall reduce design year noise levels back to existing levels? X Yes ____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? ____ Yes ____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum ____ Yes ____ No

Decision

Is the Noise Wall WARRANTED? X Yes ____ No

Is the Noise Wall FEASIBLE? X Yes ____ No

Is the Noise Wall REASONABLE? X Yes ____ No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 14
Noise Wall Identification (i.e., Wall 1)	NSA 14

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening
2. Total number of impacted receptor units in community	
Category A units impacted	
Category B units impacted	13
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."	X	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?	X	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	X	No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 13
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 46.20%
   c. Is the percentage 50 or greater? ____ Yes X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)
   c. SF/BR = 2a/2b
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? ____ Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? _____ Yes _____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? _____ Yes _____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? _____ Yes _____ No

e. Does the noise wall reduce design year noise levels back to existing levels? _____ Yes _____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? _____ Yes _____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum _____ Yes _____ No

Decision

Is the Noise Wall WARRANTED? X Yes _____ No

Is the Noise Wall FEASIBLE? X Yes _____ No

Is the Noise Wall REASONABLE? _____ Yes X No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 16
Noise Wall Identification (i.e., Wall 1)	NSA 16

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	12
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."

X 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?

X 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 X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 12
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 83.30%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 11,808
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 18
   c. SF/BR = 2a/2b 656
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? X Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? X Yes ____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? X Yes ____ No

e. Does the noise wall reduce design year noise levels back to existing levels? X Yes ____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? ____ Yes ____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum ____ Yes ____ No

Decision

Is the Noise Wall WARRANTED? X Yes ____ No

Is the Noise Wall FEASIBLE? X Yes ____ No

Is the Noise Wall REASONABLE? X Yes ____ No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	1/15/2016
Project Name	FULL DEPTH ROADWAY RECONSTRUCTION AND WIDENING OF THE PENNSYLVANIA TURNPIKE (I-76) FROM MILEPOST 57 TO 67
County	Allegheny & Westmoreland Counties
SR, Section	I-76, MP 57 to 67
Community Name and/or NSA #	NSA 17
Noise Wall Identification (i.e., Wall 1)	NSA 17

General

1. Type of project (new location, reconstruction, etc.):	reconstruction and widening

2. Total number of impacted receptor units in community

Category A units impacted	
Category B units impacted	16
Category C units impacted	
Category D units impacted (if interior analysis required)	
Category E units impacted	

Warranted

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 *CE, ROD, or FONSI, as appropriate* ."

X 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? X 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 X No

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? ____ Yes X No

Feasibility – Questions 1c through 7 must all be answered "yes" for a noise barrier to be determined to be feasible.

1. Impacted receptor units
   a. Total number of impacted receptor units: 16
   b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss: 100.00%
   c. Is the percentage 50 or greater? X 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

1. Community Desires Related to the Barrier
   a. 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." ____ Yes ____ No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation
   a. Area (SF) of the proposed noise wall 23,800
   b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss) 30
   c. SF/BR = 2a/2b 793
   d. Is 2c less than or equal to the MaxSF/BR value of 2000? X Yes ____ No

3. Noise Reduction Design Goals (Activity Categories A, B, C, and E) A "yes" answer is required to Question 3a. for the noise wall to be determined to be reasonable. Questions 3b through 3e represent desirable goals that need not be met for a noise wall to be determined reasonable. However, they must be addressed and should be considered in the determination of the recommended noise wall.

a. Does the noise wall reduce design year exterior noise levels by at least 7 dB(A) for at least one benefited receptor? X Yes ____ No

b. Does the noise wall provide an insertion loss of at least 7 dB(A) for more receptors than required under 3a.while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

c. Does the noise wall provide insertion losses of greater than 7 dB(A) while still conforming to the MaxSF/BR value of 2,000 and a "point of diminishing returns" evaluation? X Yes ____ No

d. Does the noise wall reduce future exterior levels to the low-60-decibel range (60-63) for Category B and C receptors and the upper-60 dB(A) range (65-68) for Category E receptors? X Yes ____ No

e. Does the noise wall reduce design year noise levels back to existing levels? X Yes ____ No

4. Noise Reduction Design Goals (Activity Category D) A "yes" answer is required to Question 4a. for the barrier to be determined to be reasonable. Question 4b represents a desirable goal that need not be met for a noise wall to be determined reasonable. However, this goal must be addressed and should be considered in the determination of the recommended noise wall.

a. Does noise wall reduce design year interior noise levels by at least 7 dB(A) for the facility's analysis point? ____ Yes ____ No

b. While conforming to the MaxSF/BR criteria and justified by a "point of diminishing returns' evaluation, does the noise wall provide an interior insertion loss above the 7 dB(A) minimum ____ Yes ____ No

Decision

Is the Noise Wall WARRANTED? X Yes ____ No

Is the Noise Wall FEASIBLE? X Yes ____ No

Is the Noise Wall REASONABLE? X Yes ____ No

Additional Reasons for Decision:

Responsible/Qualified Individuals Making the Above Decisions

PennDOT, Engineering District Environmental Manager	Date
Alan Dunay, Noise Specialist, Skelly & Loy, Inc.	1/15/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

APPENDIX F -
TNM FILES

PTC 57-67 TNM models can be downloaded here:

http://www.skellyloy-gis.com/downloads/2016-01-15 - PTC 57-67 TNM impact and mitigation models.zip