The Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186
Reconstruction Project

Preliminary Noise Analysis Draft Report

Fulton and Huntingdon Counties, Pennsylvania

Prepared for:

The Pennsylvania Turnpike Commission
P.O. Box 67676
Harrisburg, PA 17106-7676

Prepared by:

McCORMICK TAYLOR
5 Capital Drive, Suite 400
Harrisburg, PA 17110

March
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PRELIMINARY NOISE ANALYSIS
FINAL REPORT

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I. Executive Summary

The Pennsylvania Turnpike Commission (PTC) is studying potential environmental consequences that could arise from the full depth reconstruction and widening of the Pennsylvania Turnpike (I-76) between Milepost 179.6 and Milepost 186 (MP 180-186). The project corridor is located in Dublin Township, Fulton County, and Dublin Township, Huntingdon County, and is approximately 6.52 miles long. The project limits extend from the Fort Littleton Interchange (Exit 180) (western project limit) to the Tuscarora Tunnel (eastern project limit).

The study area for the environmental studies consists of lands on both sides of existing I-76 with a wider band being examined in the areas of proposed curve flattening/straightening. The noise analysis for the project specifically focuses on the noise-sensitive land uses adjacent to the project corridor.

This Preliminary Noise Analysis report documents the Existing (2014) and Design Year (2044) noise levels associated with the PTC MP 180-186 Reconstruction and Widening Project. Noise monitoring was performed at 11 locations while noise modeling was conducted for 65 additional sites to gain a thorough understanding of the existing noise environment and to determine how the proposed improvements would affect the noise levels throughout the project area. Project field views were performed to examine the project area, as well as document major sources of acoustic shielding (e.g., terrain lines, building rows, etc.) adjacent to the project corridor. For reporting purposes, the project was divided into groupings of common Noise Study Areas, referred to as NSAs (Refer to ***Figures 2-1*** through ***2-8***). Since there is no noise sensitive land uses within 500 feet of the existing or proposed Turnpike alignment west of NSA A there was no detailed project mapping shown for this area. Noise modeling was completed for Existing (2014), Design Year (2044) No-Build and Design Year (2044) Build conditions.

Design Year (2044) Build noise levels were predicted at each monitored and modeled receptor site under the proposed improvements. As identified in ***Table 2***, by the sound level ranges listed in Column 9, Design Year (2044) Build noise levels are projected to approach or exceed the FHWA/PennDOT Noise Abatement Criteria (NAC) at 36 of the 76 receptor sites. In total, 15 residential land uses, the Ye Olde Mill Campground, and one cemetery are impacted and warrant noise abatement consideration. A noise abatement evaluation concluded that noise abatement is not warranted for NSA A but is warranted, feasible, but *not* reasonable for NSA B, C (C-1, C-2, and C-3), D (Barrier Option 1, Barrier Option 2, and Barrier Option 3), E, F, and G, as per PennDOT Publication 24 guidance. A detailed discussion of the noise analysis procedures, methodologies and recommendations is contained in the following sections of this report.

II. Introduction

Impacts associated with noise are often a prime concern when evaluating roadway improvement projects. Roadway construction at a new location or improvements to the existing transportation network may cause impacts to the noise-sensitive environment located adjacent to the project corridor. For this reason, FHWA and PennDOT have established a noise analysis methodology and associated noise level criteria to assess the potential noise impacts associated with the construction and use of transportation projects.

The PTC is currently proposing the addition of a third travel lane in each direction from Milepost 180 to Milepost 186, which will improve traffic flow and relieve congestion during peak travel periods. They are also proposing to flatten/straighten two curves within this stretch of the Turnpike. Several local roads (Nine Mile Run Road, Cemetery Road, SR 1010, and Locke Road) that pass under the Turnpike will also be modified during construction but will not have significant contributions to the noise environment. The project area is shown on ***Figure 1 - Project Location/Reference Map***.

This report details the steps involved in the noise analysis for the PTC MP 180-186 Reconstruction and Widening Project, including noise monitoring/modeling methodologies, results, impact evaluation, and potential abatement recommendations.

III. Noise Analysis Methodology, Terminology and Criteria

The methodologies applied to the noise analysis for the PTC MP 180-186 Reconstruction Project are in accordance with PennDOT's "*Publication 24",* effective December 2013. PennDOT guidelines are based on the updated U.S. Department of Transportation, Federal Aid Policy Guide 23 CFR 772, U.S. Government Printing Office.

To determine the degree of highway noise impact, Noise Abatement Criteria (NAC) have been established for a number of different land use categories. ***Table 1*** documents the NAC for the associated activity land use category shown in the adjacent column. The majority of the land uses within the project corridor are considered Category B; however, Category C land uses are also present. Category B receptors are comprised of and limited to residential areas, while the Category C receptors (in this case) represent a campground and cemetery. The campground is located in the center of the project area just north of I-76 along Grist Mill Road. The cemetery is located in the center of the project area just south of I-76 along Cemetery Road.

The NAC are given in terms of an hourly, A-weighted, equivalent sound level. The A-weighted sound level frequency is used for human use areas because it is comprised of the sound level frequencies that are most easily distinguished by the human ear, out of the entire sound level spectrum. Highway traffic noise is categorized as a linear noise source, where varying noise levels occur at a fixed point during a single vehicle pass by. It is acceptable to characterize these fluctuating noise levels with a single number known as the equivalent noise level (Leq). The Leq is the value of a steady sound level that would represent the same sound energy as the actual time-varying sound level evaluated over the same time period. For highway noise assessments, Leq is typically evaluated over a one-hour period.

Noise abatement determination is based on PennDOT's three-phased approach. The first phase (***Phase 1***) distinguishes if a sensitive receptor, within a project corridor, warrants highway traffic noise abatement. The following describes the ***Phase 1*** warranted criterion, as discussed in PennDOT policy. Receptors that satisfy either condition, warrant consideration of highway traffic noise abatement.

- Predicted highway traffic noise levels (for the design year) approach or exceed the highway traffic noise abatement criteria in ***Table 1***. "Approach" has been defined by PennDOT as 1 dBA below the noise abatement criteria.

~or~

- A substantial noise increase over existing conditions occurs in the Design Year. PennDOT has defined a substantial noise increase as a 10 dBA increase above existing noise levels for all noise-sensitive exterior activity categories. A 10 dBA increase in noise reflects the generally accepted range of a perceived doubling of the loudness.

Phase 2 and ***Phase 3*** of the three-phase approach will be discussed in the noise abatement evaluation, located in ***Section VI*** of this report.

The identification of noise-sensitive land uses and the location of the proposed widening improvements, as well as the existing roadway network, guided the selection of noise monitoring locations along the project corridor. In order to determine the existing noise conditions within the project area, noise monitoring was conducted at 11 representative noise sensitive receptor sites. ***Figures 2-1*** through ***2-8*** identify the project area and the locations of the noise monitoring sites (R01 – R11).

Monitoring was performed at each of the selected noise sensitive receptors using Rion NL-42 Sound level meters. Readings were taken on the A-weighted scale and reported in decibels (dB(A)). The noise monitoring equipment meets all requirements of the American National Standard Specifications for Sound Level Meters, ANSI S1.4-1983 (R1991), Type 2, and meets all requirements as defined by FHWA. Noise monitoring was conducted in accordance with the methodologies contained in FHWA-PD-96-046, Measurement of Highway-Related Noise, (FHWA, May 1996).

During a project status meeting on June 3, 2014 with PTC representatives, it was discussed and agreed upon that 24-hour noise monitoring was not necessary for the project since this is not a typical commuter route with a defined noise peak. In general, noise levels are consistent throughout the day. As such, noise monitoring was performed on June 4, 2014 from 8:00 AM to 11:30 AM. All noise monitoring data and witnessed traffic during the monitoring phase are used to validate the TNM noise model. Worst-case conditions for existing and the design year scenarios are based on the worst-case traffic volumes and composition traffic data provided by PTC staff and is considered a reliable and acceptable method.

Short-term monitoring was performed during free-flow conditions for the purposes of noise model validation and not to predict impacts. Short-term noise monitoring was performed on June 4, 2014 between the hours of 8AM and 11:30AM. Noise levels were recorded at 10-second intervals for the duration of the test. Data collected by the sound analyzers included time, average noise level (L_{av}), maximum noise level (L_{max}), and instantaneous peak noise level (L_{pk}) for each recorded interval. Additional data collected at each monitoring location included atmospheric conditions, wind speed, background noise sources, and unusual / atypical noise events (including any non-roadway noise sources). Traffic data (vehicle volume and speed) were also video-recorded on all roadways which were visible from the monitoring sites and substantially contributed to the overall noise levels. Traffic was grouped into one of three categories: cars, medium trucks, and heavy trucks, as per PennDOT procedures. Combined, all of this data is used during the noise model validation process.

IV. Validation and Existing Conditions

Computer modeling is the accepted technique for predicting Existing (2014) and Design Year (2044) noise levels associated with traffic-induced noise. Currently, the FHWA Traffic Noise Model (TNM) 2.5 computer-modeling program is the approved highway noise prediction model. The TNM has been established as a reliable tool for representing noise generated by highway traffic. The information applied to the modeling effort includes the following: highway design files (existing and proposed design), traffic data, roadway cross-sections, and surveying of terrain. Base mapping, aerial photography, and field views were used to identify noise-sensitive land uses within the corridor and any terrain features that may shield roadway noise. As discussed earlier, the project corridor features Activity Category B and C land uses.

The modeling process begins with model validation, as per PennDOT requirements. This is accomplished by comparing the monitored noise levels with noise levels generated by the computer model, using the traffic volumes, speeds and compositions that were witnessed during the monitoring effort. This comparison ensures that reported changes in noise levels between Existing and Design Year conditions are due to changes in traffic conditions and not to discrepancies between monitoring and modeling techniques. A difference of three decibels (3 dBA) or less between the monitored and modeled level is considered acceptable, since this is the limit of change detectable by the typical human ear. ***Table 2*** provides a summary of the model validation for the Existing (2014) monitored conditions. *Column 5* represents the difference between the monitored level (*Column 3*) and the modeled level produced by the noise model (*Column 4*). All of the monitored receptors show less than a 3 dBA difference between the monitored and modeled noise levels, therefore the model is considered an accurate representation of actual existing conditions throughout the project area.

Following the validation of the existing conditions noise model, additional noise modeling was performed for existing conditions using traffic data supplied by PTC and McCormick Taylor traffic engineers (reference ***Appendix D***). Mainline I-76 traffic data was supplied by the PTC traffic engineering department. In addition, for the local roadway system data was collected from PennDOT's Internet Traffic Monitoring System (iTMS) website and was grown by McCormick Taylor traffic engineers to match the analysis years for the noise study. This modeling step was performed to evaluate existing "worst-case" conditions associated with existing worst-case traffic volumes and composition. Thorough review of the traffic data indicated that the PM peak contains slightly heavier traffic volumes across the transportation network. As such, the PM peak was considered worst-case and was used throughout the analysis. *Column 6* of ***Table 2*** provides a summary of worst-case existing noise levels, based on supplied worst-case existing traffic volumes. Based on the Existing (2014) noise levels, the noise impact criterion was determined at each receptor site, based on either the "absolute" criteria shown in ***Table 1*** or PennDOT's "substantial increase" above existing conditions criterion. The criterion for each receptor site is summarized in *Column 7* of ***Table 2***.

Traffic noise levels were predicted at all noise-sensitive land uses along existing I-76, using the latest version of the FHWA TNM 2.5. Major and secondary roadways in close proximity to receptor sites that carry considerable traffic volumes were added to the noise model. For the purposes of this noise analysis, it was determined through field verification and noise monitoring

that I-76 is the dominant noise source for the majority of the project area. Traffic data supplied by PTC traffic engineers, including volumes, speeds and composition, were added to the noise model to predict existing (2014) worst-case noise levels. Posted roadway speeds were identified during the field view and were also incorporated into the noise model. For the purposes of this portion of the assessment, a posted speed of 65 mph was used on existing I-76. Free flow, hourly traffic volumes were used for the noise analysis as shown in ***Appendix D***.

The following is a discussion of the existing noise environment for each NSA that was evaluated for the PTC MP 180-186 Reconstruction and Widening Project. NSAs are groupings of receptor sites that, by location, form distinct communities within the project area and have a common noise environment. These areas are used to evaluate traffic noise impacts and potential noise abatement options to residential developments or communities as a whole, as well as for consideration of feasibility and reasonableness of possible noise abatement measures for specific communities. Where residential communities or groupings of noise-sensitive land uses exist, both noise monitoring (e.g., R1) and noise modeling-*only* (e.g., M-A1) sites were grouped into a NSA, per PennDOT guidance.

NSA A

Noise Study Area A (NSA A) is located north of existing I-76 in the western portion of the project area (reference ***Figure 2-1***). NSA A includes two monitoring sites (R01 & R02) and four "modeling-*only*" receptor sites (M-A1 through M-A4), representing seven separate residences. NSA A is comprised solely of residential (Category B) land uses. The Existing (2014) worst-case noise levels range from 60-66 dBA, as shown in *Column 6* of ***Table 2***.

NSA B

Noise Study Area B (NSA B) is located east of NSA A and south of I-76. NSA B contains one monitoring site (R03) and three noise "modeling-*only"* sites (M-B1 through M-B3), representing four residences (reference ***Figure 2-2***). NSA B is comprised solely of residential (Category B) land uses. Existing (2014) worst-case noise levels range from 58-60 dBA, as shown in *Column 6* of ***Table 2***.

NSA C

Noise Study Area C (NSA C) is located east of NSA B and north of I-76. NSA C contains two monitoring sites (R04 & R05) and six noise "modeling-*only"* sites (M-C1 through M–C6), representing nine residences (reference ***Figure 2-3***). NSA C is comprised solely of residential (Category B) land uses. Existing (2014) worst-case noise levels range from 59-75 dBA, as shown in *Column 6* of ***Table 2***.

NSA D

Noise Study Area D (NSA D) is located east of NSA C and north of I-76. NSA D contains three monitoring (R06 – R08) and 38 "modeling-*only*" receptor sites (M-D1 through M-D38), representing 25 single family residences and the Ye Olde Mill Campground which represents

five equivalent residential units (ERU's) (reference ***Figures 2-4, 2-5 & 2-6***). The Existing (2014) worst-case noise levels range from 58-65 dBA, as shown in *Column 6* of ***Table 2.***

NSA E

Noise Study Area E (NSA E) is located east of NSA D and south of I-76. NSA E contains one monitoring site (R09) and four "modeling-*only*" receptor sites (M-E1 through M-E4), representing five single family residences (reference ***Figure 2-5***). NSA E is comprised solely of residential (Category B) land uses. The Existing (2014) worst-case noise levels range from 60-66 dBA, as shown in *Column 6* of ***Table 2.***

NSA F

Noise Study Area F (NSA F) is located in the eastern portion of the project area, north of I-76. NSA F contains two monitoring sites (R10 & R11) and one "modeling-*only*" receptor site (M-F1), representing four single family residences (reference ***Figure 2-8***). NSA F is comprised solely of residential (Category B) land uses. Existing (2014) worst-case noise levels range from 61-70 dBA, as shown in *Column 6* of ***Table 2***.

NSA G

Noise Study Area G (NSA G) is located in the eastern portion of the project area, south of I-76. NSA G contains two "modeling-*only*" receptor sites (M-G1 & M-G2) representing three single family residences (reference ***Figure 2-8).*** NSA G is comprised solely of residential (Category B) land uses. Existing (2014) worst-case noise levels range from 62-67 dBA, as shown in *Column 6* of ***Table 2***.

NSA H

Noise Study Area H (NSA H) is located in the center of the project area, south of I-76. NSA H contains seven "modeling-*only*" receptor sites (M-H1 & M-H7) representing approximately 90 - 100 grave sites (reference ***Figure 2-4).*** NSA H is comprised solely of cemetery (Category C) land uses. Noise levels were determined for NSA E using a 130' grid system, referenced from Appendix E of PennDOT's Publication 24. Existing (2014) worst-case noise levels range from 63-69 dBA, as shown in *Column 6* of ***Table 2***.

V. Evaluation of Design Year Noise Levels & Noise Impact Assessment

Following the development of the existing conditions model and the prediction of Existing (2014) noise levels, the assessment continued with the projection of Design Year (2044) noise levels. This task was accomplished by accounting for the proposed improvements and applying Design Year (2044) traffic volumes and composition to the validated computer model. The proposed improvements should be considered conceptual and preliminary in nature. The proposed improvements are shown on ***Figures 2-1*** through ***2-8***. Design Year (2044) Build noise levels were predicted with the preliminary improvements in place and in use.

Design Year (2044) noise levels were modeled for the No-Build alternative for comparative purposes to Build conditions. The No-Build alternative was modeled with the assumption that the roadway improvements proposed, as part of the PTC project, would not be in place in the Design Year (2044) of the project, but the existing roadways would carry Design Year traffic volumes, speeds and composition. The noise levels associated with the No-Build modeling analysis are summarized in *Column 8* of ***Table 2***. No-Build noise levels are projected to approach or exceed the FHWA/PennDOT NAC at 29 sensitive receptor sites, representing 14 Category B land uses and 30 Category C Land uses (e.g. 23 campsites).

The next step in the noise analysis is to project Design Year (2044) Build noise levels and to determine if receptors will approach or exceed the NAC. If the criteria are approached or exceeded at any receptor, noise abatement would be considered and evaluated in an attempt to reduce Design Year noise levels. The noise levels associated with the Build condition modeling analysis are summarized in *Column 9* of ***Table 2***. As shown, Design Year (2044) Build condition noise levels are projected to approach or exceed the NAC within seven of the eight NSAs (B, C, D, E, F, G, and H) at 36 receptor sites, representing 15 Category B land uses and 43 Category C Land uses (e.g. 36 campsites).

The information applied to the Design Year modeling effort includes the following: proposed preliminary design roadway improvements, and traffic data derived from modeling efforts for Design Year Build (2044) conditions. A future build speed of 70 mph was used for all Design Year (2044) modeling. Base mapping and field views were used to further identify noise-sensitive land uses and terrain that shields noise levels considerably within the project corridor. The Design Year Build (2044) conditions model was created by adding the proposed roadway improvements to the existing computer model and accounting for proposed roadway changes in vertical and horizontal alignment.

Design Year (2044) traffic volumes, vehicle composition, and speeds were assigned to all existing and proposed roadways. All traffic data used in the noise analyses were derived from traffic engineering studies for the project. The following discussion presents a summary of the Design Year (2044) noise levels throughout the project corridor.

As indicated in the PennDOT guidance, if undeveloped land is not permitted for development, a noise analysis is still required to predict future noise levels for use by local planning officials. Coordination with Huntingdon and Fulton Counties was done to see if there was any new permitted land uses within their respective counties for inclusion into the Preliminary Noise Analysis. It was confirmed that no land permits within 500 feet of the PTC's right of way were issued so an undeveloped land noise analysis was completed. As shown in ***Figures 2-1*** through ***2-8***, there are areas along the project corridor that are comprised of a large wooded areas and agricultural fields. As such, modeling receptors were offset every 50 feet up to 500 feet from the edge of shoulder of the new I-76 westbound alignment to predict the depth of noise impact (66 dBA) from the proposed improvement. As shown in ***Table 3***, using site modeling techniques, noise impacts are predicted approximately 200 feet from the edge of shoulder of the proposed westbound travel lanes. Local planning officials should exercise caution if any planned developments extend within 200 feet of the proposed improvements since it would be within the impact threshold. During Final Design, coordination should be performed to determine if the

status of the undeveloped lands in the project corridor has changed.

VI. Noise Abatement Evaluation

Design Year (2044) noise levels are projected to approach or exceed the FHWA/PennDOT NAC at 15 Category B land uses, the Ye Old Mill Campground, and a cemetery within the project corridor. Therefore, as per FHWA/PennDOT procedures, noise abatement considerations are warranted, as discussed above for ***Phase 1*** of PennDOT's three-phased approach, for the impacted properties in NSAs B, C, D, E, F, G, and H.

Where it is determined in **Phase 1** of the noise analysis that consideration of noise abatement is warranted, **Phase 2** and **Phase 3** (feasibility and reasonableness) are then considered. ***Phase 2*** and ***Phase 3*** of PennDOT's three-phased approach to considering noise abatement and determining the feasibility and reasonableness of noise barriers are discussed below in detail.

Phase 2: Feasibility Criteria for Noise Barriers

- *At least a 5 dBA highway traffic noise reduction at impacted receptors. Per 23 CFR 772 FHWA requires the highway agency to determine the number of impacted receptors required to achieve at least 5 dBA of reduction. PennDOT requires that fifty percent (50%) or more of the impacted receptors experience 5 dBA or more of insertion loss to be feasible; and*

- *The determination that it is possible to design and construct the noise abatement measure. The factors related to the design and construction include: safety, barrier height, topography, drainage, utilities, maintenance of the abatement measure, maintenance access to adjacent properties, and general access to adjacent properties (i.e. arterial widening projects).*

FHWA and PennDOT guidelines recommend a variety of abatement measures which should be considered in response to transportation-related noise impacts. While noise barriers and/or earth berms are generally the most effective form of noise abatement, additional abatement measures exist which have the potential to provide considerable noise reductions, under certain circumstances. A brief description of PennDOT-approved noise abatement options is provided below:

- Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable noise abatement measure.

- Traffic management measures including, but not limited to, traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits, and exclusive lane designations.

- Alteration of horizontal and vertical alignments.

- Acquisition of real property or interests therein (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise. This measure may be included in Type I projects only.

- Noise insulation of Activity Category D land use facilities listed in ***Table 1***. Post-installation maintenance and operational costs for noise insulation are not eligible for Federal-aid funding.

Due to the project need and the nature of the proposed improvements, traffic control measures were not considered an appropriate solution. Property acquisition to provide noise abatement was not necessary or supported by the analysis. Therefore, noise barriers and/or earth berms were considered the only form of abatement having the potential to reduce Design Year (2044) noise levels for this project.

Noise walls and earth berms are often incorporated into the highway design in response to identified noise impacts. The use of earth berms is not always an option, due to the excessive space they require adjacent to the roadway corridor. At a standard slope of 2:1, every one foot of berm height would require approximately four feet of horizontal width. This requirement becomes more complex on roadway improvement projects, where residential properties often neighbor the proposed roadway corridor. In these situations, implementation of earth berms can require considerable property acquisition to accommodate noise abatement. Therefore, noise barriers were evaluated in an attempt to reduce Design Year (2044) noise levels below criteria.

Phase 3: Reasonableness Criteria for Noise Barriers

A determination of noise barrier reasonableness will include the consideration of the parameters listed below. When performing a reasonableness analysis for the preliminary engineering studies, some parameters (e.g., desires of the impacted community) will not yet be quantifiable. All of the reasonableness factors must collectively be achieved in order for a noise abatement measure to be deemed reasonable.

- **Noise Reduction Design Goals**

  The design goal is a reasonableness factor indicating a specific reduction in noise levels that PennDOT uses to identify that a noise abatement measure effectively reduces noise. The design goal establishes a criterion, selected by PennDOT that noise abatement must achieve. The design goal is not the same as acoustic feasibility, which is the minimum level of effectiveness of a noise abatement measure. Acoustic feasibility indicates that the noise abatement measure can, at a minimum, achieve a discernible reduction in noise levels.

- **Cost-effectiveness**

  PennDOT's noise barrier cost effectiveness value is based upon a Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 2,000 sq. ft. This MaxSF/BR criterion shall be applied as part of the noise barrier reasonableness determination. It replaces the previously used "Cost per Benefited Receptor" criteria under the previous noise policy.

- **Viewpoints of the benefited receptors**
  PennDOT shall solicit the viewpoints of all benefited receptors through certified mailings and obtain enough responses to document a decision as to whether or not there is a desire for the proposed noise abatement measure. Fifty percent (50%) or more of the respondents shall be required to favor the noise abatement measure in determining reasonableness.

The effectiveness of a noise barrier is measured by examining the barrier's capability to reduce Design Year noise levels. Noise reduction is measured by comparing Design Year pre-and post-barrier noise levels. This difference between unabated and abated noise levels is known as "insertion loss" (IL). It is important to optimize the noise barrier design to achieve the most effective noise barrier in terms of both noise reduction (insertion losses) and cost. Although at least a 5 dBA reduction is required to meet the feasibility criteria, the following tiered noise barrier abatement goals should be used to govern barrier design and optimization.

- Reduction of future highway traffic noise by 7 dBA at one (1) or more of the impacted receptor sites (required criterion).

- Reduction of future highway traffic noise levels to the low-60-decibel range when practical (desirable).

- Reduction of future highway traffic noise levels to existing noise levels when practical (desirable).

The following discussion presents potential abatement alternatives for NSA B, C, D, E, F, and G within the PTC 180 – 186 Reconstruction Project corridor. Where a noise barrier was evaluated, the effectiveness was measured in terms of achievable IL (reference ***Table 4*****).** Each analyzed noise barrier was evaluated at multiple heights to determine if additional benefits were gained with increased barrier height. Each evaluated noise barrier was optimized based on a "diminishing returns" analysis, meaning that any 2-foot increase in noise barrier height will not increase insertion losses by more than 1 dBA.

The following is a preliminary discussion of the evaluated noise barrier system for each of the impacted NSAs. Noise abatement was evaluated where noise impacts are predicted to occur. The noise evaluation is preliminary and based on the preliminary engineering design / project elements. As such, noise barriers that are found to be feasible and reasonable during the preliminary noise analysis may not be found to be feasible and reasonable during the Final Design noise analysis if any changes to the design elements occur. Conversely, noise barriers that were not considered feasible and reasonable may meet the established criteria and be recommended for construction.

NSA B

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at one impacted Category B land use within NSA B. A continuous post and panel noise barrier was evaluated along the I-76 eastbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-2***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at a height of 12 feet. The

preliminary barrier in NSA B has a height of 12 feet and length of 758 feet, which yields a total area of 9,096 ft^2. The preliminary barrier for NSA B has a total square footage per benefited land use of 9,096 which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited land use (***Table 6***). Considering these factors, noise abatement for NSA B is feasible, but not reasonable at this time.

NSA C

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at five impacted Category B land uses within NSA C. Due to the size of NSA C and where the impacted properties are located, three separate noise wall systems were evaluated (C-1, C-2, and C-3) in an effort to reduce Design Year Build condition (2044) noise levels. A discussion of each evaluated noise wall system is referenced below.

C-1 Noise Barrier

A continuous post and panel noise barrier was evaluated for receptors R05, M-C4, and M-C6 along the proposed I-76 westbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-3***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at a height of 14 feet. The preliminary barrier has a height of 14 feet and length of 1,364 feet, which yields a total area of 19,096 ft^2. The preliminary barrier for NSA C has a total square footage per benefited residence of 6,365, which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, noise abatement for the properties behind Noise Barrier C-1 is feasible, but not reasonable at this time.

C-2 Noise Barrier

A continuous post and panel noise barrier was evaluated for receptor M-C3 along the proposed I-76 westbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-3***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at a height of 8 feet. The preliminary barrier has a height of 8 feet and length of 299 feet, which yields a total area of 2,389 ft^2. The preliminary barrier for C-2 has a total square footage per benefited residence of 2,389, which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, noise abatement for M-C3 behind Noise Barrier C-2 is feasible, but not reasonable at this time.

C-3 Noise Barrier

A continuous post and panel noise barrier was evaluated for receptor R04 along the westbound top of cut slope at heights ranging from 8 to 20 feet (reference ***Figure 2-3***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at a height of 8 feet. The preliminary barrier has a height of 8 feet and length of 431 feet, which yields a total area of 3,447 ft^2. The preliminary barrier for C-2 has a total square footage per benefited residence of 3,447, which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, noise abatement for R04 behind Noise Barrier C-3 is feasible, but not reasonable at this time.

NSA D

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at two Category B land uses and the Ye Olde Mill Campground (Category C land use), which represents five Equivalent Residential Units (ERU's) within NSA D. In order to calculate the campgrounds ERU's, coordination was performed with the management of the Ye Olde Mill Campground on September 29, 2014 to determine the appropriate ERU value of the benefited area adjacent to the preliminary noise barrier (Barrier Option 2) in NSA D (**Appendix E, Pub 24**). The ERU's are intended to provide a reasonable "person-hours-per-year" value which represents the degree of use which occurs at a given site. As discussed with management of the facility, it was determined that the campground is open all year round. However, the typical peak-season for the campground facility is approximately April 1st to December 1st of each year (8 months). During this eight month period, the campground averages a 57% occupancy use. In addition, the assumed average daily use of each site is approximately 12 hours. ***Table 5*** was used to determine the total ERU value within NSA D. In addition, the actual camp sites rented around the facility can also vary from week to week. Assumptions have been made regarding the specifics of the campground and use values (***Table 5***).

NSA D – Barrier Option 1 – Entire NSA

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at two impacted Category B land uses and the Ye Olde Mill Campground. A continuous post and panel noise barrier was evaluated along the proposed I-76 westbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-4*** and ***2-5***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at a height of 10 feet. The preliminary barrier for NSA D has a height of 10 feet and length of 3,106 feet, which yields a total area of 31,060 ft^2. The preliminary barrier for NSA D has a total square footage per benefited residence of 2,588 which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, Barrier Option 1 is feasible, but not reasonable at this time. However, since the campground and the rest of NSA D is separated by approximately 1,000 linear feet of forest, a separate noise mitigation evaluation was conducted for the residential area to the west and the campground to the east to see if noise mitigation was warranted, feasible, and reasonable for each respective location.

NSA D – Barrier Option 2 – Campground Only

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at 36 campsites (represented by five ERU's) within the Ye Olde Mill Campground. A continuous post and panel noise barrier was evaluated along the proposed I-76 westbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-6***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at an average height of 10.25 feet. The preliminary barrier has an average height of 10.25 feet and length of 1,086 feet, which yields a total area of 11,132 ft^2. The preliminary barrier for the campground has a total square footage per benefited residence of 2,226, which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, Barrier Option 2 is feasible, but not reasonable at this time.

NSA D – Barrier Option 3 – Homes Only

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at two impacted Category B land uses west of the Ye Olde Mill Campground. A continuous post and panel noise barrier was evaluated along the proposed I-76 westbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-7***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at an average height of 8 feet. The preliminary barrier has an average height of 8 feet and length of 1,450 feet, which yields a total area of 11,600 ft^2. The preliminary barrier for the residences has a total square footage per benefited residence of 2,900, which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, Barrier Option 3 is feasible, but not reasonable at this time.

NSA E

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at two impacted Category B land uses within NSA E. A continuous post and panel noise barrier was evaluated along the proposed I-76 eastbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-5***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at a height of 10 feet. The preliminary barrier has a height of 10 feet and length of 2,077 feet, which yields a total area of 20,770 ft^2. The preliminary barrier for NSA E has a total square footage per benefited residence of 4,154 which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, noise abatement for NSA E is feasible, but not reasonable at this time. However, if any change to the design elements occurs, this area will be re-evaluated again during the Final Design phase of the project.

NSA F

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at two impacted Category B land uses within NSA F. A continuous post and panel noise barrier was evaluated along the proposed I-76 westbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-8***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria at a height of 12 feet. The preliminary barrier has a height of 12 feet and length of 1,620 feet, which yields a total area of 19,440 ft^2. The preliminary barrier for NSA F has a total square footage per benefited residence of 9,720, which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, noise abatement for NSA F is feasible, but not reasonable at this time.

NSA G

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at three impacted Category B land uses within NSA G. A continuous post and panel noise barrier was evaluated along the proposed I-76 eastbound edge-of-shoulder at heights ranging from 8 to 20 feet (reference ***Figure 2-8***). As shown in ***Table 4***, the preliminary noise barrier evaluated for this area satisfies the feasibility criteria for the majority of

impacted receptors at a height of 16 feet. The preliminary barrier has a height of 16 feet and length of 1,887 feet, which yields a total area of 30,192 ft^2. The preliminary barrier for NSA G has a total square footage per benefited residence of 30,192, which exceeds the PennDOT reasonableness limit of 2,000 Max/SF per benefited residence (***Table 6***). Considering these factors, noise abatement for NSA G is feasible, but not reasonable at this time

NSA H

Design Year Build condition (2044) noise levels have been predicted to approach or exceed the FHWA/PennDOT NAC at seven grid points/receptor sites within the cemetery in NSA H (reference ***Figure 2-4***). Following the results of the Equivalent Residential Units (ERUs) analysis (Appendix E of Publication 24), it was determined that each grid point within this NSA represents .0021 units (**Table 7**). Combined, the seven impacted receptor sites total less than one ERU. Although the sites within NSA H are impacted, any noise mitigation design for this area would not be reasonable because any barrier over 2,000 square feet would far exceed the PennDOT criterion of 2,000 Max/SF per benefited residence. Therefore, noise mitigation is warranted for NSA H, but not reasonable at this time. Noise mitigation for NSA H will not be discussed further.

VII. Construction Noise

In addition to the Design Year (2044) Build condition noise levels, the PTC is also concerned with noise generated during the construction phase of the proposed project. The degree of noise impact will vary, as it is directly related to the number and types of equipment used and the proximity to the noise-sensitive land uses within the project area.

Based on a review of the project area, no considerable, long-term construction-related noise impacts are anticipated. Any noise impacts that do occur as a result of roadway construction are anticipated to be temporary in nature and will cease upon completion of the project construction phase. The contractor shall use equipment adapted to operate with the least possible noise and shall conduct his work so that annoyance to occupants of nearby property and the general public will be minimized. Potential construction-related noise impacts should be re-evaluated during the Final Design noise assessment as deemed appropriate.

VIII. Conclusion

In summary, the results of the noise analysis for the PTC MP 180-186 Reconstruction Project indicate that Design Year (2044) noise levels are anticipated to approach or exceed the FHWA/PennDOT NAC within seven of the eight NSAs at 36 receptor sites, representing 15 Category B and 43 Category C land uses. These areas were evaluated for potential noise abatement measures, per PennDOT guidance. As discussed in Section VI, noise barriers were considered the only form of abatement having the potential to reduce Design Year (2044) noise levels for this project. The barrier analyses conclude that noise abatement as part of this project is not warranted for NSA A, but is warranted, feasible, but not reasonable for NSA's B, C (C-1, C-2, and C-3), D (Barrier Option 1, Barrier Option 2 and Barrier Option 3), E, F, G, and H. All evaluated barriers are not reasonable because they exceed the PennDOT reasonableness criterion of 2,000 Max/SF per benefited residence. In addition, the undeveloped land analysis concluded

that local planning officials should exercise caution if any planned developments extend within 200 feet of the proposed improvements since it would be within the impact threshold. All supporting documentation can be found in the Appendices at the end of this document.

All noise sensitive land uses will be re-evaluated during the Final Design phase of the project if any change in design elements occurs. A final decision on the recommendations will be made upon completion of the project design and the public involvement processes.

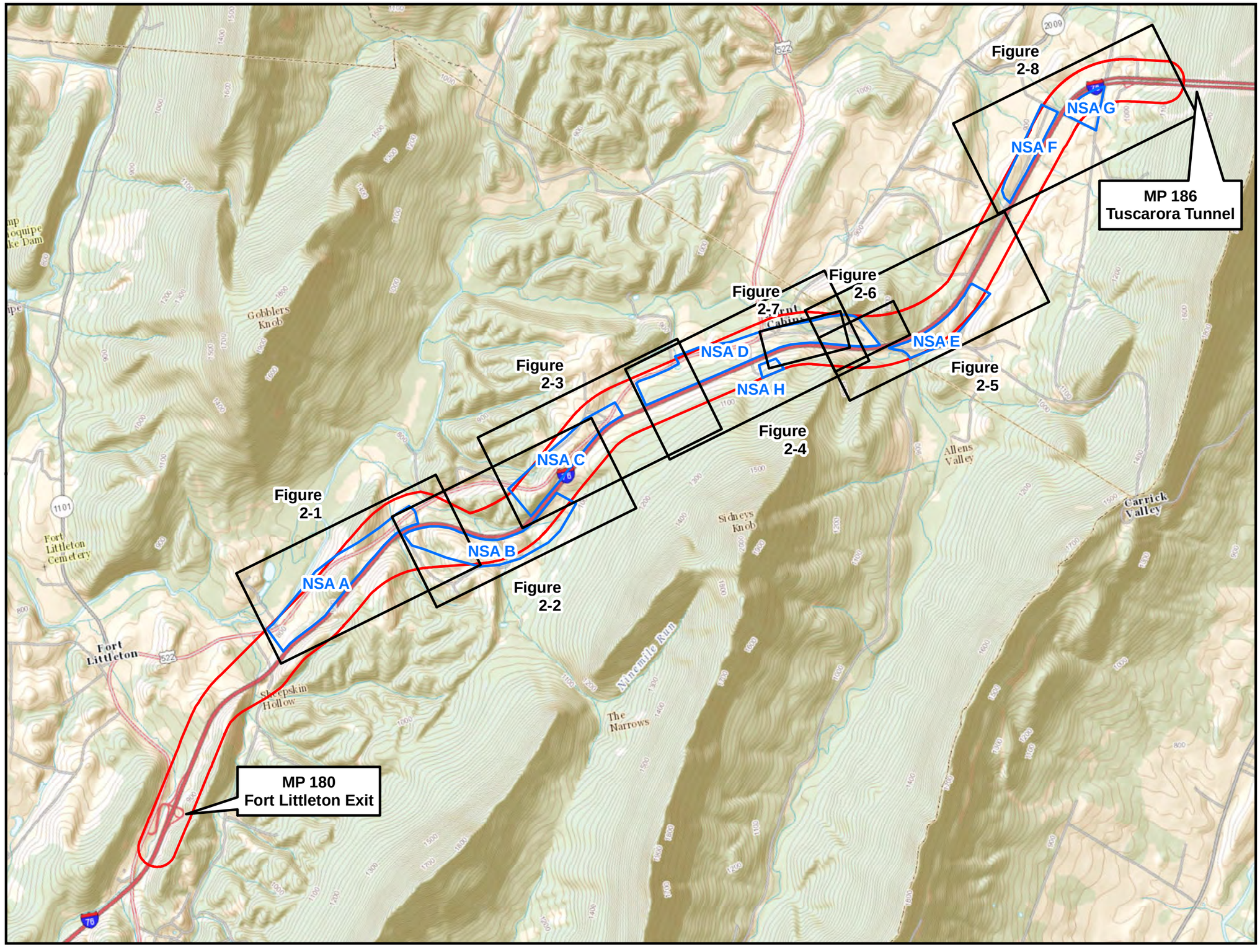

Figure 1
Project Location/Reference Map

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186
Reconstruction Project

Dublin Township, Fulton County and
Dublin Township, Huntingdon County, PA

(Source: USGS, The National Map, 2013

Project Limit
Noise Study Areas
Figure Name

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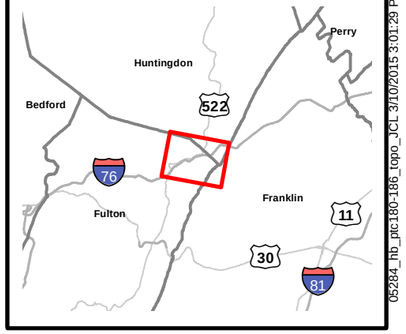
0 1,250 2,500 5,000
Feet



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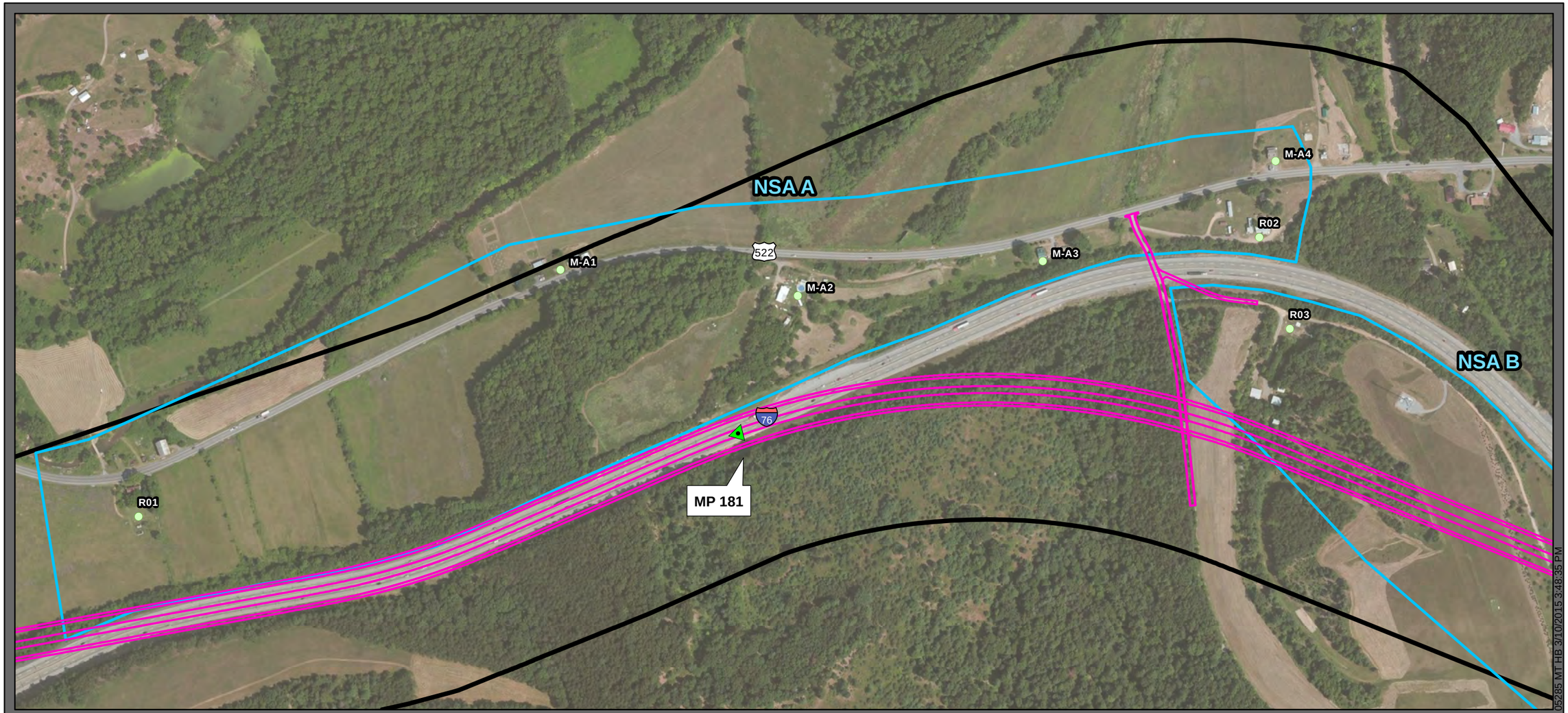


"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

0 200 400 800 Feet

0 48 96 144 192 240 Meters

N W E S

McCORMICK TAYLOR

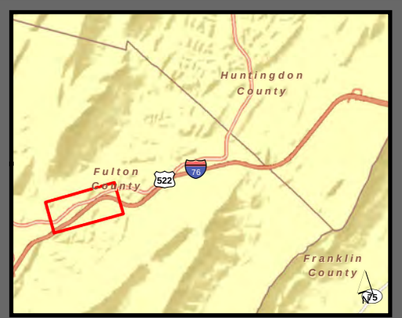
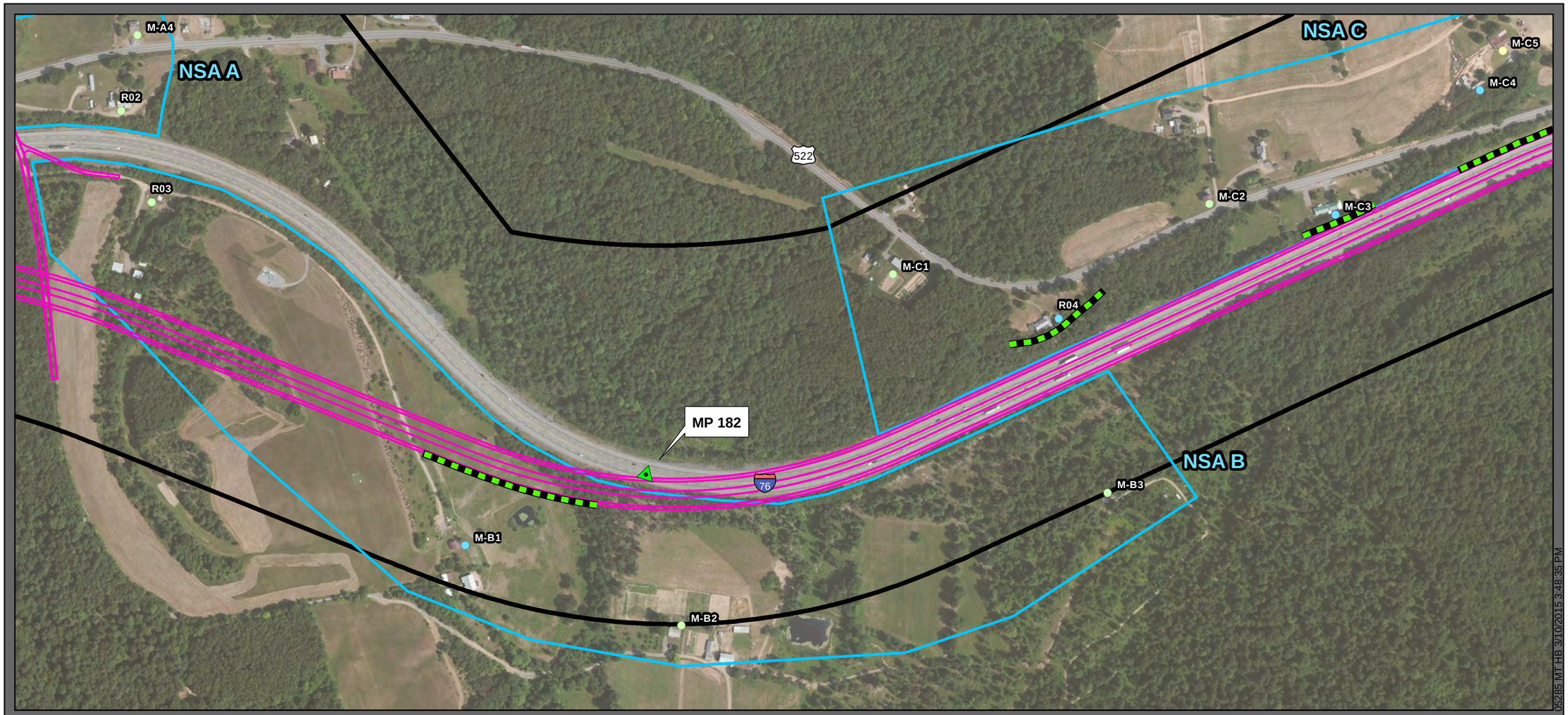


Figure 2-1
NSA A Future Conditions

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013



"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

N W E S

0 200 400 800 Feet

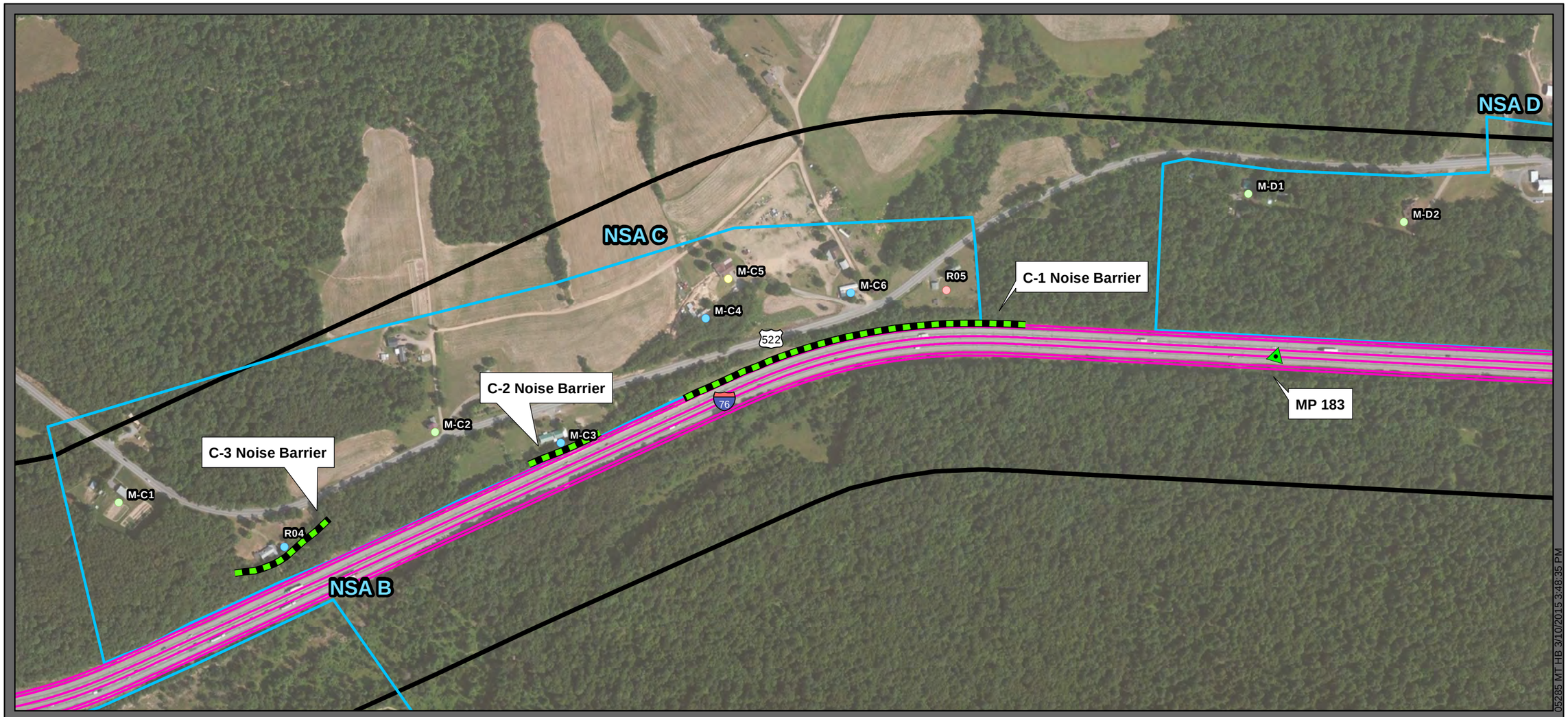
0 48 96 144 192 240 Meters

McCORMICK TAYLOR

Figure 2-2
NSA B Future Conditions

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013



"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

N W E S

0 200 400 800 Feet

0 48 96 144 192 240 Meters

McCORMICK TAYLOR

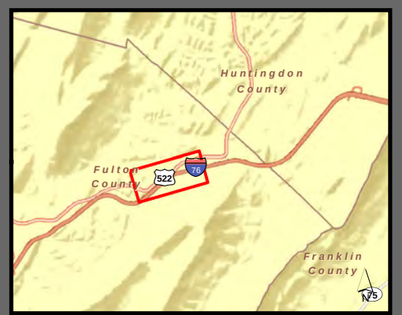
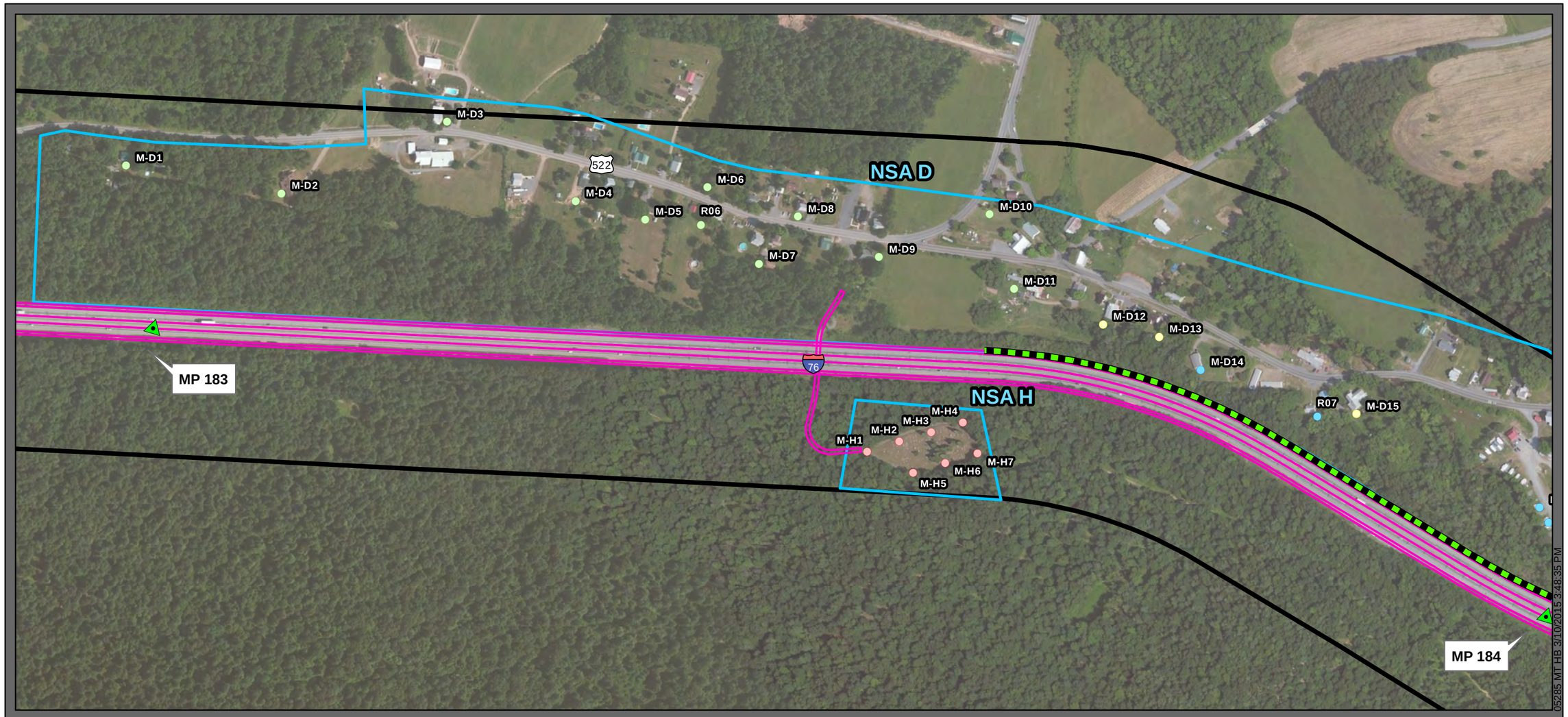


Figure 2-3
NSA C Future Conditions

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013



"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

N, W, E, S

0 200 400 800 Feet

0 48 96 144 192 240 Meters

McCORMICK TAYLOR

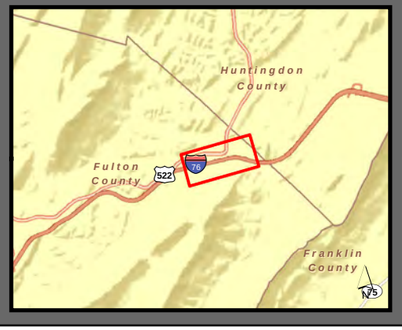
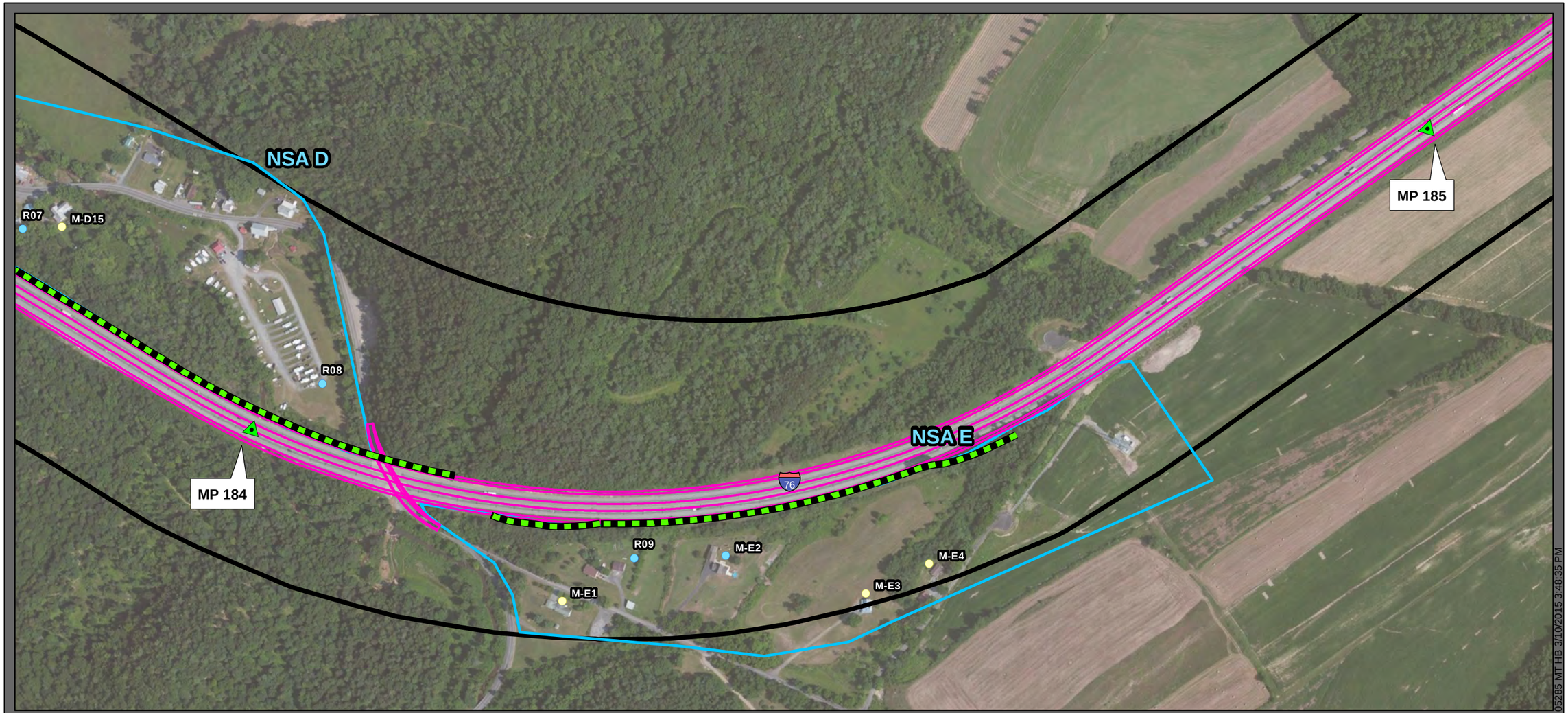


Figure 2-4
NSA D - (Barrier Option 1)
& NSA H Future Conditions

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013



"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

0 200 400 800 Feet

0 48 96 144 192 240 Meters

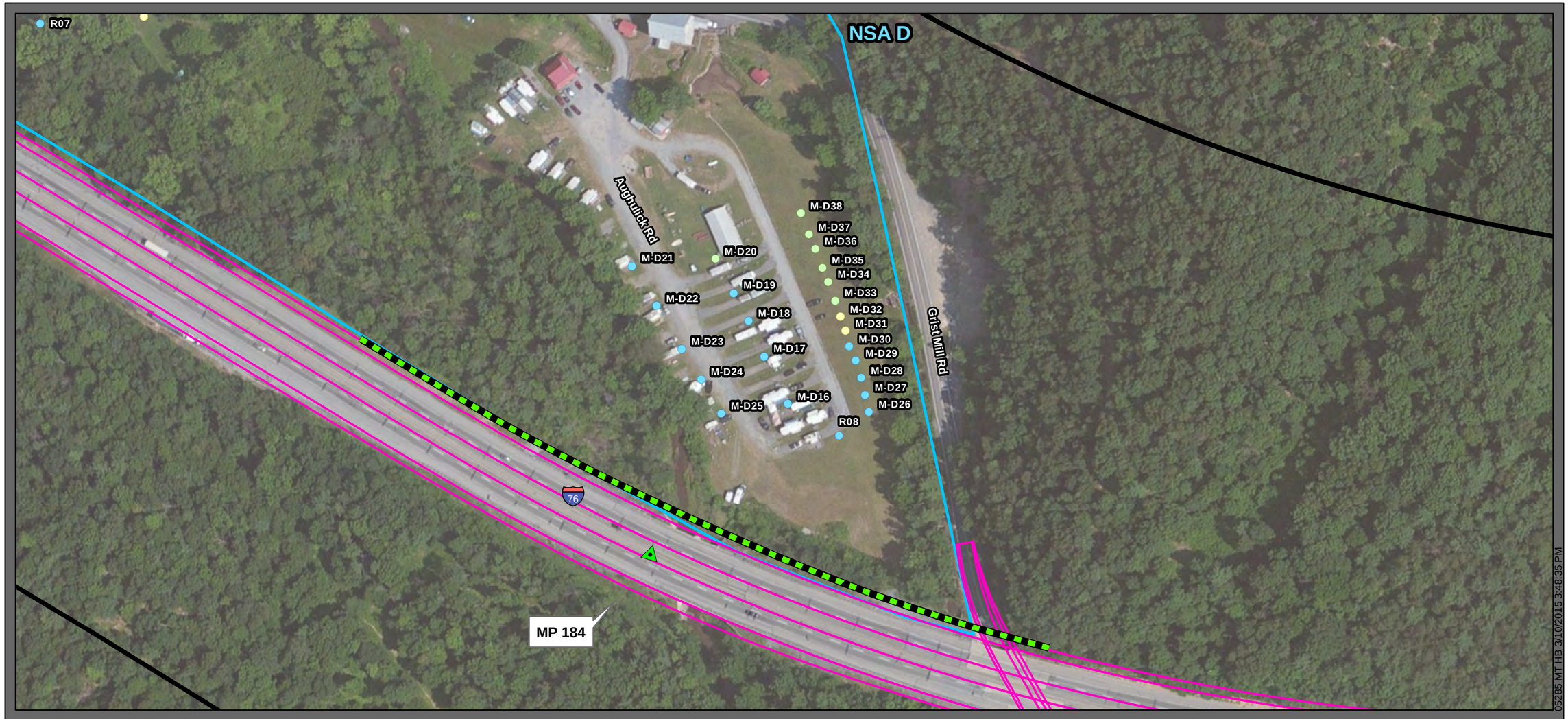
N W E S

McCORMICK TAYLOR

Figure 2-5
NSA D (Barrier Option 1)
& NSA E Future Conditions

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013



"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

0 100 200 400 Feet

0 24 48 72 96 120 Meters

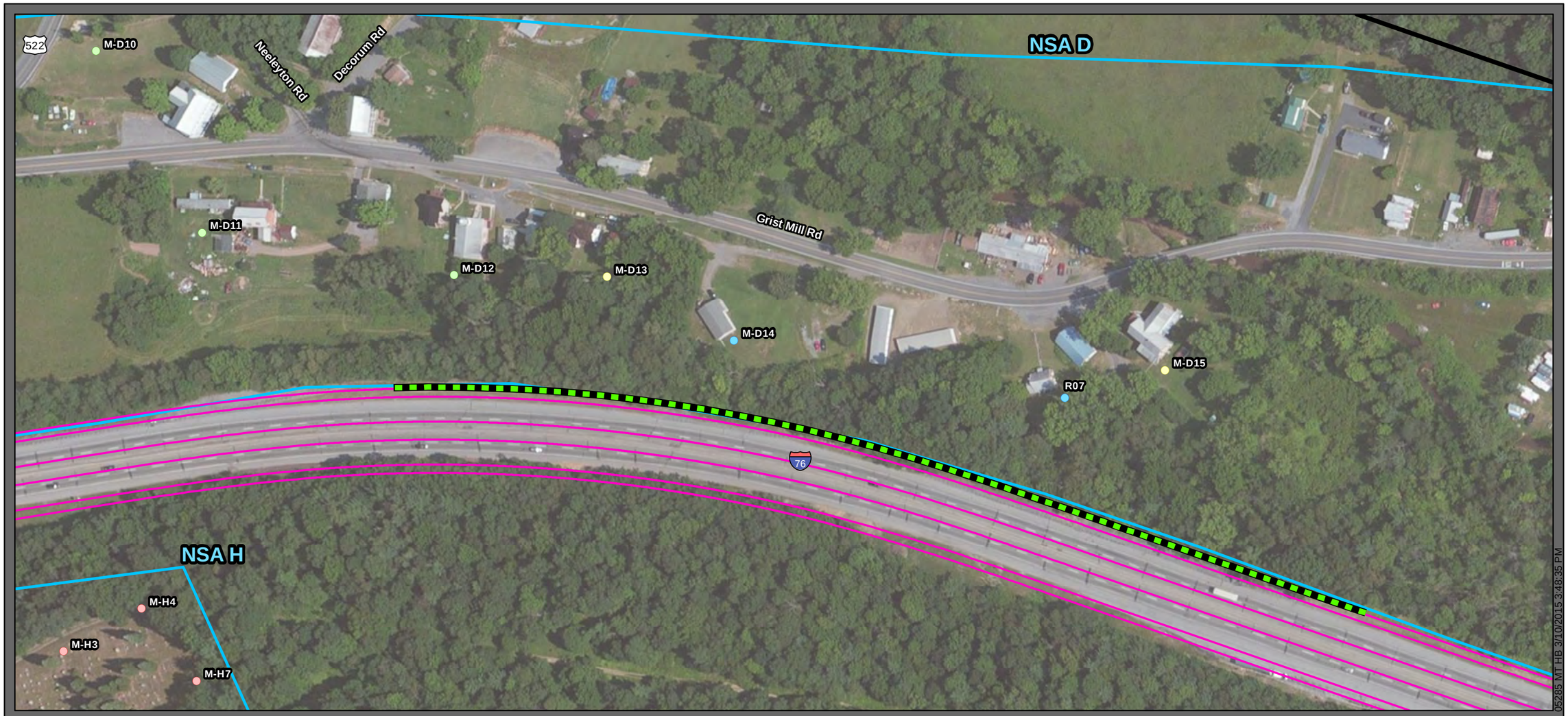
N W E S

McCORMICK TAYLOR

Figure 2-6
NSA D - Campground Only
(Barrier Option 2)

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013



"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

N W E S

0 100 200 400 Feet

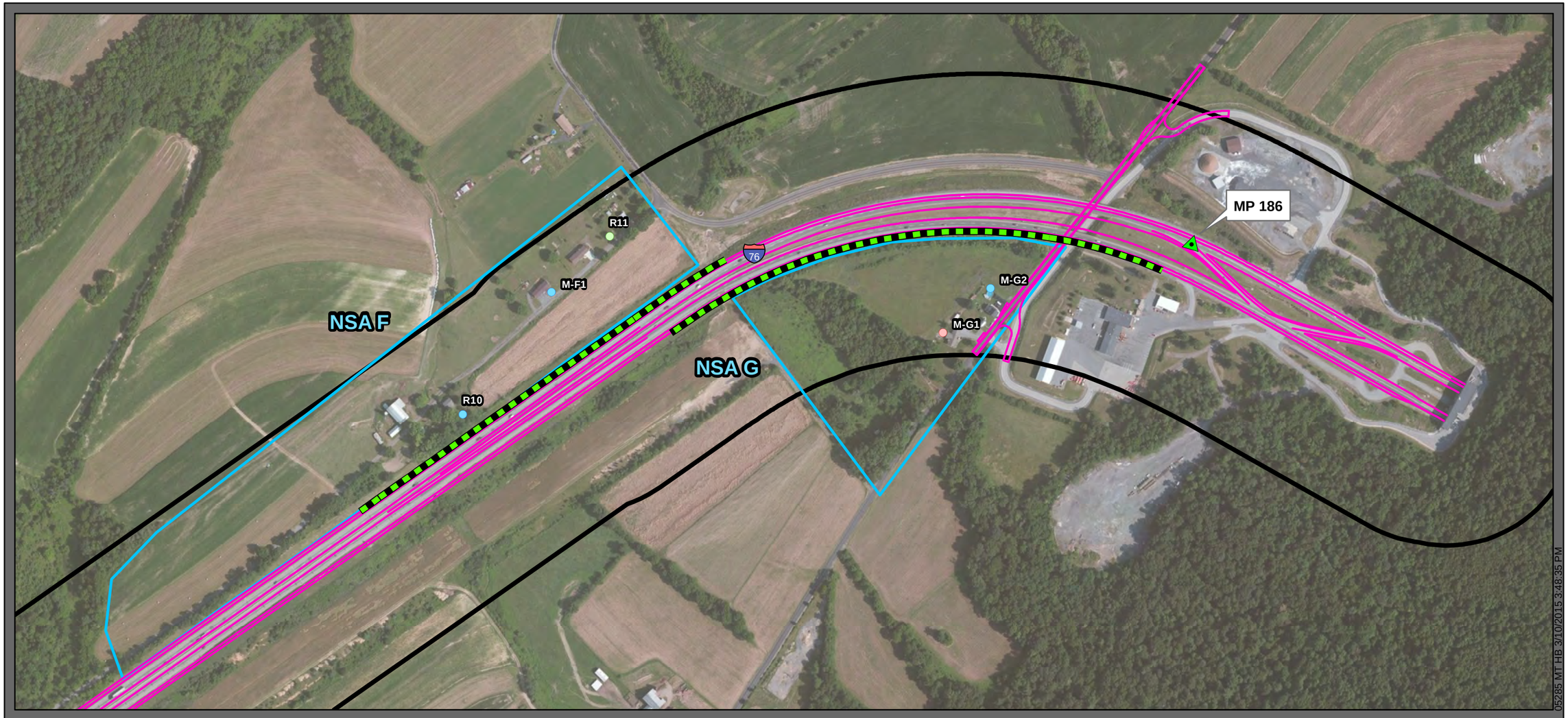
0 24 48 72 96 120 Meters

McCORMICK TAYLOR

Figure 2-7
NSA D - Homes Only
(Barrier Option 3)

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013



"R"01 = Monitoring/Modeling Sites, "M"-A1 = Modeling Only Sites

- Impacted/Benefited
- Impacted/Not Benefited
- Not Impacted/Not Benefited
- Not Impacted/Benefited
- Barrier Feasible but not Reasonable
- Proposed Improvements
- Noise Study Area
- Project Limit

0 200 400 800 Feet

0 48 96 144 192 240 Meters

N W E S

McCORMICK TAYLOR

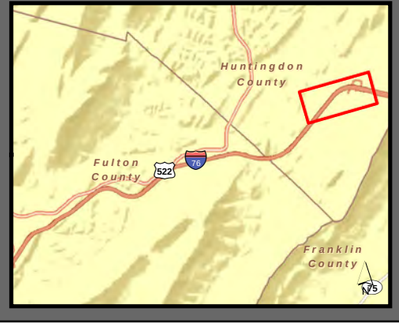


Figure 2-8
NSA F & NSA G
Future Conditions

Pennsylvania Turnpike Commission
Milepost 180 to Milepost 186 Reconstruction Project
Dublin Township, Fulton County, PA
and Dublin Township, Huntingdon County, PA

Aerial Source: Esri & DigitalGlobe, 2013

TABLE 1

PTC Milepost 180 to Milepost 186 Reconstruction Project

FHWA/PennDOT Noise Abatement Criteria
Hourly-A-Weighted Sound Levels in Decibels (dB(A))
for Various Land Use Activity Categories*

Activity Category	Activity L_{eq} (h)[1]	Evaluation Location	Description of Activity Category
A	57 (Exterior)	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)	Exterior	Residential.
C[2]	67 (Exterior)	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Exterior)	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, schools, and television studios.
E[2]	72 (Exterior)	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties of activities not included in A-D or F.
F	--	Exterior	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 Criteria.

* PennDOT has chosen to use Leq(h) on all of its transportation improvement projects.

Table 2
PTC Milepost 180 to Milepost 186 Reconstruction Project
Sound Level Summary

NSA	1 Receptor Site	2 Site Representation	3 Monitored Noise Level	4 Modeled Noise Level	5 Difference (Mon.- Mod.)	6 Existing Worst-Case (2014)	7 Criteria*	8 Future No-Build (2044)	9 Future Build (2044)
NSA A	R01	1 Residence	56.6	59.4	-2.8	60	66	62	65
	R02	2 Residences	62.4	65.1	-2.7	66	66	68	54
	M-A1	1 Residence	-	-	-	62	66	63	63
	M-A2	1 Residence	-	-	-	62	66	64	63
	M-A3	1 Residence	-	-	-	65	66	67	61
	M-A4	1 Residence	-	-	-	62	66	64	61
NSA B	R03	1 Residence	56.6	57.9	-1.3	58	66	60	58
	M-B1	1 Residence	-	-	-	58	66	60	66
	M-B2	1 Residences	-	-	-	58	66	60	62
	M-B3	1 Residence	-	-	-	60	66	63	64
NSA C	R04	1 Residence	58.9	60.9	-2.0	62	66	64	72
	R05	1 Residence	62.4	65.3	-2.9	65	66	67	66
	M-C1	1 Residence	-	-	-	59	66	60	60
	M-C2	2 Residences	-	-	-	64	66	65	65
	M-C3	1 Residence	-	-	-	75	66	77	78
	M-C4	1 Residence	-	-	-	65	66	67	67
	M-C5	1 Residence	-	-	-	62	66	64	64
	M-C6	1 Residence	-	-	-	65	66	67	66

Impacted Receptor

* Criteria based on levels "approaching" the absolute criteria or that meets the "substantial increase" criterion

Table 2 (Continued)
PTC Milepost 180 to Milepost 186 Reconstruction Project
Sound Level Summary

NSA	1 Receptor Site	2 Site Representation	3 Monitored Noise Level	4 Modeled Noise Level	5 Difference (Mon.-Mod.)	6 Existing Worst-Case (2014)	7 Criteria*	8 Future No-Build (2044)	9 Future Build (2044)
NSA D	R06	1 Residence	55.3	57.3	-2.0	60	66	61	62
	R07	1 Residence	62.7	63.8	-1.1	64	66	66	67
	R08	5 ERU's (campground)	63.2	64.0	-0.8	64	66	67	67
	M-D1	2 Residences	-	-	-	58	66	60	60
	M-D2	1 Residence	-	-	-	58	66	60	60
	M-D3	1 Residence	-	-	-	62	66	63	63
	M-D4	3 Residences	-	-	-	58	66	60	60
	M-D5	1 Residence	-	-	-	59	66	61	61
	M-D6	1 Residence	-	-	-	62	66	63	63
	M-D7	2 Residences	-	-	-	61	66	63	64
	M-D8	1 Residence	-	-	-	63	66	65	65
	M-D9	2 Residences	-	-	-	62	66	63	64
	M-D10	1 Residence	-	-	-	59	66	61	61
	M-D11	2 Residences	-	-	-	62	66	64	64
	M-D12	3 Residences	-	-	-	63	66	65	65
	M-D13	1 Residence	-	-	-	63	66	65	65
	M-D14	1 Residence	-	-	-	65	66	67	68
	M-D15	1 Residence	-	-	-	62	66	63	64
	M-D16	8 Campsites	-	-	-	65	66	67	68
	M-D17	6 Campsites	-	-	-	64	66	66	67
	M-D18	4 Campsites	-	-	-	63	66	65	67
	M-D19	4 Campsites	-	-	-	62	66	65	66
	M-D20	2 Campsites	-	-	-	62	66	64	65
	M-D21	2 Campsites	-	-	-	63	66	65	66
	M-D22	2 Campsites	-	-	-	63	66	66	67
	M-D23	2 Campsites	-	-	-	64	66	67	67
	M-D24	2 Campsites	-	-	-	65	66	67	68
	M-D25	1 Campsite	-	-	-	65	66	68	68
	M-D26	1 Campsite	-	-	-	64	66	66	67
	M-D27	1 Campsite	-	-	-	64	66	66	67
	M-D28	1 Campsite	-	-	-	63	66	65	67
	M-D29	1 Campsite	-	-	-	63	66	65	66
	M-D30	1 Campsite	-	-	-	62	66	65	66
	M-D31	1 Campsite	-	-	-	62	66	64	65
	M-D32	1 Campsite	-	-	-	62	66	64	65
	M-D33	1 Campsite	-	-	-	61	66	64	65
	M-D34	1 Campsite	-	-	-	61	66	63	64
	M-D35	1 Campsite	-	-	-	61	66	63	64
	M-D36	1 Campsite	-	-	-	60	66	63	64
	M-D37	1 Campsite	-	-	-	60	66	62	63
	M-D38	2 Campsites	-	-	-	60	66	62	63

Impacted Receptor

* Criteria based on levels "approaching" the absolute criteria or that meets the "substantial increase" criterion

Table 2 (Continued)
PTC Milepost 180 to Milepost 186 Reconstruction Project
Sound Level Summary

NSA	1 Receptor Site	2 Site Representation	3 Monitored Noise Level	4 Modeled Noise Level	5 Difference (Mon.-Mod.)	6 Existing Worst-Case (2014)	7 Criteria*	8 Future No-Build (2044)	9 Future Build (2044)
NSA E	R09	1 Residence	61.0	63.3	-2.3	64	66	66	66
	M-E1	1 Residence	-	-	-	62	66	64	65
	M-E2	1 Residence	-	-	-	66	66	68	68
	M-E3	1 Residence	-	-	-	60	66	62	62
	M-E4	1 Residence	-	-	-	61	66	63	61
NSA F	R10	1 Residence	63.7	66.5	-2.8	70	66	72	71
	R11	2 Residences	55.8	58.7	-2.9	61	66	63	63
	M-F1	1 Residence	-	-	-	64	66	66	66
NSA G	M-G1	2 Residences	-	-	-	62	66	64	66
	M-G2	1 Residence	-	-	-	67	66	69	69
NSA H	M-H1	0 Units	-	-	-	64	66	67	69
	M-H2	0 Units	-	-	-	66	66	68	71
	M-H3	0 Units	-	-	-	68	66	70	72
	M-H4	0 Units	-	-	-	69	66	72	73
	M-H5	0 Units	-	-	-	63	66	66	67
	M-H6	0 Units	-	-	-	64	66	67	68
	M-H7	0 Units	-	-	-	65	66	68	68

Impacted Receptor

* Criteria based on levels "approaching" the absolute criteria or that meets the "substantial increase" criterion

Table 3
Undeveloped Lands - Noise Level Summary
Distance from Edge of Shoulder (feet)*

Design Year (2044) Noise Level Summary

Receptor Site	Distance	Sound Level
Undeveloped Land 1	100	69
Undeveloped Land 2	150	67
Undeveloped Land 3	200	66
Undeveloped Land 4	250	64

* From edge of shoulder of new Interstate 76 westbound alignment.

Table 4

PTC Milepost 180 to Milepost 186 Reconstruction Project

Summary Noise Mitigation Evaluation

NSA	Receptor Site	Site Representation	Future Build Noise Level (2044)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
NSA B																	
B	M-B1	1 Residence	66	64	3	63	4	61	5	60	7	59	7	59	8	58	8
NSA C - C-1 Noise Barrier																	
C-1	R05	1 Residence	66	65	2	63	3	62	4	62	4	62	5	61	5	61	5
	M-C4	1 Residence	67	65	2	65	2	63	4	61	6	61	6	60	7	60	7
	M-C5	1 Residence	64	64	0	62	2	60	4	59	5	58	6	58	6	58	7
	M-C6	1 Residence	66	66	0	63	3	62	4	61	5	61	5	61	5	60	6
NSA C - C-2 Noise Barrier																	
C-2	M-C3	1 Residence	78	68	11	67	11	67	11	67	12	67	11	67	12	67	12
NSA C - C-3 Noise Barrier																	
C-3	R04	1 Residence	72	60	12	59	13	59	14	58	14	58	15	57	15	57	15
NSA D - Option 1 - Entire NSA																	
D Opt. 1	R07	1 Residence	67	61	6	60	7	59	7	59	8	58	9	57	9	57	10
	R08	5 ERU's (campground)	67	63	4	60	7	59	8	58	9	57	10	57	11	56	11
	M-D11	2 Residences	64	61	3	61	3	61	3	61	3	61	3	61	3	61	3
	M-D12	3 Residences	65	59	5	59	6	59	6	58	7	58	7	57	8	57	8
	M-D13	1 Residence	65	60	5	60	6	59	7	58	7	58	8	57	8	57	8
	M-D14	1 Residence	68	61	7	60	7	60	8	59	9	59	9	58	10	58	10
	M-D15	1 Residence	64	60	4	59	5	59	5	58	6	58	7	57	7	57	7

Impacted Receptor

Protected Residence(s)

Recommended Barrier Height

Table 4 (Continued)

PTC Milepost 180 to Milepost 186 Reconstruction Project
Summary Noise Mitigation Evaluation

NSA	Receptor Site	Site Representation	Future Build Noise Level (2044)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
				NSA D - Option 2 - Campground Only													
D Opt. 2	M-D16	8 Campsites	68	64	4	61	7	60	8	59	9	59	9	58	10	58	10
	M-D17	6 Campsites	67	64	3	61	6	60	8	59	9	58	9	57	10	57	10
	M-D18	4 Campsites	67	64	3	61	6	59	7	59	8	58	9	57	9	57	10
	M-D19	4 Campsites	66	63	3	61	5	59	7	58	8	58	8	57	9	57	9
	M-D20	2 Campsites	65	63	2	61	4	59	6	58	7	58	8	57	8	57	9
	M-D21	2 Campsites	66	63	3	61	5	60	6	59	7	58	8	58	8	58	8
	M-D22	2 Campsites	67	64	3	61	6	60	7	59	8	58	8	58	9	58	9
	M-D23	2 Campsites	67	64	4	61	6	60	7	59	8	59	9	58	9	58	10
	M-D24	2 Campsites	68	64	4	61	7	60	8	59	8	59	9	58	10	58	10
	M-D25	1 Campsite	68	63	5	61	7	60	8	59	9	59	9	58	10	58	10
	M-D26	1 Campsite	67	64	3	61	6	60	7	59	8	58	9	58	10	57	10
	M-D27	1 Campsite	67	64	3	61	6	60	7	59	8	58	9	57	9	57	10
	M-D28	1 Campsite	67	64	3	61	6	59	7	58	8	58	9	57	10	57	10
	M-D29	1 Campsite	66	63	3	61	5	59	7	58	8	58	9	57	9	57	10
	M-D30	1 Campsite	66	63	2	61	5	59	7	58	8	57	8	57	9	56	9
	M-D31	1 Campsite	65	63	2	61	5	59	7	58	8	57	8	57	9	56	9
	M-D32	1 Campsite	65	63	2	60	5	59	6	58	7	57	8	57	9	56	9
	M-D33	1 Campsite	65	63	2	61	4	59	6	58	7	57	8	56	8	56	9
	M-D34	1 Campsite	64	63	2	61	3	58	6	57	7	57	7	56	8	56	8
	M-D35	1 Campsite	64	62	2	61	3	58	6	57	7	57	7	56	8	56	8
	M-D36	1 Campsite	64	62	1	61	3	58	5	57	6	57	7	56	8	56	8
	M-D37	1 Campsite	63	62	1	61	3	58	5	57	6	57	7	56	7	56	8
	M-D38	2 Campsites	63	61	1	60	3	58	5	57	6	56	7	56	7	56	7

Impacted Receptor
Protected Residence(s)
Recommended Barrier Height

Table 4 (Continued)

PTC Milepost 180 to Milepost 186 Reconstruction Project
Summary Noise Mitigation Evaluation

NSA	Receptor Site	Site Representation	Future Build Noise Level (2044)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
NSA D - Option 3 - Homes Only																	
D Opt. 3	R07	1 Residence	67	62	5	61	6	61	6	61	6	60	7	60	7	60	7
	M-D12	3 Residence	65	61	3	61	4	61	4	61	4	61	4	61	4	61	4
	M-D13	1 Residence	65	61	5	60	5	60	6	59	6	59	6	59	7	59	7
	M-D14	1 Residence	68	61	7	60	7	60	8	59	8	59	9	59	9	58	9
	M-D15	1 Residence	64	60	5	59	5	59	6	58	6	58	6	58	6	58	7
NSA E																	
E	R09	1 Residence	66	61	5	60	6	59	7	59	7	58	8	58	8	57	9
	M-E1	1 Residence	65	61	4	60	5	60	5	59	5	59	5	59	6	59	6
	M-E2	1 Residence	68	62	6	60	8	60	8	59	9	58	10	58	10	57	11
	M-E3	1 Residence	62	58	4	57	6	56	6	55	7	55	7	54	8	54	8
	M-E4	1 Residence	61	57	4	56	5	56	6	55	6	55	6	54	7	54	7
NSA F																	
F	R10	1 Residence	71	69	3	65	7	63	8	62	9	61	10	61	10	60	11
	R11	2 Residences	63	62	1	61	2	60	3	60	3	60	4	59	4	59	4
	M-F1	1 Residence	66	64	2	63	3	62	5	60	6	59	7	58	8	58	8
NSA G																	
G	M-G1	2 Residences	66	65	0	65	1	65	1	64	1	63	2	62	4	60	5
	M-G2	1 Residence	69	68	2	67	2	67	3	66	3	63	7	62	8	61	9

Impacted Receptor
Protected Residence(s)
Recommended Barrier Height

Table 5

PTC Milepost 180 to Milepost 186 Reconstruction Project
Equivalent Residential Unit (ERU) Calculation (Campground)

Category C Exterior Use Represented by a Single Location on Property*

NSA D - Ye Olde Mill Campground

D	Benefited Campsites[1]	38
E	Average Use Factor [2]	0.57
F	Hours Available Per Day [3]	12
I	Person-Hours Per Day	260
J	Days Per Year Used [4]	245
K	Person-Hours Used Per Year= I X J	63,680

Equivalent Residential Unit (ERU) Value = Row K value divided by 13,578 [5]
5

Assumptions:

1 Total capacity on the grounds is 64**; however, only 38 campsites are benefitted (see Table 4).

2 The average days camped per week = 4 days (Thursday through Sunday) or 57% of each week.

3 The average daily use of each site would be approximately 12 hours.

4 From April 1 to December 1 = 245 days

5 13,578 represents the usage (person hours per year) of occupants of a single family residential dwelling unit in Pennsylvannia.

* Source: Appendix E - Table E3/Picnic Area; PennDot Publication No. 24

** Capacity of campground with 2015 expansion project included.

Table 6

PTC Milepost 180 to Milepost 186 Reconstruction Project
Noise Abatement Feasibility/Reasonableness Evaluation

NSA	Number of Benefited Land Uses	Combined Noise Barrier Length	Average Noise Barrier Height	Square Footage	Total sf. per benefit (max 2,000 sf.)	Feasible?	Reasonable?
B	1	758	12	9,096	9,096	Yes	No
C-1	3	1,364	14	19,096	6,365	Yes	No
C-2	1	299	8	2,389	2,389	Yes	No
C-3	1	431	8	3,447	3,447	Yes	No
D Option 1	12	3,106	10	31,060	2,588	Yes	No
D Option 2	5	1,086	10.25	11,132	2,226	Yes	No
D Option 3	4	1,450	8	11,600	2,900	Yes	No
E	5	2,077	10	20,770	4,154	Yes	No
F	2	1,620	12	19,440	9,720	Yes	No
G	1	1,887	16	30,192	30,192	Yes	No

Table 7
PTC Milepost 180 to Milepost 186 Reconstruction Project
Equivalent Residential Unit (ERU) Calculation (Cemetery)
Reasonableness Calculation for Single Receptors Representing Activities of Multiple Users*

Receptor Site	Capacity of Site[1]	Average Use Factor	Hours Available Per Day	Average Time Used By Each Persons Per Day (hrs.)	Persons Using Per Day	Person Hours Per Day	Days Per Year Used	Person Hours Used Per Year	Equivalent Residential Units (ERUs)**	Applied Value to Each Grid Point
CEM***	100					2	1	200	0.01	0.0021

* Calculations based of PennDOT Publication 24, Appendix E
*** Cemetery calculation based on Table E2, Appendix E, Cemetery (case 2). Totaling 7 grid points.

Appendix A

NOISE METER CALIBRATION CERTIFICATES

Certificate number: 2KNC0171
Issue date: 25/12/2012
(DD/MM/YYYY)

CALIBRATION CERTIFICATE

Customer name: Scantek, Inc.

Product type: SOUND CALIBRATOR
Model name: NC－74
Serial number: 35125820
Calibration date: 27/11/2012 (DD/MM/YYYY)
Ambient condition: Temperature 25 ℃ Relative Humidity 41 %

We hereby certify that the above product was tested and calibrated according to the prescribed RION procedures, and that it fulfills all specification requirements, as listed on the appended sheet. The measuring equipment and reference devices used for testing and calibrating this unit are managed under the RION traceability system and are traceable according to official Japanese standards and official standards of countries belonging to the International Committee of Weights and Measures.

RION primary standards

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone	4160	1843697	02/2014
(Electric)			
DC Reference standard	732B	6265015	09/2014
Standard resistor	742A-1	6480018	11/2013
Standard resistor	742A-10k	6390001	06/2014
Digital multimeter	3458A	2823A13632	03/2013
Universal counter	53132A	MY40005574	08/2013
Distortion Meter	VA-2230A	11076061	12/2012

RION working standards

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone	4160	CM-0335	10/2013
(Electric)			
Measuring amplifier	NA-42SK	NA-1063	12/2012

Manager, Quality Control Dept.

Certificate number: 3 K N L 0 0 1 5
Issue date: 29/01/2013
(DD/MM/YYYY)

CALIBRATION CERTIFICATE

Customer name: Scantek, Inc.

Product type: SOUND LEVEL METER
Model name: N L − 4 2
Serial number: 0 1 1 2 2 5 8 0
Calibration date: 08/01/2013 (DD/MM/YYYY)
Ambient condition : Temperature 25 ℃ Relative Humidity 38 %

We hereby certify that the above product was tested and calibrated according to the prescribed RION procedures, and that it fulfills all specification requirements, as listed on the appended sheet. The measuring equipment and reference devices used for testing and calibrating this unit are managed under the RION traceability system and are traceable according to official Japanese standards and official standards of countries belonging to the International Committee of Weights and Measures.

RION primary standards

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone	4160	1843697	02/2014
(Electric)			
DC Reference standard	732B	6265015	09/2014
Standard resistor	742A-1	6480018	11/2013
Standard resistor	742A-10k	6390001	06/2014
Digital multimeter	3458A	2823A13632	03/2013
Universal counter	53132A	3404A01375	03/2013

RION working standards

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone	UC-27	CM-0300	01/2013
(Electric)			
Measuring amplifier	XN-88	NA-1036	01/2013
Attenuator	TPA-302B	AT-1145	07/2013
Function generator	33120A	SY-1146	09/2013

M. Maruyama
Manager, Quality Control Dept.

Certificate number: 3 K N L 0 0 1 3
Issue date: 29/01/2013
(DD/MM/YYYY)

CALIBRATION CERTIFICATE

Customer name: Scantek, Inc.

Product type: SOUND LEVEL METER
Model name: N L − 4 2
Serial number: 0 1 2 2 2 8 7 5
Calibration date: 21/01/2013 (DD/MM/YYYY)
Ambient condition : Temperature 25 ℃ Relative Humidity 38 %

We hereby certify that the above product was tested and calibrated according to the prescribed RION procedures, and that it fulfills all specification requirements, as listed on the appended sheet. The measuring equipment and reference devices used for testing and calibrating this unit are managed under the RION traceability system and are traceable according to official Japanese standards and official standards of countries belonging to the International Committee of Weights and Measures.

Verification Standard for Acoustics

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone	4160	1843696	03/2013

RION primary standards

Model	Model number	Controlled number	Cal due date
(Electric)			
DC Reference standard	732B	6265015	09/2014
Standard resistor	742A-1	6480018	11/2013
Standard resistor	742A-10k	6390001	06/2014
Digital multimeter	3458A	2823A13632	03/2013
Universal counter	53132A	3404A01375	03/2013

RION working standards

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone for sound level meter	UC-33P	CM-0332	07/2013
Sound level meter	NA-42改	NA-1104	07/2013
(Electric)			
Sound level meter	NA-42改	NA-1104	07/2013
Attenuator	TPA-302B	AT-1134	10/2013
Function generator	33120A	SY-1152	03/2013

Y. Yamyama
Manager, Quality Control Dept.

Certificate number: 3 K N L 0 0 1 2
Issue date: 29/01/2013
(DD/MM/YYYY)

CALIBRATION CERTIFICATE

Customer name: Scantek, Inc.

Product type: SOUND LEVEL METER
Model name: N L－4 2
Serial number: 0 1 2 2 2 8 7 4
Calibration date: 21/01/2013 (DD/MM/YYYY)
Ambient condition : Temperature 25 ℃ Relative Humidity 38 %

We hereby certify that the above product was tested and calibrated according to the prescribed RION procedures, and that it fulfills all specification requirements, as listed on the appended sheet. The measuring equipment and reference devices used for testing and calibrating this unit are managed under the RION traceability system and are traceable according to official Japanese standards and official standards of countries belonging to the International Committee of Weights and Measures.

Verification Standard for Acoustics

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone	4160	1843696	03/2013

RION primary standards

Model	Model number	Controlled number	Cal due date
(Electric)			
DC Reference standard	732B	6265015	09/2014
Standard resistor	742A-1	6480018	11/2013
Standard resistor	742A-10k	6390001	06/2014
Digital multimeter	3458A	2823A13632	03/2013
Universal counter	53132A	3404A01375	03/2013

RION working standards

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone for sound level meter	UC-33P	CM-0332	07/2013
Sound level meter	NA-42改	NA-1104	07/2013
(Electric)			
Sound level meter	NA-42改	NA-1104	07/2013
Attenuator	TPA-302B	AT-1134	10/2013
Function generator	33120A	SY-1152	03/2013

Y. Yamamoto.
Manager, Quality Control Dept.

Certificate number: 3 K N L 0 0 1 1
Issue date: 29/01/2013
(DD/MM/YYYY)

CALIBRATION CERTIFICATE

Customer name: Scantek, Inc.

Product type: SOUND LEVEL METER
Model name: N L − 4 2
Serial number: 0 1 2 2 2 8 7 3
Calibration date: 21/01/2013 (DD/MM/YYYY)
Ambient condition : Temperature 25 ℃ Relative Humidity 38 %

We hereby certify that the above product was tested and calibrated according to the prescribed RION procedures, and that it fulfills all specification requirements, as listed on the appended sheet. The measuring equipment and reference devices used for testing and calibrating this unit are managed under the RION traceability system and are traceable according to official Japanese standards and official standards of countries belonging to the International Committee of Weights and Measures.

Verification Standard for Acoustics

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone	4160	1843696	03/2013

RION primary standards

Model	Model number	Controlled number	Cal due date
(Electric)			
DC Reference standard	732B	6265015	09/2014
Standard resistor	742A-1	6480018	11/2013
Standard resistor	742A-10k	6390001	06/2014
Digital multimeter	3458A	2823A13632	03/2013
Universal counter	53132A	3404A01375	03/2013

RION working standards

Model	Model number	Controlled number	Cal due date
(Acoustic)			
Condenser microphone for sound level meter	UC-33P	CM-0332	07/2013
Sound level meter	NA-42改	NA-1104	07/2013
(Electric)			
Sound level meter	NA-42改	NA-1104	07/2013
Attenuator	TPA-302B	AT-1134	10/2013
Function generator	33120A	SY-1152	03/2013

M. Yamuyama
Manager, Quality Control Dept.

Appendix B

NOISE MONITORING DATA FORMS

PTC Milepost 180 - 186 Reconstruction Project

Site # R01 **Description :** 31210 Great Cove Rd, Fort Littleton, PA 17223

Meter # 1

Done By: JCL

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	11:05 AM		
End Time	11:20 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB	/	/
Traffic Count:	464 / 468	0 / 0	0 / 0
Cars	284 / 292	/	/
MT	0 / 20	/	/
HT	180 / 156	/	/
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	8
Temp. (°F)	74
Humidity (%)	55

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View — NORTH

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 365 feet from I-76.

Off-Peak:

PM Peak

McCormick Taylor, Inc

PTC Milepost 180 - 186 Reconstruction Project

Site # R02 **Description :** 32136 Great Cove Rd, Fort Littleton, PA 17223

Meter # 4

Done By: JCL

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	11:05 AM		
End Time	11:20 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data Roadway	76		
Direction	WB / EB		
Traffic Count:	464 / 468	0 / 0	0 / 0
Cars	284 / 292		
MT	0 / 20		
HT	180 / 156		
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	8
Temp. (°F)	74
Humidity (%)	55

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 90 feet from I-76.

Off-Peak:

PM Peak

PTC Milepost 180 - 186 Reconstruction Project

Site # R03

Meter # 2

Done By:

Description : 221 Nine Mile Run Ln, Burnt Cabins, PA 17215

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	11:05 AM		
End Time	11:20 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB		
Traffic Count:	464 / 468	0 / 0	0 / 0
Cars	284 / 292		
MT	0 / 20		
HT	180 / 156		
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	8
Temp. (°F)	74
Humidity (%)	55

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View

NORTH

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 150 feet from I-76.

Off-Peak:

PM Peak

McCormick Taylor, Inc

PTC Milepost 180 - 186 Reconstruction Project

Site # R04 **Description :** 32780 Great Cove Rd, Burnt Cabins, PA 17215

Meter # 1

Done By: JCL

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	10:15 AM		
End Time	10:30 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76	522	
Direction	WB / EB	Total	
Traffic Count:	540 / 408	52	0 / 0
Cars	336 / 232	32	
MT	16 / 12	4	
HT	188 / 164	16	
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	7
Temp. (°F)	73
Humidity (%)	57

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 140 feet from I-76.

Off-Peak:

PM Peak

McCormick Taylor, Inc

PTC Milepost 180 - 186 Reconstruction Project

Site # R05 **Description :** 33316 Great Cove Rd, Burnt Cabins, PA 17215

Meter # 4

Done By: JCL

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	10:15 AM		
End Time	10:30 AM		
Duration	15 MIN	MIN	MIN
Leq.			

Traffic Data						
Roadway	76		522			
Direction	WB	EB	Total			
Traffic Count:	540	408	52	0	0	0
Cars	336	232	32			
MT	16	12	4			
HT	188	164	16			
Weather Conditions						

Atmospheric Data
Wind Speed (mph) 7
Temp. (°F) 73
Humidity (%) 57

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 140 feet from I-76.

Off-Peak:

PM Peak

McCormick Taylor, Inc

PTC Milepost 180 - 186 Reconstruction Project

Site # T-06 **Description :** 34014 Great Cove Rd, Burnt Cabins, PA 17215

Meter # 1

Done By: AD

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	9:30 AM		
End Time	9:45 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB		
Traffic Count:	580 / 328	0 / 0	0 / 0
Cars	384 / 156		
MT	12 / 12		
HT	184 / 160		
Weather Conditions			

Atmospheric Data
Wind Speed (mph) 5
Temp. (°F) 71
Humidity (%) 61

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View — NORTH

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 445 feet from I-76.

Off-Peak:

PM Peak

McCormick Taylor, Inc

PTC Milepost 180 - 186 Reconstruction Project

Site # R07 **Description :** 420 Grist Mill Rd, Burnt Cabins, PA 17215

Meter # 4

Done By: AD

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	9:30 AM		
End Time	9:45 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB		
Traffic Count:	580 / 328	0 / 0	0 / 0
Cars	384 / 156		
MT	12 / 12		
HT	184 / 160		
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	5
Temp. (°F)	71
Humidity (%)	61

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 170 feet from I-76.

Off-Peak:

PM Peak

PTC Milepost 180 - 186 Reconstruction Project

Site # R08 **Description :** 582 Grist Mill Rd, Burnt Cabins, PA 17215

Meter # 2

Done By: JCL

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	9:30 AM		
End Time	9:45 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB		
Traffic Count:	580 / 328	0 / 0	0 / 0
Cars	384 / 156		
MT	12 / 12		
HT	184 / 160		
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	5
Temp. (°F)	71
Humidity (%)	61

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 220 feet from I-76.

Off-Peak:

PM Peak

PTC Milepost 180 - 186 Reconstruction Project

Site # R09

Meter # 3

Done By: AD

Description : 11171 Fannettsburg Pike, Shade Gap, PA 17255

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	9:30 AM		
End Time	9:45 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB		
Traffic Count:	580 / 328	0 / 0	0 / 0
Cars	384 / 156		
MT	12 / 12		
HT	184 / 160		
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	5
Temp. (°F)	71
Humidity (%)	61

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Site Photo

Plan View

NORTH

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 120 feet from I-76.

Off-Peak:

PM Peak

McCormick Taylor, Inc

PTC Milepost 180 - 186 Reconstruction Project

Site # 10 **Description :** 24553 Odonnell Rd, Burnt Cabins, PA 17215

Meter # 3

Done By: JCL

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	8:40 AM		
End Time	8:55 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB		
Traffic Count:	520 / 528	0 / 0	0 / 0
Cars	296 / 312		
MT	24 / 24		
HT	200 / 192		
Weather Conditions			

Atmospheric Data
Wind Speed (mph) 4
Temp. (°F) 69
Humidity (%) 65

Site Data: Site Surface (alpha): _____ Shielding Factor : _____ Pavement Type : _____

Plan View

Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 90 feet from I-76.

Off-Peak:

PM Peak

McCormick Taylor, Inc

PTC Milepost 180 - 186 Reconstruction Project

Site # 11 **Description :** 24454 Odonnell Rd, Burnt Cabins, PA 17215

Meter # 1

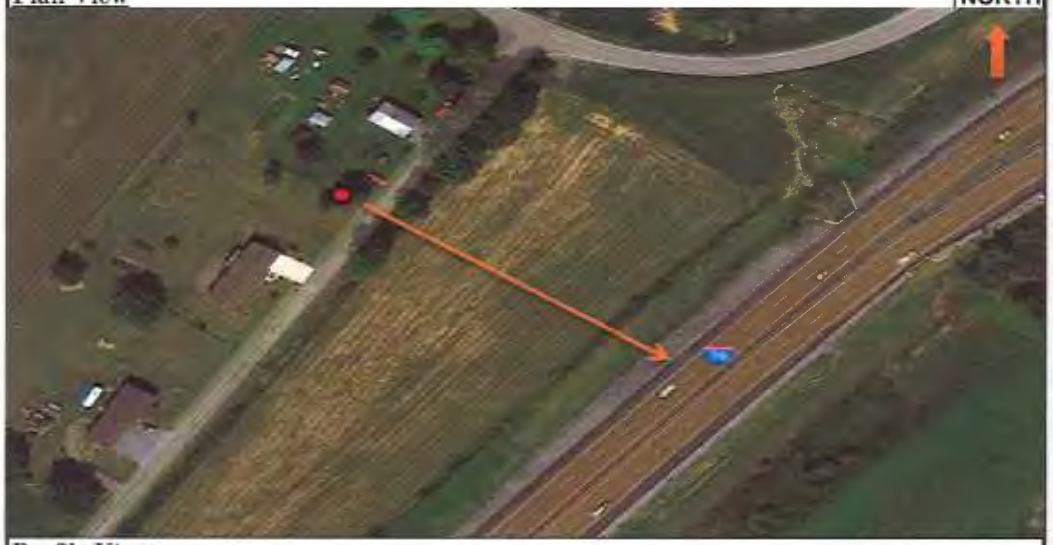
Done By: AD

Monitoring Data:	AM Peak	Off-Peak	PM Peak
Date	6/4/14		
Start Time	11:05 AM		
End Time	11:20 AM		
Duration	15 MIN	MIN	MIN
Leq.			
Traffic Data			
Roadway	76		
Direction	WB / EB		
Traffic Count:	520 / 528	0 / 0	0 / 0
Cars	296 / 312		
MT	24 / 24		
HT	200 / 192		
Weather Conditions			

Atmospheric Data	
Wind Speed (mph)	4
Temp. (°F)	69
Humidity (%)	65

Site Data: Site Surface (alpha): ____ Shielding Factor : ____ Pavement Type : ____

Plan View



Profile View:

Monitoring Notes

AM Peak: Noise meter is approimately 330 feet from I-76.

Off-Peak:

PM Peak

Appendix C

NOISE MONITORING DATA (2014)

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R01																56.6
1	6/4/2014	11:05:00 00d 00:10.0	53.3	63.3	56.3	51.9	-.-	56.1	55.9	53.3	52.2	52.1	----	-----	213796.2	
2	6/4/2014	11:05:10 00d 00:10.0	52.5	62.5	53.4	51.5	-.-	53.2	53	52.1	51.6	51.6	----	-----	177827.9	
3	6/4/2014	11:05:20 00d 00:10.0	52.2	62.2	53.4	51	-.-	53.1	53	52.4	51.5	51.1	----	-----	165958.7	
4	6/4/2014	11:05:30 00d 00:10.0	60.6	70.6	66	50.9	-.-	65.5	64.4	57.1	52	51.6	----	-----	1148153.6	
5	6/4/2014	11:05:40 00d 00:10.0	62.3	72.3	63.6	60.1	-.-	63.4	63.4	62.6	60.6	60.2	----	-----	1698243.7	
6	6/4/2014	11:05:50 00d 00:10.0	58.9	68.9	62.5	58	-.-	62.2	61.9	58.6	58.1	58.1	----	-----	776247.1	
7	6/4/2014	11:06:00 00d 00:10.0	56.9	66.9	59.2	55.6	-.-	58.9	58.5	57	56.5	56.2	----	-----	489778.8	
8	6/4/2014	11:06:10 00d 00:10.0	55.7	65.7	57.8	52	-.-	57.5	57.4	55.7	52.3	52.1	----	-----	371535.2	
9	6/4/2014	11:06:20 00d 00:10.0	51.2	61.2	57	48.5	-.-	56.1	55.5	51.3	49.4	49.1	----	-----	131825.7	
10	6/4/2014	11:06:30 00d 00:10.0	47.4	57.4	48.9	46.6	-.-	48.8	48.2	47.4	46.9	46.8	----	-----	54954.1	
11	6/4/2014	11:06:40 00d 00:10.0	49.7	59.7	51.2	47	-.-	51	50.9	49.8	47.2	47.2	----	-----	93325.4	
12	6/4/2014	11:06:50 00d 00:10.0	47.6	57.6	49.7	46.3	-.-	49.3	48.7	47.5	46.8	46.5	----	-----	57544.0	
13	6/4/2014	11:07:00 00d 00:10.0	51.7	61.7	53.1	48.1	-.-	53	53	51.9	48.5	48.3	----	-----	147910.8	
14	6/4/2014	11:07:10 00d 00:10.0	51.6	61.6	52.3	49.7	-.-	52.2	52.1	51.7	50	49.8	----	-----	144544.0	
15	6/4/2014	11:07:20 00d 00:10.0	53.6	63.6	55.3	51.6	-.-	55.1	54.6	53	52	51.8	----	-----	229086.8	
16	6/4/2014	11:07:30 00d 00:10.0	50.6	60.6	55.1	46.8	-.-	54.9	54.8	50	47.3	47.1	----	-----	114815.4	
17	6/4/2014	11:07:40 00d 00:10.0	50.4	60.4	53	46.9	-.-	52.9	52.8	49	47	46.9	----	-----	109647.8	
18	6/4/2014	11:07:50 00d 00:10.0	51.8	61.8	53.1	50.7	-.-	52.9	52.8	52.2	50.9	50.8	----	-----	151356.1	
19	6/4/2014	11:08:00 00d 00:10.0	58	68	59.7	51.5	-.-	59.7	59.4	58	53.3	52.6	----	-----	630957.3	
20	6/4/2014	11:08:10 00d 00:10.0	59.3	69.3	60.9	58	-.-	60.6	59.7	58.9	58.3	58.1	----	-----	851138.0	
21	6/4/2014	11:08:20 00d 00:10.0	60.8	70.8	62.8	58.7	-.-	62.6	62.6	60.8	58.9	58.8	----	-----	1202264.4	
22	6/4/2014	11:08:30 00d 00:10.0	59.5	69.5	60.3	58.8	-.-	60.2	60.1	59.5	59	59	----	-----	891250.9	
23	6/4/2014	11:08:40 00d 00:10.0	59.1	69.1	60.8	58	-.-	60.5	60.1	58.8	58.1	58.1	----	-----	812830.5	
24	6/4/2014	11:08:50 00d 00:10.0	59.8	69.8	61.5	58	-.-	61.1	60.9	60	58.8	58.2	----	-----	954992.6	
25	6/4/2014	11:09:00 00d 00:10.0	60.7	70.7	62.6	58.5	-.-	62.5	61.7	60.4	58.9	58.6	----	-----	1174897.6	
26	6/4/2014	11:09:10 00d 00:10.0	57.2	67.2	60.5	53.3	-.-	60.3	60.1	56.9	53.8	53.5	----	-----	524807.5	
27	6/4/2014	11:09:20 00d 00:10.0	52.7	62.7	53.4	52	-.-	53.3	53.2	52.7	52.3	52.1	----	-----	186208.7	
28	6/4/2014	11:09:30 00d 00:10.0	50.8	60.8	53.3	48.7	-.-	53.2	53.1	50.7	49	48.8	----	-----	120226.4	
29	6/4/2014	11:09:40 00d 00:10.0	47.7	57.7	49.3	46.5	-.-	49.1	49	47.5	46.8	46.6	----	-----	58884.4	
30	6/4/2014	11:09:50 00d 00:10.0	49.3	59.3	51.3	47.4	-.-	50.8	50.3	48.2	47.6	47.5	----	-----	85113.8	
31	6/4/2014	11:10:00 00d 00:10.0	55.3	65.3	57.7	51.3	-.-	57.4	57.2	55.3	52.5	52.2	----	-----	338844.2	
32	6/4/2014	11:10:10 00d 00:10.0	50.5	60.5	53.4	48.6	-.-	53.4	52.2	49.3	49	48.9	----	-----	112201.8	
33	6/4/2014	11:10:20 00d 00:10.0	51.7	61.7	54.2	48.7	-.-	54	53.9	52	49.1	48.8	----	-----	147910.8	
34	6/4/2014	11:10:30 00d 00:10.0	52.9	62.9	55.5	49.3	-.-	55.4	55.2	51	49.6	49.5	----	-----	194984.5	
35	6/4/2014	11:10:40 00d 00:10.0	53.8	63.8	57.5	49.4	-.-	57.3	57.1	53.5	49.7	49.6	----	-----	239883.3	
36	6/4/2014	11:10:50 00d 00:10.0	50.1	60.1	50.9	49.3	-.-	50.8	50.7	49.9	49.5	49.4	----	-----	102329.3	
37	6/4/2014	11:11:00 00d 00:10.0	52.1	62.1	54	49.4	-.-	53.8	53.5	52	49.5	49.4	----	-----	162181.0	
38	6/4/2014	11:11:10 00d 00:10.0	49.4	59.4	51.7	48.5	-.-	51.3	50.8	49.5	48.6	48.5	----	-----	87096.4	
39	6/4/2014	11:11:20 00d 00:10.0	52.3	62.3	54.6	49.1	-.-	54.3	53.8	51.6	49.2	49.2	----	-----	169824.4	
40	6/4/2014	11:11:30 00d 00:10.0	54.9	64.9	55.6	53.8	-.-	55.6	55.5	54.9	54.2	53.8	----	-----	309029.5	
41	6/4/2014	11:11:40 00d 00:10.0	51.7	61.7	54.4	50.5	-.-	54.4	54.1	51.1	50.7	50.7	----	-----	147910.8	
42	6/4/2014	11:11:50 00d 00:10.0	54	64	56.6	50.9	-.-	56.4	55.9	52.9	51.1	51	----	-----	251188.6	
43	6/4/2014	11:12:00 00d 00:10.0	58.3	68.3	59.2	56.5	-.-	59.1	59.1	58.2	57.1	56.9	----	-----	676083.0	
44	6/4/2014	11:12:10 00d 00:10.0	50.7	60.7	57	47.8	-.-	56.5	55.8	50.4	48	48	----	-----	117489.8	
45	6/4/2014	11:12:20 00d 00:10.0	51.5	61.5	53.6	48.2	-.-	53.5	53	51.2	48.5	48.4	----	-----	141253.8	
46	6/4/2014	11:12:30 00d 00:10.0	55.9	65.9	58.4	52.6	-.-	58.2	57.2	54.3	52.7	52.7	----	-----	389045.1	
47	6/4/2014	11:12:40 00d 00:10.0	55.3	65.3	58.5	53.5	-.-	58.3	58	55.2	53.7	53.6	----	-----	338844.2	
48	6/4/2014	11:12:50 00d 00:10.0	55.4	65.4	56.3	53.9	-.-	56.2	56.1	55.6	54.4	54.1	----	-----	346736.9	
49	6/4/2014	11:13:00 00d 00:10.0	53.8	63.8	56	52.9	-.-	55.9	55.4	53.4	53	53	----	-----	239883.3	
50	6/4/2014	11:13:10 00d 00:10.0	60.7	70.7	63.5	53	-.-	63.1	62.8	60.4	54.3	53.6	----	-----	1174897.6	
51	6/4/2014	11:13:20 00d 00:10.0	58.9	68.9	62.8	55.9	-.-	62.7	62	59.6	57.1	56.4	----	-----	776247.1	
52	6/4/2014	11:13:30 00d 00:10.0	56.5	66.5	57.6	54.9	-.-	57.5	57.1	56.5	55.1	55	----	-----	446683.6	
53	6/4/2014	11:13:40 00d 00:10.0	57.6	67.6	58.9	55.3	-.-	58.8	58.7	58.1	55.9	55.7	----	-----	575439.9	
54	6/4/2014	11:13:50 00d 00:10.0	52.3	62.3	55.4	51	-.-	54.7	54.3	52.2	51.1	51	----	-----	169824.4	
55	6/4/2014	11:14:00 00d 00:10.0	54.3	64.3	56.2	51.7	-.-	56.1	55.9	53.1	52.5	51.9	----	-----	269153.5	
56	6/4/2014	11:14:10 00d 00:10.0	55.6	65.6	57	54	-.-	56.9	56.9	55.6	54.3	54.2	----	-----	363078.1	
57	6/4/2014	11:14:20 00d 00:10.0	56.9	66.9	58.6	54.5	-.-	58.4	58.3	56.6	54.8	54.7	----	-----	489778.8	
58	6/4/2014	11:14:30 00d 00:10.0	58.9	68.9	60.5	55.8	-.-	60.2	60.1	58.9	56.8	56.1	----	-----	776247.1	
59	6/4/2014	11:14:40 00d 00:10.0	54.8	64.8	56.3	53.1	-.-	56	55.8	55.2	54.2	53.5	----	-----	301995.2	
60	6/4/2014	11:14:50 00d 00:10.0	54	64	54.8	53.1	-.-	54.7	54.6	53.5	53.3	53.3	----	-----	251188.6	
61	6/4/2014	11:15:00 00d 00:10.0	57.6	67.6	60.2	54.3	-.-	60	59.5	57	55.3	54.4	----	-----	575439.9	
62	6/4/2014	11:15:10 00d 00:10.0	60.5	70.5	63.1	56.3	-.-	62.8	62.4	60.9	56.4	56.4	----	-----	1122018.5	
63	6/4/2014	11:15:20 00d 00:10.0	60.2	70.2	61.7	59.3	-.-	61.4	61.4	60.3	59.5	59.4	----	-----	1047128.5	
64	6/4/2014	11:15:30 00d 00:10.0	60.6	70.6	61.4	59.4	-.-	61.4	61.3	60.2	59.7	59.6	----	-----	1148153.6	
65	6/4/2014	11:15:40 00d 00:10.0	59	69	62.1	55.6	-.-	62	61.9	58.8	55.8	55.7	----	-----	794328.2	
66	6/4/2014	11:15:50 00d 00:10.0	53.8	63.8	56.3	51.7	-.-	56	55.6	53.9	52	51.8	----	-----	239883.3	
67	6/4/2014	11:16:00 00d 00:10.0	52.7	62.7	53.6	51.6	-.-	53.5	53.4	52.6	52.1	51.9	----	-----	186208.7	
68	6/4/2014	11:16:10 00d 00:10.0	51.9	61.9	54.1	49.7	-.-	53.9	53.3	51.6	50	49.8	----	-----	154881.7	
69	6/4/2014	11:16:20 00d 00:10.0	55.2	65.2	55.9	53.7	-.-	55.8	55.7	55.1	53.9	53.9	----	-----	331131.1	
70	6/4/2014	11:16:30 00d 00:10.0	55.2	65.2	56.8	51.7	-.-	56.7	56.6	55.9	52.8	52.2	----	-----	331131.1	
71	6/4/2014	11:16:40 00d 00:10.0	51	61	51.7	50.5	-.-	51.4	51.3	51	50.7	50.6	----	-----	125892.5	
72	6/4/2014	11:16:50 00d 00:10.0	54.5	64.5	56.5	51.1	-.-	56.2	55.3	53.9	51.8	51.6	----	-----	281838.3	
73	6/4/2014	11:17:00 00d 00:10.0	58.8	68.8	61.7	56.3	-.-	61.1	60.9	58.1	56.8	56.8	----	-----	758577.6	

74	6/4/2014	11:17:10	00d	00:10.0	51.3	61.3	56.3	49.7	-.-	54.8	53.9	51.5	50.2	49.9	----	-----	134896.3
75	6/4/2014	11:17:20	00d	00:10.0	55.2	65.2	56.2	52.6	-.-	56.1	56	55.4	53.1	53	----	-----	331131.1
76	6/4/2014	11:17:30	00d	00:10.0	55.2	65.2	58.1	53.1	-.-	58	57.1	53.9	53.5	53.4	----	-----	331131.1
77	6/4/2014	11:17:40	00d	00:10.0	59.9	69.9	63.8	55.8	-.-	63.4	62.8	58.5	56.3	56.1	----	-----	977237.2
78	6/4/2014	11:17:50	00d	00:10.0	54.7	64.7	56.1	52.5	-.-	56.1	55.9	55.3	53.5	53	----	-----	295120.9
79	6/4/2014	11:18:00	00d	00:10.0	54.8	64.8	56.8	51.9	-.-	56.7	56.5	54.7	52.1	52	----	-----	301995.2
80	6/4/2014	11:18:10	00d	00:10.0	50.6	60.6	53.8	48.8	-.-	53.3	53.2	50.5	49.1	48.9	----	-----	114815.4
81	6/4/2014	11:18:20	00d	00:10.0	53.8	63.8	55.5	48.7	-.-	55.3	55.1	54	49.2	49	----	-----	239883.3
82	6/4/2014	11:18:30	00d	00:10.0	55.6	65.6	56.7	54.7	-.-	56.6	56.3	55.8	54.8	54.7	----	-----	363078.1
83	6/4/2014	11:18:40	00d	00:10.0	57	67	57.7	55.2	-.-	57.6	57.6	57.1	55.8	55.4	----	-----	501187.2
84	6/4/2014	11:18:50	00d	00:10.0	55.2	65.2	56.5	53.9	-.-	56.4	56.3	55.4	54	54	----	-----	331131.1
85	6/4/2014	11:19:00	00d	00:10.0	54.5	64.5	55.8	52.9	-.-	55.7	55.6	54.1	53.3	53.1	----	-----	281838.3
86	6/4/2014	11:19:10	00d	00:10.0	57.1	67.1	57.7	55.8	-.-	57.5	57.5	57.1	56.7	56.5	----	-----	512861.4
87	6/4/2014	11:19:20	00d	00:10.0	65.1	75.1	69.5	56.7	-.-	69.2	68.9	64.2	58.2	57.2	----	-----	3235936.6
88	6/4/2014	11:19:30	00d	00:10.0	61.1	71.1	62.4	58.8	-.-	62.3	62.2	61.1	59	58.9	----	-----	1288249.6
89	6/4/2014	11:19:40	00d	00:10.0	57.4	67.4	60.8	54.8	-.-	60.7	60.6	57	55.7	55.4	----	-----	549540.9
90	6/4/2014	11:19:50	00d	00:10.0	55.3	65.3	57.6	52.6	-.-	57.5	57.4	54.2	52.7	52.6	----	-----	338844.2

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Lv	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R02																62.4
1	6/4/2014	11:05:00 00d 00:10.0	53.8	63.8	56.6	51.2	-.-	56.3	55.6	51.7	51.3	51.3	----	-----	239883.3	
2	6/4/2014	11:05:10 00d 00:10.0	62	72	64.9	56.6	-.-	64.8	64.2	61.1	57.3	57.2	----	-----	1584893.2	
3	6/4/2014	11:05:20 00d 00:10.0	61.7	71.7	64.7	58.9	-.-	64.3	64.2	61	59.1	59	----	-----	1479108.4	
4	6/4/2014	11:05:30 00d 00:10.0	60.1	70.1	64.3	57.8	-.-	63.8	63	60.7	58.1	58	----	-----	1023293.0	
5	6/4/2014	11:05:40 00d 00:10.0	56.9	66.9	59.8	55.3	-.-	59.6	59.3	56.3	55.5	55.4	----	-----	489778.8	
6	6/4/2014	11:05:50 00d 00:10.0	58.4	68.4	59.1	56.8	-.-	59.1	59	58.5	57.2	57.1	----	-----	691831.0	
7	6/4/2014	11:06:00 00d 00:10.0	60.1	70.1	61.6	57.8	-.-	61.3	61.2	59.5	58	57.9	----	-----	1023293.0	
8	6/4/2014	11:06:10 00d 00:10.0	60.9	70.9	62	59.9	-.-	61.9	61.9	61	60.3	60.2	----	-----	1230268.8	
9	6/4/2014	11:06:20 00d 00:10.0	57.8	67.8	59.9	55.4	-.-	59.4	59	58.1	55.7	55.5	----	-----	602559.6	
10	6/4/2014	11:06:30 00d 00:10.0	58.8	68.8	61.6	54.8	-.-	61.2	60.7	58.1	55.4	55.1	----	-----	758577.6	
11	6/4/2014	11:06:40 00d 00:10.0	60.4	70.4	62.1	58.3	-.-	62	61.6	60.3	58.5	58.4	----	-----	1096478.2	
12	6/4/2014	11:06:50 00d 00:10.0	58.8	68.8	61.5	57	-.-	60.6	60.2	58.3	57.1	57.1	----	-----	758577.6	
13	6/4/2014	11:07:00 00d 00:10.0	62.4	72.4	66.6	58.2	-.-	66.4	66.1	60.5	58.4	58.3	----	-----	1737800.8	
14	6/4/2014	11:07:10 00d 00:10.0	62.1	72.1	66.4	58.8	-.-	65.7	64	59.9	59	58.9	----	-----	1621810.1	
15	6/4/2014	11:07:20 00d 00:10.0	63.1	73.1	66.9	60.9	-.-	66.7	66.5	63.3	61.2	61.1	----	-----	2041737.9	
16	6/4/2014	11:07:30 00d 00:10.0	64.1	74.1	66.2	61.8	-.-	66.1	65.9	63.5	62.5	62.3	----	-----	2570395.8	
17	6/4/2014	11:07:40 00d 00:10.0	65.8	75.8	67.4	62.2	-.-	67.3	67.2	65.8	62.3	62.3	----	-----	3801894.0	
18	6/4/2014	11:07:50 00d 00:10.0	66.5	76.5	68.1	64.3	-.-	68	67.8	66.2	64.5	64.5	----	-----	4466835.9	
19	6/4/2014	11:08:00 00d 00:10.0	67	77	68.9	65.9	-.-	68.9	68.6	66.3	66.1	66	----	-----	5011872.3	
20	6/4/2014	11:08:10 00d 00:10.0	63.3	73.3	66	61.7	-.-	65.7	65.1	63.5	61.9	61.8	----	-----	2137962.1	
21	6/4/2014	11:08:20 00d 00:10.0	65.6	75.6	68.3	61.9	-.-	68	67.5	64.8	62.5	62.4	----	-----	3630780.5	
22	6/4/2014	11:08:30 00d 00:10.0	64.1	74.1	66.1	62.5	-.-	65.6	65.5	63.9	62.7	62.6	----	-----	2570395.8	
23	6/4/2014	11:08:40 00d 00:10.0	62.7	72.7	66.4	60.2	-.-	66.3	66.1	62.4	60.6	60.3	----	-----	1862087.1	
24	6/4/2014	11:08:50 00d 00:10.0	58.5	68.5	62.2	55.6	-.-	62.1	61.4	58.6	56.1	55.7	----	-----	707945.8	
25	6/4/2014	11:09:00 00d 00:10.0	53.1	63.1	58.7	51.7	-.-	58.4	57.3	53.1	51.8	51.8	----	-----	204173.8	
26	6/4/2014	11:09:10 00d 00:10.0	61.4	71.4	65.1	51.8	-.-	65	64.6	58.1	51.9	51.9	----	-----	1380384.3	
27	6/4/2014	11:09:20 00d 00:10.0	62.2	72.2	63.1	61.3	-.-	63	63	62.2	61.8	61.8	----	-----	1659586.9	
28	6/4/2014	11:09:30 00d 00:10.0	59.9	69.9	61.9	57.9	-.-	61.9	61.7	59.9	59	58.9	----	-----	977237.2	
29	6/4/2014	11:09:40 00d 00:10.0	63.8	73.8	69.6	56.9	-.-	69.3	68.8	57.5	57	56.9	----	-----	2398832.9	
30	6/4/2014	11:09:50 00d 00:10.0	61.8	71.8	68	61	-.-	66.9	65.5	61.9	61.2	61.1	----	-----	1513561.2	
31	6/4/2014	11:10:00 00d 00:10.0	61.1	71.1	64.2	58.3	-.-	64.2	63.9	60.6	58.9	58.4	----	-----	1288249.6	
32	6/4/2014	11:10:10 00d 00:10.0	54.5	64.5	58.5	50.5	-.-	57.8	57.3	55.1	50.7	50.6	----	-----	281838.3	
33	6/4/2014	11:10:20 00d 00:10.0	55.8	65.8	59.8	49.8	-.-	59.8	59.6	53.7	50.3	50	----	-----	380189.4	
34	6/4/2014	11:10:30 00d 00:10.0	58.2	68.2	59.6	56	-.-	59.5	59.4	58.1	56.2	56.1	----	-----	660693.4	
35	6/4/2014	11:10:40 00d 00:10.0	61.4	71.4	65	56.6	-.-	64.9	64.7	59.1	56.7	56.7	----	-----	1380384.3	
36	6/4/2014	11:10:50 00d 00:10.0	60.3	70.3	64.2	57.9	-.-	63.3	62.5	61.5	58.2	58	----	-----	1071519.3	
37	6/4/2014	11:11:00 00d 00:10.0	61.9	71.9	65.6	57.9	-.-	65.1	63.9	60.5	58.4	58.1	----	-----	1548816.6	
38	6/4/2014	11:11:10 00d 00:10.0	65.7	75.7	67.5	62.9	-.-	67.4	67.3	65.8	63.2	63	----	-----	3715352.3	
39	6/4/2014	11:11:20 00d 00:10.0	63.2	73.2	65.4	62.2	-.-	64.8	64.1	63.5	63	62.6	----	-----	2089296.1	
40	6/4/2014	11:11:30 00d 00:10.0	59	69	62.2	57.7	-.-	61.8	61.4	58.9	57.9	57.8	----	-----	794328.2	
41	6/4/2014	11:11:40 00d 00:10.0	62	72	65.4	57.8	-.-	65.4	65.2	59.1	57.9	57.9	----	-----	1584893.2	
42	6/4/2014	11:11:50 00d 00:10.0	61.5	71.5	63.7	59.9	-.-	63.3	62.9	61.2	60	59.9	----	-----	1412537.5	
43	6/4/2014	11:12:00 00d 00:10.0	61.2	71.2	64.1	60.1	-.-	63.9	63.7	61.2	60.2	60.2	----	-----	1318256.7	
44	6/4/2014	11:12:10 00d 00:10.0	63	73	66.6	60.5	-.-	65.7	64.4	61.2	60.6	60.6	----	-----	1995262.3	
45	6/4/2014	11:12:20 00d 00:10.0	67.3	77.3	69.7	63.8	-.-	69.6	69.4	67.4	64	63.9	----	-----	5370318.0	
46	6/4/2014	11:12:30 00d 00:10.0	65.8	75.8	68.4	63.7	-.-	67.9	66.9	64.7	63.8	63.8	----	-----	3801894.0	
47	6/4/2014	11:12:40 00d 00:10.0	66.1	76.1	68.5	65	-.-	68.2	67.5	66.4	65.2	65	----	-----	4073802.8	
48	6/4/2014	11:12:50 00d 00:10.0	65.8	75.8	68.9	61.9	-.-	68.8	68.5	65.5	63	62.5	----	-----	3801894.0	
49	6/4/2014	11:13:00 00d 00:10.0	59.9	69.9	61.9	58.8	-.-	61.3	61.1	59.9	59	59	----	-----	977237.2	
50	6/4/2014	11:13:10 00d 00:10.0	61.1	71.1	63.3	58.5	-.-	62.3	61.5	60.9	58.8	58.7	----	-----	1288249.6	
51	6/4/2014	11:13:20 00d 00:10.0	63.3	73.3	65.4	60.3	-.-	65	64.7	62.8	60.8	60.5	----	-----	2137962.1	
52	6/4/2014	11:13:30 00d 00:10.0	61.8	71.8	65.4	60.3	-.-	64.9	64	61.6	60.5	60.4	----	-----	1513561.2	
53	6/4/2014	11:13:40 00d 00:10.0	66.5	76.5	69.2	63.4	-.-	69	68.5	65.9	63.8	63.5	----	-----	4466835.9	
54	6/4/2014	11:13:50 00d 00:10.0	64.5	74.5	66.8	62.6	-.-	66.7	66.6	64.7	62.8	62.7	----	-----	2818382.9	
55	6/4/2014	11:14:00 00d 00:10.0	63.6	73.6	65	62	-.-	64.8	64.7	63.1	62.2	62	----	-----	2290867.7	
56	6/4/2014	11:14:10 00d 00:10.0	64.1	74.1	66.5	59.8	-.-	66.4	66.3	64.4	60.8	60.2	----	-----	2570395.8	
57	6/4/2014	11:14:20 00d 00:10.0	56.5	66.5	59.8	54.8	-.-	59.2	58.9	56.9	54.9	54.9	----	-----	446683.6	
58	6/4/2014	11:14:30 00d 00:10.0	57.9	67.9	58.7	54.9	-.-	58.6	58.6	58	56.2	55.5	----	-----	616595.0	
59	6/4/2014	11:14:40 00d 00:10.0	58.9	68.9	60.7	56	-.-	60.3	59.7	58.7	56.3	56.2	----	-----	776247.1	
60	6/4/2014	11:14:50 00d 00:10.0	66.5	76.5	68.8	60.7	-.-	68.6	68.4	66	62.2	61.4	----	-----	4466835.9	
61	6/4/2014	11:15:00 00d 00:10.0	64.3	74.3	66.7	61.9	-.-	66.6	66.4	63.9	63.1	62.5	----	-----	2691534.8	
62	6/4/2014	11:15:10 00d 00:10.0	63.1	73.1	65	61.6	-.-	64.9	64.6	62.7	61.7	61.7	----	-----	2041737.9	
63	6/4/2014	11:15:20 00d 00:10.0	60	70	62.6	56.1	-.-	62.5	62.4	60.2	57.1	56.5	----	-----	1000000.0	
64	6/4/2014	11:15:30 00d 00:10.0	51.7	61.7	56.2	49.7	-.-	55.6	55.2	51.8	49.9	49.8	----	-----	147910.8	
65	6/4/2014	11:15:40 00d 00:10.0	61.3	71.3	63.8	50.7	-.-	63.7	63.4	61.8	52.1	51	----	-----	1348962.9	
66	6/4/2014	11:15:50 00d 00:10.0	60.1	70.1	61.7	59.4	-.-	61.3	61.2	59.8	59.5	59.5	----	-----	1023293.0	
67	6/4/2014	11:16:00 00d 00:10.0	58.2	68.2	59.8	56.7	-.-	59.7	59.4	57.6	57	56.9	----	-----	660693.4	
68	6/4/2014	11:16:10 00d 00:10.0	63.3	73.3	67.4	59.4	-.-	67.2	66.8	61.5	59.7	59.6	----	-----	2137962.1	
69	6/4/2014	11:16:20 00d 00:10.0	61.9	71.9	63	60.7	-.-	62.8	62.7	61.7	61.2	61	----	-----	1548816.6	
70	6/4/2014	11:16:30 00d 00:10.0	61	71	61.7	59.7	-.-	61.6	61.5	61.2	60.6	60.1	----	-----	1258925.4	
71	6/4/2014	11:16:40 00d 00:10.0	54.2	64.2	59.7	50.2	-.-	59.4	58.9	54.1	50.5	50.3	----	-----	263026.8	
72	6/4/2014	11:16:50 00d 00:10.0	56.8	66.8	57.9	52.3	-.-	57.8	57.6	56.3	55.7	54.2	----	-----	478630.1	
73	6/4/2014	11:17:00 00d 00:10.0	62.1	72.1	63	57.7	-.-	62.9	62.8	61.9	59.8	58.8	----	-----	1621810.1	

74	6/4/2014	11:17:10	00d	00:10.0	62.6	72.6	64.8	60.5	-.-	64.7	64.5	62.2	60.6	60.6	----	-----	1819700.9
75	6/4/2014	11:17:20	00d	00:10.0	61.4	71.4	63.5	59.2	-.-	63.1	62.8	61.8	59.5	59.5	----	-----	1380384.3
76	6/4/2014	11:17:30	00d	00:10.0	62	72	64.1	60.2	-.-	64	63.8	61.3	60.4	60.3	----	-----	1584893.2
77	6/4/2014	11:17:40	00d	00:10.0	64.3	74.3	66.3	61.2	-.-	66.1	65.9	64.2	62.4	61.9	----	-----	2691534.8
78	6/4/2014	11:17:50	00d	00:10.0	65.8	75.8	68.3	60.8	-.-	68	67.7	65.5	61.1	60.9	----	-----	3801894.0
79	6/4/2014	11:18:00	00d	00:10.0	62.7	72.7	65.8	61.9	-.-	65.5	64.9	62.7	62.1	62	----	-----	1862087.1
80	6/4/2014	11:18:10	00d	00:10.0	66.2	76.2	67.8	62.8	-.-	67.7	67.6	66.1	63.6	63.5	----	-----	4168693.8
81	6/4/2014	11:18:20	00d	00:10.0	60.5	70.5	63.5	57.8	-.-	63.3	62.9	60.6	58.1	58	----	-----	1122018.5
82	6/4/2014	11:18:30	00d	00:10.0	53.1	63.1	58	50.5	-.-	57.9	57.7	52.2	50.7	50.7	----	-----	204173.8
83	6/4/2014	11:18:40	00d	00:10.0	54	64	54.8	51.4	-.-	54.8	54.8	53.9	52.5	52.1	----	-----	251188.6
84	6/4/2014	11:18:50	00d	00:10.0	58.3	68.3	60.5	53.9	-.-	60.4	60.2	57.9	56	54.5	----	-----	676083.0
85	6/4/2014	11:19:00	00d	00:10.0	62.6	72.6	64.9	55.9	-.-	64.8	64.7	62.5	56.2	56	----	-----	1819700.9
86	6/4/2014	11:19:10	00d	00:10.0	64.1	74.1	65.6	62.1	-.-	65.4	65.3	63.8	62.4	62.2	----	-----	2570395.8
87	6/4/2014	11:19:20	00d	00:10.0	60.5	70.5	63.8	58.7	-.-	62.9	62.2	61	60.1	59.4	----	-----	1122018.5
88	6/4/2014	11:19:30	00d	00:10.0	58.3	68.3	59.6	56.9	-.-	59.4	59.1	58.2	57.2	57	----	-----	676083.0
89	6/4/2014	11:19:40	00d	00:10.0	59	69	60.2	57.4	-.-	59.8	59.5	58.9	57.6	57.5	----	-----	794328.2
90	6/4/2014	11:19:50	00d	00:10.0	60.6	70.6	61.8	59.1	-.-	61.8	61.6	60.7	59.5	59.3	----	-----	1148153.6

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
↓ R03																56.6
1	6/4/2014	11:05:00 00d 00:10.0	48.3	58.3	52.7	45.2	-.-	51.2	49.2	46.6	45.5	45.5	----	-----	67608.3	
2	6/4/2014	11:05:10 00d 00:10.0	58.3	68.3	60.2	52.7	-.-	60	59.6	58.1	56	54.9	----	-----	676083.0	
3	6/4/2014	11:05:20 00d 00:10.0	55.7	65.7	59.3	49.3	-.-	59.2	58.9	54	49.6	49.5	----	-----	371535.2	
4	6/4/2014	11:05:30 00d 00:10.0	53.6	63.6	56.6	51.4	-.-	56.1	55.6	54.1	51.7	51.5	----	-----	229086.8	
5	6/4/2014	11:05:40 00d 00:10.0	48.3	58.3	53.9	46.5	-.-	52.9	51.9	48.1	47.2	47	----	-----	67608.3	
6	6/4/2014	11:05:50 00d 00:10.0	56.7	66.7	59.2	47.7	-.-	59.1	58.9	56.3	48.5	48	----	-----	467735.1	
7	6/4/2014	11:06:00 00d 00:10.0	59.6	69.6	61.8	54.7	-.-	61.7	61.7	57.8	56.1	55.9	----	-----	912010.8	
8	6/4/2014	11:06:10 00d 00:10.0	56.3	66.3	61.7	50.9	-.-	61.4	60.3	56.8	52.9	51.8	----	-----	426579.5	
9	6/4/2014	11:06:20 00d 00:10.0	56.1	66.1	61.4	48.2	-.-	61.2	60.7	49.3	48.5	48.4	----	-----	407380.3	
10	6/4/2014	11:06:30 00d 00:10.0	52.3	62.3	59.3	48.3	-.-	57.9	56.5	52.5	48.9	48.6	----	-----	169824.4	
11	6/4/2014	11:06:40 00d 00:10.0	51.6	61.6	54.2	49.9	-.-	53.4	52.8	51.9	51.2	50.6	----	-----	144544.0	
12	6/4/2014	11:06:50 00d 00:10.0	53.3	63.3	57.6	47.7	-.-	56.9	56.2	50.2	48.2	47.9	----	-----	213796.2	
13	6/4/2014	11:07:00 00d 00:10.0	51.6	61.6	57.7	48.3	-.-	57.6	57	50.7	48.7	48.5	----	-----	144544.0	
14	6/4/2014	11:07:10 00d 00:10.0	56.5	66.5	59.9	50.5	-.-	59.7	59.5	54.2	52.7	51.5	----	-----	446683.6	
15	6/4/2014	11:07:20 00d 00:10.0	55.5	65.5	58.8	53.1	-.-	57.7	57.1	55.2	53.5	53.3	----	-----	354813.4	
16	6/4/2014	11:07:30 00d 00:10.0	57.5	67.5	60.8	51.2	-.-	60.8	60.4	56.4	51.7	51.4	----	-----	562341.3	
17	6/4/2014	11:07:40 00d 00:10.0	61.3	71.3	63.7	58.4	-.-	63.6	63.3	60.5	58.9	58.6	----	-----	1348962.9	
18	6/4/2014	11:07:50 00d 00:10.0	60.2	70.2	62.5	57.5	-.-	62.1	61.9	60.4	58	57.7	----	-----	1047128.5	
19	6/4/2014	11:08:00 00d 00:10.0	59.7	69.7	63.4	52.9	-.-	63.3	63.1	59.6	53.9	53.1	----	-----	933254.3	
20	6/4/2014	11:08:10 00d 00:10.0	57.2	67.2	59.3	52.8	-.-	59.2	59.1	56.2	54	53.1	----	-----	524807.5	
21	6/4/2014	11:08:20 00d 00:10.0	57.5	67.5	60.7	54.6	-.-	60.5	60.2	57.5	54.9	54.7	----	-----	562341.3	
22	6/4/2014	11:08:30 00d 00:10.0	56.4	66.4	59.3	51.9	-.-	59.2	59	55	52.3	52	----	-----	436515.8	
23	6/4/2014	11:08:40 00d 00:10.0	54.3	64.3	57.5	51.1	-.-	56.7	56.6	54.8	51.4	51.2	----	-----	269153.5	
24	6/4/2014	11:08:50 00d 00:10.0	49.2	59.2	54.7	45.2	-.-	54.5	54.4	47.5	45.7	45.6	----	-----	83176.4	
25	6/4/2014	11:09:00 00d 00:10.0	47.2	57.2	51.9	44	-.-	50.3	48.5	44.9	44.3	44.2	----	-----	52480.7	
26	6/4/2014	11:09:10 00d 00:10.0	56.1	66.1	59.1	51.9	-.-	58.9	58.6	55.1	53.2	52.9	----	-----	407380.3	
27	6/4/2014	11:09:20 00d 00:10.0	57.9	67.9	61.2	52.5	-.-	61	60.9	56.7	53.1	52.7	----	-----	616595.0	
28	6/4/2014	11:09:30 00d 00:10.0	55.6	65.6	60.4	48.5	-.-	60.3	60	53.1	50.3	49.4	----	-----	363078.1	
29	6/4/2014	11:09:40 00d 00:10.0	55.8	65.8	59.8	47.4	-.-	59.6	59.4	54	47.8	47.6	----	-----	380189.4	
30	6/4/2014	11:09:50 00d 00:10.0	54.5	64.5	57.5	50	-.-	57.4	57.2	54.7	50.3	50.2	----	-----	281838.3	
31	6/4/2014	11:10:00 00d 00:10.0	55.3	65.3	59.5	45.9	-.-	59.3	59.1	54.5	48.3	46.7	----	-----	338844.2	
32	6/4/2014	11:10:10 00d 00:10.0	37.5	47.5	45.9	36.4	-.-	44.3	42.6	37.8	36.6	36.5	----	-----	5623.4	
33	6/4/2014	11:10:20 00d 00:10.0	50.6	60.6	51.9	38.9	-.-	51.7	51.6	51	44.1	41.9	----	-----	114815.4	
34	6/4/2014	11:10:30 00d 00:10.0	55.1	65.1	57.3	49.5	-.-	57.2	56.9	55.4	49.9	49.7	----	-----	323593.7	
35	6/4/2014	11:10:40 00d 00:10.0	55.6	65.6	58.2	51.6	-.-	57.4	57.3	54.8	51.9	51.8	----	-----	363078.1	
36	6/4/2014	11:10:50 00d 00:10.0	54.8	64.8	60	48.8	-.-	59.9	59.6	52.2	49.2	49.1	----	-----	301995.2	
37	6/4/2014	11:11:00 00d 00:10.0	58.6	68.6	63.3	50.3	-.-	63	62.7	52.8	51.8	51	----	-----	724436.0	
38	6/4/2014	11:11:10 00d 00:10.0	58.7	68.7	61.3	53.4	-.-	60.8	60.6	59.7	55.5	54.4	----	-----	741310.2	
39	6/4/2014	11:11:20 00d 00:10.0	58.3	68.3	63.2	51.1	-.-	63.1	62.5	53.1	51.3	51.3	----	-----	676083.0	
40	6/4/2014	11:11:30 00d 00:10.0	54.1	64.1	57.6	51.2	-.-	56.4	55.7	55	51.6	51.3	----	-----	257039.6	
41	6/4/2014	11:11:40 00d 00:10.0	57	67	59.3	52.6	-.-	59.2	59.2	56	54.7	54.5	----	-----	501187.2	
42	6/4/2014	11:11:50 00d 00:10.0	56.1	66.1	60.2	50.1	-.-	60.1	59.8	53.6	50.5	50.3	----	-----	407380.3	
43	6/4/2014	11:12:00 00d 00:10.0	51.2	61.2	58.4	49.3	-.-	57.3	56.2	50.5	49.6	49.5	----	-----	131825.7	
44	6/4/2014	11:12:10 00d 00:10.0	60.7	70.7	63.2	49.5	-.-	63.1	62.9	60.3	49.9	49.7	----	-----	1174897.6	
45	6/4/2014	11:12:20 00d 00:10.0	59.3	69.3	63	55.6	-.-	62.6	61.9	60.1	56.4	56	----	-----	851138.0	
46	6/4/2014	11:12:30 00d 00:10.0	60.5	70.5	61.9	56.8	-.-	61.9	61.8	60.9	57.1	56.9	----	-----	1122018.5	
47	6/4/2014	11:12:40 00d 00:10.0	60.2	70.2	62.3	57.2	-.-	62.2	61.9	59.7	57.6	57.4	----	-----	1047128.5	
48	6/4/2014	11:12:50 00d 00:10.0	58.7	68.7	61.9	50.7	-.-	61.9	61.7	59.7	52.1	51.2	----	-----	741310.2	
49	6/4/2014	11:13:00 00d 00:10.0	50.8	60.8	51.9	49.7	-.-	51.7	51.7	50.6	49.9	49.9	----	-----	120226.4	
50	6/4/2014	11:13:10 00d 00:10.0	58.6	68.6	60.6	50.7	-.-	60.5	60.2	58.9	51.7	51	----	-----	724436.0	
51	6/4/2014	11:13:20 00d 00:10.0	56	66	59.2	52.6	-.-	59.1	58.8	56	52.9	52.7	----	-----	398107.2	
52	6/4/2014	11:13:30 00d 00:10.0	59.8	69.8	64	53.9	-.-	63.8	63.5	56.5	54.4	54.1	----	-----	954992.6	
53	6/4/2014	11:13:40 00d 00:10.0	59.8	69.8	63.4	55.7	-.-	63.3	63.1	59.8	56.9	56.1	----	-----	954992.6	
54	6/4/2014	11:13:50 00d 00:10.0	56.5	66.5	57.8	54.6	-.-	57.7	57.5	56.1	55	54.8	----	-----	446683.6	
55	6/4/2014	11:14:00 00d 00:10.0	57.7	67.7	59.4	55	-.-	59.4	59.3	57.1	55.3	55.1	----	-----	588843.7	
56	6/4/2014	11:14:10 00d 00:10.0	54	64	58.6	47.8	-.-	58.3	57.8	55.2	48.8	48.3	----	-----	251188.6	
57	6/4/2014	11:14:20 00d 00:10.0	49.2	59.2	51.9	46.9	-.-	51.8	51.5	47.8	47.2	47.1	----	-----	83176.4	
58	6/4/2014	11:14:30 00d 00:10.0	54.8	64.8	59	48.4	-.-	58.9	58.5	53.4	49.2	48.8	----	-----	301995.2	
59	6/4/2014	11:14:40 00d 00:10.0	54.5	64.5	58.4	50	-.-	57.4	55.9	52.8	50.3	50.3	----	-----	281838.3	
60	6/4/2014	11:14:50 00d 00:10.0	60.8	70.8	64.2	55.5	-.-	64.1	63.9	60	56	55.7	----	-----	1202264.4	
61	6/4/2014	11:15:00 00d 00:10.0	55.1	65.1	57.5	52.8	-.-	57.2	56.5	55.7	53.1	52.9	----	-----	323593.7	
62	6/4/2014	11:15:10 00d 00:10.0	54	64	56.6	50.4	-.-	56.5	56.4	53.4	50.8	50.7	----	-----	251188.6	
63	6/4/2014	11:15:20 00d 00:10.0	49.7	59.7	51.6	46.5	-.-	51.5	51.4	50.8	47	46.9	----	-----	93325.4	
64	6/4/2014	11:15:30 00d 00:10.0	48.3	58.3	52.2	45.9	-.-	51.3	49.3	46.8	46.4	46.3	----	-----	67608.3	
65	6/4/2014	11:15:40 00d 00:10.0	57.2	67.2	61.2	51.7	-.-	60.5	58.5	55.4	52.2	52	----	-----	524807.5	
66	6/4/2014	11:15:50 00d 00:10.0	57.6	67.6	61.6	51.5	-.-	61.5	61	57.9	52.2	51.7	----	-----	575439.9	
67	6/4/2014	11:16:00 00d 00:10.0	54.8	64.8	59.7	47	-.-	58.9	58.2	52.5	47.6	47.1	----	-----	301995.2	
68	6/4/2014	11:16:10 00d 00:10.0	52.6	62.6	59.7	48.1	-.-	59.6	59	50.6	48.4	48.3	----	-----	181970.1	
69	6/4/2014	11:16:20 00d 00:10.0	58.3	68.3	60.8	49.6	-.-	60.7	60.6	58.8	53.2	51.6	----	-----	676083.0	
70	6/4/2014	11:16:30 00d 00:10.0	55.7	65.7	60.3	47.3	-.-	60.2	59.9	53.9	48.5	47.9	----	-----	371535.2	
71	6/4/2014	11:16:40 00d 00:10.0	48.2	58.2	51.4	46	-.-	50.9	50.1	46.7	46.2	46.2	----	-----	66069.3	
72	6/4/2014	11:16:50 00d 00:10.0	49	59	51.6	47.8	-.-	51.4	51.2	48.7	48.2	48.1	----	-----	79432.8	
73	6/4/2014	11:17:00 00d 00:10.0	60	70	64.7	48.9	-.-	64.5	64.1	57.3	50.3	49.4	----	-----	1000000.0	

74	6/4/2014	11:17:10	00d	00:10.0	58.2	68.2	63	49.7	-.-	63	62.9	56.2	50.2	50	----	-----	660693.4
75	6/4/2014	11:17:20	00d	00:10.0	58.8	68.8	63.1	53.5	-.-	63	62.9	56.2	53.9	53.7	----	-----	758577.6
76	6/4/2014	11:17:30	00d	00:10.0	56.8	66.8	60.1	50.7	-.-	60	59.8	54.6	51.1	50.9	----	-----	478630.1
77	6/4/2014	11:17:40	00d	00:10.0	59.5	69.5	62	55.1	-.-	61.9	61.7	60	55.4	55.2	----	-----	891250.9
78	6/4/2014	11:17:50	00d	00:10.0	58.6	68.6	60.4	56.3	-.-	60.4	60.2	58.2	57	56.9	----	-----	724436.0
79	6/4/2014	11:18:00	00d	00:10.0	55.8	65.8	62.1	50.6	-.-	59.8	57.2	52	50.8	50.8	----	-----	380189.4
80	6/4/2014	11:18:10	00d	00:10.0	61.4	71.4	65.7	54.1	-.-	65.5	65.2	60.2	54.6	54.3	----	-----	1380384.3
81	6/4/2014	11:18:20	00d	00:10.0	53	63	60.9	46.2	-.-	60.7	60.2	50.2	46.8	46.5	----	-----	199526.2
82	6/4/2014	11:18:30	00d	00:10.0	46.4	56.4	47.3	45.5	-.-	47.1	47	46.4	45.7	45.6	----	-----	43651.6
83	6/4/2014	11:18:40	00d	00:10.0	49.6	59.6	54.7	45.6	-.-	53.1	51	46.9	46	45.9	----	-----	91201.1
84	6/4/2014	11:18:50	00d	00:10.0	51.4	61.4	55.7	48.1	-.-	55.6	55.3	50.6	48.4	48.4	----	-----	138038.4
85	6/4/2014	11:19:00	00d	00:10.0	56.7	66.7	58.1	48.8	-.-	58	57.9	56.5	51.1	49.8	----	-----	467735.1
86	6/4/2014	11:19:10	00d	00:10.0	55.6	65.6	58.4	51.3	-.-	58.3	58.1	56	53.6	52.3	----	-----	363078.1
87	6/4/2014	11:19:20	00d	00:10.0	50.7	60.7	53.8	48.4	-.-	52.7	51.3	50.2	48.7	48.5	----	-----	117489.8
88	6/4/2014	11:19:30	00d	00:10.0	54.5	64.5	58.5	49.2	-.-	58.2	57.7	53.1	49.5	49.4	----	-----	281838.3
89	6/4/2014	11:19:40	00d	00:10.0	55.4	65.4	60	52	-.-	58.9	58.2	53.2	52.3	52.2	----	-----	346736.9
90	6/4/2014	11:19:50	00d	00:10.0	54.6	64.6	60.4	49.3	-.-	60.4	60.2	53.7	50.5	49.6	----	-----	288403.2

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R04																58.9
1	6/4/2014	10:15:00 00d 00:10.0	57.3	67.3	58.3	56.2	-.-	58.1	58	57.4	56.4	56.3	----	-----	537031.8	
2	6/4/2014	10:15:10 00d 00:10.0	59.6	69.6	60.2	57	-.-	60.1	60	59.7	57.6	57.4	----	-----	912010.8	
3	6/4/2014	10:15:20 00d 00:10.0	57.5	67.5	60.9	51.6	-.-	60.8	60.8	57.8	52.2	51.8	----	-----	562341.3	
4	6/4/2014	10:15:30 00d 00:10.0	60.3	70.3	62.6	51	-.-	62.4	62.1	59.8	51.4	51.2	----	-----	1071519.3	
5	6/4/2014	10:15:40 00d 00:10.0	58	68	62.7	49.5	-.-	62.6	62.3	58.5	52.2	50.7	----	-----	630957.3	
6	6/4/2014	10:15:50 00d 00:10.0	48.8	58.8	50.1	46.9	-.-	50	50	48.9	47.8	47.7	----	-----	75857.8	
7	6/4/2014	10:16:00 00d 00:10.0	42.3	52.3	46.9	40.1	-.-	46.2	45.3	41.9	40.5	40.3	----	-----	16982.4	
8	6/4/2014	10:16:10 00d 00:10.0	53.1	63.1	56.2	44.6	-.-	55.4	54.5	52.8	45.2	44.9	----	-----	204173.8	
9	6/4/2014	10:16:20 00d 00:10.0	62.3	72.3	65.4	55.1	-.-	65.3	65.3	61.4	56.7	56.2	----	-----	1698243.7	
10	6/4/2014	10:16:30 00d 00:10.0	55	65	58.7	51	-.-	58.3	57.8	52.9	51.2	51.1	----	-----	316227.8	
11	6/4/2014	10:16:40 00d 00:10.0	60.7	70.7	61.3	58.7	-.-	61.2	61.1	60.7	59.9	59.2	----	-----	1174897.6	
12	6/4/2014	10:16:50 00d 00:10.0	63.4	73.4	67	59.6	-.-	66.9	66.7	62.1	60.6	60.6	----	-----	2187761.6	
13	6/4/2014	10:17:00 00d 00:10.0	58.2	68.2	59.6	57.3	-.-	59.3	59.2	58.3	57.3	57.3	----	-----	660693.4	
14	6/4/2014	10:17:10 00d 00:10.0	58.2	68.2	60.1	55.8	-.-	60	59.7	58	56	56	----	-----	660693.4	
15	6/4/2014	10:17:20 00d 00:10.0	55.6	65.6	60.1	51.1	-.-	60	59.9	55.6	51.3	51.2	----	-----	363078.1	
16	6/4/2014	10:17:30 00d 00:10.0	50.8	60.8	52.5	48.2	-.-	52.4	52.4	51.1	48.6	48.4	----	-----	120226.4	
17	6/4/2014	10:17:40 00d 00:10.0	56.9	66.9	58.4	50.2	-.-	58	57.8	56.7	52.1	51.3	----	-----	489778.8	
18	6/4/2014	10:17:50 00d 00:10.0	57.8	67.8	59.3	55.7	-.-	59	58.5	57.8	56	55.9	----	-----	602559.6	
19	6/4/2014	10:18:00 00d 00:10.0	59.5	69.5	60.3	58.8	-.-	60.3	60.1	59.2	58.9	58.8	----	-----	891250.9	
20	6/4/2014	10:18:10 00d 00:10.0	60.1	70.1	61.2	58.9	-.-	61	61	59.8	59.3	59	----	-----	1023293.0	
21	6/4/2014	10:18:20 00d 00:10.0	59.7	69.7	61.7	57.3	-.-	61.3	60.9	60.1	58.3	57.9	----	-----	933254.3	
22	6/4/2014	10:18:30 00d 00:10.0	55.3	65.3	57.3	54.5	-.-	57	56.3	55.4	54.6	54.6	----	-----	338844.2	
23	6/4/2014	10:18:40 00d 00:10.0	54.6	64.6	56.8	52.1	-.-	56.5	56.3	54.5	52.5	52.3	----	-----	288403.2	
24	6/4/2014	10:18:50 00d 00:10.0	57.3	67.3	58.9	55.4	-.-	58.7	58.5	57.3	55.7	55.6	----	-----	537031.8	
25	6/4/2014	10:19:00 00d 00:10.0	58.6	68.6	60.1	56	-.-	60	59.9	58	56.3	56.2	----	-----	724436.0	
26	6/4/2014	10:19:10 00d 00:10.0	56.3	66.3	59.9	53.9	-.-	59.8	59.5	55.9	54	53.9	----	-----	426579.5	
27	6/4/2014	10:19:20 00d 00:10.0	57.9	67.9	59.2	55.8	-.-	59.2	59.1	57.4	56.2	56	----	-----	616595.0	
28	6/4/2014	10:19:30 00d 00:10.0	57.6	67.6	59.2	57	-.-	58.9	58.6	57.6	57.1	57	----	-----	575439.9	
29	6/4/2014	10:19:40 00d 00:10.0	54.9	64.9	57	53.8	-.-	56.5	56.2	54.7	54	53.9	----	-----	309029.5	
30	6/4/2014	10:19:50 00d 00:10.0	57.4	67.4	59.5	55.9	-.-	59.2	58.6	56.8	56.1	56	----	-----	549540.9	
31	6/4/2014	10:20:00 00d 00:10.0	56.1	66.1	58.8	52.4	-.-	58.6	58.5	55.3	52.6	52.5	----	-----	407380.3	
32	6/4/2014	10:20:10 00d 00:10.0	56.7	66.7	58.8	55.8	-.-	58.6	58.4	56.4	55.9	55.9	----	-----	467735.1	
33	6/4/2014	10:20:20 00d 00:10.0	59.2	69.2	60	57.1	-.-	60	59.9	59.1	58.1	57.4	----	-----	831763.8	
34	6/4/2014	10:20:30 00d 00:10.0	60.2	70.2	61.6	58	-.-	61.5	61.5	60.3	58.3	58.1	----	-----	1047128.5	
35	6/4/2014	10:20:40 00d 00:10.0	60.9	70.9	63.8	56.3	-.-	63.7	63.5	60.4	57.1	56.6	----	-----	1230268.8	
36	6/4/2014	10:20:50 00d 00:10.0	56	66	58.2	54.2	-.-	57.8	57.7	55.4	54.4	54.3	----	-----	398107.2	
37	6/4/2014	10:21:00 00d 00:10.0	59.6	69.6	60.1	58.2	-.-	60	59.7	59.5	59	58.6	----	-----	912010.8	
38	6/4/2014	10:21:10 00d 00:10.0	58.5	68.5	60.1	55.1	-.-	60	60	59.6	55.7	55.4	----	-----	707945.8	
39	6/4/2014	10:21:20 00d 00:10.0	50.9	60.9	55.1	47	-.-	54.8	54.4	50.2	47.2	47.1	----	-----	123026.9	
40	6/4/2014	10:21:30 00d 00:10.0	50.4	60.4	51.2	48.8	-.-	51.2	51.1	50.3	49.6	49.4	----	-----	109647.8	
41	6/4/2014	10:21:40 00d 00:10.0	51.3	61.3	54.9	47.3	-.-	54.1	53.7	49.4	47.7	47.6	----	-----	134896.3	
42	6/4/2014	10:21:50 00d 00:10.0	55.4	65.4	57.2	51.6	-.-	57	56.9	56.1	52.3	51.8	----	-----	346736.9	
43	6/4/2014	10:22:00 00d 00:10.0	57.2	67.2	59.4	51.5	-.-	59.3	59.2	56.4	51.6	51.6	----	-----	524807.5	
44	6/4/2014	10:22:10 00d 00:10.0	60.5	70.5	62.1	58.6	-.-	62	61.9	60.4	59.1	58.8	----	-----	1122018.5	
45	6/4/2014	10:22:20 00d 00:10.0	61.6	71.6	62.4	60.7	-.-	62.3	62.3	61.4	60.8	60.8	----	-----	1445439.8	
46	6/4/2014	10:22:30 00d 00:10.0	59.3	69.3	61.5	57.7	-.-	61.3	61.2	59.3	57.8	57.8	----	-----	851138.0	
47	6/4/2014	10:22:40 00d 00:10.0	56.2	66.2	59	51.3	-.-	58.9	58.8	57	51.5	51.4	----	-----	416869.4	
48	6/4/2014	10:22:50 00d 00:10.0	59.7	69.7	62	52.6	-.-	61.9	61.3	58.9	55.8	54.1	----	-----	933254.3	
49	6/4/2014	10:23:00 00d 00:10.0	61	71	62.2	58.7	-.-	62.1	61.8	61.4	60.1	59.4	----	-----	1258925.4	
50	6/4/2014	10:23:10 00d 00:10.0	54.7	64.7	58.7	53.9	-.-	57.9	57	54.9	54.1	54	----	-----	295120.9	
51	6/4/2014	10:23:20 00d 00:10.0	63.8	73.8	68	54.5	-.-	67.8	67.5	62.2	55	54.8	----	-----	2398832.9	
52	6/4/2014	10:23:30 00d 00:10.0	55.7	65.7	62.4	52.9	-.-	61.4	60.4	55.4	53.1	53	----	-----	371535.2	
53	6/4/2014	10:23:40 00d 00:10.0	58.1	68.1	60.6	53.3	-.-	60.4	60.2	57.5	53.7	53.5	----	-----	645654.2	
54	6/4/2014	10:23:50 00d 00:10.0	54.7	64.7	59.3	51.4	-.-	58.9	58.4	54.5	51.9	51.6	----	-----	295120.9	
55	6/4/2014	10:24:00 00d 00:10.0	56.6	66.6	57.9	51.4	-.-	57.8	57.8	56.4	53.5	52.5	----	-----	457088.2	
56	6/4/2014	10:24:10 00d 00:10.0	52.8	62.8	55.2	49.1	-.-	55.1	55	53.4	50	49.5	----	-----	190546.1	
57	6/4/2014	10:24:20 00d 00:10.0	56.1	66.1	57.8	48.9	-.-	57.8	57.7	56	49.1	49	----	-----	407380.3	
58	6/4/2014	10:24:30 00d 00:10.0	55.5	65.5	57.5	54.6	-.-	57.1	56.5	55.4	54.7	54.6	----	-----	354813.4	
59	6/4/2014	10:24:40 00d 00:10.0	56.5	66.5	57.7	55.7	-.-	57.6	57.5	56.2	55.8	55.8	----	-----	446683.6	
60	6/4/2014	10:24:50 00d 00:10.0	55.2	65.2	57.1	52.8	-.-	56.9	56.4	55	53.2	53	----	-----	331131.1	
61	6/4/2014	10:25:00 00d 00:10.0	57	67	58.6	52.4	-.-	58.5	58.5	57.8	53.9	53.1	----	-----	501187.2	
62	6/4/2014	10:25:10 00d 00:10.0	53.3	63.3	57.7	49.3	-.-	56.9	55.8	50.9	49.5	49.5	----	-----	213796.2	
63	6/4/2014	10:25:20 00d 00:10.0	63.1	73.1	66.9	53.9	-.-	66.8	66.4	62.3	56	54.6	----	-----	2041737.9	
64	6/4/2014	10:25:30 00d 00:10.0	55.7	65.7	58.4	53.5	-.-	57.8	57.4	54.2	53.6	53.5	----	-----	371535.2	
65	6/4/2014	10:25:40 00d 00:10.0	57.7	67.7	59.5	55.4	-.-	59.4	59.2	57.5	55.8	55.6	----	-----	588843.7	
66	6/4/2014	10:25:50 00d 00:10.0	67.4	77.4	70.9	57.4	-.-	70.7	70.6	66.1	58.6	58.1	----	-----	5495408.7	
67	6/4/2014	10:26:00 00d 00:10.0	60.4	70.4	64.7	59.5	-.-	63.6	62.5	60.8	60.1	59.9	----	-----	1096478.2	
68	6/4/2014	10:26:10 00d 00:10.0	58.2	68.2	59.5	57.8	-.-	59	58.8	58.2	58	57.9	----	-----	660693.4	
69	6/4/2014	10:26:20 00d 00:10.0	59.4	69.4	62.2	56.1	-.-	61.8	61.3	58	56.3	56.2	----	-----	870963.6	
70	6/4/2014	10:26:30 00d 00:10.0	59.4	69.4	62.5	57.6	-.-	62.4	62.3	58.5	57.8	57.7	----	-----	870963.6	
71	6/4/2014	10:26:40 00d 00:10.0	61.7	71.7	63.2	58.5	-.-	63.2	63.1	61.3	59.2	58.7	----	-----	1479108.4	
72	6/4/2014	10:26:50 00d 00:10.0	61.6	71.6	64	59.7	-.-	63.8	63.5	60.7	59.9	59.8	----	-----	1445439.8	
73	6/4/2014	10:27:00 00d 00:10.0	57.1	67.1	60.3	55.4	-.-	60	59.7	56.8	55.6	55.5	----	-----	512861.4	

74	6/4/2014	10:27:10	00d	00:10.0	58.7	68.7	59.6	57.1	-.-	59.5	59.5	58.6	57.6	57.3	----	-----	741310.2
75	6/4/2014	10:27:20	00d	00:10.0	55.1	65.1	57.7	53.9	-.-	56.9	56.1	55.3	54	54	----	-----	323593.7
76	6/4/2014	10:27:30	00d	00:10.0	55.5	65.5	56.5	54.2	-.-	56.3	56.3	55.6	54.6	54.3	----	-----	354813.4
77	6/4/2014	10:27:40	00d	00:10.0	54.5	64.5	55.5	52.8	-.-	55.4	55.3	54.6	53.6	53.2	----	-----	281838.3
78	6/4/2014	10:27:50	00d	00:10.0	57.4	67.4	60.3	52.2	-.-	60.1	59.9	55.6	52.3	52.3	----	-----	549540.9
79	6/4/2014	10:28:00	00d	00:10.0	58.7	68.7	60.4	57.4	-.-	60.3	60.2	58.6	57.6	57.5	----	-----	741310.2
80	6/4/2014	10:28:10	00d	00:10.0	67	77	71.1	58	-.-	71	70.6	64.4	58.5	58.2	----	-----	5011872.3
81	6/4/2014	10:28:20	00d	00:10.0	59.5	69.5	65.6	58.4	-.-	64.3	63.4	59.2	58.6	58.5	----	-----	891250.9
82	6/4/2014	10:28:30	00d	00:10.0	57.7	67.7	59.5	54.7	-.-	59.4	59.4	58.2	55.3	55.1	----	-----	588843.7
83	6/4/2014	10:28:40	00d	00:10.0	56.1	66.1	58.2	52.7	-.-	58.1	57.9	55	53	52.9	----	-----	407380.3
84	6/4/2014	10:28:50	00d	00:10.0	57	67	58.1	56.2	-.-	57.9	57.7	57.2	56.4	56.4	----	-----	501187.2
85	6/4/2014	10:29:00	00d	00:10.0	52.8	62.8	56.2	50.3	-.-	55.5	55.2	52.2	50.7	50.6	----	-----	190546.1
86	6/4/2014	10:29:10	00d	00:10.0	58	68	58.7	55.9	-.-	58.7	58.6	57.6	57.1	56.7	----	-----	630957.3
87	6/4/2014	10:29:20	00d	00:10.0	52.3	62.3	58.4	48.9	-.-	57.9	57.5	51.3	49.1	49	----	-----	169824.4
88	6/4/2014	10:29:30	00d	00:10.0	54.4	64.4	59.9	48.2	-.-	58.6	57.5	50	48.7	48.7	----	-----	275422.9
89	6/4/2014	10:29:40	00d	00:10.0	62.3	72.3	64.2	58.2	-.-	64.2	64	62.4	59.3	58.7	----	-----	1698243.7
90	6/4/2014	10:29:50	00d	00:10.0	62.4	72.4	67.3	56.8	-.-	66.4	64.8	59.5	57.2	57	----	-----	1737800.8

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R05																62.4
1	6/4/2014	10:15:00 00d 00:10.0	57.3	67.3	61.4	55.6	-.-	60.6	60	57.1	55.8	55.8	----	-----	537031.8	
2	6/4/2014	10:15:10 00d 00:10.0	69	79	72.7	59.2	-.-	72.5	72.2	68.1	62.9	61.6	----	-----	7943282.3	
3	6/4/2014	10:15:20 00d 00:10.0	55.5	65.5	62.4	54.1	-.-	61.3	60.2	55.1	54.3	54.2	----	-----	354813.4	
4	6/4/2014	10:15:30 00d 00:10.0	67.1	77.1	73.3	54.2	-.-	73	72.1	60.1	54.8	54.6	----	-----	5128613.8	
5	6/4/2014	10:15:40 00d 00:10.0	67.6	77.6	72.8	59.6	-.-	72.6	72.5	66.3	61.5	60.5	----	-----	5754399.4	
6	6/4/2014	10:15:50 00d 00:10.0	54.7	64.7	59.6	50.7	-.-	58.9	58.2	55.1	50.9	50.8	----	-----	295120.9	
7	6/4/2014	10:16:00 00d 00:10.0	52.5	62.5	54.9	50	-.-	54.8	54.4	51.8	50.3	50.2	----	-----	177827.9	
8	6/4/2014	10:16:10 00d 00:10.0	63.8	73.8	67.6	49.9	-.-	67.5	67.3	58.4	51.1	50.3	----	-----	2398832.9	
9	6/4/2014	10:16:20 00d 00:10.0	65.9	75.9	68.2	57.1	-.-	68.1	68	67	59.4	58.2	----	-----	3890451.4	
10	6/4/2014	10:16:30 00d 00:10.0	53.9	63.9	57.1	51.8	-.-	56.3	55.7	53.8	51.9	51.9	----	-----	245470.9	
11	6/4/2014	10:16:40 00d 00:10.0	63.7	73.7	68	56.6	-.-	67.6	67	62.4	58.4	58.3	----	-----	2344228.8	
12	6/4/2014	10:16:50 00d 00:10.0	62.4	72.4	66.5	54.6	-.-	66.4	66.1	61.3	55.9	55.3	----	-----	1737800.8	
13	6/4/2014	10:17:00 00d 00:10.0	53.7	63.7	54.6	52.6	-.-	54.3	54.3	53.9	52.7	52.7	----	-----	234422.9	
14	6/4/2014	10:17:10 00d 00:10.0	61.3	71.3	63.4	53.2	-.-	63.3	63.2	61.2	53.5	53.4	----	-----	1348962.9	
15	6/4/2014	10:17:20 00d 00:10.0	61.6	71.6	66	56.8	-.-	65.6	65.2	59.3	57	56.9	----	-----	1445439.8	
16	6/4/2014	10:17:30 00d 00:10.0	59.7	69.7	66	53.9	-.-	65.8	65.7	56.5	54.2	54	----	-----	933254.3	
17	6/4/2014	10:17:40 00d 00:10.0	53.1	63.1	55.5	51.4	-.-	55	54.6	52.8	51.8	51.6	----	-----	204173.8	
18	6/4/2014	10:17:50 00d 00:10.0	61.1	71.1	65.1	54.9	-.-	64.1	63.3	58.9	56.8	56	----	-----	1288249.6	
19	6/4/2014	10:18:00 00d 00:10.0	60.1	70.1	66.3	52.2	-.-	66.1	65.6	57.7	52.7	52.5	----	-----	1023293.0	
20	6/4/2014	10:18:10 00d 00:10.0	55	65	58.3	50.1	-.-	58.1	57.9	51.9	50.5	50.3	----	-----	316227.8	
21	6/4/2014	10:18:20 00d 00:10.0	52.4	62.4	57.6	49.1	-.-	57.5	57.2	51.7	49.3	49.2	----	-----	173780.1	
22	6/4/2014	10:18:30 00d 00:10.0	61.2	71.2	64	52.3	-.-	63.7	63.6	59.4	55.4	53.6	----	-----	1318256.7	
23	6/4/2014	10:18:40 00d 00:10.0	59.7	69.7	64.4	54.8	-.-	64.3	64.1	59.2	55.6	55.4	----	-----	933254.3	
24	6/4/2014	10:18:50 00d 00:10.0	62.3	72.3	64.7	54.4	-.-	64.6	64.6	62	54.7	54.5	----	-----	1698243.7	
25	6/4/2014	10:19:00 00d 00:10.0	62.6	72.6	65.9	58.4	-.-	65.9	65.7	61.4	58.9	58.6	----	-----	1819700.9	
26	6/4/2014	10:19:10 00d 00:10.0	55.8	65.8	58.9	53.3	-.-	58.5	58.3	56	53.5	53.4	----	-----	380189.4	
27	6/4/2014	10:19:20 00d 00:10.0	59.4	69.4	60.8	56	-.-	60.7	60.6	59.5	57	56.5	----	-----	870963.6	
28	6/4/2014	10:19:30 00d 00:10.0	60.6	70.6	62.3	57.3	-.-	62.2	62.1	60.4	57.5	57.4	----	-----	1148153.6	
29	6/4/2014	10:19:40 00d 00:10.0	72	82	76.6	60.1	-.-	76.3	75.9	69.9	62.1	61.1	----	-----	15848931.9	
30	6/4/2014	10:19:50 00d 00:10.0	65.8	75.8	68.3	61.3	-.-	68	67.6	66.2	61.9	61.5	----	-----	3801894.0	
31	6/4/2014	10:20:00 00d 00:10.0	65	75	68.6	60.4	-.-	68.4	68.3	62.4	60.7	60.5	----	-----	3162277.7	
32	6/4/2014	10:20:10 00d 00:10.0	59.1	69.1	67.3	55.4	-.-	66.6	65.5	58.4	55.5	55.5	----	-----	812830.5	
33	6/4/2014	10:20:20 00d 00:10.0	56.6	66.6	57.8	55.1	-.-	57.6	57.4	56.8	55.3	55.2	----	-----	457088.2	
34	6/4/2014	10:20:30 00d 00:10.0	65.8	75.8	68.2	55.3	-.-	68.1	67.9	65.9	56.7	56	----	-----	3801894.0	
35	6/4/2014	10:20:40 00d 00:10.0	61.4	71.4	67.4	56.2	-.-	67.3	67.2	59.2	56.3	56.3	----	-----	1380384.3	
36	6/4/2014	10:20:50 00d 00:10.0	58	68	58.8	56.3	-.-	58.7	58.6	58.2	57.2	56.8	----	-----	630957.3	
37	6/4/2014	10:21:00 00d 00:10.0	54.7	64.7	57.1	52.1	-.-	56.9	56.8	54.8	52.4	52.2	----	-----	295120.9	
38	6/4/2014	10:21:10 00d 00:10.0	51.6	61.6	54.7	48.9	-.-	54.4	54.1	51.8	49.5	49.3	----	-----	144544.0	
39	6/4/2014	10:21:20 00d 00:10.0	45.8	55.8	52.1	43.8	-.-	50.4	48.9	46.1	44.4	44	----	-----	38018.9	
40	6/4/2014	10:21:30 00d 00:10.0	55.7	65.7	57.5	47.3	-.-	56.8	56.7	56	50.7	49.6	----	-----	371535.2	
41	6/4/2014	10:21:40 00d 00:10.0	58	68	60.8	50.8	-.-	60.7	60.5	58.6	52.2	51.6	----	-----	630957.3	
42	6/4/2014	10:21:50 00d 00:10.0	46.1	56.1	50.8	44.5	-.-	49.8	48.8	46.3	44.8	44.8	----	-----	40738.0	
43	6/4/2014	10:22:00 00d 00:10.0	46.5	56.5	49	44.1	-.-	48.8	48.6	46.2	44.6	44.4	----	-----	44668.4	
44	6/4/2014	10:22:10 00d 00:10.0	57.1	67.1	60.8	45.9	-.-	60.7	60.6	52.4	46.2	46.1	----	-----	512861.4	
45	6/4/2014	10:22:20 00d 00:10.0	63.1	73.1	67	56	-.-	66.9	66.7	58.5	56.1	56.1	----	-----	2041737.9	
46	6/4/2014	10:22:30 00d 00:10.0	67.7	77.7	71.4	63.1	-.-	71.3	71	66.3	63.5	63.3	----	-----	5888436.6	
47	6/4/2014	10:22:40 00d 00:10.0	65.4	75.4	67.6	62.7	-.-	67.4	67.3	65.9	63.1	63	----	-----	3467368.5	
48	6/4/2014	10:22:50 00d 00:10.0	58.3	68.3	62.7	56.2	-.-	62.2	61.6	58.4	56.7	56.4	----	-----	676083.0	
49	6/4/2014	10:23:00 00d 00:10.0	57.2	67.2	59.2	55.2	-.-	59	58.9	56.6	55.4	55.3	----	-----	524807.5	
50	6/4/2014	10:23:10 00d 00:10.0	61.2	71.2	63	57.4	-.-	62.4	61.7	60.6	59.6	58.3	----	-----	1318256.7	
51	6/4/2014	10:23:20 00d 00:10.0	64.5	74.5	67.9	58.1	-.-	67.6	66.9	65.3	59	58.6	----	-----	2818382.9	
52	6/4/2014	10:23:30 00d 00:10.0	64.8	74.8	68.4	57.5	-.-	68.3	68	62.1	57.7	57.6	----	-----	3019951.7	
53	6/4/2014	10:23:40 00d 00:10.0	58.9	68.9	66.6	55.1	-.-	65.3	63.8	60.1	55.5	55.2	----	-----	776247.1	
54	6/4/2014	10:23:50 00d 00:10.0	58.1	68.1	60.8	56.4	-.-	60.2	59.9	57.2	56.5	56.4	----	-----	645654.2	
55	6/4/2014	10:24:00 00d 00:10.0	65.1	75.1	68.7	57.7	-.-	68.5	68.2	64.5	58.4	57.8	----	-----	3235936.6	
56	6/4/2014	10:24:10 00d 00:10.0	59.7	69.7	63.4	56.5	-.-	62.9	62	58	56.7	56.6	----	-----	933254.3	
57	6/4/2014	10:24:20 00d 00:10.0	59.3	69.3	64.2	54.1	-.-	64	63.8	57.6	54.7	54.5	----	-----	851138.0	
58	6/4/2014	10:24:30 00d 00:10.0	61.3	71.3	64.5	54.1	-.-	64.4	64.2	60.7	54.8	54.3	----	-----	1348962.9	
59	6/4/2014	10:24:40 00d 00:10.0	51	61	57.1	48.3	-.-	56.5	55.6	50.7	48.7	48.5	----	-----	125892.5	
60	6/4/2014	10:24:50 00d 00:10.0	61.7	71.7	65.7	50.8	-.-	65.6	65	60.3	53.8	52.2	----	-----	1479108.4	
61	6/4/2014	10:25:00 00d 00:10.0	51	61	57.2	49.2	-.-	56.2	55.1	51	49.3	49.2	----	-----	125892.5	
62	6/4/2014	10:25:10 00d 00:10.0	67.1	77.1	70.7	51.9	-.-	70.6	70.4	59.8	53.1	52.6	----	-----	5128613.8	
63	6/4/2014	10:25:20 00d 00:10.0	63.2	73.2	70	59.4	-.-	69.7	69.1	61.4	59.6	59.5	----	-----	2089296.1	
64	6/4/2014	10:25:30 00d 00:10.0	64.7	74.7	67.5	59.8	-.-	67.3	67.2	63.7	59.9	59.8	----	-----	2951209.2	
65	6/4/2014	10:25:40 00d 00:10.0	54.9	64.9	64.3	52.8	-.-	63	61.5	54.3	53.1	52.9	----	-----	309029.5	
66	6/4/2014	10:25:50 00d 00:10.0	63.4	73.4	66.3	54	-.-	66.1	66	61.7	55.8	55	----	-----	2187761.6	
67	6/4/2014	10:26:00 00d 00:10.0	61.1	71.1	65.8	56.6	-.-	65	64.7	60.5	56.7	56.7	----	-----	1288249.6	
68	6/4/2014	10:26:10 00d 00:10.0	67.5	77.5	69.3	59.8	-.-	69.1	68.9	67.3	62.9	61.8	----	-----	5623413.3	
69	6/4/2014	10:26:20 00d 00:10.0	65.5	75.5	69.1	62	-.-	68.8	68.1	64.2	62.3	62.2	----	-----	3548133.9	
70	6/4/2014	10:26:30 00d 00:10.0	66.7	76.7	69.8	63.3	-.-	69.7	69.5	66.4	65.1	64.3	----	-----	4677351.4	
71	6/4/2014	10:26:40 00d 00:10.0	60.1	70.1	63.3	59.3	-.-	62.6	62.2	60	59.4	59.3	----	-----	1023293.0	
72	6/4/2014	10:26:50 00d 00:10.0	60.3	70.3	61	59.6	-.-	60.9	60.7	60.2	59.7	59.7	----	-----	1071519.3	
73	6/4/2014	10:27:00 00d 00:10.0	58.4	68.4	60.4	56.8	-.-	60.2	60	58.6	56.9	56.9	----	-----	691831.0	

74	6/4/2014	10:27:10	00d	00:10.0	56	66	59	53.4	-.-	58.9	58.9	55.5	53.6	53.5	----	-----	398107.2
75	6/4/2014	10:27:20	00d	00:10.0	55.9	65.9	58.5	53.1	-.-	58.3	58.2	56.1	53.2	53.2	----	-----	389045.1
76	6/4/2014	10:27:30	00d	00:10.0	55.2	65.2	57	52.9	-.-	56.9	56.8	53.9	53.1	53	----	-----	331131.1
77	6/4/2014	10:27:40	00d	00:10.0	55	65	56.4	51.7	-.-	56.3	56.2	55.8	52.8	52.3	----	-----	316227.8
78	6/4/2014	10:27:50	00d	00:10.0	46.7	56.7	51.8	44.4	-.-	51	50.4	46.3	44.7	44.6	----	-----	46773.5
79	6/4/2014	10:28:00	00d	00:10.0	46.5	56.5	50.7	42.8	-.-	49.9	48.8	44.2	43.1	43	----	-----	44668.4
80	6/4/2014	10:28:10	00d	00:10.0	55.7	65.7	56.4	50.7	-.-	56.3	56.3	55.7	52.5	51.5	----	-----	371535.2
81	6/4/2014	10:28:20	00d	00:10.0	59.9	69.9	61.7	55.2	-.-	61.5	61.4	59.3	55.6	55.3	----	-----	977237.2
82	6/4/2014	10:28:30	00d	00:10.0	58.1	68.1	61.8	54.1	-.-	61.7	61.6	58	54.3	54.2	----	-----	645654.2
83	6/4/2014	10:28:40	00d	00:10.0	64.5	74.5	67.2	54.4	-.-	66.6	66.5	64	55.4	54.7	----	-----	2818382.9
84	6/4/2014	10:28:50	00d	00:10.0	66.2	76.2	70.5	58	-.-	70.3	69.9	65.5	58.3	58.1	----	-----	4168693.8
85	6/4/2014	10:29:00	00d	00:10.0	59.2	69.2	62.5	54.4	-.-	62.4	62.2	59	55	54.6	----	-----	831763.8
86	6/4/2014	10:29:10	00d	00:10.0	66.8	76.8	69.7	54.5	-.-	69.4	69.1	65.5	55.7	55	----	-----	4786300.9
87	6/4/2014	10:29:20	00d	00:10.0	62.7	72.7	68.3	56.4	-.-	67.8	67.3	61.8	57.3	56.9	----	-----	1862087.1
88	6/4/2014	10:29:30	00d	00:10.0	56	66	58.1	54.2	-.-	57.7	57.4	55.6	54.7	54.6	----	-----	398107.2
89	6/4/2014	10:29:40	00d	00:10.0	56.7	66.7	61	52.9	-.-	60.1	59	55.2	53.2	53	----	-----	467735.1
90	6/4/2014	10:29:50	00d	00:10.0	61.4	71.4	65.4	53.4	-.-	65.3	65	61.2	53.7	53.6	----	-----	1380384.3

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
↓ R06																55.3
1	6/4/2014	9:30:00 00d 00:10.0	47.5	57.5	48.6	46.2	-.-	48.4	48.2	47.3	46.3	46.2	----	-----	56234.1	
2	6/4/2014	9:30:10 00d 00:10.0	51.4	61.4	52.7	48.6	-.-	52.6	52.4	51	49.6	49	----	-----	138038.4	
3	6/4/2014	9:30:20 00d 00:10.0	52.4	62.4	53.1	51.8	-.-	53	52.9	52.3	51.9	51.8	----	-----	173780.1	
4	6/4/2014	9:30:30 00d 00:10.0	54.3	64.3	56.5	52.1	-.-	55.7	54.9	53.6	52.7	52.4	----	-----	269153.5	
5	6/4/2014	9:30:40 00d 00:10.0	59.2	69.2	60	56.4	-.-	59.8	59.7	59.3	56.9	56.8	----	-----	831763.8	
6	6/4/2014	9:30:50 00d 00:10.0	58.3	68.3	60.5	55.4	-.-	60.4	60.2	58.6	56.2	55.9	----	-----	676083.0	
7	6/4/2014	9:31:00 00d 00:10.0	53.6	63.6	55.4	53.3	-.-	54.9	54.5	53.7	53.4	53.4	----	-----	229086.8	
8	6/4/2014	9:31:10 00d 00:10.0	54.6	64.6	54.9	53.5	-.-	54.9	54.9	54.7	54	53.7	----	-----	288403.2	
9	6/4/2014	9:31:20 00d 00:10.0	49.6	59.6	54.2	46.1	-.-	53.8	53.4	49.7	46.3	46.3	----	-----	91201.1	
10	6/4/2014	9:31:30 00d 00:10.0	55.1	65.1	58.8	46.5	-.-	58.4	57.9	52.2	47.7	47.2	----	-----	323593.7	
11	6/4/2014	9:31:40 00d 00:10.0	59.4	69.4	61.3	56.1	-.-	61.1	61	59.6	57.5	56.9	----	-----	870963.6	
12	6/4/2014	9:31:50 00d 00:10.0	54.8	64.8	56.1	53.1	-.-	56	55.9	55	53.4	53.3	----	-----	301995.2	
13	6/4/2014	9:32:00 00d 00:10.0	54.9	64.9	55.8	53.9	-.-	55.6	55.5	55.1	54	54	----	-----	309029.5	
14	6/4/2014	9:32:10 00d 00:10.0	55.7	65.7	57	53.8	-.-	56.9	56.9	55.3	53.9	53.8	----	-----	371535.2	
15	6/4/2014	9:32:20 00d 00:10.0	55.1	65.1	57	51.4	-.-	57	56.9	55.9	52.3	51.9	----	-----	323593.7	
16	6/4/2014	9:32:30 00d 00:10.0	48.3	58.3	51.4	46.9	-.-	51	50.8	47.8	47.2	47.1	----	-----	67608.3	
17	6/4/2014	9:32:40 00d 00:10.0	50.6	60.6	52.7	47.3	-.-	52.2	52	49.8	47.9	47.9	----	-----	114815.4	
18	6/4/2014	9:32:50 00d 00:10.0	53	63	53.6	52.4	-.-	53.5	53.4	52.9	52.6	52.5	----	-----	199526.2	
19	6/4/2014	9:33:00 00d 00:10.0	49.2	59.2	52.9	47.8	-.-	52.6	52.3	48.5	48	48	----	-----	83176.4	
20	6/4/2014	9:33:10 00d 00:10.0	50.9	60.9	51.7	48.3	-.-	51.6	51.6	51	49	48.6	----	-----	123026.9	
21	6/4/2014	9:33:20 00d 00:10.0	50.6	60.6	53.9	47.9	-.-	53.6	53	49.7	48.1	48	----	-----	114815.4	
22	6/4/2014	9:33:30 00d 00:10.0	52.5	62.5	58	43.1	-.-	57.5	57	50.8	44.2	43.7	----	-----	177827.9	
23	6/4/2014	9:33:40 00d 00:10.0	43	53	45.8	41.2	-.-	45.2	44.9	42.5	41.5	41.4	----	-----	19952.6	
24	6/4/2014	9:33:50 00d 00:10.0	50.1	60.1	51.7	43.2	-.-	51.5	51.4	49.8	45.5	43.8	----	-----	102329.3	
25	6/4/2014	9:34:00 00d 00:10.0	52.7	62.7	55.5	47.6	-.-	55.4	55.2	53.2	48.5	48	----	-----	186208.7	
26	6/4/2014	9:34:10 00d 00:10.0	53.1	63.1	56.9	46.1	-.-	56.6	56.2	49.8	46.5	46.3	----	-----	204173.8	
27	6/4/2014	9:34:20 00d 00:10.0	54.5	64.5	56.3	52.7	-.-	56	55.6	54.9	52.9	52.8	----	-----	281838.3	
28	6/4/2014	9:34:30 00d 00:10.0	55	65	57.6	52.8	-.-	57.2	56.8	54.6	53.1	53	----	-----	316227.8	
29	6/4/2014	9:34:40 00d 00:10.0	57.8	67.8	58.9	54.5	-.-	58.7	58.6	57.7	55.6	54.6	----	-----	602559.6	
30	6/4/2014	9:34:50 00d 00:10.0	60.5	70.5	65.5	57.2	-.-	65	64.2	58.4	57.5	57.4	----	-----	1122018.5	
31	6/4/2014	9:35:00 00d 00:10.0	54.3	64.3	57.4	50.9	-.-	57.3	57.3	54.7	51.6	51.4	----	-----	269153.5	
32	6/4/2014	9:35:10 00d 00:10.0	49.9	59.9	51.3	48.9	-.-	50.8	50.6	49.9	49.1	49.1	----	-----	97723.7	
33	6/4/2014	9:35:20 00d 00:10.0	54.4	64.4	55.7	50.6	-.-	55.6	55.5	53.9	51.7	51.1	----	-----	275422.9	
34	6/4/2014	9:35:30 00d 00:10.0	54.4	64.4	55.8	52.6	-.-	55.6	55.6	54.6	53.6	53.2	----	-----	275422.9	
35	6/4/2014	9:35:40 00d 00:10.0	52.1	62.1	53.7	50.1	-.-	53.5	53.4	51.7	50.3	50.2	----	-----	162181.0	
36	6/4/2014	9:35:50 00d 00:10.0	51	61	55.3	48.4	-.-	54.7	54.2	50.7	48.7	48.6	----	-----	125892.5	
37	6/4/2014	9:36:00 00d 00:10.0	51.8	61.8	53.5	48.8	-.-	53.3	53.1	51.7	50	49	----	-----	151356.1	
38	6/4/2014	9:36:10 00d 00:10.0	54.3	64.3	56	50.6	-.-	55.7	55.6	55	50.8	50.7	----	-----	269153.5	
39	6/4/2014	9:36:20 00d 00:10.0	56.9	66.9	58.4	55.1	-.-	58.3	58.2	57	55.5	55.3	----	-----	489778.8	
40	6/4/2014	9:36:30 00d 00:10.0	56	66	57.2	55	-.-	57	56.9	55.9	55.1	55.1	----	-----	398107.2	
41	6/4/2014	9:36:40 00d 00:10.0	54	64	56.6	51.1	-.-	56.4	56.3	54.4	51.4	51.4	----	-----	251188.6	
42	6/4/2014	9:36:50 00d 00:10.0	51.4	61.4	52.5	50.4	-.-	52.2	51.8	51.4	50.9	50.8	----	-----	138038.4	
43	6/4/2014	9:37:00 00d 00:10.0	49.8	59.8	53.6	46.5	-.-	52.9	51.3	48.5	46.8	46.6	----	-----	95499.3	
44	6/4/2014	9:37:10 00d 00:10.0	56.8	66.8	57.7	53.4	-.-	57.6	57.6	57.2	54.3	53.7	----	-----	478630.1	
45	6/4/2014	9:37:20 00d 00:10.0	55.5	65.5	57.2	53.5	-.-	57.1	57.1	55.8	53.8	53.6	----	-----	354813.4	
46	6/4/2014	9:37:30 00d 00:10.0	54.7	64.7	56.7	51.4	-.-	56.6	56.5	53.8	51.6	51.5	----	-----	295120.9	
47	6/4/2014	9:37:40 00d 00:10.0	55.7	65.7	57.1	52.5	-.-	57	56.9	56.6	53.8	53.2	----	-----	371535.2	
48	6/4/2014	9:37:50 00d 00:10.0	51.8	61.8	52.8	50.8	-.-	52.5	52.2	51.8	50.9	50.9	----	-----	151356.1	
49	6/4/2014	9:38:00 00d 00:10.0	53.1	63.1	54.9	51.2	-.-	54.7	54.5	53.3	51.4	51.2	----	-----	204173.8	
50	6/4/2014	9:38:10 00d 00:10.0	54.1	64.1	56.7	50.7	-.-	56.6	56.3	53.8	50.9	50.8	----	-----	257039.6	
51	6/4/2014	9:38:20 00d 00:10.0	55.2	65.2	56.9	51	-.-	56.7	56.3	54.9	52.4	51.4	----	-----	331131.1	
52	6/4/2014	9:38:30 00d 00:10.0	53.7	63.7	56.2	52.9	-.-	55.6	54.7	53.9	53.3	53.1	----	-----	234422.9	
53	6/4/2014	9:38:40 00d 00:10.0	55.9	65.9	59.5	52.4	-.-	58.5	57.6	54.5	52.7	52.5	----	-----	389045.1	
54	6/4/2014	9:38:50 00d 00:10.0	62.4	72.4	66.3	55	-.-	66	65.7	62.1	56.3	55.6	----	-----	1737800.8	
55	6/4/2014	9:39:00 00d 00:10.0	55.5	65.5	56.4	54.5	-.-	56.3	56.2	55.3	54.7	54.6	----	-----	354813.4	
56	6/4/2014	9:39:10 00d 00:10.0	52.8	62.8	56.1	51.8	-.-	55.5	55.2	52.3	52.1	51.9	----	-----	190546.1	
57	6/4/2014	9:39:20 00d 00:10.0	54.7	64.7	56.2	51.2	-.-	56.1	56	54.5	51.5	51.4	----	-----	295120.9	
58	6/4/2014	9:39:30 00d 00:10.0	54.4	64.4	56.7	51.2	-.-	56.6	56.5	55	51.4	51.2	----	-----	275422.9	
59	6/4/2014	9:39:40 00d 00:10.0	58.3	68.3	61.6	51.3	-.-	60.7	59.7	57	52.3	51.9	----	-----	676083.0	
60	6/4/2014	9:39:50 00d 00:10.0	59.7	69.7	63.4	54	-.-	63.2	63	59.6	54.2	54.1	----	-----	933254.3	
61	6/4/2014	9:40:00 00d 00:10.0	62.4	72.4	65.4	55.6	-.-	65.2	64.9	62.2	57.7	57.1	----	-----	1737800.8	
62	6/4/2014	9:40:10 00d 00:10.0	51.8	61.8	56.8	49.6	-.-	55.7	54.7	52.1	50	49.8	----	-----	151356.1	
63	6/4/2014	9:40:20 00d 00:10.0	53.7	63.7	54.4	53	-.-	54.3	54.2	53.8	53.2	53.1	----	-----	234422.9	
64	6/4/2014	9:40:30 00d 00:10.0	49.9	59.9	53.4	48.1	-.-	53.1	52.5	49.6	48.2	48.2	----	-----	97723.7	
65	6/4/2014	9:40:40 00d 00:10.0	54	64	55.5	49.7	-.-	55.4	55.4	53.6	50.5	49.8	----	-----	251188.6	
66	6/4/2014	9:40:50 00d 00:10.0	51.1	61.1	55.5	45.3	-.-	55.3	55.2	51	46.6	45.7	----	-----	128825.0	
67	6/4/2014	9:41:00 00d 00:10.0	49.2	59.2	52.3	44.7	-.-	52.2	52	46.3	45	44.9	----	-----	83176.4	
68	6/4/2014	9:41:10 00d 00:10.0	51.4	61.4	52.4	50.8	-.-	52.2	52	51.5	51.1	51	----	-----	138038.4	
69	6/4/2014	9:41:20 00d 00:10.0	54.1	64.1	55.7	50.9	-.-	55.6	55.6	53.4	51.4	51.2	----	-----	257039.6	
70	6/4/2014	9:41:30 00d 00:10.0	56.4	66.4	58.1	54.9	-.-	58	57.9	56	55	54.9	----	-----	436515.8	
71	6/4/2014	9:41:40 00d 00:10.0	60.6	70.6	65.6	55.3	-.-	65.3	64.9	57.1	55.4	55.4	----	-----	1148153.6	
72	6/4/2014	9:41:50 00d 00:10.0	62.8	72.8	66.4	57.5	-.-	66.1	65.8	62.3	60.2	58.8	----	-----	1905460.7	
73	6/4/2014	9:42:00 00d 00:10.0	49	59	57.5	46.4	-.-	56.2	55.1	48.3	47.6	47	----	-----	79432.8	

74	6/4/2014	9:42:10	00d	00:10.0	45.3	55.3	47	43.1	-.-	46.6	46.5	45.8	43.7	43.3	----	-----	33884.4
75	6/4/2014	9:42:20	00d	00:10.0	48.7	58.7	52.9	43.1	-.-	52.7	52.3	45.5	43.6	43.3	----	-----	74131.0
76	6/4/2014	9:42:30	00d	00:10.0	57.6	67.6	59.5	52.9	-.-	59.4	59.2	56.8	53.8	53.3	----	-----	575439.9
77	6/4/2014	9:42:40	00d	00:10.0	57.1	67.1	59.6	51.6	-.-	59.4	59.1	58.2	52.9	52.1	----	-----	512861.4
78	6/4/2014	9:42:50	00d	00:10.0	46.5	56.5	51.6	43.4	-.-	50.9	50.3	46.2	43.8	43.7	----	-----	44668.4
79	6/4/2014	9:43:00	00d	00:10.0	54	64	58.6	44	-.-	58.3	56.4	51.5	45.5	44.3	----	-----	251188.6
80	6/4/2014	9:43:10	00d	00:10.0	56.7	66.7	61.4	49.6	-.-	61.1	60.6	57.1	50	49.8	----	-----	467735.1
81	6/4/2014	9:43:20	00d	00:10.0	50.4	60.4	51.3	49.4	-.-	51	50.9	50.2	49.6	49.5	----	-----	109647.8
82	6/4/2014	9:43:30	00d	00:10.0	53.1	63.1	54.7	50.8	-.-	54.6	54.4	52.5	51.6	51.1	----	-----	204173.8
83	6/4/2014	9:43:40	00d	00:10.0	51.3	61.3	53.3	50	-.-	52.9	52.7	51.2	50.3	50.2	----	-----	134896.3
84	6/4/2014	9:43:50	00d	00:10.0	55.3	65.3	56.2	52.4	-.-	56.1	56	55	53.1	52.9	----	-----	338844.2
85	6/4/2014	9:44:00	00d	00:10.0	58.4	68.4	59.4	56.2	-.-	59.2	59.2	58.2	56.5	56.4	----	-----	691831.0
86	6/4/2014	9:44:10	00d	00:10.0	58.5	68.5	60.4	57	-.-	60.2	59.7	58.3	57.2	57.1	----	-----	707945.8
87	6/4/2014	9:44:20	00d	00:10.0	50.8	60.8	58.9	46	-.-	58	57.7	49	46.5	46.4	----	-----	120226.4
88	6/4/2014	9:44:30	00d	00:10.0	53.5	63.5	54.6	48.1	-.-	54.5	54.4	53.8	49.6	49.4	----	-----	223872.1
89	6/4/2014	9:44:40	00d	00:10.0	50.5	60.5	53.9	47.3	-.-	53.8	53.7	50.6	48.2	47.7	----	-----	112201.8
90	6/4/2014	9:44:50	00d	00:10.0	48.5	58.5	49.7	47.2	-.-	49.5	49.4	48.6	47.4	47.3	----	-----	70794.6

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
↓ R07																62.7
1	6/4/2014	9:30:00 00d 00:10.0	46.9	56.9	51.6	42.2	-.-	50.4	48.9	44.2	42.5	42.4	----	-----	48977.9	
2	6/4/2014	9:30:10 00d 00:10.0	61.1	71.1	63.3	51.5	-.-	63.3	63.1	60.3	55.5	53.1	----	-----	1288249.6	
3	6/4/2014	9:30:20 00d 00:10.0	68	78	70.5	62.2	-.-	70.4	70.3	67	65.3	64.3	----	-----	6309573.4	
4	6/4/2014	9:30:30 00d 00:10.0	59.5	69.5	66.2	53.5	-.-	66	65.7	57.3	53.8	53.6	----	-----	891250.9	
5	6/4/2014	9:30:40 00d 00:10.0	63.4	73.4	66.7	58.6	-.-	66.6	66.4	60.8	59.5	59.2	----	-----	2187761.6	
6	6/4/2014	9:30:50 00d 00:10.0	61.4	71.4	66.5	59.8	-.-	66	65.3	61.2	59.9	59.8	----	-----	1380384.3	
7	6/4/2014	9:31:00 00d 00:10.0	58.8	68.8	61.2	56.7	-.-	61	60.8	59	57.1	56.9	----	-----	758577.6	
8	6/4/2014	9:31:10 00d 00:10.0	72	82	75.9	59.7	-.-	75.7	75.2	68.7	61.5	60.4	----	-----	15848931.9	
9	6/4/2014	9:31:20 00d 00:10.0	62.6	72.6	74.4	56.8	-.-	72.8	71	62.4	57.4	57.1	----	-----	1819700.9	
10	6/4/2014	9:31:30 00d 00:10.0	65.3	75.3	68.5	60.2	-.-	68.4	68.3	65.4	60.4	60.3	----	-----	3388441.6	
11	6/4/2014	9:31:40 00d 00:10.0	62.4	72.4	65.2	57.6	-.-	65.1	65	60.9	58	57.8	----	-----	1737800.8	
12	6/4/2014	9:31:50 00d 00:10.0	63.1	73.1	67.3	52.6	-.-	67	66.6	64.4	54.4	53.6	----	-----	2041737.9	
13	6/4/2014	9:32:00 00d 00:10.0	46.9	56.9	52.6	43.7	-.-	51.8	51.6	46.3	44	43.8	----	-----	48977.9	
14	6/4/2014	9:32:10 00d 00:10.0	52.3	62.3	57.2	46.5	-.-	56.5	55.4	47.9	46.6	46.6	----	-----	169824.4	
15	6/4/2014	9:32:20 00d 00:10.0	62	72	65	57.2	-.-	64.9	64.8	59.9	58.5	58.1	----	-----	1584893.2	
16	6/4/2014	9:32:30 00d 00:10.0	57.8	67.8	64.8	55.4	-.-	64.2	63.4	57.3	55.7	55.6	----	-----	602559.6	
17	6/4/2014	9:32:40 00d 00:10.0	60.9	70.9	62.2	56.9	-.-	62.1	62.1	60.7	58.5	57.7	----	-----	1230268.8	
18	6/4/2014	9:32:50 00d 00:10.0	58.5	68.5	61.1	54.7	-.-	60.9	60.8	59.3	55.6	55.1	----	-----	707945.8	
19	6/4/2014	9:33:00 00d 00:10.0	51.5	61.5	54.7	49.3	-.-	54.4	53.9	51.3	49.8	49.6	----	-----	141253.8	
20	6/4/2014	9:33:10 00d 00:10.0	48.7	58.7	51.1	46.7	-.-	51	51	48.6	47	46.9	----	-----	74131.0	
21	6/4/2014	9:33:20 00d 00:10.0	50.6	60.6	52.1	48.9	-.-	51.6	51.5	50.1	49	49	----	-----	114815.4	
22	6/4/2014	9:33:30 00d 00:10.0	56.2	66.2	57.6	52.1	-.-	57.6	57.5	55.8	53.9	53	----	-----	416869.4	
23	6/4/2014	9:33:40 00d 00:10.0	53.9	63.9	55.8	51.9	-.-	55.7	55.7	54	52.2	51.9	----	-----	245470.9	
24	6/4/2014	9:33:50 00d 00:10.0	64.3	74.3	67.7	52	-.-	67.6	67.5	63.3	54.3	53.7	----	-----	2691534.8	
25	6/4/2014	9:34:00 00d 00:10.0	57.7	67.7	59.1	54.5	-.-	59	59	58.1	54.9	54.7	----	-----	588843.7	
26	6/4/2014	9:34:10 00d 00:10.0	62.1	72.1	67.2	56.1	-.-	66.4	64.4	58.8	56.4	56.2	----	-----	1621810.1	
27	6/4/2014	9:34:20 00d 00:10.0	66.4	76.4	69.3	59.9	-.-	69.2	69.1	67.2	60.5	60.1	----	-----	4365158.3	
28	6/4/2014	9:34:30 00d 00:10.0	64.7	74.7	68.9	56.7	-.-	68.8	68.6	63.8	57.5	57.2	----	-----	2951209.2	
29	6/4/2014	9:34:40 00d 00:10.0	57.3	67.3	61.3	54.2	-.-	60.7	59.9	55.2	54.4	54.3	----	-----	537031.8	
30	6/4/2014	9:34:50 00d 00:10.0	60.4	70.4	63.7	54.6	-.-	63.6	63.5	60.3	54.7	54.6	----	-----	1096478.2	
31	6/4/2014	9:35:00 00d 00:10.0	63.3	73.3	66.3	57.9	-.-	66.2	66	62.5	59.5	58.9	----	-----	2137962.1	
32	6/4/2014	9:35:10 00d 00:10.0	56.4	66.4	58.7	54.1	-.-	58	57.9	56.7	54.5	54.3	----	-----	436515.8	
33	6/4/2014	9:35:20 00d 00:10.0	58.2	68.2	60	55.2	-.-	59.9	59.8	58.1	55.3	55.3	----	-----	660693.4	
34	6/4/2014	9:35:30 00d 00:10.0	57.7	67.7	61.2	52	-.-	61.1	60.9	57.7	53.5	52.8	----	-----	588843.7	
35	6/4/2014	9:35:40 00d 00:10.0	56.1	66.1	62.4	49.1	-.-	61.1	58.1	50.9	49.4	49.2	----	-----	407380.3	
36	6/4/2014	9:35:50 00d 00:10.0	66	76	67.7	62.4	-.-	67.6	67.6	65.4	63.4	63.3	----	-----	3981071.7	
37	6/4/2014	9:36:00 00d 00:10.0	62.8	72.8	65.7	57.1	-.-	65.7	65.7	62.3	57.4	57.2	----	-----	1905460.7	
38	6/4/2014	9:36:10 00d 00:10.0	63.8	73.8	67.2	55.9	-.-	67.1	67	64.2	57.4	56.5	----	-----	2398832.9	
39	6/4/2014	9:36:20 00d 00:10.0	65.8	75.8	71.8	54.2	-.-	71.5	70.7	57.4	54.4	54.3	----	-----	3801894.0	
40	6/4/2014	9:36:30 00d 00:10.0	58.9	68.9	67.2	52.9	-.-	66.2	65.1	59.1	53.7	53.3	----	-----	776247.1	
41	6/4/2014	9:36:40 00d 00:10.0	64.5	74.5	69	51.8	-.-	68.9	68.6	56.6	52	51.9	----	-----	2818382.9	
42	6/4/2014	9:36:50 00d 00:10.0	66.4	76.4	69.6	58.9	-.-	69.4	68.9	67.3	61.2	59.9	----	-----	4365158.3	
43	6/4/2014	9:37:00 00d 00:10.0	59.8	69.8	60.4	58.2	-.-	60.3	60.3	59.9	58.5	58.3	----	-----	954992.6	
44	6/4/2014	9:37:10 00d 00:10.0	66	76	68.5	59.9	-.-	68.4	68.4	65.6	61	60.1	----	-----	3981071.7	
45	6/4/2014	9:37:20 00d 00:10.0	58.8	68.8	64.4	55.5	-.-	63	62.4	57.9	55.7	55.6	----	-----	758577.6	
46	6/4/2014	9:37:30 00d 00:10.0	62.6	72.6	66.6	56.7	-.-	66.3	66.1	62	57.1	56.8	----	-----	1819700.9	
47	6/4/2014	9:37:40 00d 00:10.0	58.3	68.3	60.2	56.1	-.-	60.1	60.1	58.6	56.3	56.2	----	-----	676083.0	
48	6/4/2014	9:37:50 00d 00:10.0	59.5	69.5	63.2	53.4	-.-	63.1	62.9	56.4	53.7	53.5	----	-----	891250.9	
49	6/4/2014	9:38:00 00d 00:10.0	56.5	66.5	63.2	51.6	-.-	63	62.5	54.6	51.7	51.6	----	-----	446683.6	
50	6/4/2014	9:38:10 00d 00:10.0	59	69	64.1	52.4	-.-	62.8	61.1	56.5	52.7	52.5	----	-----	794328.2	
51	6/4/2014	9:38:20 00d 00:10.0	61.5	71.5	66.7	50.6	-.-	66.6	66.5	59.4	50.9	50.7	----	-----	1412537.5	
52	6/4/2014	9:38:30 00d 00:10.0	55.6	65.6	57.2	50.6	-.-	57.1	57	55.8	50.9	50.7	----	-----	363078.1	
53	6/4/2014	9:38:40 00d 00:10.0	49.9	59.9	54.8	45.5	-.-	54	53	50.9	47.3	46.8	----	-----	97723.7	
54	6/4/2014	9:38:50 00d 00:10.0	45.2	55.2	47.3	43.2	-.-	46.4	46.1	44.8	44	43.5	----	-----	33113.1	
55	6/4/2014	9:39:00 00d 00:10.0	64.9	74.9	68.9	47.3	-.-	68.8	68.7	63.4	50.1	49	----	-----	3090295.4	
56	6/4/2014	9:39:10 00d 00:10.0	70.3	80.3	76.3	57	-.-	75.7	74.5	61.1	57.3	57.1	----	-----	10715193.1	
57	6/4/2014	9:39:20 00d 00:10.0	69.4	79.4	77	59.5	-.-	76.9	76.6	64.2	60.9	60.2	----	-----	8709635.9	
58	6/4/2014	9:39:30 00d 00:10.0	57.7	67.7	60.1	54.7	-.-	60	59.8	57.9	55	54.8	----	-----	588843.7	
59	6/4/2014	9:39:40 00d 00:10.0	56.9	66.9	58.4	53.5	-.-	58.3	58.3	57	53.8	53.6	----	-----	489778.8	
60	6/4/2014	9:39:50 00d 00:10.0	63.9	73.9	66.9	58.2	-.-	66.8	66.7	63.1	59.6	59.1	----	-----	2454708.9	
61	6/4/2014	9:40:00 00d 00:10.0	58.2	68.2	61.1	50.1	-.-	61	60.9	59.3	51.6	50.8	----	-----	660693.4	
62	6/4/2014	9:40:10 00d 00:10.0	60.2	70.2	64.5	49.6	-.-	64.4	64.2	52.5	49.7	49.7	----	-----	1047128.5	
63	6/4/2014	9:40:20 00d 00:10.0	62.7	72.7	66.3	51.3	-.-	66.2	66.1	63.7	53.6	52.3	----	-----	1862087.1	
64	6/4/2014	9:40:30 00d 00:10.0	45.9	55.9	51.3	43.3	-.-	50.6	49.8	45.9	44	43.5	----	-----	38904.5	
65	6/4/2014	9:40:40 00d 00:10.0	54.5	64.5	58.7	44.7	-.-	58.1	57.7	50.7	45.6	45.5	----	-----	281838.3	
66	6/4/2014	9:40:50 00d 00:10.0	57.3	67.3	59.7	52.5	-.-	59.3	59.1	57.2	53.1	52.7	----	-----	537031.8	
67	6/4/2014	9:41:00 00d 00:10.0	63.7	73.7	65.9	59.7	-.-	64.9	64.8	63.1	61.2	60.5	----	-----	2344228.8	
68	6/4/2014	9:41:10 00d 00:10.0	62.2	72.2	66.9	55.1	-.-	66.8	66.7	60.7	56.2	55.6	----	-----	1659586.9	
69	6/4/2014	9:41:20 00d 00:10.0	52.1	62.1	55.1	47.1	-.-	55	54.9	53.3	47.3	47.2	----	-----	162181.0	
70	6/4/2014	9:41:30 00d 00:10.0	56.4	66.4	58.5	47.4	-.-	58.4	58.3	56.5	48.9	48	----	-----	436515.8	
71	6/4/2014	9:41:40 00d 00:10.0	51.4	61.4	55.4	50.3	-.-	54.7	54	51.2	50.3	50.3	----	-----	138038.4	
72	6/4/2014	9:41:50 00d 00:10.0	55	65	57.4	50.2	-.-	57.4	57.3	54.8	51.1	50.8	----	-----	316227.8	
73	6/4/2014	9:42:00 00d 00:10.0	64.3	74.3	68	50	-.-	67.8	67.6	60.2	50.1	50	----	-----	2691534.8	

74	6/4/2014	9:42:10	00d	00:10.0	66.4	76.4	69.1	60.7	-.-	69	68.9	66.1	62.9	61.8	----	-----	4365158.3
75	6/4/2014	9:42:20	00d	00:10.0	54.2	64.2	60.7	49.5	-.-	59.9	59.3	53.6	49.7	49.6	----	-----	263026.8
76	6/4/2014	9:42:30	00d	00:10.0	51.1	61.1	52.6	49.2	-.-	51.7	51.6	51.2	49.4	49.3	----	-----	128825.0
77	6/4/2014	9:42:40	00d	00:10.0	56	66	57.3	52.6	-.-	57.2	57.1	55.9	54.2	53.6	----	-----	398107.2
78	6/4/2014	9:42:50	00d	00:10.0	55.2	65.2	57.6	51.6	-.-	57.5	57.4	55.1	52.1	51.8	----	-----	331131.1
79	6/4/2014	9:43:00	00d	00:10.0	62.7	72.7	66.2	53.7	-.-	66.1	65.8	61.6	53.9	53.8	----	-----	1862087.1
80	6/4/2014	9:43:10	00d	00:10.0	51.5	61.5	57.8	49.6	-.-	56.5	55.3	51.5	49.9	49.7	----	-----	141253.8
81	6/4/2014	9:43:20	00d	00:10.0	62.6	72.6	66.2	52.7	-.-	66.1	65.7	58.3	55.1	53.9	----	-----	1819700.9
82	6/4/2014	9:43:30	00d	00:10.0	72	82	76.2	62.7	-.-	76.1	75.8	66.3	63.4	63	----	-----	15848931.9
83	6/4/2014	9:43:40	00d	00:10.0	66.5	76.5	74.9	63.3	-.-	73.4	72.2	66.2	64.7	64.5	----	-----	4466835.9
84	6/4/2014	9:43:50	00d	00:10.0	53.1	63.1	63.3	48.1	-.-	62.1	60.7	52.9	48.7	48.3	----	-----	204173.8
85	6/4/2014	9:44:00	00d	00:10.0	56.6	66.6	62.3	47.6	-.-	61.5	60	50.4	47.8	47.7	----	-----	457088.2
86	6/4/2014	9:44:10	00d	00:10.0	60.5	70.5	65.6	49	-.-	65.5	65.2	58.4	49.3	49.1	----	-----	1122018.5
87	6/4/2014	9:44:20	00d	00:10.0	56.4	66.4	58.6	49.3	-.-	57.9	57.4	55.8	51.4	50.8	----	-----	436515.8
88	6/4/2014	9:44:30	00d	00:10.0	59.7	69.7	63.4	55.5	-.-	62.4	61.2	59	55.9	55.6	----	-----	933254.3
89	6/4/2014	9:44:40	00d	00:10.0	64	74	66.4	55	-.-	66.3	66.2	64.9	57.9	56.4	----	-----	2511886.4
90	6/4/2014	9:44:50	00d	00:10.0	47.4	57.4	55	44	-.-	53.9	52.9	47	44.8	44.5	----	-----	54954.1

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
ROS																63.2
1	6/4/2014	9:30:00 00d 00:10.0	66.8	76.8	69.4	60.4	-.-	69.1	68.9	65.5	61	60.7	----	-----	4786300.9	
2	6/4/2014	9:30:10 00d 00:10.0	66	76	69.9	59.8	-.-	69.8	69.7	66.3	61.4	60.6	----	-----	3981071.7	
3	6/4/2014	9:30:20 00d 00:10.0	57.8	67.8	59.8	56.7	-.-	59.2	58.8	57.5	57.2	57.1	----	-----	602559.6	
4	6/4/2014	9:30:30 00d 00:10.0	59.8	69.8	62.1	56.7	-.-	62	61.7	59.8	57.7	57.1	----	-----	954992.6	
5	6/4/2014	9:30:40 00d 00:10.0	55.2	65.2	57.9	52.9	-.-	57.8	56.9	54.5	53	53	----	-----	331131.1	
6	6/4/2014	9:30:50 00d 00:10.0	63.4	73.4	66.7	57.9	-.-	66.3	65.7	61.2	58.2	57.9	----	-----	2187761.6	
7	6/4/2014	9:31:00 00d 00:10.0	67.1	77.1	68.7	63.7	-.-	68.6	68.6	67.4	64.4	63.9	----	-----	5128613.8	
8	6/4/2014	9:31:10 00d 00:10.0	67.7	77.7	69.3	63.7	-.-	69.1	68.9	67.7	65.2	64.2	----	-----	5888436.6	
9	6/4/2014	9:31:20 00d 00:10.0	65.7	75.7	66.5	63.9	-.-	66.3	66.2	65.9	64.4	64.3	----	-----	3715352.3	
10	6/4/2014	9:31:30 00d 00:10.0	66.7	76.7	67.9	65.5	-.-	67.8	67.6	66.7	65.9	65.7	----	-----	4677351.4	
11	6/4/2014	9:31:40 00d 00:10.0	64.6	74.6	66.4	62.8	-.-	66.2	66	64.8	63.3	62.9	----	-----	2884031.5	
12	6/4/2014	9:31:50 00d 00:10.0	58.5	68.5	63	48.7	-.-	62.9	62.9	58.4	50.1	49.3	----	-----	707945.8	
13	6/4/2014	9:32:00 00d 00:10.0	58.3	68.3	61.2	48.2	-.-	60	59.9	57.7	48.5	48.3	----	-----	676083.0	
14	6/4/2014	9:32:10 00d 00:10.0	63.3	73.3	65.1	60	-.-	65	64.9	63.2	60.9	60.4	----	-----	2137962.1	
15	6/4/2014	9:32:20 00d 00:10.0	56.4	66.4	60.1	54.2	-.-	59.4	58.6	56.2	54.9	54.6	----	-----	436515.8	
16	6/4/2014	9:32:30 00d 00:10.0	58.7	68.7	59.5	57.6	-.-	59.4	59.3	58.6	57.9	57.8	----	-----	741310.2	
17	6/4/2014	9:32:40 00d 00:10.0	57.6	67.6	59.8	56	-.-	59.4	59	57	56.2	56.1	----	-----	575439.9	
18	6/4/2014	9:32:50 00d 00:10.0	61.7	71.7	63.1	59.8	-.-	63	62.6	61.7	60.3	60.3	----	-----	1479108.4	
19	6/4/2014	9:33:00 00d 00:10.0	56.5	66.5	60.5	50.9	-.-	60.4	60.3	56.8	52	51.5	----	-----	446683.6	
20	6/4/2014	9:33:10 00d 00:10.0	55.1	65.1	57.4	49.5	-.-	57.3	57	54.2	49.9	49.7	----	-----	323593.7	
21	6/4/2014	9:33:20 00d 00:10.0	59.6	69.6	65.7	57	-.-	64	62.3	58.1	57.2	57.1	----	-----	912010.8	
22	6/4/2014	9:33:30 00d 00:10.0	65	75	69.5	53.8	-.-	69	68.5	59.3	55	54.1	----	-----	3162277.7	
23	6/4/2014	9:33:40 00d 00:10.0	63.5	73.5	67.2	60.1	-.-	67	66.6	64.2	60.3	60.3	----	-----	2238721.1	
24	6/4/2014	9:33:50 00d 00:10.0	59.9	69.9	61.2	58.5	-.-	61.1	60.9	59.9	59.1	58.8	----	-----	977237.2	
25	6/4/2014	9:34:00 00d 00:10.0	65.9	75.9	67.4	58.6	-.-	67.3	67.2	66.4	61.9	60	----	-----	3890451.4	
26	6/4/2014	9:34:10 00d 00:10.0	66.2	76.2	68.7	59.7	-.-	68.5	68.3	66.5	60.5	59.9	----	-----	4168693.8	
27	6/4/2014	9:34:20 00d 00:10.0	60.2	70.2	65.1	57	-.-	64.4	63.9	60.1	57.2	57.1	----	-----	1047128.5	
28	6/4/2014	9:34:30 00d 00:10.0	63.7	73.7	65.7	59.2	-.-	65.5	65.4	64	61	60	----	-----	2344228.8	
29	6/4/2014	9:34:40 00d 00:10.0	63.1	73.1	64.9	55.5	-.-	64.7	64.6	63.9	56.2	55.7	----	-----	2041737.9	
30	6/4/2014	9:34:50 00d 00:10.0	65.8	75.8	68.9	62.8	-.-	68.7	68.6	65.1	62.9	62.9	----	-----	3801894.0	
31	6/4/2014	9:35:00 00d 00:10.0	54.4	64.4	62.8	52.1	-.-	61.4	60.2	54.1	52.4	52.2	----	-----	275422.9	
32	6/4/2014	9:35:10 00d 00:10.0	59.4	69.4	61.1	52.2	-.-	61	61	59.8	52.5	52.4	----	-----	870963.6	
33	6/4/2014	9:35:20 00d 00:10.0	58.5	68.5	61.6	57	-.-	61.4	61.1	57.9	57.2	57.1	----	-----	707945.8	
34	6/4/2014	9:35:30 00d 00:10.0	66.1	76.1	67.8	58.1	-.-	67.7	67.6	65.7	58.3	58.2	----	-----	4073802.8	
35	6/4/2014	9:35:40 00d 00:10.0	66.3	76.3	68.8	60.4	-.-	68.7	68.7	67.3	62	61.1	----	-----	4265795.2	
36	6/4/2014	9:35:50 00d 00:10.0	65	76	66.9	60.2	-.-	66.8	66.8	66.4	61.7	60.8	----	-----	3981071.7	
37	6/4/2014	9:36:00 00d 00:10.0	60.8	70.8	65.1	58.2	-.-	64.8	63.9	59.8	58.5	58.4	----	-----	1202264.4	
38	6/4/2014	9:36:10 00d 00:10.0	61.6	71.6	64.2	58.6	-.-	64.1	64	61.9	58.9	58.7	----	-----	1445439.8	
39	6/4/2014	9:36:20 00d 00:10.0	61.4	71.4	64.5	58.4	-.-	64.1	63.8	59.4	58.6	58.5	----	-----	1380384.3	
40	6/4/2014	9:36:30 00d 00:10.0	67.5	77.5	68.7	64.5	-.-	68.6	68.2	67.5	65.7	65	----	-----	5623413.3	
41	6/4/2014	9:36:40 00d 00:10.0	62.1	72.1	67.4	54.9	-.-	67.2	66.8	62.3	55.5	55.3	----	-----	1621810.1	
42	6/4/2014	9:36:50 00d 00:10.0	63.9	73.9	67.2	55.8	-.-	67	67	62.1	55.9	55.9	----	-----	2454708.9	
43	6/4/2014	9:37:00 00d 00:10.0	64.7	74.7	68.1	61.7	-.-	68	67.7	64.2	62.1	61.9	----	-----	2951209.2	
44	6/4/2014	9:37:10 00d 00:10.0	65.4	75.4	66.4	62.8	-.-	66.3	66.3	65.5	63.1	63	----	-----	3467368.5	
45	6/4/2014	9:37:20 00d 00:10.0	58.4	68.4	64.4	55.9	-.-	63.4	62.5	59	56.4	56.1	----	-----	691831.0	
46	6/4/2014	9:37:30 00d 00:10.0	59.8	69.8	64.6	54.9	-.-	64.2	62.7	56.8	55.1	55	----	-----	954992.6	
47	6/4/2014	9:37:40 00d 00:10.0	63.8	73.8	66.2	59	-.-	66	66	64.7	59.9	59.5	----	-----	2398832.9	
48	6/4/2014	9:37:50 00d 00:10.0	57.6	67.6	59	56.5	-.-	58.5	58.4	57.9	56.9	56.9	----	-----	575439.9	
49	6/4/2014	9:38:00 00d 00:10.0	64.9	74.9	67.7	56.4	-.-	67.4	67.2	64.5	56.7	56.5	----	-----	3090295.4	
50	6/4/2014	9:38:10 00d 00:10.0	60.2	70.2	63.8	56.8	-.-	63.7	63.6	58.9	57.2	56.9	----	-----	1047128.5	
51	6/4/2014	9:38:20 00d 00:10.0	53	63	57.2	47.4	-.-	56.6	56.2	53.7	48.5	47.8	----	-----	199526.2	
52	6/4/2014	9:38:30 00d 00:10.0	48.9	58.9	52.3	45.9	-.-	52.1	52	46.9	46.1	46	----	-----	77624.7	
53	6/4/2014	9:38:40 00d 00:10.0	59.3	69.3	64.6	52.2	-.-	64.4	63.4	52.9	52.4	52.3	----	-----	851138.0	
54	6/4/2014	9:38:50 00d 00:10.0	63.4	73.4	66.3	57.3	-.-	66.2	66	63.8	58.5	57.7	----	-----	2187761.6	
55	6/4/2014	9:39:00 00d 00:10.0	64.7	74.7	67.5	57.7	-.-	67.3	67.1	64.6	59.8	58.8	----	-----	2951209.2	
56	6/4/2014	9:39:10 00d 00:10.0	55.7	65.7	58	51.7	-.-	57.9	57.8	55.2	52.1	51.9	----	-----	371535.2	
57	6/4/2014	9:39:20 00d 00:10.0	56.6	66.6	57.6	55.7	-.-	57.2	57.1	56.8	55.9	55.8	----	-----	457088.2	
58	6/4/2014	9:39:30 00d 00:10.0	63.6	73.6	65.8	56.8	-.-	65.7	65.5	64.1	57.7	57.3	----	-----	2290867.7	
59	6/4/2014	9:39:40 00d 00:10.0	63.2	73.2	64.9	62.8	-.-	64.7	64.2	63.2	63	62.9	----	-----	2089296.1	
60	6/4/2014	9:39:50 00d 00:10.0	60.9	70.9	63.5	58.3	-.-	62.7	62.4	60.6	58.6	58.4	----	-----	1230268.8	
61	6/4/2014	9:40:00 00d 00:10.0	65.8	75.8	66.7	63.4	-.-	66.6	66.6	65.7	64.2	64.1	----	-----	3801894.0	
62	6/4/2014	9:40:10 00d 00:10.0	58.9	68.9	65	50.6	-.-	64.8	64.3	57.5	51.5	51.2	----	-----	776247.1	
63	6/4/2014	9:40:20 00d 00:10.0	46.4	56.4	50.6	43.8	-.-	50	49.3	47	44.1	44.1	----	-----	43651.6	
64	6/4/2014	9:40:30 00d 00:10.0	53.9	63.9	55.8	44	-.-	55.5	55.3	54.3	44.3	44.2	----	-----	245470.9	
65	6/4/2014	9:40:40 00d 00:10.0	63.8	73.8	66.8	55.8	-.-	66.7	66.6	62.3	56.2	56	----	-----	2398832.9	
66	6/4/2014	9:40:50 00d 00:10.0	65.2	75.2	66.7	62.9	-.-	66.6	66.3	65.6	63.8	63.4	----	-----	3311311.2	
67	6/4/2014	9:41:00 00d 00:10.0	58.7	68.7	62.9	57.2	-.-	62.3	61.6	58.8	57.7	57.5	----	-----	741310.2	
68	6/4/2014	9:41:10 00d 00:10.0	53.9	63.9	57.3	51.2	-.-	56.9	56.6	53.7	52.2	51.7	----	-----	245470.9	
69	6/4/2014	9:41:20 00d 00:10.0	48.9	58.9	51.2	47.7	-.-	50.8	50.5	49	48	47.9	----	-----	77624.7	
70	6/4/2014	9:41:30 00d 00:10.0	54.3	64.3	56.8	48.5	-.-	56.6	56.3	53.5	50.8	49.1	----	-----	269153.5	
71	6/4/2014	9:41:40 00d 00:10.0	60.2	70.2	64.5	53.7	-.-	63.8	62.3	57.4	55	54.4	----	-----	1047128.5	
72	6/4/2014	9:41:50 00d 00:10.0	67.2	77.2	68.1	64.5	-.-	67.9	67.8	67.3	65.3	65.3	----	-----	5248074.6	
73	6/4/2014	9:42:00 00d 00:10.0	62.8	72.8	67	56.5	-.-	66.8	66.5	63.2	57.9	57.1	----	-----	1905460.7	

74	6/4/2014	9:42:10	00d	00:10.0	50	60	56.5	46.9	-.-	55.8	55	49.6	47.6	47.3	----	-----	100000.0
75	6/4/2014	9:42:20	00d	00:10.0	55.7	65.7	57.8	47.5	-.-	57.7	57.7	55.8	47.5	47.5	----	-----	371535.2
76	6/4/2014	9:42:30	00d	00:10.0	57.9	67.9	59.4	57	-.-	59.3	59	57.8	57.2	57.2	----	-----	616595.0
77	6/4/2014	9:42:40	00d	00:10.0	67.8	77.8	73	55.5	-.-	72.7	71.1	56.8	55.7	55.6	----	-----	6025595.9
78	6/4/2014	9:42:50	00d	00:10.0	68.4	78.4	73.6	59.2	-.-	73.4	73.2	67.6	59.5	59.5	----	-----	6918309.7
79	6/4/2014	9:43:00	00d	00:10.0	60.3	70.3	65.6	54	-.-	64.5	62.4	58.2	54.3	54.2	----	-----	1071519.3
80	6/4/2014	9:43:10	00d	00:10.0	67	77	68.4	64.9	-.-	68.3	68.2	66.6	65.3	65.3	----	-----	5011872.3
81	6/4/2014	9:43:20	00d	00:10.0	68.8	78.8	70.3	67	-.-	70	69.9	68.8	67.2	67.1	----	-----	7585775.8
82	6/4/2014	9:43:30	00d	00:10.0	66.8	76.8	68.8	62.8	-.-	68.6	68.5	67.7	64.4	63.7	----	-----	4786300.9
83	6/4/2014	9:43:40	00d	00:10.0	54.1	64.1	62.8	49.5	-.-	61.8	60.9	53.6	50.1	49.7	----	-----	257039.6
84	6/4/2014	9:43:50	00d	00:10.0	64.8	74.8	68.4	49.5	-.-	67.2	66.1	64	53.6	50.2	----	-----	3019951.7
85	6/4/2014	9:44:00	00d	00:10.0	59	69	68.8	56.3	-.-	67.9	66.2	57.8	56.5	56.4	----	-----	794328.2
86	6/4/2014	9:44:10	00d	00:10.0	54.5	64.5	56.6	52.9	-.-	56.4	55.9	54.7	53.5	53.2	----	-----	281838.3
87	6/4/2014	9:44:20	00d	00:10.0	65.5	75.5	67.7	54.9	-.-	67.6	67.6	64.7	55.6	55.5	----	-----	3548133.9
88	6/4/2014	9:44:30	00d	00:10.0	61.6	71.6	66.9	59.7	-.-	66.4	65.6	61	59.9	59.8	----	-----	1445439.8
89	6/4/2014	9:44:40	00d	00:10.0	57.4	67.4	59.9	54.6	-.-	59.8	59.7	58.4	55.2	55	----	-----	549540.9
90	6/4/2014	9:44:50	00d	00:10.0	58.3	68.3	59.6	55.1	-.-	59.5	59.4	58.3	55.6	55.5	----	-----	676083.0

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
↓ R09																61.0
1	6/4/2014	9:30:00 00d 00:10.0	67.4	77.4	69.4	65.9	-.-	69.4	69.3	67.2	66.1	66	----	-----	5495408.7	
2	6/4/2014	9:30:10 00d 00:10.0	60.8	70.8	67.4	55.9	-.-	67.3	66.6	60	56.5	56.3	----	-----	1202264.4	
3	6/4/2014	9:30:20 00d 00:10.0	51.8	61.8	55.9	45.8	-.-	55.6	55.5	51.8	46.9	46.4	----	-----	151356.1	
4	6/4/2014	9:30:30 00d 00:10.0	44	54	49.2	41.7	-.-	48.7	47.4	43.7	42.2	42	----	-----	25118.9	
5	6/4/2014	9:30:40 00d 00:10.0	55.5	65.5	59.7	43.6	-.-	59.2	58.8	51.7	44	43.7	----	-----	354813.4	
6	6/4/2014	9:30:50 00d 00:10.0	60.1	70.1	64.1	53.9	-.-	63.9	63.6	59.9	54.4	54.1	----	-----	1023293.0	
7	6/4/2014	9:31:00 00d 00:10.0	58.8	68.8	61.2	55.5	-.-	61.1	61.1	58.6	55.6	55.6	----	-----	758577.6	
8	6/4/2014	9:31:10 00d 00:10.0	65.8	75.8	68.1	56.2	-.-	68	67.8	65.1	61.5	58.9	----	-----	3801894.0	
9	6/4/2014	9:31:20 00d 00:10.0	65.7	75.7	67.3	62.3	-.-	67.2	67.2	65.8	63.6	63.1	----	-----	3715352.3	
10	6/4/2014	9:31:30 00d 00:10.0	65.4	75.4	68.7	60.1	-.-	67.9	66.6	64.3	60.5	60.2	----	-----	3467368.5	
11	6/4/2014	9:31:40 00d 00:10.0	68.5	78.5	72.2	59.9	-.-	72	72	68.5	61.7	60.8	----	-----	7079457.8	
12	6/4/2014	9:31:50 00d 00:10.0	59.5	69.5	63.9	56.7	-.-	62.1	59.8	58.1	57.2	57	----	-----	891250.9	
13	6/4/2014	9:32:00 00d 00:10.0	66.5	76.5	68.8	63.2	-.-	68.6	68.5	66.3	63.8	63.5	----	-----	4466835.9	
14	6/4/2014	9:32:10 00d 00:10.0	59.1	69.1	64.5	56	-.-	64.3	63.8	58	57	56.6	----	-----	812830.5	
15	6/4/2014	9:32:20 00d 00:10.0	53.7	63.7	56.3	50.2	-.-	56.3	56.2	54	50.7	50.5	----	-----	234422.9	
16	6/4/2014	9:32:30 00d 00:10.0	50.6	60.6	53.6	45.8	-.-	53.5	53.4	49.3	46.2	46	----	-----	114815.4	
17	6/4/2014	9:32:40 00d 00:10.0	46.6	56.6	52.3	43.1	-.-	51.4	50.8	47	43.7	43.6	----	-----	45708.8	
18	6/4/2014	9:32:50 00d 00:10.0	46.5	56.5	49.5	43.2	-.-	48.1	47.3	45.9	43.8	43.7	----	-----	44668.4	
19	6/4/2014	9:33:00 00d 00:10.0	60	70	64.5	49.5	-.-	63.9	63.5	55.5	53.9	51.7	----	-----	1000000.0	
20	6/4/2014	9:33:10 00d 00:10.0	66	76	67.5	64.4	-.-	67.3	67.2	65.8	64.7	64.6	----	-----	3981071.7	
21	6/4/2014	9:33:20 00d 00:10.0	60.7	70.7	64.5	58.9	-.-	63.7	63.2	60.9	60.2	59.9	----	-----	1174897.6	
22	6/4/2014	9:33:30 00d 00:10.0	54.7	64.7	58.9	52.5	-.-	57.9	57.3	54.6	52.8	52.6	----	-----	295120.9	
23	6/4/2014	9:33:40 00d 00:10.0	55.7	65.7	60	51.9	-.-	59.5	58.9	52.6	52	52	----	-----	371535.2	
24	6/4/2014	9:33:50 00d 00:10.0	57.7	67.7	60.3	53.6	-.-	60.2	60.2	58.5	54	53.8	----	-----	588843.7	
25	6/4/2014	9:34:00 00d 00:10.0	59.5	69.5	61.7	54.8	-.-	61.5	59.9	59.2	55.4	54.9	----	-----	891250.9	
26	6/4/2014	9:34:10 00d 00:10.0	57.9	67.9	61.6	56.1	-.-	61.6	61.3	57.7	56.2	56.2	----	-----	616595.0	
27	6/4/2014	9:34:20 00d 00:10.0	52.6	62.6	56.6	48.4	-.-	56.5	56.5	51.7	48.6	48.5	----	-----	181970.1	
28	6/4/2014	9:34:30 00d 00:10.0	54.5	64.5	57	49.1	-.-	56.9	56.7	54.1	50.8	49.9	----	-----	281838.3	
29	6/4/2014	9:34:40 00d 00:10.0	58.3	68.3	64.4	46.5	-.-	64.3	63.4	48	46.6	46.6	----	-----	676083.0	
30	6/4/2014	9:34:50 00d 00:10.0	58.5	68.5	64.4	53.4	-.-	64.2	63.9	58	54.4	53.7	----	-----	707945.8	
31	6/4/2014	9:35:00 00d 00:10.0	52.9	62.9	55.4	51.2	-.-	55.4	55	52	51.4	51.3	----	-----	194984.5	
32	6/4/2014	9:35:10 00d 00:10.0	53.3	63.3	55	51.7	-.-	54.8	54.6	53.1	51.8	51.8	----	-----	213796.2	
33	6/4/2014	9:35:20 00d 00:10.0	62.6	72.6	68	54.3	-.-	67.1	65.6	62.4	56.2	55.2	----	-----	1819700.9	
34	6/4/2014	9:35:30 00d 00:10.0	64.9	74.9	67.8	60.8	-.-	67.6	67.6	64.4	60.9	60.8	----	-----	3090295.4	
35	6/4/2014	9:35:40 00d 00:10.0	63.6	73.6	66.6	61.1	-.-	66.5	66.2	62.7	61.2	61.2	----	-----	2290867.7	
36	6/4/2014	9:35:50 00d 00:10.0	64.2	74.2	67	60.7	-.-	66.5	65.4	63.1	60.9	60.7	----	-----	2630268.0	
37	6/4/2014	9:36:00 00d 00:10.0	63.5	73.5	67.1	59.4	-.-	67	66.5	64	61.1	60.2	----	-----	2238721.1	
38	6/4/2014	9:36:10 00d 00:10.0	55.4	65.4	59.4	52	-.-	58.6	58	55.4	52.4	52.2	----	-----	346736.9	
39	6/4/2014	9:36:20 00d 00:10.0	63.9	73.9	65.8	57.8	-.-	65.7	65.5	63.7	58.8	58.5	----	-----	2454708.9	
40	6/4/2014	9:36:30 00d 00:10.0	63.5	73.5	66.8	61.3	-.-	66.6	66.4	62.4	61.6	61.5	----	-----	2238721.1	
41	6/4/2014	9:36:40 00d 00:10.0	66	76	68.6	62.2	-.-	68.5	68.4	64.7	63.6	63.4	----	-----	3981071.7	
42	6/4/2014	9:36:50 00d 00:10.0	63.9	73.9	67.1	58.8	-.-	67.1	66.9	61.2	59.2	59.1	----	-----	2454708.9	
43	6/4/2014	9:37:00 00d 00:10.0	60.1	70.1	66.6	54.3	-.-	65.7	64.8	60.8	54.6	54.4	----	-----	1023293.0	
44	6/4/2014	9:37:10 00d 00:10.0	61.9	71.9	66.8	52.8	-.-	66.6	66.4	55	53.1	53	----	-----	1548816.6	
45	6/4/2014	9:37:20 00d 00:10.0	62.4	72.4	66.4	60.7	-.-	65.9	65.1	61.6	60.8	60.8	----	-----	1737800.8	
46	6/4/2014	9:37:30 00d 00:10.0	65.7	75.7	67.9	61.4	-.-	67.7	67.5	65.8	62.6	62	----	-----	3715352.3	
47	6/4/2014	9:37:40 00d 00:10.0	57.3	67.3	61.4	55.2	-.-	60.9	60.2	57	55.6	55.4	----	-----	537031.8	
48	6/4/2014	9:37:50 00d 00:10.0	58	68	60.2	53.5	-.-	60.1	59.9	57.8	55	54.2	----	-----	630957.3	
49	6/4/2014	9:38:00 00d 00:10.0	57.5	67.5	63.7	50.1	-.-	63	60.6	51.9	50.4	50.4	----	-----	562341.3	
50	6/4/2014	9:38:10 00d 00:10.0	61.7	71.7	64	58.4	-.-	63.9	63.7	62	59	58.6	----	-----	1479108.4	
51	6/4/2014	9:38:20 00d 00:10.0	56.6	66.6	60.9	53.7	-.-	60.1	59.3	56.5	54	53.8	----	-----	457088.2	
52	6/4/2014	9:38:30 00d 00:10.0	58.7	68.7	61.2	55.5	-.-	61.1	60.8	57.3	55.7	55.6	----	-----	741310.2	
53	6/4/2014	9:38:40 00d 00:10.0	57.7	67.7	61.2	53.8	-.-	61	60.8	57.2	54.5	54	----	-----	588843.7	
54	6/4/2014	9:38:50 00d 00:10.0	58.4	68.4	60.1	53.5	-.-	60	59.9	58.8	53.8	53.7	----	-----	691831.0	
55	6/4/2014	9:39:00 00d 00:10.0	53.7	63.7	59.4	47.7	-.-	58.8	58	53.4	49.8	48.7	----	-----	234422.9	
56	6/4/2014	9:39:10 00d 00:10.0	47.8	57.8	49.7	46.3	-.-	49.1	48.8	47.8	46.6	46.5	----	-----	60256.0	
57	6/4/2014	9:39:20 00d 00:10.0	56.7	66.7	60.7	47.5	-.-	60.6	60.3	55.2	48.9	48	----	-----	467735.1	
58	6/4/2014	9:39:30 00d 00:10.0	54.3	64.3	56.6	51.5	-.-	56.5	56.5	53.4	51.6	51.6	----	-----	269153.5	
59	6/4/2014	9:39:40 00d 00:10.0	64.1	74.1	66.8	55.6	-.-	66.6	66.3	63.5	56.2	55.7	----	-----	2570395.8	
60	6/4/2014	9:39:50 00d 00:10.0	66.3	76.3	68.7	62	-.-	68.5	68.3	66.5	62.6	62.5	----	-----	4265795.2	
61	6/4/2014	9:40:00 00d 00:10.0	65.3	75.3	69.2	60.8	-.-	68.8	68.6	64.1	61.3	61.3	----	-----	3388441.6	
62	6/4/2014	9:40:10 00d 00:10.0	63.5	73.5	67.2	57.1	-.-	67.1	66.8	62.9	57.6	57.3	----	-----	2238721.1	
63	6/4/2014	9:40:20 00d 00:10.0	63.7	73.7	67.1	58.7	-.-	67	66.8	62.8	59.5	59.2	----	-----	2344228.8	
64	6/4/2014	9:40:30 00d 00:10.0	58.8	68.8	60.8	57.5	-.-	60.7	60.4	58.5	57.8	57.7	----	-----	758577.6	
65	6/4/2014	9:40:40 00d 00:10.0	56.5	66.5	58.8	52.2	-.-	58.7	58.6	57.1	53.1	52.6	----	-----	446683.6	
66	6/4/2014	9:40:50 00d 00:10.0	49	59	52.2	46.1	-.-	51.9	51.6	49.3	47	46.4	----	-----	79432.8	
67	6/4/2014	9:41:00 00d 00:10.0	44.8	54.8	49.3	41.6	-.-	49.1	48.5	44.2	41.9	41.7	----	-----	30199.5	
68	6/4/2014	9:41:10 00d 00:10.0	42.7	52.7	45.8	40.5	-.-	44.9	44	41.7	40.7	40.6	----	-----	18620.9	
69	6/4/2014	9:41:20 00d 00:10.0	56	66	58.7	45.8	-.-	58.6	58.3	55.3	50.5	48	----	-----	398107.2	
70	6/4/2014	9:41:30 00d 00:10.0	56.3	66.3	58.4	53.8	-.-	58.3	57.9	55.1	53.9	53.9	----	-----	426579.5	
71	6/4/2014	9:41:40 00d 00:10.0	59	69	59.7	57.6	-.-	59.7	59.6	59.3	57.9	57.8	----	-----	794328.2	
72	6/4/2014	9:41:50 00d 00:10.0	56	66	59.3	51.3	-.-	59.2	59	54.7	51.9	51.6	----	-----	398107.2	
73	6/4/2014	9:42:00 00d 00:10.0	61.3	71.3	64.1	56.3	-.-	64.1	63.9	60.9	56.5	56.3	----	-----	1348962.9	

74	6/4/2014	9:42:10	00d	00:10.0	60	70	65.4	56.6	-.-	63.9	60.5	57.4	56.7	56.6	----	-----	1000000.0
75	6/4/2014	9:42:20	00d	00:10.0	59.7	69.7	65.4	52.6	-.-	65.2	64.8	59.6	53.4	52.9	----	-----	933254.3
76	6/4/2014	9:42:30	00d	00:10.0	55.6	65.6	57.6	51.7	-.-	57.5	57.4	54.3	52.4	52	----	-----	363078.1
77	6/4/2014	9:42:40	00d	00:10.0	57	67	63.7	49	-.-	61.9	58.3	52.1	49.7	49.4	----	-----	501187.2
78	6/4/2014	9:42:50	00d	00:10.0	61.8	71.8	64.9	58.3	-.-	64.7	64.5	60.6	58.8	58.4	----	-----	1513561.2
79	6/4/2014	9:43:00	00d	00:10.0	60.2	70.2	61.2	59.3	-.-	60.9	60.8	60	59.5	59.4	----	-----	1047128.5
80	6/4/2014	9:43:10	00d	00:10.0	59.5	69.5	61.2	56.5	-.-	61	60.9	59.4	57	56.8	----	-----	891250.9
81	6/4/2014	9:43:20	00d	00:10.0	60.2	70.2	63.1	54.1	-.-	63	62.6	61.1	56	55	----	-----	1047128.5
82	6/4/2014	9:43:30	00d	00:10.0	51.3	61.3	54.8	48.5	-.-	54.4	53.7	50.1	48.6	48.6	----	-----	134896.3
83	6/4/2014	9:43:40	00d	00:10.0	55	65	57.5	51.6	-.-	57.4	57.1	54.9	52.3	51.9	----	-----	316227.8
84	6/4/2014	9:43:50	00d	00:10.0	49.1	59.1	52.4	46.5	-.-	51.8	51.2	49.6	47	46.6	----	-----	81283.1
85	6/4/2014	9:44:00	00d	00:10.0	48.7	58.7	52.2	44.9	-.-	51.1	50.6	47.9	45.1	45.1	----	-----	74131.0
86	6/4/2014	9:44:10	00d	00:10.0	60.1	70.1	63	52.2	-.-	62.9	62.8	59.6	54.4	54.1	----	-----	1023293.0
87	6/4/2014	9:44:20	00d	00:10.0	50.4	60.4	57.3	46.4	-.-	56.4	55.3	50.4	47	46.6	----	-----	109647.8
88	6/4/2014	9:44:30	00d	00:10.0	52.3	62.3	56.1	47.8	-.-	56	55.8	51.2	48.6	48.1	----	-----	169824.4
89	6/4/2014	9:44:40	00d	00:10.0	51.8	61.8	53.1	49	-.-	52.9	52.8	51.4	50.2	50.2	----	-----	151356.1
90	6/4/2014	9:44:50	00d	00:10.0	59	69	64.4	53	-.-	63.4	60	56.2	54.5	53.6	----	-----	794328.2

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R10																63.7
1	6/4/2014	8:40:00 00d 00:10.0	61.4	71.4	64.7	59.9	-.-	64.3	63.8	61.3	60.6	60.5	----	-----	1380384.3	
2	6/4/2014	8:40:10 00d 00:10.0	63.9	73.9	68.4	56.1	-.-	68.2	67.9	59.7	56.4	56.3	----	-----	2454708.9	
3	6/4/2014	8:40:20 00d 00:10.0	63.4	73.4	68.8	57.1	-.-	68.7	68.7	62.3	57.6	57.4	----	-----	2187761.6	
4	6/4/2014	8:40:30 00d 00:10.0	53.3	63.3	57.1	50.5	-.-	56.9	56.8	52.6	51.1	50.9	----	-----	213796.2	
5	6/4/2014	8:40:40 00d 00:10.0	48	58	53	42.4	-.-	52.3	51.9	46.2	43.5	43	----	-----	63095.7	
6	6/4/2014	8:40:50 00d 00:10.0	54.1	64.1	57.3	46.7	-.-	57.2	57	53.2	47.2	47	----	-----	257039.6	
7	6/4/2014	8:41:00 00d 00:10.0	55.3	65.3	58.5	48.8	-.-	58.4	58.2	54.7	49.5	49.1	----	-----	338844.2	
8	6/4/2014	8:41:10 00d 00:10.0	61.2	71.2	63.5	55.9	-.-	63.4	63.1	61.2	56.3	56.1	----	-----	1318256.7	
9	6/4/2014	8:41:20 00d 00:10.0	56.5	66.5	60.6	53.8	-.-	60	58.9	56.8	54.2	54	----	-----	446683.6	
10	6/4/2014	8:41:30 00d 00:10.0	66.4	76.4	69.9	58.6	-.-	69.8	69.8	64.9	60.6	59.9	----	-----	4365158.3	
11	6/4/2014	8:41:40 00d 00:10.0	55	65	59.5	51.7	-.-	58.5	58.1	55.2	52.3	52.1	----	-----	316227.8	
12	6/4/2014	8:41:50 00d 00:10.0	55	65	56.5	51.6	-.-	56.3	56.1	54.9	52.6	51.8	----	-----	316227.8	
13	6/4/2014	8:42:00 00d 00:10.0	54.1	64.1	56.2	51.6	-.-	55.8	55.8	53.5	51.8	51.7	----	-----	257039.6	
14	6/4/2014	8:42:10 00d 00:10.0	56.2	66.2	57.7	53	-.-	57.7	57.5	56.3	53.5	53.2	----	-----	416869.4	
15	6/4/2014	8:42:20 00d 00:10.0	53.2	63.2	56.6	49.1	-.-	56	55.7	54.7	50	49.5	----	-----	208929.6	
16	6/4/2014	8:42:30 00d 00:10.0	58.5	68.5	65.3	46.3	-.-	63.8	62	48.4	46.6	46.5	----	-----	707945.8	
17	6/4/2014	8:42:40 00d 00:10.0	62.7	72.7	67.3	58.2	-.-	67.1	67	61.1	59.4	58.7	----	-----	1862087.1	
18	6/4/2014	8:42:50 00d 00:10.0	54.9	64.9	58.2	54	-.-	57.6	57.1	54.9	54.2	54.1	----	-----	309029.5	
19	6/4/2014	8:43:00 00d 00:10.0	56.6	66.6	61.5	50.6	-.-	60.9	58.5	54.3	51	50.7	----	-----	457088.2	
20	6/4/2014	8:43:10 00d 00:10.0	66	76	70	58.6	-.-	69.8	69.6	64.2	60.8	59.7	----	-----	3981071.7	
21	6/4/2014	8:43:20 00d 00:10.0	55.3	65.3	58.6	53.5	-.-	57.7	57.3	54.9	53.9	53.6	----	-----	338844.2	
22	6/4/2014	8:43:30 00d 00:10.0	54.7	64.7	57.4	52.9	-.-	57	56.6	54.4	53.3	53.1	----	-----	295120.9	
23	6/4/2014	8:43:40 00d 00:10.0	69	79	70.5	56.6	-.-	70.3	69.9	69	61.7	59.7	----	-----	7943282.3	
24	6/4/2014	8:43:50 00d 00:10.0	65.4	75.4	70.6	56.6	-.-	70.5	70	64.9	58.2	57.2	----	-----	3467368.5	
25	6/4/2014	8:44:00 00d 00:10.0	69	79	72.4	56	-.-	72.2	72	69	56.4	56.2	----	-----	7943282.3	
26	6/4/2014	8:44:10 00d 00:10.0	65.5	75.5	68	63.8	-.-	67.5	67.4	65.4	64	64	----	-----	3548133.9	
27	6/4/2014	8:44:20 00d 00:10.0	66.1	76.1	69.5	60.2	-.-	69.4	69.3	65.5	60.7	60.4	----	-----	4073802.8	
28	6/4/2014	8:44:30 00d 00:10.0	68	78	70.6	62.5	-.-	70.5	70.3	67.2	63	62.7	----	-----	6309573.4	
29	6/4/2014	8:44:40 00d 00:10.0	65.2	75.2	69.5	58.7	-.-	69.3	69.2	64.5	58.9	58.8	----	-----	3311311.2	
30	6/4/2014	8:44:50 00d 00:10.0	68.9	78.9	72.7	60.5	-.-	72.5	72.3	67.4	61.8	61.3	----	-----	7762471.2	
31	6/4/2014	8:45:00 00d 00:10.0	67	77	70.2	59.9	-.-	70	69.9	63.5	60.6	60.3	----	-----	5011872.3	
32	6/4/2014	8:45:10 00d 00:10.0	60.6	70.6	68.9	54.8	-.-	67.4	66.3	61.9	56.8	55.7	----	-----	1148153.6	
33	6/4/2014	8:45:20 00d 00:10.0	55.8	65.8	58.5	53	-.-	58.4	58.3	54.9	53.8	53.7	----	-----	380189.4	
34	6/4/2014	8:45:30 00d 00:10.0	49.3	59.3	53	46.7	-.-	52.2	51.6	48.8	47	46.9	----	-----	85113.8	
35	6/4/2014	8:45:40 00d 00:10.0	60.1	70.1	61.7	52.4	-.-	61.4	61.3	59.8	57	55	----	-----	1023293.0	
36	6/4/2014	8:45:50 00d 00:10.0	70.6	80.6	77.2	53.3	-.-	76.8	76.2	58	53.8	53.5	----	-----	11481536.2	
37	6/4/2014	8:46:00 00d 00:10.0	66.4	76.4	76.2	59.5	-.-	74.8	73.5	66.9	61.1	60.1	----	-----	4365158.3	
38	6/4/2014	8:46:10 00d 00:10.0	56.3	66.3	59.6	51.7	-.-	59.2	59	57.6	52.6	52	----	-----	426579.5	
39	6/4/2014	8:46:20 00d 00:10.0	50.4	60.4	52.4	48.2	-.-	52.2	51.8	50.2	48.5	48.4	----	-----	109647.8	
40	6/4/2014	8:46:30 00d 00:10.0	54.8	64.8	57.6	51.2	-.-	57.4	57.3	54.3	51.5	51.3	----	-----	301995.2	
41	6/4/2014	8:46:40 00d 00:10.0	49.3	59.3	52.1	47.9	-.-	51.8	51.7	48.8	48.3	48.2	----	-----	85113.8	
42	6/4/2014	8:46:50 00d 00:10.0	66.4	76.4	73.4	46.8	-.-	72.7	70.4	52.7	47.4	46.9	----	-----	4365158.3	
43	6/4/2014	8:47:00 00d 00:10.0	61.5	71.5	73.1	52.7	-.-	72.1	70.6	59.2	54.4	53.6	----	-----	1412537.5	
44	6/4/2014	8:47:10 00d 00:10.0	46.7	56.7	56.1	45	-.-	54.6	53.1	46.8	45.9	45.8	----	-----	46773.5	
45	6/4/2014	8:47:20 00d 00:10.0	50.6	60.6	54.6	44.5	-.-	53.9	53.5	46.6	44.8	44.6	----	-----	114815.4	
46	6/4/2014	8:47:30 00d 00:10.0	69.9	79.9	74.3	54.6	-.-	73.5	72.3	68	58.2	56.5	----	-----	9772372.2	
47	6/4/2014	8:47:40 00d 00:10.0	69.3	79.3	75.4	64.2	-.-	75.3	74.8	67.9	64.6	64.3	----	-----	8511380.4	
48	6/4/2014	8:47:50 00d 00:10.0	67.7	77.7	70.2	65	-.-	70	69.9	67.1	65.6	65.3	----	-----	5888436.6	
49	6/4/2014	8:48:00 00d 00:10.0	60.9	70.9	67	55.5	-.-	66.9	66.5	60.7	55.9	55.6	----	-----	1230268.8	
50	6/4/2014	8:48:10 00d 00:10.0	69	79	71.5	56	-.-	71.2	70.9	68.8	57.6	56.6	----	-----	7943282.3	
51	6/4/2014	8:48:20 00d 00:10.0	65.5	75.5	70.9	55.3	-.-	70.8	70.7	63.6	56.9	56	----	-----	3548133.9	
52	6/4/2014	8:48:30 00d 00:10.0	52	62	55.3	49.8	-.-	55.1	54.7	51.7	50	50	----	-----	158489.3	
53	6/4/2014	8:48:40 00d 00:10.0	49.5	59.5	52.1	48	-.-	51.8	51.1	49.5	48.4	48.2	----	-----	89125.1	
54	6/4/2014	8:48:50 00d 00:10.0	49.3	59.3	51.7	47.9	-.-	51.5	51.3	48.8	48.2	48.1	----	-----	85113.8	
55	6/4/2014	8:49:00 00d 00:10.0	54.9	64.9	57.5	47.8	-.-	57.4	57.3	54.7	48.1	47.9	----	-----	309029.5	
56	6/4/2014	8:49:10 00d 00:10.0	59.1	69.1	62.8	50.5	-.-	62.7	62.6	53.9	51	50.7	----	-----	812830.5	
57	6/4/2014	8:49:20 00d 00:10.0	66.4	76.4	70.7	58.8	-.-	70.2	69.7	65.9	59.2	58.9	----	-----	4365158.3	
58	6/4/2014	8:49:30 00d 00:10.0	55	65	64.5	47.2	-.-	63.7	62.7	52.7	47.8	47.4	----	-----	316227.8	
59	6/4/2014	8:49:40 00d 00:10.0	48.1	58.1	52.1	45.2	-.-	51.6	51.4	46.9	45.3	45.3	----	-----	64565.4	
60	6/4/2014	8:49:50 00d 00:10.0	49.4	59.4	50.5	47.1	-.-	50.4	50.3	48.9	48.1	48	----	-----	87096.4	
61	6/4/2014	8:50:00 00d 00:10.0	55	65	57.4	50.3	-.-	57.3	57.1	54.5	52.6	51.8	----	-----	316227.8	
62	6/4/2014	8:50:10 00d 00:10.0	64.6	74.6	69	50.5	-.-	68.9	68.5	57.3	51	50.7	----	-----	2884031.5	
63	6/4/2014	8:50:20 00d 00:10.0	66.2	76.2	67.8	63.2	-.-	67.7	67.5	66	63.6	63.3	----	-----	4168693.8	
64	6/4/2014	8:50:30 00d 00:10.0	58.7	68.7	67.2	52.2	-.-	66.4	65.2	58.7	54.3	53.3	----	-----	741310.2	
65	6/4/2014	8:50:40 00d 00:10.0	57	67	63.3	49.4	-.-	61.8	59.7	51.5	50	49.7	----	-----	501187.2	
66	6/4/2014	8:50:50 00d 00:10.0	66.7	76.7	69.4	62.2	-.-	69.3	69.2	66.5	62.4	62.3	----	-----	4677351.4	
67	6/4/2014	8:51:00 00d 00:10.0	62.2	72.2	63.7	57.5	-.-	63.6	63.6	62.7	59.5	58.5	----	-----	1659586.9	
68	6/4/2014	8:51:10 00d 00:10.0	52	62	57.5	48.4	-.-	56.8	56	52.1	49.2	48.6	----	-----	158489.3	
69	6/4/2014	8:51:20 00d 00:10.0	52.1	62.1	55.1	48.3	-.-	54.9	53.8	50.6	49.9	49.4	----	-----	162181.0	
70	6/4/2014	8:51:30 00d 00:10.0	70.3	80.3	74.7	55.1	-.-	74.4	74.3	68.3	58.1	55.9	----	-----	10715193.1	
71	6/4/2014	8:51:40 00d 00:10.0	53.8	63.8	63.3	50.4	-.-	61.9	60.6	52.6	51	50.8	----	-----	239883.3	
72	6/4/2014	8:51:50 00d 00:10.0	55.7	65.7	59.1	48.7	-.-	58.9	58.8	54.9	49.2	48.9	----	-----	371535.2	
73	6/4/2014	8:52:00 00d 00:10.0	66.6	76.6	70.9	52.7	-.-	70.8	70.7	57.5	53.2	52.8	----	-----	4570881.9	

74	6/4/2014	8:52:10	00d	00:10.0	68.2	78.2	71	59.7	-.-	70.8	70.5	69.4	61.8	60.7	----	-----	6606934.5
75	6/4/2014	8:52:20	00d	00:10.0	52.1	62.1	59.7	47.2	-.-	58.9	58.1	51.4	49	48.2	----	-----	162181.0
76	6/4/2014	8:52:30	00d	00:10.0	48.4	58.4	51.7	45	-.-	51.6	51.3	47	45.1	45	----	-----	69183.1
77	6/4/2014	8:52:40	00d	00:10.0	57.1	67.1	60.6	49.2	-.-	60.6	60.3	53.7	49.4	49.3	----	-----	512861.4
78	6/4/2014	8:52:50	00d	00:10.0	62.2	72.2	68.5	54.2	-.-	67.2	64.5	57.7	54.3	54.3	----	-----	1659586.9
79	6/4/2014	8:53:00	00d	00:10.0	69	79	70.6	67.7	-.-	70.6	70.4	69.1	67.8	67.7	----	-----	7943282.3
80	6/4/2014	8:53:10	00d	00:10.0	62.6	72.6	68.4	55.4	-.-	68.3	68.2	60.7	55.9	55.5	----	-----	1819700.9
81	6/4/2014	8:53:20	00d	00:10.0	52.3	62.3	55.8	50.8	-.-	55.4	54.9	51.7	51	51	----	-----	169824.4
82	6/4/2014	8:53:30	00d	00:10.0	58.4	68.4	62.5	50.8	-.-	62.3	61.7	55.4	51	50.9	----	-----	691831.0
83	6/4/2014	8:53:40	00d	00:10.0	58	68	62.9	50.7	-.-	62.7	62.7	57.8	51.7	51	----	-----	630957.3
84	6/4/2014	8:53:50	00d	00:10.0	64.7	74.7	68.6	50.6	-.-	68.4	68.2	60.4	51.2	50.9	----	-----	2951209.2
85	6/4/2014	8:54:00	00d	00:10.0	67.8	77.8	70.7	62.1	-.-	70.3	70.1	67.5	62.6	62.3	----	-----	6025595.9
86	6/4/2014	8:54:10	00d	00:10.0	67.6	77.6	71.6	60.1	-.-	71.5	71.5	66.9	61.2	60.6	----	-----	5754399.4
87	6/4/2014	8:54:20	00d	00:10.0	56.8	66.8	60.1	53.9	-.-	59.8	59.7	56.4	55	54.5	----	-----	478630.1
88	6/4/2014	8:54:30	00d	00:10.0	55.5	65.5	60.1	51.2	-.-	59.4	57.1	53.7	51.3	51.3	----	-----	354813.4
89	6/4/2014	8:54:40	00d	00:10.0	56.5	66.5	60.3	52.6	-.-	60.2	60.2	55.4	52.7	52.7	----	-----	446683.6
90	6/4/2014	8:54:50	00d	00:10.0	60.4	70.4	63.7	53	-.-	63.1	62.3	59.6	53.2	53.1	----	-----	1096478.2

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R11																55.8
1	6/4/2014	8:40:00 00d 00:10.0	58.3	68.3	59.8	56.5	-.-	59.6	59.3	57.8	56.9	56.7	----	-----	676083.0	
2	6/4/2014	8:40:10 00d 00:10.0	58.3	68.3	60.6	56.1	-.-	60.6	60.4	58.4	56.4	56.2	----	-----	676083.0	
3	6/4/2014	8:40:20 00d 00:10.0	55	65	56.1	54.3	-.-	55.9	55.8	54.9	54.5	54.4	----	-----	316227.8	
4	6/4/2014	8:40:30 00d 00:10.0	56.2	66.2	59.8	53.2	-.-	59.4	59.2	55.1	54.2	53.8	----	-----	416869.4	
5	6/4/2014	8:40:40 00d 00:10.0	56.2	66.2	62.6	48.4	-.-	62	61.5	51.9	49.8	49	----	-----	416869.4	
6	6/4/2014	8:40:50 00d 00:10.0	51.1	61.1	56	48.7	-.-	54.6	53.9	51.5	49.1	49	----	-----	128825.0	
7	6/4/2014	8:41:00 00d 00:10.0	52.2	62.2	53.8	49.5	-.-	53.7	53.6	52.3	49.9	49.8	----	-----	165958.7	
8	6/4/2014	8:41:10 00d 00:10.0	50.7	60.7	53.3	48.6	-.-	52.5	52.2	50.2	48.9	48.8	----	-----	117489.8	
9	6/4/2014	8:41:20 00d 00:10.0	57.9	67.9	59.6	53.3	-.-	59.5	59.4	57.8	54.9	54.4	----	-----	616595.0	
10	6/4/2014	8:41:30 00d 00:10.0	52.5	62.5	54.1	50.1	-.-	54	53.9	52.9	50.6	50.4	----	-----	177827.9	
11	6/4/2014	8:41:40 00d 00:10.0	49.5	59.5	52.9	46.1	-.-	52.6	51.9	49.7	46.4	46.2	----	-----	89125.1	
12	6/4/2014	8:41:50 00d 00:10.0	51.6	61.6	54.5	46	-.-	54.3	53.9	50.7	48.2	47.8	----	-----	144544.0	
13	6/4/2014	8:42:00 00d 00:10.0	52.6	62.6	56.1	48.3	-.-	55.8	55.3	51.6	50.2	50.1	----	-----	181970.1	
14	6/4/2014	8:42:10 00d 00:10.0	52.8	62.8	55.6	49.3	-.-	55.4	55.2	51	49.8	49.4	----	-----	190546.1	
15	6/4/2014	8:42:20 00d 00:10.0	55.2	65.2	59.2	50	-.-	58.4	58.3	52.7	50.3	50.2	----	-----	331131.1	
16	6/4/2014	8:42:30 00d 00:10.0	59.5	69.5	64	51.7	-.-	63.5	63	59.7	53	52.3	----	-----	891250.9	
17	6/4/2014	8:42:40 00d 00:10.0	50	60	54.1	46.8	-.-	53.9	53.6	49.6	47	46.9	----	-----	100000.0	
18	6/4/2014	8:42:50 00d 00:10.0	52.8	62.8	56.1	46.8	-.-	55.3	54.8	51.7	48.5	48.3	----	-----	190546.1	
19	6/4/2014	8:43:00 00d 00:10.0	60	70	63.3	53.6	-.-	62.9	62.7	59.4	54.3	53.8	----	-----	1000000.0	
20	6/4/2014	8:43:10 00d 00:10.0	54.4	64.4	57.1	52.7	-.-	56.5	56.3	54.5	53.1	52.9	----	-----	275422.9	
21	6/4/2014	8:43:20 00d 00:10.0	55.7	65.7	58.3	52.7	-.-	57.6	57.5	55.6	53.1	53	----	-----	371535.2	
22	6/4/2014	8:43:30 00d 00:10.0	60.8	70.8	62.3	53.5	-.-	62.1	62	60.2	55.7	54.7	----	-----	1202264.4	
23	6/4/2014	8:43:40 00d 00:10.0	59.4	69.4	62.2	55.1	-.-	62	61.8	60.2	55.7	55.4	----	-----	870963.6	
24	6/4/2014	8:43:50 00d 00:10.0	60.3	70.3	61.8	55	-.-	61.7	61.7	60.8	55.4	55.2	----	-----	1071519.3	
25	6/4/2014	8:44:00 00d 00:10.0	58.7	68.7	60.9	57.5	-.-	60.6	60.2	58.9	57.8	57.6	----	-----	741310.2	
26	6/4/2014	8:44:10 00d 00:10.0	59.6	69.6	60.6	57.8	-.-	60.4	60.3	59.8	58.4	58.1	----	-----	912010.8	
27	6/4/2014	8:44:20 00d 00:10.0	59.4	69.4	60.5	58.1	-.-	60.4	60.3	59	58.6	58.3	----	-----	870963.6	
28	6/4/2014	8:44:30 00d 00:10.0	59	69	60.9	57.1	-.-	60.7	60.6	58.6	57.4	57.2	----	-----	794328.2	
29	6/4/2014	8:44:40 00d 00:10.0	59.5	69.5	61.3	56.6	-.-	61.2	61.1	59.8	57.2	56.8	----	-----	891250.9	
30	6/4/2014	8:44:50 00d 00:10.0	58.1	68.1	59.7	55.5	-.-	59.6	59.3	57.4	55.7	55.6	----	-----	645654.2	
31	6/4/2014	8:45:00 00d 00:10.0	56.9	66.9	59.5	55.5	-.-	59.2	58.8	56.8	55.9	55.7	----	-----	489778.8	
32	6/4/2014	8:45:10 00d 00:10.0	53.8	63.8	56.9	52.6	-.-	56.7	56.5	53.6	52.7	52.7	----	-----	239883.3	
33	6/4/2014	8:45:20 00d 00:10.0	50.2	60.2	52.8	48.1	-.-	52.4	52.1	50.5	48.6	48.5	----	-----	104712.9	
34	6/4/2014	8:45:30 00d 00:10.0	50.4	60.4	53	48.1	-.-	52.6	52.4	50.2	48.9	48.6	----	-----	109647.8	
35	6/4/2014	8:45:40 00d 00:10.0	55.5	65.5	60.6	47.8	-.-	59	57.8	52.2	48.1	48.1	----	-----	354813.4	
36	6/4/2014	8:45:50 00d 00:10.0	60.1	70.1	62.8	58.5	-.-	62.6	62.1	59.5	58.8	58.7	----	-----	1023293.0	
37	6/4/2014	8:46:00 00d 00:10.0	53.9	63.9	58.6	51.3	-.-	57.9	57.3	54.1	52.8	52	----	-----	245470.9	
38	6/4/2014	8:46:10 00d 00:10.0	50.6	60.6	53.9	46	-.-	53.5	52.9	50.9	47.1	46.3	----	-----	114815.4	
39	6/4/2014	8:46:20 00d 00:10.0	46.7	56.7	51.2	43.6	-.-	50.6	50.3	45.5	43.8	43.7	----	-----	46773.5	
40	6/4/2014	8:46:30 00d 00:10.0	47.5	57.5	50.3	44.2	-.-	49.7	47.8	46.8	45	44.4	----	-----	56234.1	
41	6/4/2014	8:46:40 00d 00:10.0	54.7	64.7	57.9	49.2	-.-	57.7	57.3	50.6	49.7	49.4	----	-----	295120.9	
42	6/4/2014	8:46:50 00d 00:10.0	55.4	65.4	60.5	47.5	-.-	60.3	59.7	54	48.3	48	----	-----	346736.9	
43	6/4/2014	8:47:00 00d 00:10.0	45.9	55.9	47.9	43.5	-.-	47.9	47.6	46.3	43.6	43.6	----	-----	38904.5	
44	6/4/2014	8:47:10 00d 00:10.0	45.4	55.4	47.6	43.2	-.-	46.9	46.8	44.3	43.5	43.4	----	-----	34673.7	
45	6/4/2014	8:47:20 00d 00:10.0	58.7	68.7	61.8	47.6	-.-	61.6	61.4	56.5	51	49.6	----	-----	741310.2	
46	6/4/2014	8:47:30 00d 00:10.0	60.3	70.3	63.7	57.2	-.-	63.6	63.5	58.8	57.5	57.4	----	-----	1071519.3	
47	6/4/2014	8:47:40 00d 00:10.0	59.8	69.8	63.2	58.3	-.-	63	62.4	59	58.5	58.5	----	-----	954992.6	
48	6/4/2014	8:47:50 00d 00:10.0	53.9	63.9	58.6	50.1	-.-	57.9	57.5	53.7	50.3	50.2	----	-----	245470.9	
49	6/4/2014	8:48:00 00d 00:10.0	59.6	69.6	61.8	51.5	-.-	61.6	61.5	59.2	53	52.3	----	-----	912010.8	
50	6/4/2014	8:48:10 00d 00:10.0	58.6	68.6	61.5	52.8	-.-	61.3	61.3	59.8	53.4	53.2	----	-----	724436.0	
51	6/4/2014	8:48:20 00d 00:10.0	49	59	52.8	45.7	-.-	52.2	51.8	49.6	46.2	45.9	----	-----	79432.8	
52	6/4/2014	8:48:30 00d 00:10.0	45.8	55.8	47.4	43.6	-.-	47.2	47.1	46	43.9	43.8	----	-----	38018.9	
53	6/4/2014	8:48:40 00d 00:10.0	44.8	54.8	46.8	42.9	-.-	46.8	46.7	44.4	43.4	43.2	----	-----	30199.5	
54	6/4/2014	8:48:50 00d 00:10.0	45.7	55.7	46.9	43.9	-.-	46.3	46.2	45.7	44.2	44	----	-----	37153.5	
55	6/4/2014	8:49:00 00d 00:10.0	50.1	60.1	52.3	46.9	-.-	52.3	52.2	49.1	47	46.9	----	-----	102329.3	
56	6/4/2014	8:49:10 00d 00:10.0	56.9	66.9	58.8	52.3	-.-	58.7	58.5	56.4	53.1	52.9	----	-----	489778.8	
57	6/4/2014	8:49:20 00d 00:10.0	49	59	57	46.8	-.-	55.9	54.8	47.7	47.1	46.9	----	-----	79432.8	
58	6/4/2014	8:49:30 00d 00:10.0	51.7	61.7	54.1	46.2	-.-	53.9	53.9	50.5	46.5	46.4	----	-----	147910.8	
59	6/4/2014	8:49:40 00d 00:10.0	48.5	58.5	53.3	45.5	-.-	53.1	53	47.3	46.1	45.9	----	-----	70794.6	
60	6/4/2014	8:49:50 00d 00:10.0	46.3	56.3	48.3	45.1	-.-	48	47.6	46.1	45.4	45.3	----	-----	42658.0	
61	6/4/2014	8:50:00 00d 00:10.0	54.8	64.8	58.5	46.4	-.-	58.5	58.1	51.9	47.2	46.9	----	-----	301995.2	
62	6/4/2014	8:50:10 00d 00:10.0	58	68	58.7	57.2	-.-	58.6	58.6	58.1	57.5	57.3	----	-----	630957.3	
63	6/4/2014	8:50:20 00d 00:10.0	52.7	62.7	57.6	49.5	-.-	57.2	56.8	52.2	49.7	49.6	----	-----	186208.7	
64	6/4/2014	8:50:30 00d 00:10.0	49.3	59.3	52.7	45.9	-.-	51.9	51.1	48.3	46.4	46.3	----	-----	85113.8	
65	6/4/2014	8:50:40 00d 00:10.0	55.8	65.8	57.4	52.7	-.-	57.3	57.2	55.9	53.2	52.9	----	-----	380189.4	
66	6/4/2014	8:50:50 00d 00:10.0	52.7	62.7	53.3	52.1	-.-	53.2	53.1	52.6	52.3	52.2	----	-----	186208.7	
67	6/4/2014	8:51:00 00d 00:10.0	49	59	52.7	46.9	-.-	52.4	51.8	49	47.7	47.1	----	-----	79432.8	
68	6/4/2014	8:51:10 00d 00:10.0	46.7	56.7	48.3	45.1	-.-	47.8	47.5	46.4	45.2	45.2	----	-----	46773.5	
69	6/4/2014	8:51:20 00d 00:10.0	60.1	70.1	63.9	48.3	-.-	63.4	63.1	60	51.7	50.5	----	-----	1023293.0	
70	6/4/2014	8:51:30 00d 00:10.0	49.8	59.8	57.5	48.4	-.-	56	54.4	50.6	48.8	48.5	----	-----	95499.3	
71	6/4/2014	8:51:40 00d 00:10.0	50.2	60.2	51.3	48.5	-.-	51.2	51.2	49.9	49	48.9	----	-----	104712.9	
72	6/4/2014	8:51:50 00d 00:10.0	56.2	66.2	60.1	48.3	-.-	59.6	59.5	51.3	48.5	48.4	----	-----	416869.4	
73	6/4/2014	8:52:00 00d 00:10.0	59.6	69.6	61.2	55.4	-.-	61	60.9	60.3	57.2	56.3	----	-----	912010.8	

74	6/4/2014	8:52:10	00d	00:10.0	48.6	58.6	55.4	44.1	-.-	54.4	53.3	48.8	45.4	44.8	----	-----	72443.6
75	6/4/2014	8:52:20	00d	00:10.0	45	55	46.7	42.7	-.-	46.4	46.3	44.5	43.2	43	----	-----	31622.8
76	6/4/2014	8:52:30	00d	00:10.0	46.9	56.9	49	44.8	-.-	48.8	48.1	46.4	45.1	45	----	-----	48977.9
77	6/4/2014	8:52:40	00d	00:10.0	52.3	62.3	56.5	47.6	-.-	55.6	54.9	49	47.9	47.7	----	-----	169824.4
78	6/4/2014	8:52:50	00d	00:10.0	60.5	70.5	61.4	56.4	-.-	61.3	61.3	60.5	58.7	57.3	----	-----	1122018.5
79	6/4/2014	8:53:00	00d	00:10.0	55.3	65.3	59.6	49.3	-.-	59.5	59.3	55.2	50.3	50.2	----	-----	338844.2
80	6/4/2014	8:53:10	00d	00:10.0	47.2	57.2	49.9	44.3	-.-	49.6	49.3	47.1	44.9	44.8	----	-----	52480.7
81	6/4/2014	8:53:20	00d	00:10.0	49.7	59.7	52.4	46.9	-.-	51.3	50.6	48.6	47.4	47.2	----	-----	93325.4
82	6/4/2014	8:53:30	00d	00:10.0	51.5	61.5	53.4	47.2	-.-	53.3	53.2	52.2	48.3	47.6	----	-----	141253.8
83	6/4/2014	8:53:40	00d	00:10.0	56	66	59.2	47.2	-.-	59	59	53.8	47.3	47.3	----	-----	398107.2
84	6/4/2014	8:53:50	00d	00:10.0	58.8	68.8	60.4	56.6	-.-	60.2	59.9	58.8	56.8	56.7	----	-----	758577.6
85	6/4/2014	8:54:00	00d	00:10.0	60.6	70.6	63.3	52	-.-	63.2	63.1	61.2	54.1	53	----	-----	1148153.6
86	6/4/2014	8:54:10	00d	00:10.0	48.6	58.6	52	47.3	-.-	51.4	50.7	48.4	47.7	47.5	----	-----	72443.6
87	6/4/2014	8:54:20	00d	00:10.0	52.6	62.6	53.3	49	-.-	53.2	53.2	52.4	50.8	49.8	----	-----	181970.1
88	6/4/2014	8:54:30	00d	00:10.0	53.4	63.4	54.6	51.3	-.-	54.6	54.5	53.7	52.1	51.9	----	-----	218776.2
89	6/4/2014	8:54:40	00d	00:10.0	51	61	52.8	49.7	-.-	52.6	52.2	50.3	49.8	49.8	----	-----	125892.5
90	6/4/2014	8:54:50	00d	00:10.0	55.5	65.5	56	52.8	-.-	56	55.9	55.5	54.1	53.3	----	-----	354813.4

Appendix D

TRAFFIC DATA SUMMARY

TNM Validation Traffic Counts
(15 min)
6/4/2014

Run 1 (R10 & R11)			
	Cars	Med	Heavys
76 WB	312	24	192
76 EB	296	24	200

Run 2 (R06 - R09)			
	Cars	Med	Heavys
76 WB	384	12	184
76 EB	156	12	160
522	120	4	28

Run 3 (R04 & R05)			
	Cars	Med	Heavys
76 WB	336	16	188
76 EB	232	12	164
Grist Mill	32	4	16

Run 4 (R01 - R03)			
	Cars	Med	Heavys
76 WB	284	0	180
76 EB	292	20	156

	SR 76 EB	SR 76 WB
2013 ADT	15,491	16,965
2013 Peak Hr Volume	1,509	1,309
2043 ADT	24,214	26,518
2043 Peak Hr Volume	2,359	2,046
Growth Rate	*1.50%*	*1.50%*
2014 ADT	15,723	17,219
2014 Peak Hr Volume	1,532	1,329
2044 ADT	24,577	26,916
2044 Peak Hr Volume	2,394	2,077
Cars	86%	80%
Medium Trucks	5%	6%
Heavy Trucks	9%	14%

*Traffic data from PTC Staff

SR 76 Hourly Volumes

	SR 76 EB				SR 76 WB			
Year	**Cars**	**MT**	**HT**	**Total**	**Cars**	**MT**	**HT**	**Total**
2014	1317	77	138	1532	1063	80	186	1329
2044	2059	120	215	2394	1661	125	291	2077

Note: Assumed trucks percentages are consistent throughout day.

Note: Traffic grown by MT traffic engineers

	US 522	**Grist Mill Rd (SR 1010)**
County	Fulton	Huntingdon
2014 AADT	**1793**	**403**
Traffic Group	Rural - Other Principal Arterials	Central Rural - Collectors and Local Roads
Growth Rate	0.79%	0.51%
2044 AADT	**2270**	**469**

*Traffic obtained from PennDOT's iTMS website.

PTC 180-186 Hourly Noise Data

	US 522	**SR 1010**
County	Fulton	Huntingdon
TPG	TPG 4	TPG 9
Truck Percent	10%	9%
2014 Total AADT	1,793	403

2014 Hourly Volumes

	US 522				**SR 1010**			
Hour	**Cars**	**MT**	**HT**	**Total**	**Cars**	**MT**	**HT**	**Total**
1	12	1	1	14	3	0	0	3
2	8	1	0	9	2	0	0	2
3	8	1	0	8	2	0	0	2
4	9	1	0	10	2	0	0	2
5	17	1	1	19	4	0	0	4
6	41	3	2	46	9	1	0	10
7	78	5	3	87	18	1	1	20
8	100	7	4	111	23	1	1	25
9	91	6	4	102	21	1	1	23
10	86	6	4	95	19	1	1	21
11	87	6	4	97	20	1	1	22
12	91	6	4	101	21	1	1	23
13	94	6	4	105	21	1	1	24
14	97	6	4	108	22	1	1	24
15	107	7	5	119	24	1	1	27
16	122	8	5	136	28	2	1	31
17	128	9	6	143	29	2	1	32
18	120	8	5	134	27	2	1	30
19	90	6	4	100	20	1	1	22
20	69	5	3	76	16	1	1	17
21	57	4	3	63	13	1	1	14
22	46	3	2	51	10	1	0	11
23	33	2	1	36	7	0	0	8
24	22	1	1	25	5	0	0	6
TOTAL*	**1614**	**108**	**72**	**1793**	**367**	**22**	**15**	**403**

*Hourly values may not sum to TOTAL due to rounding

Note: Traffic volumes grown by MT traffic engineers

PTC 180-186 Hourly Noise Data

	US 522	SR 1010
County	Fulton	Huntingdon
TPG	TPG 4	TPG 9
Truck Percent	10%	9%
2014 Total AADT	2,270	469

2044 Hourly Volumes

	US 522				SR 1010			
Hour	**Cars**	**MT**	**HT**	**Total**	**Cars**	**MT**	**HT**	**Total**
1	16	1	1	18	3	0	0	4
2	11	1	0	12	2	0	0	2
3	10	1	0	11	2	0	0	2
4	12	1	1	13	2	0	0	3
5	21	1	1	24	4	0	0	5
6	52	3	2	58	11	1	0	12
7	99	7	4	110	21	1	1	23
8	127	8	6	141	26	2	1	29
9	116	8	5	129	24	1	1	27
10	109	7	5	121	23	1	1	25
11	111	7	5	123	23	1	1	25
12	115	8	5	127	24	1	1	26
13	119	8	5	133	25	1	1	27
14	123	8	5	136	26	2	1	28
15	135	9	6	150	28	2	1	31
16	155	10	7	172	32	2	1	36
17	162	11	7	180	34	2	1	37
18	152	10	7	169	32	2	1	35
19	114	8	5	126	24	1	1	26
20	87	6	4	96	18	1	1	20
21	72	5	3	80	15	1	1	17
22	58	4	3	65	12	1	0	13
23	41	3	2	46	9	1	0	9
24	28	2	1	31	6	0	0	6
TOTAL*	**2043**	**136**	**91**	**2270**	**427**	**25**	**17**	**469**

*Hourly values may not sum to TOTAL due to rounding

Note: Traffic volumes grown by MT traffic engineers

Appendix E

TNM Noise Modeling Data
Input and Output File
(included on CD)

Appendix F

WARRANTED, FEASIBLE & REASONABLE WORKSHEETS

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	B
Noise Wall Identification (i.e., Wall 1)	B

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	1
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation	
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A

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* ."

N/A 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

____ 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:	100%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	9,096			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	1			
c. SF/BR = 2a/2b	9,096			
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	X	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	X	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	X	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?	N/A	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	N/A	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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	C
Noise Wall Identification (i.e., Wall 1)	C - 1

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	3
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation	
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A

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* ."

N/A 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	____ 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:	66%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	19,096			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	3			
c. SF/BR = 2a/2b	6,365			
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	X	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	X	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	X	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?	N/A	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	N/A	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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	C
Noise Wall Identification (i.e., Wall 1)	C - 2

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	1
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation	
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A

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* ."

N/A 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	____ 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:	100%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	2,389			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	1			
c. SF/BR = 2a/2b	2,389			
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?	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?		Yes	X	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	X	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	X	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?	N/A	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	N/A	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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	C
Noise Wall Identification (i.e., Wall 1)	C - 3

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	1
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation			
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A		
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A		
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* ."	N/A	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		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:	100%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	3,447			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	1			
c. SF/BR = 2a/2b	3,447			
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?	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?		Yes	X	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	X 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?	N/A 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	N/A 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

Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc

PennDOT, Engineering District Environmental Manager — Date

3/10/2015

Qualified Professional Performing the Analysis — Date
(name, title, and company name)

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	D
Noise Wall Identification (i.e., Wall 1)	D - 1 (Entire NSA D)

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	2
Category C units impacted	5 ERU's
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation	
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A

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* ."

N/A 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	____ 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%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	31,060			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	12			
c. SF/BR = 2a/2b	2,588			
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?	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?		Yes	X	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	X 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?	N/A 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	N/A 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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	D
Noise Wall Identification (i.e., Wall 1)	D - 2 (Campground only)

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	0
Category C units impacted	5 ERU's
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation

a. Date community was permitted (for new developments or developments planned for or under construction)	N/A
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A

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* ."

N/A 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	____ 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:	14			
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	100%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	11,132			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	38 Campsites (5 ERU's)			
c. SF/BR = 2a/2b	2,226			
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?	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?		Yes	X	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	X 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?	N/A 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	N/A 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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	D
Noise Wall Identification (i.e., Wall 1)	D - 3 (Homes only)

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	2
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation	
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A

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* ."

N/A 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	____ 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:	2			
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	100%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	11,600			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	4			
c. SF/BR = 2a/2b	2,900			
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?	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?		Yes	X	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	X 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?	N/A 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	N/A 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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	E
Noise Wall Identification (i.e., Wall 1)	E

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	2
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation			
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A		
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A		
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* ."	N/A	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		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:	2			
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	100%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	20,770			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	5			
c. SF/BR = 2a/2b	4,154			
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?	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?		Yes	X	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	X 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?	N/A 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	N/A 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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	F
Noise Wall Identification (i.e., Wall 1)	F

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	2
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation			
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A		
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A		
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* ."	N/A	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		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:	2			
b. Percentage of impacted receptor units receiving 5 dB(A) or more insertion loss:	100%			
c. Is the percentage 50 or greater?	X	Yes		No
2. Can the noise wall be designed and physically constructed at the proposed location?	X	Yes		No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes		No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes		No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes		No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes		No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes		No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	19,440			
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	2			
c. SF/BR = 2a/2b	9,720			
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?	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?		Yes	X	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	X 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?	N/A 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	N/A 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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet – Noise Wall

Date	3/10/2015
Project Name	PTC Milepost 180 to Milepost 186 Reconstruction Project
County	Fulton & Huntingdon Counties
SR, Section	PA Turnpike (I-76) MP 180 - MP 186
Community Name and/or NSA #	G
Noise Wall Identification (i.e., Wall 1)	G

General

1. Type of project (new location, reconstruction, etc.):	Widening, reconstruction, and curve flatening

2. Total number of impacted receptor units in community

Category A units impacted	0
Category B units impacted	2
Category C units impacted	0
Category D units impacted (if interior analysis required)	0
Category E units impacted	0

Warranted

1. Community Documentation			
a. Date community was permitted (for new developments or developments planned for or under construction)	N/A		
b. Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	N/A		
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* ."	N/A	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		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:	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?	X	Yes	No
3. Can the noise wall be constructed without causing a safety problem?	X	Yes	No
4. Can the noise wall be constructed without restricting access to vehicular or pedestrian travel?	X	Yes	No
5. Can the noise wall be constructed in a manner that allows for access for required maintenance and inspection operations?	X	Yes	No
6. Can the noise wall be constructed in a manner that permits utilities to function in a normal manner?	X	Yes	No
7. Can the noise wall be constructed in a manner that permits drainage features to function in a normal manner?	X	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."	N/A	Yes	No

2. Square Footage Per Benefited Receptor (SF/BR) Evaluation

a. Area (SF) of the proposed noise wall	30,192		
b. Number of benefited receptor units (any unit receiving 5 dB(A) or more insertion loss)	1		
c. SF/BR = 2a/2b	30,192		
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?	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?	_____ Yes	X 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?	N/A 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	N/A 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
Adam Diltz, Acoustical Scientist, McCormick Taylor , Inc	3/10/2015
Qualified Professional Performing the Analysis (name, title, and company name)	Date

Appendix G

REFERENCES

References

- Pennsylvania Department of Transportation Publication #24, "Project Level Highway Traffic Noise Handbook," December 2013.

- Federal Highway Administration Federal Aid Policy Guide 23 CFR 772, U.S. Government Printing Office, updated July 13, 2010.

- U.S. Department of Transportation, Federal Highway Administration "Highway Traffic Noise: Analysis and Abatement Guidance," December 2011.

- U.S. Department of Transportation, Federal Highway Administration "Measurement of Highway-Related Noise," FHWA Report No. FHWA-PD-96-046, May 1996.

- U.S. Department of Transportation, Federal Highway Administration "FHWA Traffic Noise Model User's Guide," FHWA Report No. FHWA-PD-96-009, January 1998.

Appendix H

LIST OF PREPARERS & REVIEWERS

List of Preparers / Reviewers

McCormick Taylor, Inc.

Jeffery C. Lasko
Acoustical Scientist
Education: *B.A., Geography and Environmental Planning*
Professional Experience: 8.3 Years
Role: Noise Monitoring

Josh J. Wilson
Sr. Transportation Noise Specialist
Education: *B.S., Geo-Environmental Studies*
M.S., Geo-Environmental Studies
Professional Experience: 14.1 Years
Role: QA/QC

Jack A. Cramer
Sr. Transportation Noise Specialist
Education: *B.S., Geo-Environmental Studies*
Professional Experience: 14.3 Years
Role: QA/QC

Adam Diltz
Acoustical Scientist
Education: *B.A., Geography and Environmental Planning*
Professional Experience: .5 Years
Role: Noise Monitoring, Noise Modeling, Report Preparation