Virginia Department of Transportation
Route 7 Widening Project

State Project Number: 0007-029-128, B610, C502, P102, R202;
UPC# 52328

From: Intersection of Route 193
To: Intersection of Route 267
Fairfax County, Virginia

PRELIMINARY NOISE ANALYSIS

Virginia Department of Transportation
Environmental Division
1401 East Broad Street
Richmond, Virginia 23219

September 2016

TABLE OF CONTENTS

I. Executive Summary....1
II. Introduction and Background....2
III. Noise Analysis Methodology, Terminology and Criteria....2
IV. Noise Monitoring Methodology....4
V. Undeveloped Lands and Permitted Developments....4
VI. Validation and Existing (2015) Conditions....5
VII. Evaluation of Design Year (2040) Noise Levels and Noise Impact Assessment....6
VIII. Noise Abatement Evaluation....14
IX. Construction Noise....27
X. Public Involvement/Local Officials Coordination....28
XI. Conclusion....30

TABLES

Table 1 – FHWA/VDOT Noise Abatement Criteria
Table 2 –TNM Validation
Table 3 – Noise Impact Summary by CNE
Table 4 – Noise Abatement Acoustical Feasibility and Reasonableness Evaluation Summary
Table 5 –CNE Specific Noise Contours

FIGURES

Figure 1 – Regional Location Map
Figures 2-1 through 2-7 – Project Mapping

APPENDICES

Appendix A – Noise Meter and Acoustical Calibrator Calibration Certificates
Appendix B – Noise Monitoring Data Forms
Appendix C – Noise Monitoring Data (2015)
Appendix D – Traffic Data Summary (CD)
Appendix E – TNM Noise Modeling Data (CD)
Appendix F – HB2577 Documentation
Appendix G – Warranted, Feasible, and Reasonable Worksheets
Appendix H – Sound Levels Table
Appendix I – Insertion Loss Table
Appendix J – References
Appendix K– List of Preparers and Reviewers

I. Executive Summary

The Virginia Department of Transportation (VDOT), in cooperation with the Federal Highway Administration (FHWA), is studying potential environmental consequences of proposed highway widening on Route 7 between the intersection of Route 267 and Georgetown Pike in Fairfax County, Virginia. The proposed roadway will provide an additional lane on each side of the existing roadway (the additional lane will be on the median side where possible) for a total of six, 12' lanes with curb and gutter, divided with a 16' raised grass median, 12' turn lanes at intersections, and a 10' multipurpose asphalt trail on each side. The project length is 6.9 miles. Service drives will be constructed as needed for access to driveways and to complete connections. Bus shelters and pullouts will be considered in the design. Alternative intersection design will be pursued at some of the intersections to improve intersection operation. The existing vertical profiles of westbound and eastbound Route 7 will be held where possible to reduce impacts to surrounding properties. A bridge is proposed at the Difficult Run major stream crossing. Storm water Management will be provided due to the increase in impervious area.

The preliminary noise analysis in this document will focus solely on Common Noise Environments, referred to as CNEs. Noise sensitive receptors within approximately 500 feet of the proposed improvements were considered for this evaluation. This report documents the Existing (2015) and Design Year (2040) Build noise levels associated with the Route 7 Widening Project. A project field view was performed to thoroughly review the project area. During this field view, major sources of acoustic shielding (e.g., terrain lines, building rows, existing noise barriers, privacy fences, etc.) adjacent to the project corridor were noted for inclusion into the noise modeling effort. Noise monitoring was performed at 12 locations, while noise modeling was conducted for 973 additional sites to gain a thorough understanding of the existing noise environment and to determine how the proposed improvements would change the noise levels throughout the project area. Monitored sites were used solely for noise model validation and not for the purposes of predicting Existing (2015) and Design Year (2040) noise impacts.

Noise modeling was completed for Existing (2015) and Design Year (2040) Build conditions. Design Year (2040) Build noise levels were predicted at each modeled receptor site under the proposed widening scenario. Under Design Year (2040) Build conditions a total of 205 receptors representing 173 residences, 13 cemetery grid units, 15 proposed trail units, one soccer field (two units), two playgrounds (seven grid units), and one historic site are predicted to experience noise impacts. Noise barriers were evaluated and determined to be both feasible and reasonable for CNE B and D (Barrier System B1–B5 and D1), CNE C (Barrier System C1–C4), CNE E (E1–E3 System), CNE F (Barrier System F1–F3 and Barrier System F4–F9) CNE G (Barrier System G1–G7, Barrier System G8–G9, and Barrier System G10–G13), CNE H (Barrier System H3–H11), CNE's I, J, and K (Barrier System I1–I6, J1–J4, and K1–K3). A detailed discussion of the noise abatement evaluation follows in ***Section VII*** of this report.

No considerable, long-term construction related noise impacts are anticipated. Any noise impacts that do occur as a result of roadway construction measures are anticipated to be temporary in nature and would cease upon completion of the project construction phase.

The findings in this document are based on conceptual information. Therefore, 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. Conversely, noise barriers that were not considered feasible and reasonable may meet the established criteria and be recommended for construction. A Final Design Noise Analysis would be performed for this project based on detailed engineering information. Thus, any conclusions derived in the report should be considered preliminary in nature and subject to change.

II. Introduction and Background

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 VDOT have established a noise analysis methodology and associated noise level criteria to assess the potential noise impacts attributed to the construction and use of transportation related projects.

This report details the steps involved in the preliminary noise analysis for the Route 7 Widening Project, including noise monitoring, noise modeling methodologies, results, and impact evaluation. The regional study area can be seen in ***Figure 1***. Relevant information and assumptions used for this analysis are included in this report's appendices.

The proposed project improvements would widen existing Route 7 from two to three general purpose lanes in each direction along the length of the project corridor. The identification of a general widening concept along the length of the study corridor is consistent with FHWA's objective of analyzing transportation solutions on a broad-enough scale to provide meaningful analysis. The proposed improvements can be referenced on ***Figures 2-1*** through ***2-7*** in this document.

III. Noise Analysis Methodology, Terminology and Criteria

The methodologies applied to the noise analysis for the Route 7 Widening Project are in accordance with VDOT's "*State Noise Abatement Policy"* effective July 13, 2011 and the "*Highway Traffic Noise Impact Analysis Guidance Manual*", updated July 14, 2015. VDOT guidelines are based on Title 23 of the Code of Federal Regulations, Part 772 and the Procedures for Abatement of Highway Traffic Noise and Construction Noise, (23 CFR 772).

To determine the degree of highway noise impact, Noise Abatement Criteria (NAC) have been established for a number of different land use categories that are considered to be sensitive to highway traffic noise. ***Table 1***, located at the end of this report, documents the NAC for the associated activity land use category shown in the adjacent column. The project is considered partially developed with dense areas of residential development, interspersed with mixed commercial and undeveloped land uses. For the purposes of this analysis, the majority of the

land uses are considered Category B, with few Category C and D land uses throughout. Each CNE description will include the category of the land uses analyzed.

Category D land uses address interior noise levels associated with hospitals, libraries, schools, medical facilities, places of worship, public or nonprofit institutions, etc. Interior noise level impacts in the project area were analyzed. To assess potential interior noise impacts, modeling sites are placed in close proximity to the existing structure. The standard noise reduction for masonry construction with modern windows is 25 dBA when comparing exterior versus interior noise levels. Both exterior and interior noise levels are provided in ***Appendix H*** in this document.

The NAC are given in terms of an hourly, A-weighted, equivalent noise level. The A-weighted noise level frequency is used for human use areas because it is comprised of the noise level frequencies that are most easily distinguished by the human ear, out of the entire noise 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 (L_{eq}). The L_{eq} is the value of a steady noise level that would represent the same acoustic energy as the actual time-varying sound evaluated over the same time period. For highway noise assessments, L_{eq} is typically evaluated over a one-hour period.

Noise abatement determination is based on VDOT'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 VDOT policy. Receptors that satisfy either condition warrants 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 VDOT as 1 dB(A) below the noise abatement criteria.

~or~

- A substantial noise increase has been defined by VDOT as a 10 dB(A) increase above existing noise levels for all noise sensitive exterior activity categories. A 10 dB(A) increase in noise reflects the generally accepted range of a perceived doubling of the loudness.

If traffic noise impact is identified within the project corridor, then consideration of noise abatement measures is necessary. The final decision on whether or not to provide noise abatement along a project corridor will take into account the feasibility of the design and overall cost weighted against the benefit.

Phase 2 and **Phase 3** of the three-phased approach are discussed in the noise abatement evaluation, located in ***Section VII*** of this report.

IV. Noise Monitoring Methodology

The identification of noise sensitive land uses with aerial imagery and local government parcel data guided the selection of noise monitoring locations along the project corridor. In order to validate the noise models, noise monitoring was conducted at 12 representative noise sensitive receptor sites. ***Figures 2-1*** through ***2-7*** show an overview of the Build Alternative and identify the project area and the locations of the 12 noise monitoring sites.

Monitoring was performed at each of the selected noise sensitive receptors using Rion NL-42 sound level meters. The noise meters were placed at each receptor site in a manner that would yield a typical absolute ambient environment noise reading, and allowed for minimal influence from atypical background noise sources. 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).

Short-term noise monitoring was performed on November 17th of 2015 during hours of free flow conditions. 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. The output of the noise meters is L_{av}, which is the average noise level over the duration of the monitoring test. This data is then converted into an average, hourly noise level (L_{eq}), for assessment purposes. Additional data collected at each monitoring location included atmospheric conditions, wind speed, background noise sources, and unusual/atypical noise events. 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, per VDOT procedures. Combined, this data is used during the noise model validation process.

Short-term noise monitoring is not a process to determine design year noise impacts or barrier locations. Short-term noise monitoring provides a level of consistency between what is present in real-world situations and how that is represented in the computer noise model. Short-term monitoring does not need to occur within every CNE to validate the computer noise model. CNEs are groupings of receptor sites that, by location, form distinct communities within the project area. These areas are used to evaluate traffic noise impacts and potential noise mitigation 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.

V. Undeveloped Lands and Permitted Developments

Highway traffic noise analyses are and will be performed for developed lands as well as undeveloped lands if they are considered "permitted." Undeveloped lands are deemed to be

permitted when there is a definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of at least one building permit.

In accordance with the *VDOT State Noise Policy,* an undeveloped lot is considered to be planned, designed, and programmed if a building permit has been issued by the local authorities prior to the Date of Public Knowledge for the relevant project. VDOT considers the Date of Public Knowledge as the date that the final National Environmental Policy Act (NEPA) approval is made. VDOT has no obligation to provide noise mitigation for any undeveloped land that is permitted or constructed after this date. The Route 7 Widening Project has not yet received NEPA approval and therefore does not have a Date of Public Knowledge.

Coordination with Fairfax County was conducted in January of 2016 to determine whether any undeveloped permitted land uses were present within the project corridor, including Category G. Category G represents undeveloped lands with no permits and no ongoing permitted land uses were defined as a result of this coordination. Coordination will occur again in Final Design to ensure that no new permitted developments have been approved.

VI. Validation and Existing (2015) Conditions

Computer modeling is the accepted technique for predicting Existing (2015) and Design Year (2040) noise levels associated with traffic-induced noise. Currently, the FHWA Traffic Noise Model (TNM 2.5) is the approved highway noise prediction model. The Traffic Noise Model 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 conceptual design), traffic data, roadway cross-sections, and surveying of terrain. Base mapping and aerial photography were used to identify noise sensitive land uses within the corridor and any terrain features that may shield roadway noise. The majority of the land uses in the project area are residential and categorized as a Category B land use. Although the majority of the receptors are of Category B land use, Category C, D and E land uses are also included in this analysis.

The modeling process begins with model validation, as per VDOT requirements. This is accomplished by comparing the monitored noise levels with noise levels generated by the computer model, using the traffic volumes, speeds, and composition that were witnessed during the monitoring effort. This comparison ensures that reported changes in noise levels between Existing (2015) and Design Year (2040) conditions are due to changes in traffic conditions and not to discrepancies between monitoring and modeling techniques. A difference of three dB(A) 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 monitored conditions. Column 4 represents the difference between the modeled levels produced by the noise model (Column 3) and the monitored level (Column 2). Since all 12 analyzed receptors show an equal to or less than 3 dB(A) difference between the monitored and modeled noise levels, the model is considered an accurate representation of actual existing conditions throughout the project area.

There are many factors that influence the measured noise levels that may cause differences with computed noise levels of several decibels. Such factors included atmospheric conditions (upwind, neutral or downwind), shielding by structures that may be difficult to model, and the representation of louder vehicles passing during the measurement period.

For the Route 7 Widening Project and as shown in ***Table 2***, receptors R3, R5 and R10 do not validate. This may be due to shielding from privacy fences that were not modeled in existing conditions. Receptor R5 is shielded by a much thicker privacy fence material, therefore the deviation from validation is greater. This methodology represents a true, worst-case condition for sound level prediction

The validated noise model was the base noise model for the remainder of the noise analysis. Modeling sites were added to the validated model to thoroughly predict Existing (2015) noise levels throughout the project corridor. Additional noise modeling was then performed for existing conditions using 2015 traffic data supplied by VDOT (see ***Appendix D***). This modeling step was performed to predict Existing (2015) worst-case noise levels associated with existing worst-case traffic volumes and composition. Columns 3 and 4 of ***Table 3*** provide a summary of the Existing (2015) worst-case noise levels along the project corridor.

Analysis locations were grouped into 14 CNEs which are groupings of receptor sites that, by location, form distinct communities within the project area and have a common noise environment. These areas were used to evaluate traffic noise impacts and potential noise abatement options and to assess the feasibility and reasonableness of potential noise abatement measures for specific communities. Where residential communities or groupings of noise sensitive land use areas exist, both noise monitoring and noise modeling-*only* sites were grouped into a CNE. A detailed discussion of each CNE and its respective, predicted noise levels is contained in ***Section VII*** of this report.

VII. Evaluation of Design Year (2040) Build Noise Levels and Noise Impact Assessment

Following the development of the existing conditions model and the prediction of Existing (2015) worst-case noise levels, the assessment continued with the prediction of Design Year (2040) Build noise levels. Design Year (2040) Build noise levels were predicted by accounting for the proposed improvements and applying Design Year (2040) traffic volumes and composition to the validated computer model. Design Year (2040) Build noise levels were predicted with the conceptual improvements of the Build Alternative in place and in use.

The Route 7 Widening Project (UPC 52328) geographically overlaps with a bridge replacement project on Route 7 (UPC 82135) that includes a final noise analysis finding of a noise barrier to be feasible and reasonable within the Route 7 Widening project corridor. As such, the proposed noise barrier from UPC 82135 was modeled in the Design Year (2040) Build model as an existing barrier per VDOT guidance.

The next step in the noise analysis is to determine if future noise levels at the noise sensitive receptors would approach or exceed the FHWA/VDOT NAC. If the criteria are approached or exceeded at any receptor, noise mitigation would be considered and evaluated in an attempt to reduce future noise to acceptable levels. The minimum and maximum noise levels associated with the Design Year (2040) Build modeling analysis are summarized in Columns 6 and 7 of ***Table 3***. Noise levels at each receptor site for the Existing (2015) and Design Year (2040) Build Conditions are shown in ***Appendix H***.

Traffic Data for the Noise Analysis

VDOT's Environmental Traffic Data (ENTRADA) tool was used to develop traffic data needed for the Route 7 Widening Project noise analysis. Existing (2015) and Design Year (2040) Build traffic volumes, vehicle composition, and speeds were assigned to proposed roadways.

Traffic data for traffic noise computations were developed by VDOT. Hourly volumes and operating speeds for each roadway segment for the Existing (2015) and Design Year (2040) Build conditions were documented. Per FHWA and VDOT policy, the traffic data used in the noise analysis must produce sound levels that are representative of the worst (loudest) hour of the day. The year 2040 is the defined analysis year for the project-level noise analysis.

Traffic was reported in hourly segments for 24 hours in ENTRADA analysis sheets. Medium and heavy truck percentages were provided separately for each roadway segment.

Additionally, all arterial roadway segments with direct access to Route 7 were analyzed approximately 500 feet north and 500 feet south of ramp termini. In Virginia, the posted speed or operating speed was used to predict the absolute worst-case highway traffic noise levels on Type I federally-funded projects. Specifically, the proposed uninterrupted operating speed was used from Lewinsville Road to Jarett Valley (46 mph). The posted speed (55 mph) represented the worst-case speed for the remainder of the project area.

Selection of Worst Noise Hour

As required by FHWA and VDOT, the noise analysis was performed for the loudest ("worst noise") hour of the day. Noise levels have been predicted for that hour of the day when the vehicle volume, operating speed, and number of trucks (vehicles with 3 or more axles) combine to produce the worst noise conditions. According to FHWA guidance, the "worst hourly traffic noise impact" occurs at a time when truck volumes and vehicle speeds are the greatest, typically when traffic is free flowing and at or near level of service (LOS) C conditions.

Due to the differing peak traffic periods for Route 7 eastbound and westbound, the loudest hour was identified for the eastbound travel lanes and used for worst-case noise modeling for the sensitive land uses along the east bound travel lanes. Consequently, to predict an absolute worst-case sound level for the sensitive land uses along the west bound travel lanes, the loudest hour was identified by calculating the west bound peak traffic and using that hour for sound level

predictions for the sensitive land uses that are adjacent to the westbound travel lanes. The loudest hours were determined to be 6:00 AM for Route 7 eastbound and 3:00 PM for Route 7 westbound.

Flow control devices such as stop signs and traffic lights were not used in the preliminary design noise analysis because they were not determined to be a significant factor in sound level prediction for this analysis. This was to ensure a "worst-case" noise environment would be modeled. However, flow control devices shall be modeled, where necessary, during the final design phase when more detailed engineering plans will be available.

Federal regulations (23 CFR Part 772) state that if a noise level at any given receptor approaches or exceeds the appropriate abatement criterion, or if predicted traffic noise levels substantially exceed the Existing (2015) noise levels by 10 dB(A)), abatement considerations are warranted. ***Table 1*** summarizes the Federal and State criteria for a variety of activity categories. Upon review of the initial TNM sound level output, there were no areas where the sound levels predicted by the model were much lower than typical ambient conditions witnessed in the project area.

The following describes the locations and predicted sound levels of each CNE in the Route 7 Widening Project study area. The CNEs are shown in ***Figures 2-1*** through ***2-7***.

CNE A

CNE A is located south of Route 7 in the western most part of the project and encompasses noise sensitive land uses on Cedar Chase Road, Cedar Chase Court, Reston Parkway, Water Pointe Lane, and Round Pebble Lane. CNE A contains 46 modeling-*only* sites (A1-A46) which represent 73 residents, The Boyd School – Reston Campus (exterior and interior), North Pointe Fire Station, Great Falls Assisted Living (exterior and interior), and Good Shepherd Lutheran Church (exterior and interior). CNE A also contains one monitoring site (R1) which was used for model validation. The location of the receptor sites are shown on ***Figure 2-1.*** The modeled Existing (2015) worst-case noise level within CNE A is predicted to range from 48-63 dB(A) as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE A is Route 7. As shown in Columns 6 and 7 of ***Table 3***, the Design Year (2040) Build sound level is predicted to range from 50-66 dB(A), with noise impacts at one receptor representing one residence. Since the school, assisted living center, and church are Category D land uses, the prediction of interior noise levels are required. The interior sound levels associated with the school, assisted living center, and the church are shown in ***Appendix H***. Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE B

CNE B is located north of Route 7 in the western most part of the project and encompasses noise sensitive land uses on Aidan Run Court, Autumn Mist Lane, Shain Court, Northfalls Court, Bowen Ave, Loran Court, Loran Road, and Utterback Store Road. CNE B contains 60 modeling-

only sites (B1-B60) which represent 60 residences, Seneca Hill Animal Hospital (exterior and interior), MTO Shahmaghsoudi School of Islamic Sufism (exterior and interior), Dranesville Church of the Brethren (interior), and Meadows Farms Nurseries & Landscaping. CNE B also contains one monitoring site (R2) which was used for model validation. The location of the receptor sites are shown on ***Figures 2-1*** and ***2-2.*** The modeled Existing (2015) worst-case noise levels within CNE B were predicted to range from 50-68 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE B is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 55-72 dB(A), with noise impacts at 16 receptors representing 16 residences. Since the school, animal hospital, and church are Category D land uses, the prediction of interior noise levels are required. The interior sound levels associated with the school, animal hospital, and church are shown in ***Appendix H.*** Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE C

CNE C is located south of Route 7 in the western part of the project and encompasses noise sensitive land uses on Stones Throw Drive, Fieldview Drive, Bright Pond Lane, Meadowlook Court, Tommye Lane, Bishopsgate Way, Markell Court, Hunter Gate Way, and Baron Cameron Avenue. CNE C contains 86 modeling-*only* sites (C1-C86) which represents 102 residences, Great Falls Crossing Community Center (interior), a playground, a basketball court, a picnic area, one swimming pool, and two tennis courts. CNE C also contains one monitoring site (R3) which was used for model validation. The location of the receptor sites are shown on ***Figures 2-1, 2-2*** and ***2-3.*** The modeled Existing (2015) worst-case noise levels within CNE C were predicted to range from 45-68 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE C is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 48-71 dB(A), with noise impacts at 17 receptors representing 17 residences. Since the community center is a Category D land use, the prediction of interior noise levels is required. The interior sound levels associated with the community center is shown in ***Appendix H.*** Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE D

CNE D is located north of Route 7 in the western part of the project and encompasses noise sensitive land uses on Utterback Store Road, Great Passage Court, and Great Passage Boulevard. CNE D contains 37 modeling-*only* sites (D1-D37) which represent seven residences, two Forestville School District soccer fields, and a Forestville School District softball field. The location of the receptor sites are shown on ***Figure 2-2.*** The modeled Existing (2015) worst-case noise levels within CNE D were predicted to range from 49-62 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE D is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 54-69 dB(A), with noise impacts at three receptors representing one residence and one soccer field (two

units). Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE E

CNE E is located north of Route 7 in the western part of the project and encompasses noise sensitive land uses on Great Passage Boulevard, Kettle Pond Lane, Amanda Drive, Riva Ridge Drive, Piney Pond Drive, Mountain Hope Court, Crippen Court, and Springvale Road. CNE E contains 52 modeling-*only* sites (E1-E52) which represent 66 residences. CNE E also contains one monitoring site (R4) which was used for model validation. The location of the receptor sites are shown on ***Figures 2-2*** and ***2-3.*** The modeled Existing (2015) worst-case noise levels within CNE E were predicted to range from 48-70 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE E is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 53-74 dB(A), with noise impacts at 15 receptors representing 16 residences. Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE F

CNE F is located north of Route 7 in the center part of the project and encompasses noise sensitive land uses on Springvale Road, Springvale Court, Van Patten Lane, Colvin Run Road, Colvin Meadows Court, Colvin Meadows Lane, Robindale Drive, Hessick Court, Locust Hill Drive, and Trotting Horse Lane. CNE F contains 141 modeling-*only* sites (F1-F141) which represent 147 residences, Meadows Farms Nurseries & Landscaping, Colvin Run Mill, and a cemetery. CNE F also contains 12 modeling-*only* sites (CCT7-CCT18) that represent the existing Cross County Connecter Trail which is going to be relocated due to project design features. Only existing sound levels were calculated for these sites. The location of these sites can be seen on ***Figure 2-4 (Existing Cross County Connector Trail)***. The relocated Cross County Connector Trail is represented by eight modeling-*only* sites (CCTB16-CCTB23). The location of the relocated trail can be seen on ***Figure 2-4 (Proposed Cross County Connector Trail)***. CNE F also contains two monitoring sites (R5 & R6) which were used for model validation. The location of the receptor sites are shown on ***Figures 2-3, 2-4*** and ***2-5.*** The modeled Existing (2015) worst-case noise levels within CNE F were predicted to range from 46-71 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE F is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 53-76 dB(A), with noise impacts at 43 receptors representing 38 residences, one historic site, one proposed trail (two units), and one cemetery (four units). Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE G

CNE G is located south of Route 7 in the center part of the project and encompasses noise sensitive land uses on Water Falls Lane, Dunn Meadows Court, Cobble Pond Way, Dunn

Meadows Road, Delta Glenn Court, Newkirk Court, Mill Wheel Lane, Colvin Forest Lane, Scenic View Terrace, Grapes Farm Way, Carpers Farm Court, Middleton Ridge Road, Middleton Court, Difficult Run Court, Tweed Court, and Beulah Road. CNE G contains 177 modeling-*only* sites (G1-G177) which represent 185 residences, Capital Church (exterior and interior), Chesterbrook Academy Preschool (exterior and interior), and Beulah Dental (interior). CNE G also contains six modeling-*only* sites (CCT1-CCT6) that represent the existing Cross County Connecter Trail which is going to be relocated due to project design features. Only existing sound levels were calculated for these sites. The location of these sites can be seen on ***Figure 2-4 (Existing Cross County Connector Trail)***. The relocated Cross County Connector Trail is represented by 15 modeling-*only* sites (CCTB1-CCTB15). The location of the relocated trail can be seen on ***Figure 2-4 (Proposed Cross County Connector Trail)***. CNE G also contains an existing local trail that will still be present in the future which is represented by seven modeling-*only* sites (LT1-LT7). CNE G also contains two monitoring sites (R7 & R8) which were used for model validation. The location of the receptor sites are shown on ***Figures 2-3, 2-4*** and ***2-5.*** The modeled Existing (2015) worst-case noise level within CNE G is predicted to range from 44-69 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE G is Route 7. As shown in Columns 6 and 7 of ***Table 3***, the Design Year (2040) Build sound level is predicted to range from 48-75 dB(A), with noise impacts at 51 receptors representing 38 residences, one playground, and one proposed trail (13 units). Since the pre-school, dentist office, and church are Category D land uses, the prediction of interior noise levels are required. The interior sound levels associated with the pre-school, dentist office, and church are shown in ***Appendix H.*** Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE H

CNE H is located north of Route 7 in the center part of the project and encompasses noise sensitive land uses on Trotting Horse Lane, Fairpine Lane, Forestville Drive, Farmingdale Court, Vernon Drive, Lyons Street, Kenmore Drive, and Towlston Road. CNE H contains 66 modeling-*only* sites (H1-H66) which represents 65 residences and The Eastern Ridge School (exterior and interior). CNE H also contains one monitoring site (R9) which was used for model validation. The location of the receptor sites are shown on ***Figures 2-5*** and ***2-6.*** The modeled Existing (2015) worst-case noise levels within CNE H were predicted to range from 51-72 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE H is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 57-78 dB(A), with noise impacts at 20 receptors representing 16 residences and one playground (six units). Since the school is a Category D land use, the prediction of interior noise levels is required. The interior sound levels associated with the school is shown in ***Appendix H.*** Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE I

CNE I is located south of Route 7 in the center part of the project and encompasses noise sensitive land uses on Beulah Road, Deramus Farm Court, Atwood Road, Robnel Place, Stokley Way, Vanetta Lane, Kilby Glen Drive, and Towlston Road. CNE I contains 66 modeling-*only* sites (I1-I66) which represents 87 residences, Wolf Trap Nursery, and Fairfax County Fire Station 42. CNE I also contains one monitoring site (R10) which was used for model validation. The location of the receptor sites are shown on ***Figures 2-5*** and ***2-6.*** The modeled Existing (2015) worst-case noise levels within CNE I were predicted to range from 47-69 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE I is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 51-74 dB(A), with noise impacts at nine receptors representing nine residences. Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE J

CNE J is located south of Route 7 in the center part of the project and encompasses noise sensitive land uses on Towlston Road, Schuman Court, and Windsor Meadows Lane. CNE J contains 31 modeling-*only* sites (J1-J31) which represents 14 residences, St. Athanasius Roman Catholic Church (interior), and Andrew Chapel Cemetery. The location of the receptor sites are shown on ***Figure 2-6.*** The modeled Existing (2015) worst-case noise levels within CNE J were predicted to range from 49-74 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE J is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 53-74 dB(A), with noise impacts at 11 receptors representing two residences and one cemetery (nine grid units). Since the church is a Category D land use, the prediction of interior noise levels is required. The interior sound levels associated with the church is shown in ***Appendix H***. Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE K

CNE K is located south of Route 7 in the eastern part of the project and encompasses noise sensitive land uses on Trap Road, Lucky Estates Drive, Timberwolf Court, Trailridge Court, Wolftrap Run Road, and Route 7. CNE K contains 28 modeling-*only* sites (K1-K28) which represents 22 residences, Andrew Chapel Preschool (exterior and interior), Bethel Baptist Church (exterior and interior), McLean Bible Church (exterior and interior), and Jill's House (exterior and interior). The location of the receptor sites are shown on ***Figures 2-6*** and ***2-7.*** The modeled Existing (2015) worst-case noise levels within CNE K were predicted to range from 48-68 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE K is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 50-70 dB(A), with noise impacts at six receptors representing six residences. Since the two churches, the non-profit, and the pre-school are Category D land uses, the prediction of interior noise levels are required. The interior sound levels associated with the

two churches, the non-profit, and the pre-school are shown in ***Appendix H.*** Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE L

CNE L is located north of Route 7 in the eastern part of the project and encompasses noise sensitive land uses on Route 7, Dreamweaver Court, Brook Road, Gallant Green Drive, Gunnell Court, Woodside Drive, and Lewinsville Road. CNE L contains 35 modeling-*only* sites (L1-L35) which represents 31 residences, Covance Laboratories (interior), Providence Baptist Church (exterior and interior), and St Thomas Episcopal Church \ McLean Preschool (exterior and interior). CNE L also contains one monitoring site (R11) which was used for model validation. The location of the receptor sites are shown on ***Figures 2-6*** and ***2-7.*** The modeled Existing (2015) worst-case noise levels within CNE L were predicted to range from 48-72 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE L is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 51-76 dB(A), with noise impacts at eight receptors representing eight residences. Since the church, the laboratory, and the pre-school are Category D land uses, the prediction of interior noise levels are required. The interior sound levels associated with the church, the laboratory, and the pre-school are shown in ***Appendix H.*** Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE M

CNE M is located north of Route 7 in the eastern most part of the project and encompasses noise sensitive land uses on Route 7, Mirador Place, Prestwould Place, Woodhurst Boulevard, and Mayhurst Boulevard. CNE M contains 50 modeling-*only* sites (M1-M50) which represents 54 residences. The location of the receptor sites are shown on ***Figure 2-7.*** Receptor site M1 is a proposed property acquisition under the build alternative; therefore no sound level predictions were made for M1 under the Design Year (2040) Build condition. The modeled Existing (2015) worst-case noise levels within CNE M were predicted to range from 52-67 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE M is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 55-67 dB(A), with noise impacts at one receptor representing one residence. Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

CNE N

CNE N is located south of Route 7 in the eastern most part of the project and encompasses noise sensitive land uses on Laurel Hill Road, Glenridge Court, Old Ash Grove, Stanbridge Place, Carrington Ridge Lane, Broadstone Place, and Jarret Valley Drive. CNE N contains 60 modeling-*only* sites (N1-N60) which represents 67 residences and Berea Church of Christ

(exterior and interior). CNE N also contains one monitoring site (R12) which was used for model validation. CNE N also has a feasible and reasonable barrier from the Route 7 over DATR - Major Bridge Rehabilitation project (UPC 82135). There were no noise impacts that were identified behind this barrier under the design year 2040; subsequently the barrier was not reevaluated for reasonableness and feasibility per the VDOT's State Noise Abatement Policy.
The location of the receptor sites are shown on ***Figure 2-7.*** The modeled Existing (2015) worst-case noise levels within CNE N were predicted to range from 47-73 dB(A), as shown in Columns 3 and 4 of ***Table 3***. The dominant noise source within CNE N is Route 7. As shown in Columns 6 and 7 of ***Table 3***, Design Year (2040) Build sound levels are predicted to range from 49-72 dB(A), with noise impacts at four receptors representing four residences. Since the church is a Category D land use, the prediction of interior noise levels is required. The interior sound levels associated with the church is shown in ***Appendix H***. Since sound levels exceed the NAC, noise abatement is warranted and will be discussed in the following section of the report.

VIII. Noise Abatement Evaluation

Design Year (2040) Build noise levels are predicted to exceed the NAC in 13 out of 15 CNEs; therefore, as per FHWA/VDOT procedures, noise abatement considerations are warranted, as discussed in **Phase 1** of VDOT's three-phased approach, for the impacted properties within these CNEs.

Phase 2 and **Phase 3** of VDOT's three-phased approach to considering noise abatement and determining the feasibility and reasonableness of noise barriers is discussed below in detail.

Phase 2: Feasibility Criteria for Noise Barriers

All receptors that meet the warranted criterion must progress to the "feasible" phase. Phase 2 of the noise abatement criteria requires that both of the following acoustical and engineering conditions be considered:

- At least a 5 dB(A) 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 dB(A) of reduction. VDOT requires that fifty percent (50%) or more of the impacted receptors experience 5 dB(A) 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).

- The noise abatement measure is said to be feasible if it meets both criteria.

FHWA and VDOT guidelines recommend a variety of abatement measures that 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 that have the potential to provide considerable noise reductions, under certain circumstances. A brief description of VDOT-approved noise abatement measures is provided below:

Traffic Control Measures (TCM): Traffic control measures, such as speed limit restrictions, truck traffic restrictions, and other traffic control measures that may be considered for the reduction of noise emission levels are not practical for this project. Reducing speeds will not be an effective noise mitigation measure since a substantial decrease in speed is necessary to provide adequate noise reduction. Typically, a 10 mph reduction in speed will result in only a 2 dB(A) decrease in noise level, which is not considered a sufficient level of attenuation to be considered feasible. Likewise, a 2 dB(A) change in noise is not perceptible to the human ear. Additionally, a reduction in speed is not practical for this project since the posted speed is already 55 miles per hour.

Alteration of Horizontal and Vertical Alignments: The alteration of the horizontal and vertical alignment has been considered to reduce or eliminate the impacts created by the proposed project. Because residential development is located adjacent to the project corridor over much of its length, it does not allow for meaningful alterations in the horizontal or vertical alignment without significant impacts. Shifting the horizontal alignment to the east or west of its existing location to reduce noise impacts to receptors will create undesirable impacts such as extensive right-of-way acquisition and potentially relocations. Additionally, shifting the roadway alignment away from one group of receptors to reduce noise impacts will cause noise levels to increase at the receptors the alignment is being moved closer to. By maintaining the existing alignment, the project balances impacts to receptors on both sides of the corridor. Further, altering the vertical alignment is not practical because this is an existing roadway with many at-grade connections. Lowering the alignment below the existing grade to reduce noise levels would widen the footprint of the roadway, increasing right-of-way impacts and relocations and making it more difficult to maintain the existing access points. Further, there are bridges and culverts located along the corridor for drainage and the passage of creeks and streams; lowering the roadway is not feasible in these locations.

Acoustical Insulation of Public-Use and Non-Profit Facilities: This noise abatement measure option applies only to public and institutional use buildings. Since no public use or institutional structures are anticipated to have interior noise levels exceeding FHWA's interior NAC, this noise abatement option will not be applied.

Acquisition of Buffering Land: The purchase of property for noise barrier construction or the creation of a "buffer zone" to reduce noise impacts is only considered for predominantly unimproved properties because the amount of property required for this option to be effective

would create significant additional impacts (e.g., in terms of residential displacements), which were determined to outweigh the benefits of land acquisition.

Construction of Berms / Noise Barriers: Construction of noise barriers can be an effective way to reduce noise levels at areas of outdoor activity. Noise barriers can be wall structures, earthen berms, or a combination of the two. The effectiveness of a noise barrier depends on the distance and elevation difference between roadway and receptor and the available placement location for a barrier. Gaps between overlapping noise barriers also decrease the effectiveness of the barrier, as opposed to a single continuous barrier. The barrier's ability to attenuate noise decreases as the gap width increases.

Noise walls and earth berms are often implemented into the highway design in response to the identified noise impacts. The effectiveness of a freestanding (post and panel) noise barrier and an earth berm of equivalent height are relatively consistent; however an earth berm is perceived as a more aesthetically pleasing option. In contrast, 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 in height would require four feet of horizontal width. This requirement becomes more complex in urban settings where residential properties often abut the proposed roadway corridor. In these situations, implementation of earth berms can require significant property acquisitions to accommodate noise mitigation, and the cost associated with the acquisition of property to construct a berm can significantly increase the total costs to implement this form of noise mitigation and make it unreasonable.

Availability of fill material to construct the berm also needs to be considered. On proposed projects where proposed grading yields excess waste material, earth berms can often be a cost effective mitigation option. On balance or borrow projects the implementation of earth berms is often an expensive solution due to the need to identify, acquire, and transport the material to the project site. Earth berms may be considered a viable mitigation option throughout the project area, and would be evaluated further where possible in the final design stage.

Additionally, the Code of Virginia (§33.1-223.2:21) states: "Whenever the Commonwealth Transportation Board or the Department plan for or undertake any highway construction or improvement project and such project includes or may include the requirement for the mitigation of traffic noise impacts, first consideration should be given to the use of noise reducing design and low noise pavement materials and techniques in lieu of construction of noise walls or noise barriers. Vegetative screening, such as the planting of appropriate conifers, in such a design would be utilized to act as a visual screen if visual screening is required." Since there is a noise impact, HB 2577 requires coordination with the Project Manager and Environmental Contact to inquire about the possibility of noise reducing design, the usage of low noise pavement, and visual screening. The HB 2577 documentation for this project can be seen in ***Appendix F***. Detailed engineering has not been done because this project is a location study; therefore, methods to reduce noise through engineering will be looked at during the design phase of the project.

In summary, due to right-of-way constraints, noise barriers were considered the only form of abatement having the potential to reduce Design Year (2040) Build noise levels.

Phase 3: Reasonableness Criteria for Noise Barriers

A determination of noise barrier reasonableness will include the consideration of the parameters listed below. The parameters used during the NEPA process are also used during the final design phase when making a determination of noise barrier reasonableness. All of the reasonableness factors must collectively be achieved in order for a noise abatement measure to be deemed reasonable.

- **Viewpoints of the benefited receptors**
  VDOT 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. Community views in and of themselves are not sufficient for a barrier to be found reasonable if one or both of the other two reasonableness criteria are not satisfied.

- **Cost-effectiveness**
  Typically, the limiting factor related to barrier reasonableness is the cost effectiveness value, where the total surface area of the barrier is divided by the number of benefited receptors receiving at least a 5 dB(A) reduction in noise level. VDOT's approved cost is based on a maximum square footage of abatement per benefited receptor, a value of 1,600 square feet per benefited receptor.

  Where multi-family housing includes balconies at elevations that exceed a 30-ft high barrier or the topography causes receptors to be above the elevation of a 30-ft barrier, these receptors are not assessed for barrier benefits and are not included in the computation of the barrier's reasonableness.

  For non-residential properties such as parks and public use facilities, a special calculation is performed in order to quantify the type and duration of activity and compare to the cost effectiveness criterion. The determination is based on cost, severity of impact (both in terms of noise levels and the size of the impacted area and the activity it contains), and amount of noise reduction.

- **Noise Reduction Design Goals**
  The design goal is a reasonableness factor indicating a specific reduction in noise levels that VDOT uses to identify that a noise abatement measure effectively reduces noise. The design goal establishes a criterion, selected by VDOT, which noise abatement must achieve. VDOT's noise reduction design goal is defined as a 7 dB(A) insertion loss for at

least one impacted receptor, meaning that at least one impacted receptor is predicted to achieve a 7 dB(A) or greater noise reduction with the proposed barrier in place. The design goal is not the same as acoustic feasibility, which defines the minimum level of effectiveness for a noise abatement measure. Acoustic feasibility indicates that the noise abatement measure can, at a minimum, achieve a discernible reduction in noise levels.

Noise reduction is measured by comparing the future design year build condition 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 dB(A) reduction is required to meet the feasibility criteria, the following tiered noise barrier abatement goals are used to govern barrier design and optimization.

- Reduction of future highway traffic noise by 7 dB(A) 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 is a discussion of the potential abatement measures for the impacted CNEs under the worst-case Design Year (2040) Build Alternative. In some cases, proposed noise abatement provided insertion losses to more than one CNE. These areas will be identified and described as such. Noise abatement was evaluated where noise impacts are predicted to occur. Where a noise barrier was evaluated, the effectiveness was measured in terms of achievable insertion loss. Noise abatement measures in the project area were evaluated at heights ranging from 10 to 30 feet, at two-foot increments. Due to the preliminary nature of this project, detailed elevation and terrain information beyond the roadway surfaces was not available, therefore base elevations of barriers were assumed to be at the proposed edge of pavement. Detailed proposed surfaces will be required to refine barrier placement in the Final Design phase. Detailed noise barriers were not optimized during this abatement analysis, as a more detailed process will be performed in Final Design. Barrier dimensions may change during the Final Design noise analysis. ***Appendix I*** list the Design Year (2040) Build noise levels, the abated noise levels, and the net insertion losses for the barriers and barrier systems that were determined to be feasible and reasonable. Feasible and reasonable noise abatement was evaluated based on constructability and the VDOT acoustic design goals. Noise abatement was determined to be both feasible and reasonable for CNE B and D (Barrier System B1–B5 and D1), CNE C (Barrier System C1–C4), CNE E (E1–E3 System), CNE F (Barrier System F1–F3 and Barrier System F4–F9) CNE G (Barrier System G1–G7, Barrier System G8–G9, and Barrier System G10–G13), CNE H (Barrier System H3–H11), CNE's I, J, and K (Barrier System I1–I6, J1–J4, and K1–K3). Further study is required in Final Design to refine the abatement options and no commitments on noise abatement are made

until the Final Design phase of the project. ***Appendix G*** provides completed warranted, feasible, and reasonable worksheets.

CNE A

Barrier A1

Design Year (2040) Build noise levels are predicted to exceed the NAC at one modeling site representing one residence within this portion of CNE A. A noise barrier was evaluated for this specific impact within CNE A along the eastbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 1,257 feet (see ***Table 4***), with an average height of 18 feet. The noise barrier achieves feasible (>5 dB(A)) noise reductions at the one impacted receptor (see ***Appendix I***). The barrier does meet the design goal of an insertion loss (IL) of 7 dB(A) at the one impacted receptor at the evaluated height. The evaluated barrier also benefits four non-impacted receptors which represents eight residences. The total area for the barrier is 22,626 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 2,514, which exceeds the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier A1 is considered feasible, but not reasonable at this time. A summary of the abatement for this barrier is shown in ***Table 4***.

CNE B and D

Barrier System B1-B5 and D1

Design Year (2040) Build noise levels are predicted to exceed the NAC at 18 modeling sites representing 16 residences and one soccer field (2 units) within CNE B and this portion of CNE D. A noise barrier system was evaluated for these specific impacts within CNE B and a portion of CNE D along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 5,616 feet (see ***Table 4***), with an average height of 14 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at all 18 of the impacted receptors (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at ten of impacted receptors at the evaluated height. The evaluated barrier system also benefits 37 non-impacted receptors which represent 32 residences, one soccer field (five grid units), one softball field (three grid units), and one commercial land use. The total area for the barrier system is 78,624 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,333, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System B1-B5 and D1 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

CNE C

Barrier System C1-C4

Design Year (2040) Build noise levels are predicted to exceed the NAC at 17 modeling sites representing 18 residences within this portion of CNE C. A noise barrier system was evaluated for these specific impacts within CNE C along the eastbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 6,291 feet (see ***Table 4***), with an average height of 18 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at 16 of the impacted receptors which represent 17 residences (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 16 impacted receptors at the evaluated height. The evaluated noise barrier system also benefits 44 non-impacted receptors which represent 58 residences. The total area for the barrier is 113,238 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,510, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System C1-C4 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier is shown in ***Table 4***.

CNE D

Barrier D2

Design Year (2040) Build noise levels are predicted to exceed the NAC at one modeling site representing one residence within CNE D. A noise barrier was evaluated for this specific impact within CNE D along the westbound travel lanes of Route 7. In total, the preliminary barrier evaluated for this project has a length of 969 feet (see ***Table 4***), with an average height of 18 feet. The noise barrier achieves feasible (>5 dB(A)) noise reductions at the one impacted receptor (see ***Appendix I***). The barrier does meet the design goal of an insertion loss (IL) of 7 dB(A) at the one impacted receptor at the evaluated height. The evaluated barrier system also benefits one non-impacted receptor which represents one residence. The total area for the barrier is 17,442 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 8,721, which exceeds the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier D2 is considered feasible, but not reasonable at this time. A summary of the abatement for this barrier is shown in ***Table 4.***

CNE E

Barrier System E1-E3

Design Year (2040) Build noise levels are predicted to exceed the NAC at 15 modeling sites representing 16 residences within CNE E. A noise barrier system was evaluated for these specific impacts within CNE E along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 3,577 feet (see ***Table 4***), with

an average height of 14 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at 14 impacted receptors which represents 15 residences (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 13 impacted receptors at the evaluated height. The evaluated barrier system also benefits 17 non-impacted receptors which represents 20 residences. The total area for the barrier system is 50,078 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,431, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System E1-E3 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

CNE F

Barrier System F1-F3

Design Year (2040) Build noise levels are predicted to exceed the NAC at 22 modeling sites representing 19 residences and one cemetery (four grid units) within this portion of CNE F. A noise barrier system was evaluated for these specific impacts within CNE F along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 3,637 feet (see ***Table 4***), with an average height of 12 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at 19 of the impacted receptors which represents 17 residences and one cemetery (three grid units) (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 13 of the impacted receptors at the evaluated height. The evaluated barrier system also benefits 14 non-impacted receptors which represents 15 residences. The total area for the barrier system is 43,644 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,247, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System F1-F3 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier System F4-F9

Design Year (2040) Build noise levels are predicted to exceed the NAC at 21 modeling sites representing 19 residences, one historic site, and one proposed trail (two grid units) within this portion of CNE F. A noise barrier system was evaluated for these specific impacts within CNE F along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 4,814 feet (see ***Table 4***), with an average height of 20 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at all 21 impacted receptors, (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 16 of the impacted receptors at the evaluated height. The evaluated barrier system also benefits 47 non-impacted receptors which represent 46 residences and one proposed trail (six grid units). The total area for the barrier system is 96,280 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor

(MaxSF/BR) value of 1,301, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System F4-F8 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

CNE G

Barrier System G1-G7

Design Year (2040) Build noise levels are predicted to exceed the NAC at 17 modeling sites representing 18 residences within this portion of CNE G. A noise barrier system was evaluated for these specific impacts within CNE G along the eastbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 5,478 feet (see ***Table 4***), with an average height of 12 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at 16 impacted receptors which represent 17 residences (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 16 impacted receptors at the evaluated height. The evaluated barrier system also benefits 38 non-impacted receptors which represent 42 residences. The total area for the barrier system is 65,736 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,114, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System G1-G7 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier System G8-G9

Design Year (2040) Build noise levels are predicted to exceed the NAC at 13 modeling sites representing a proposed trail (13 grid units) within this portion of CNE G. A noise barrier system was evaluated for these specific impacts within CNE G along the eastbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 1,643 feet (see ***Table 4***), with an average height of 13 feet. The noise barrier achieves feasible (>5 dB(A)) noise reductions at nine of the impacted receptors (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at nine of the impacted receptors at the evaluated height. The evaluated barrier system also benefits five non-impacted receptors which represent one residence, one existing trail (two grid units), and one proposed trail (two grid units). The total area for the barrier system is 20,513 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,465, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System G8-G9 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier System G10-G16

Design Year (2040) Build noise levels are predicted to exceed the NAC at 21 modeling sites representing 20 residences and one playground within this portion of CNE G. A noise barrier system was evaluated for these specific impacts within CNE G along the eastbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 3,690 feet (see ***Table 4***), with an average height of 11 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at 19 of the impacted receptors which represent 18 residences and one playground (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 12 impacted receptors at the evaluated height. The evaluated barrier system also benefits three non-impacted receptors which represent two residences and one dentist office. The total area for the barrier system is 39,250 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,784, which exceeds the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System G10-G16 is considered feasible, but not reasonable at this time. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier System G10-G13

Design Year (2040) Build noise levels are predicted to exceed the NAC at 18 modeling sites representing 18 residences within this portion of CNE G. A noise barrier system was evaluated for these specific impacts within CNE G along the eastbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 2,661 feet (see ***Table 4***), with an average height of 11 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at 16 impacted receptors which represent 16 residences (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 11 impacted receptors at the evaluated height. The evaluated barrier system also benefits two non-impacted receptors which represent two residences. The total area for the barrier system is 28,185 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,566, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System G10-G13 is considered feasible and reasonable at this time and recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier System G14-G16

Design Year (2040) Build noise levels are predicted to exceed the NAC at three modeling sites representing two residences and a playground within this portion of CNE G. A noise barrier system was evaluated for these specific impacts within CNE G along the eastbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 1,108 feet (see ***Table 4***), with an average height of 10 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reductions at two impacted receptors which represent one residence and one playground (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at one of the three impacted receptors at the evaluated height. The

evaluated barrier system also benefits one non-impacted receptor which represents one dentist office. The total area for the barrier system is 11,080 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 3,693, which exceeds the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System G14-G16 is considered feasible, but not reasonable at this time. A summary of the abatement for this barrier system is shown in ***Table 4***.

CNE H

Barrier System H1-H2

Design Year (2040) Build noise levels are predicted to exceed the NAC at three modeling sites representing three residences within this portion of CNE H. A noise barrier system was evaluated for these specific impacts within CNE H along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 738 feet (see ***Table 4***), with an average height of 10 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reduction at all three of the impacted sites (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at one of the impacted receptors at the evaluated height. The total area for the barrier system is 7,380 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 2,460, which exceeds the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System H1-H2 is considered feasible, but not reasonable at this time. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier System H3-H11

Design Year (2040) Build noise levels are predicted to exceed the NAC at 17 modeling sites representing 13 residences and one playground (six units) within this portion of CNE H. A noise barrier system was evaluated for these specific impacts within CNE H along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 3,408 feet (see ***Table 4***), with an average height of 12 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reduction at 16 of the impacted sites which represent 13 residences and one playground (five units) (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 13 of the impacted receptors at the evaluated height. The barrier system also benefits 17 non-impacted receptors which represent 19 residences. The total area for the barrier system is 40,896 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,105, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System H3-H11 is considered feasible and reasonable at this time and is recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

CNE I, CNE J, and CNE K

Barrier System I1-I6, J1-J4, and K1-K3

Design Year (2040) Build noise levels are predicted to exceed the NAC at 26 modeling sites representing 17 residences and one cemetery (nine grid units) within CNE I, CNE J, and CNE K. A noise barrier system was evaluated for the specific impacts within CNE I, J and K along the eastbound travel lanes of Route 7. Since the barriers are in close proximity to each other, each individual barrier provides benefit to the next adjacent CNE. Therefore for the purposes of this preliminary study, the noise barrier for CNEs I, J and K were evaluated as one system. In total, the preliminary barrier system evaluated has a combined length of 6,242 feet (see ***Table 4***), with an average height of 14 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reduction at 25 impacted receptor sites which represents 16 residences and one cemetery (nine grid units) (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at 16 impacted receptors at the evaluated height. The barrier system also benefits 46 non-impacted receptors which represent 44 residences, one cemetery (six grid units), one church (interior), one preschool (interior and exterior), and one non-profit organization (interior and exterior). The total area for the barrier system is 87,388 square feet. It is considered reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,092, which is within the allowable (MaxSF/BR) value of 1,600. Therefore, the barrier system I1-I6, J1-J4, and K1-K3 is considered feasible and reasonable at this time and is recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

CNE L

Barrier System L1-L9

Design Year (2040) Build noise levels are predicted to exceed the NAC at eight modeling sites representing eight residences within this portion of CNE L. A noise barrier system was evaluated for the specific impacts within CNE L along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 2,181 feet (see ***Table 4***), with an average height of 10 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reduction at six of the impacted receptors (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at two of the impacted receptors at the evaluated height. The total area for the barrier system is 21,810 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 3,635, which exceeds the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System L1-L9 is considered feasible, but not reasonable at this time. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier System L1-L3

Design Year (2040) Build noise levels are predicted to exceed the NAC at four modeling sites representing four residences within this portion of CNE L. A noise barrier system was evaluated for this specific impact within CNE L along the westbound travel lanes of Route 7. In total, the preliminary barrier system evaluated for this project has a length of 887 feet (see ***Table 4***), with an average height of 12 feet. The noise barrier system achieves feasible (>5 dB(A)) noise reduction at four of the impacted receptors (see ***Appendix I***). The barrier system does meet the design goal of an insertion loss (IL) of 7 dB(A) at two of the impacted receptors at the evaluated height. The total area for the barrier system is 10,664 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 2,661, which exceeds the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System L1-L3 is considered feasible, but not reasonable at this time. A summary of the abatement for this barrier system is shown in ***Table 4***.

CNE M

Barrier M1

Design Year (2040) Build noise levels are predicted to exceed the NAC at one modeling site representing one residence within CNE M. A noise barrier was evaluated for this specific impact within CNE M along the eastbound travel lanes of Route 7. In total, the preliminary barrier evaluated for this project has a length of 530 feet (see ***Table 4***), with an average height of 12 feet. The noise barrier achieves feasible (>5 dB(A)) noise reductions at the impacted receptor (see ***Appendix I***). The barrier does meet the design goal of an insertion loss (IL) of 7 dB(A) at the impacted receptor at the evaluated height. The total area for the barrier is 6,360 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 6,360 being above the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier M1 is considered feasible, but not reasonable at this time and is not recommended for further consideration. A summary of the abatement for this barrier is shown in ***Table 4***.

CNE N

Barrier System N1-N3

Design Year (2040) Build noise levels are predicted to exceed the NAC at three modeling sites representing three residences within this portion CNE N. A noise barrier system was evaluated for this specific impact within this portion CNE N along the eastbound travel lanes of Route 7. In total, the preliminary barrier evaluated for this project has a length of 1,408 feet (see ***Table 4***), with an average height of 10 feet. The noise barrier achieves feasible (>5 dB(A)) noise reductions at all three impacted receptors (see ***Appendix I***). The barrier does meet the design goal of an insertion loss (IL) of 7 dB(A) at one impacted receptor at the evaluated height. The evaluated barrier system also benefits five non-impacted receptors which represent five

residences. The total area for the barrier is 14,080 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 1,760 being above the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier System N1-N3 is considered feasible, but not reasonable at this time and is not recommended for further consideration. A summary of the abatement for this barrier system is shown in ***Table 4***.

Barrier N4

Design Year (2040) Build noise levels are predicted to exceed the NAC at one modeling site representing one residence within this portion CNE N. A noise barrier was evaluated for this specific impact within this portion CNE N along the eastbound travel lanes of Route 7. In total, the preliminary barrier evaluated for this project has a length of 290 feet (see ***Table 4***), with an average height of 12 feet. The noise barrier achieves feasible (>5 dB(A)) noise reductions at the impacted receptor (see ***Appendix I***). The barrier does meet the design goal of an insertion loss (IL) of 7 dB(A) at the impacted receptor at the evaluated height. The total area for the barrier is 3,480 square feet. It is considered not reasonable due to its Maximum Square Footage of Abatement per Benefited Receptor (MaxSF/BR) value of 3,480 being above the allowable (MaxSF/BR) value of 1,600. Therefore, Barrier N1 is considered feasible, but not reasonable at this time and is not recommended for further consideration. A summary of the abatement for this barrier is shown in ***Table 4***.

IX. Construction Noise

VDOT is also concerned with noise generated during the construction phase of the proposed project. While the degree of construction noise impact will vary, it is directly related to the types and number of equipment used and the proximity to the noise sensitive land uses within the project area. Land uses that are sensitive to traffic noise are also potentially sensitive to construction noise.

Any construction noise impacts that do occur as a result of roadway construction measures are anticipated to be temporary in nature and will cease upon completion of the project construction phase. A method of controlling construction noise is to establish the maximum level of noise that construction operations can generate.

In view of this, VDOT has developed and FHWA has approved a specification that establishes construction noise limits. This specification can be found in VDOT's 2007 *Road and Bridge Specifications, Section 107.16(b.3), "Noise"*. The contractor will be required to conform to this specification to reduce the impact of construction noise on the surrounding community.

The specifications have been reproduced below:

- The Contractor's operations shall be performed so that exterior noise levels measured during a noise sensitive activity shall not exceed 80 decibels. Such noise level measurements shall be taken at a point on the perimeter of the construction limit that is closest to the adjoining property on which a noise sensitive activity is occurring. A noise sensitive activity is any activity for which lowered noise levels are essential if the activity is to serve its intended purpose and not present an unreasonable public nuisance. Such

activities include, but are not limited to, those associated with residences, hospitals, nursing homes, churches, schools, libraries, parks, and recreational areas.

- VDOT may monitor construction-related noise. If construction noise levels exceed 80 decibels during noise sensitive activities, the Contractor shall take corrective action before proceeding with operations. The Contractor shall be responsible for costs associated with the abatement of construction noise and the delay of operations attributable to noncompliance with these requirements.

- VDOT may prohibit or restrict to certain portions of the project any work that produces objectionable noise between 10 PM and 6 AM. If other hours are established by local ordinance, the local ordinance shall govern.

- Equipment shall in no way be altered so as to result in noise levels that are greater than those produced by the original equipment.

- When feasible, the Contractor shall establish haul routes that direct his vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.

- These requirements shall not be applicable if the noise produced by sources other than the Contractor's operation at the point of reception is greater than the noise from the Contractor's operation at the same point.

X. Public Involvement/Local Officials Coordination

FHWA and VDOT policies require that VDOT provides certain information to local officials within whose jurisdiction the highway project is located to minimize future traffic noise impacts of Type I projects on currently undeveloped lands (Type I projects involve highway improvements with noise analysis). This information must include details on noise-compatible land-use planning and noise impact zones for undeveloped lands within the project corridor. The aforementioned details are provided below and shown on the graphics on ***Figures 2-1*** through ***2-7***. Additional information about VDOT's noise abatement program has also been included in this section.

Sections 12.1 and 12.2 of VDOT's 2011 Highway Traffic Noise Impact Analysis Guidance Manual outline VDOT's approach to communication with local officials, and provide information and resources on highway noise and noise-compatible land-use planning. VDOT's intention is to assist local officials in planning the uses of undeveloped land adjacent to highways to minimize the potential impacts of highway traffic noise.

Entering the Quiet Zone is a brochure that provides general information and examples to elected officials, planners, developers, and the general public about the problem of traffic noise and effective responses to the noise. The following is a link to this brochure on FHWA's website:

http://www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/land_use/qz00.cfm.

A wide variety of administrative strategies may be used to minimize or eliminate potential highway noise impacts, thereby preventing the need or desire for costly noise abatement structures such as noise barriers in future years. There are five broad categories of such strategies:

- Zoning,
- Other legal restrictions (subdivision control, building codes, health codes),
- Municipal ownership or control of the land,
- Financial incentives for compatible development, and
- Educational and advisory services.

The Audible Landscape: A Manual for Highway and Land Use is a very well-written and comprehensive guide addressing these noise-compatible land use planning strategies, with detailed information. This document is available through FHWA's website, at http://www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/audible_landscape/al00.cfm.

Also required under the revised FHWA and VDOT noise policies is information on the noise impact zones adjacent to project roadways in undeveloped lands. To determine these zones, noise levels are computed at various distances from the edge of the project roadways in each of the undeveloped areas of the project study area. The distances from the edge of the roadway to the NAC noise levels are then determined through interpolation. Distances vary in the project corridor due to changes in traffic volumes or terrain features. The distances for this project are summarized in ***Table 5.*** Any noise sensitive sites within these zones should be considered noise impacted if no barrier is present to reduce noise levels.

Noise level contours are lines of equal noise exposure that typically parallel roadway alignments. Highway traffic noise is considered a linear noise source and noise levels can drop considerably over distance. The degree that noise levels decrease can vary based on a number of different factors including objects that shield the roadway noise, terrain features and ground cover type (e.g., pavement, grass or snow). The use of noise level contours have become increasingly popular over the last several years, as they have been implemented in planning programs for undeveloped areas with roadway noise influence. Through conscious planning efforts and noise contour generation, municipal officials can restrict future development inside the noise impact zone (i.e., the area within the 66 dB(A) noise contour). ***Figures 2-1*** through ***2-7*** show the approximate 66 dB(A) noise level contours when considering the improvements made to the Route 7 Widening Project with the Design Year (2040) Build traffic volumes, speeds and composition. ***Table 5*** shows the approximate distance of the 66 dB(A) contour line from the centerline of the 2040 Build Alternative to each CNE throughout the project area.

XI. Conclusion

Under Design Year (2040) Build conditions a total of 205 receptors representing 173 residences, 13 cemetery grid units, 15 proposed trail units, one soccer field (two units), two playgrounds (seven grid units), and one historic site are predicted to experience noise impacts. Noise barriers were evaluated for a worst-case alternative and determined to be both feasible and reasonable for CNE B and D (Barrier System B1–B5 and D1), CNE C (Barrier System C1–C4), CNE E (E1–E3 System), CNE F (Barrier System F1–F3 and Barrier System F4–F9) CNE G (Barrier System G1–G7, Barrier System G8–G9, and Barrier System G10–G13), CNE H (Barrier System H3–H11), CNE's I, J, and K (Barrier System I1–I6, J1–J4, and K1–K3). Further study is required in Final Design to refine the abatement options and no commitments on noise abatement are made until the Final Design phase of the project.

TABLE 1

Route 7 Widening Project

FHWA/VDOT Noise Abatement Criteria

Hourly-A-Weighted Sound Level in Decibels (dB(A)) [1]

Activity Category	Activity L_{eq} (h)[4]	Criteria[2] L10 (h)	Evaluation Location	Description of Activity Category
A	57	60	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[3]	67	70	Exterior	Residential.
C[3]	67	70	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	55	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[3]	72	75	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 Either Leq (h) or L10 (h) (but not both) may be used on a project.

2 The Leq (h) and L10 (h) Activity Criteria values are for impact determination only, and are not design standards for noise abatement measure.

3 Includes undeveloped lands permitted for this Activity Criteria.

4 VDOT utilizes the Leq(h) designation.

TABLE 2

Route 7 Widening Project

TNM Validation

1	*2*	*3*	*4*	*5*
Receptor	**Monitored Level**	**Modeled Level**	**Difference**	**Validated**
R1	57.2	58.2	1.0	Yes
R2	63.2	65.7	2.5	Yes
R3	58.1	61.9	3.8	No
R4	60.7	63.6	2.9	Yes
R5	59.5	68.4	8.9	No
R6	60.1	62.9	2.8	Yes
R7	64.4	63.7	-0.7	Yes
R8	63.3	66.3	3.0	Yes
R9	58.1	60.0	1.9	Yes
R10	62.9	68.6	5.7	No
R11	63.4	66.3	2.9	Yes
R12	65.2	68.0	2.8	Yes
	Differnce between Monitored and Modeled Leq greater than 3 db(A)			

Table 3

Route 7 Widening Project

Noise Impact Summary by CNE

1	2	3	4	5	6	7	8
CNE	Site Representation	Existing 2015 Noise Level Range (dB(A))			Build 2040 Noise Level Range (dB(A))		
		Min	Max	# Impacts	Min	Max	# Impacts
A	73 Residences, 1 School, 1 Fire Station, 1 Church, 1 Assisted Living Center	48 (29)	63 (32)	0 Impacts	50 (31)	66 (35)	1 Residence
B	60 Residences, 1 School, 1 Animal Hospital, 1 Church, 1 Tree Nursery	50 (25)	68 (44)	8 Residences	55 (31)	72 (46)	16 Residences
C	102 Residences, 1 Pool, 1 Community Center, 1 Playground, 2 Tennis Courts, 1 Basketball Court, 1 Picnic Area	45 (28)	68 (28)	3 Residences	48 (31)	71 (31)	18 Residences
D	7 Residences, 2 Soccer Fields, 1 Softball Field	49	62	0 Impacts	54	69	1 Residence and 1 Soccer Field (2 Units)
E	66 Residences	48	70	7 Residences	53	74	16 Residences
F	147 Residences, 1 Cemetery, 1 Historic Site, 1 Tree Nursery, 1 Proposed Trail	46	71	8 Residences, 1 Cemetery (2 Units), 1 Trail (1 Unit), 1 Running Trail (1 Unit)	53	76	38 Residences, 1 Cemetery (4 Units), 1 Historic Site, 1 Proposed Trail (2 Units)
G	185 Residences, 1 Church, 1 Pre-School, 1 Dentist Office, 1 Existing Trail, 1 Proposed Trail	44 (31)	69 (46)	17 Residences	48 (36)	75 (49)	38 Residences, 1 Playground, 1 Proposed Trail (13 Units)
H	65 Residences, 1 School	51 (36)	72 (36)	12 Residences	57 (43)	78 (43)	16 Residences and 1 Playground (6 Units)
I	87 Residences, 1 Fire Station, 1 Nursery	47	69	3 Residences	51	74	9 Residences
J	14 Residences, 1 Church, 1 Cemetery	49 (45)	74 (45)	2 Residences, 1 Cemetery (5 Units)	53 (47)	74 (47)	2 Residences, 1 Cemetery (9 Units)
K	22 Residences, 2 Churches, 1 Non-Profit, 1 Pre-School	48 (24)	68 (42)	2 Residences	50 (24)	70 (43)	6 Residences
L	31 Residences, 1 Pre-School, 1 Church, 1 Laboratory	48 (35)	72 (38)	5 Residences	51 (38)	76 (43)	8 Residences
M	54 Residences	52	67	1 Residence	55	67	1 Residence
N	67 Residences, 1 Church	47 (47)	73 (47)	2 Residences	49 (40)	72 (40)	4 Residences

( ) Indicates interior sound level

TABLE 4

Route 7 Widening Project

Noise Abatement Acoustical Feasibility and Reasonableness Evaluation Summary

CNE	Proposed Barrier								
	Barrier I.D.	Number of Benefited Receptor Units	Combined Noise Barrier Length (ft.)	Average Noise Barrier Height (ft.)	Square Footage (SF)	Net SF per Benefited Receptor	Barrier Cost*	Feasible?	Reasonable?
A	A1	9	1,257	18	22,626	2,514	$701,406	Yes	No
B/D	B1 - B5 and D1 System	59	5,616	14	78,624	1,333	$2,437,344	Yes	Yes
C	C1 - C4 System	75	6,291	18	113,238	1,510	$3,510,378	Yes	Yes
D	D2	2	969	18	17,442	8,721	$540,702	Yes	No
E	E1 - E3 System	35	3,577	14	50,078	1,431	$1,552,418	Yes	Yes
F	F1 - F3 System	35	3,637	12	43,644	1,247	$1,352,964	Yes	Yes
	F4 - F9 System	74	4,814	20	96,280	1,301	$2,984,680	Yes	Yes
G	G1 - G7 System	59	5,478	12	65,736	1,114	$2,037,816	Yes	Yes
	G8 - G9 System	14	1,643	13	20,513	1,465	$635,903	Yes	Yes
	G10 - G16 System	22	3,690	11	39,250	1,784	$1,216,750	Yes	No
	G10 - G13 System	18	2,661	11	28,185	1,566	$873,735	Yes	Yes
	G14 - G16 System	3	1,108	10	11,080	3,693	$343,480	Yes	No
H	H1 - H2 System	3	738	10	7,380	2,460	$228,780	Yes	No
	H3 - H11 System	37	3,408	12	40,896	1,105	$1,267,776	Yes	Yes
I/J/K	I1- I6, J1 - J4 and K1 - K3 System	80	6,242	14	87,388	1,092	$2,709,028	Yes	Yes
L	L1 - L9 System	6	2,181	10	21,810	3,635	$676,110	Yes	No
	L1 - L3	4	887	12	10,644	2,661	$329,964	Yes	No
M	M1	1	530	12	6,360	6,360	$197,160	Yes	No
N	N1 - N3 System	8	1,408	10	14,080	1,760	$436,480	Yes	No
	N4	1	290	12	3,480	3,480	$107,880	Yes	No

Indicates the Barriers/Barrier Systems shown in Figures 2-1 through 2-7 and Appendix I (Insertion Loss Table).

* 48.50/ft^2 for projects with less than 50,000ft^2 of barrier construction, and $31/ft^2 for projects with more than 50,000ft^2 of feasible/reasonable barriers.

[1] Reduced cost of $31/ft^2 only applicable when barriers are considered both feasible and reasonable.

TABLE 5

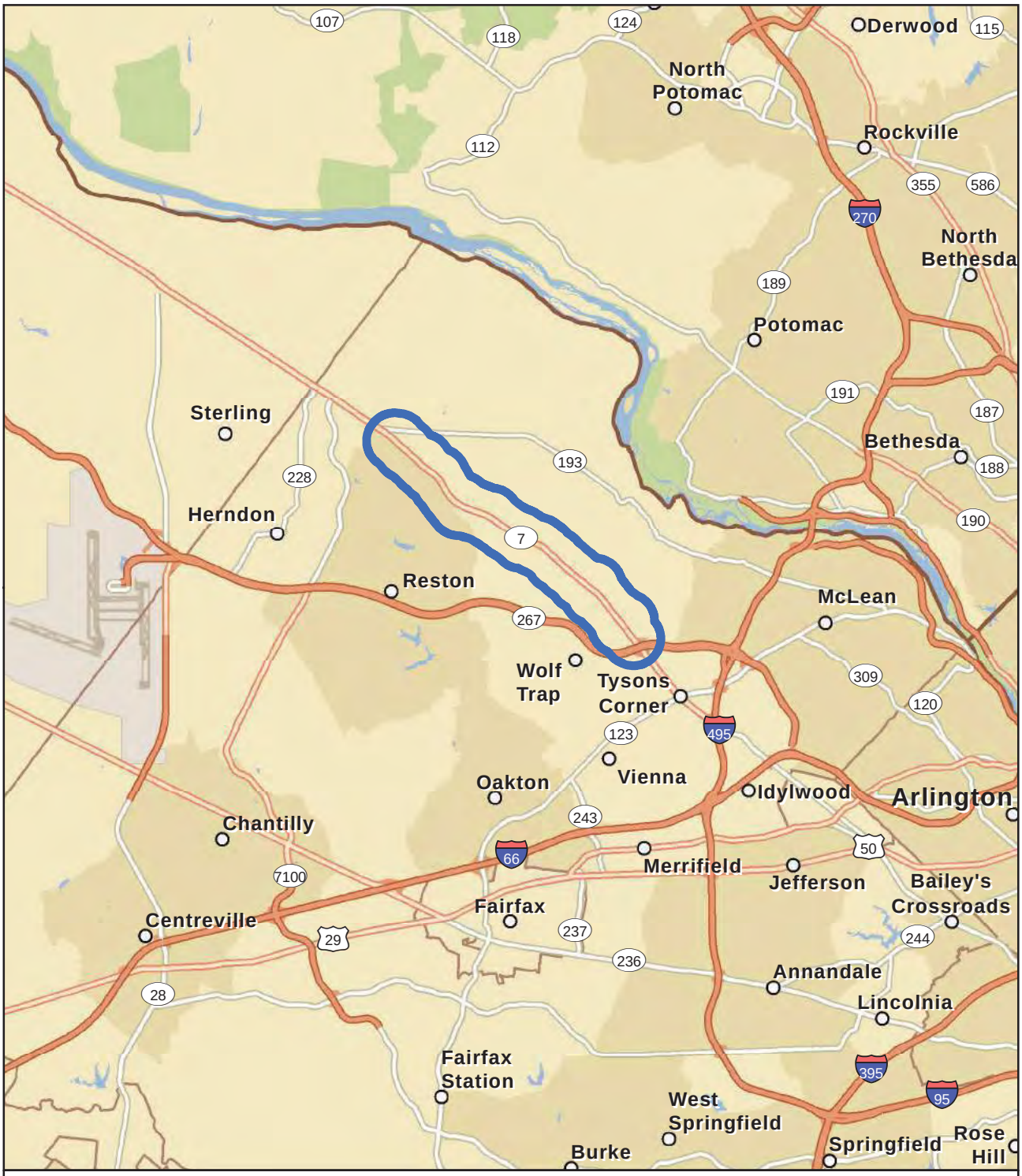
Route 7 Widening Project

Distance from Centerline of Proposed Design Travel Lanes

CNE Specific Noise Contours

Design Year (2040) Noise Level Contours
66 dB(A)

CNE	Distance (feet)
A	180
B	110-190
C	110-250
D	180-240
E	75-340
F	110-500
G	125-320
H	140-260
I	100-190
J	150-290
K	100-290
L	70-270
M	170
N	90-170



Route 7 Widening Project
Preliminary Noise Report

VIRGINIA DEPARTMENT OF TRANSPORTATION
Figure 1 - Project Location Map
Fairfax County, Virginia

State Project 0007-029-128, B610, C502, P102, R202; UPC: 52328
From: Intersection of Route 267

Modeled Receivers*

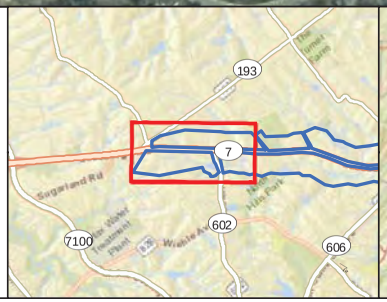
- Not Impacted not Benefited
- Benefited not Impacted
- Impacted and Benefited
- Impacted not Benefited

Potential Barriers

- Barrier Feasible and Reasonable
- Barrier Feasible not Reasonable
- Barrier not Feasible
- Existing Barrier Location from UPC 82135

- Monitoring Site
- Design Edge of Pavement
- 66 dB(A) Contour
- CNE Boundary
- 500' Boundary from EOP

0 250 500 1,000 Feet
0 50 100 200 Meters



Aerial imagery courtesy of Esri World Imagery Service 2015

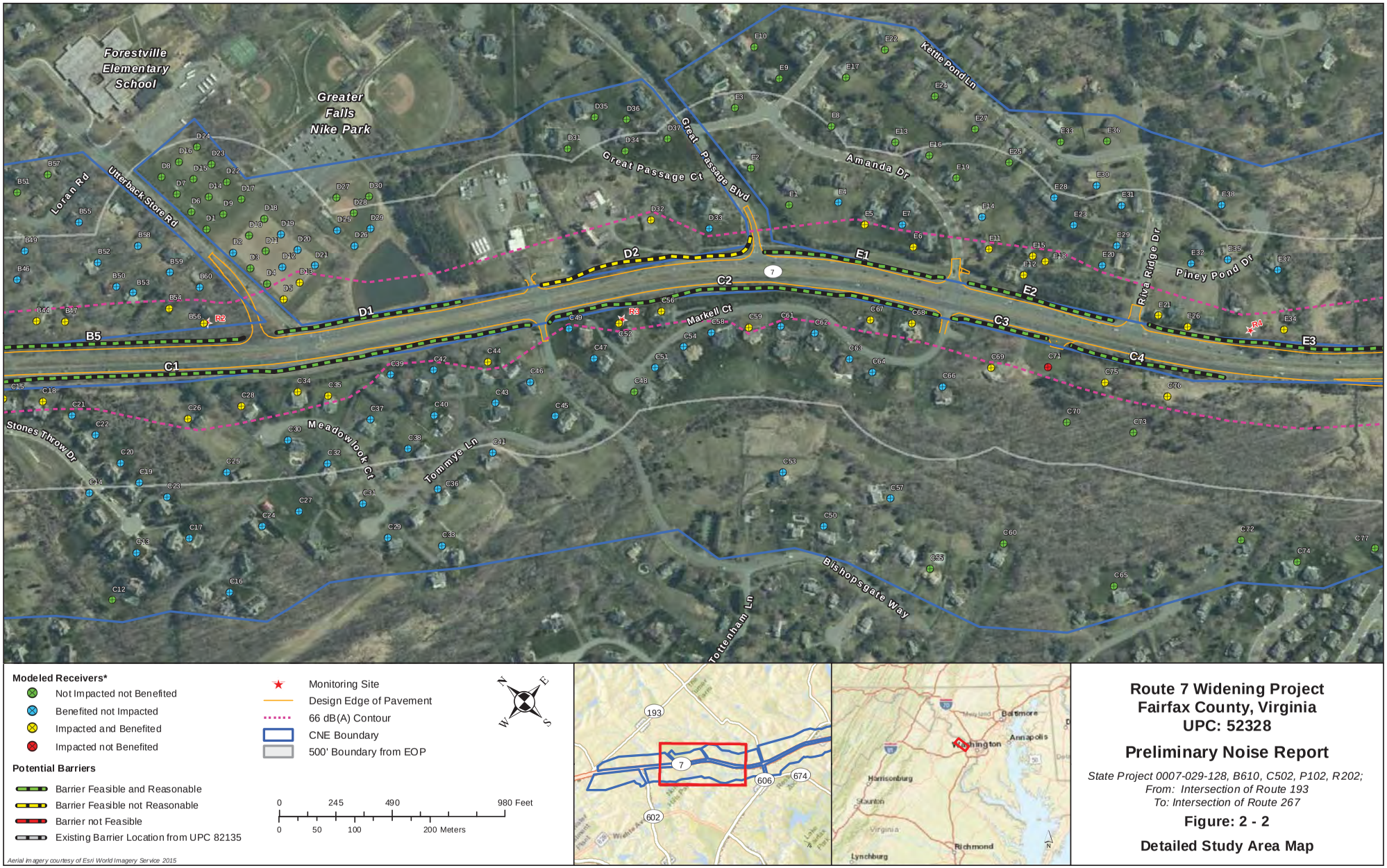
Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 1

Detailed Study Area Map



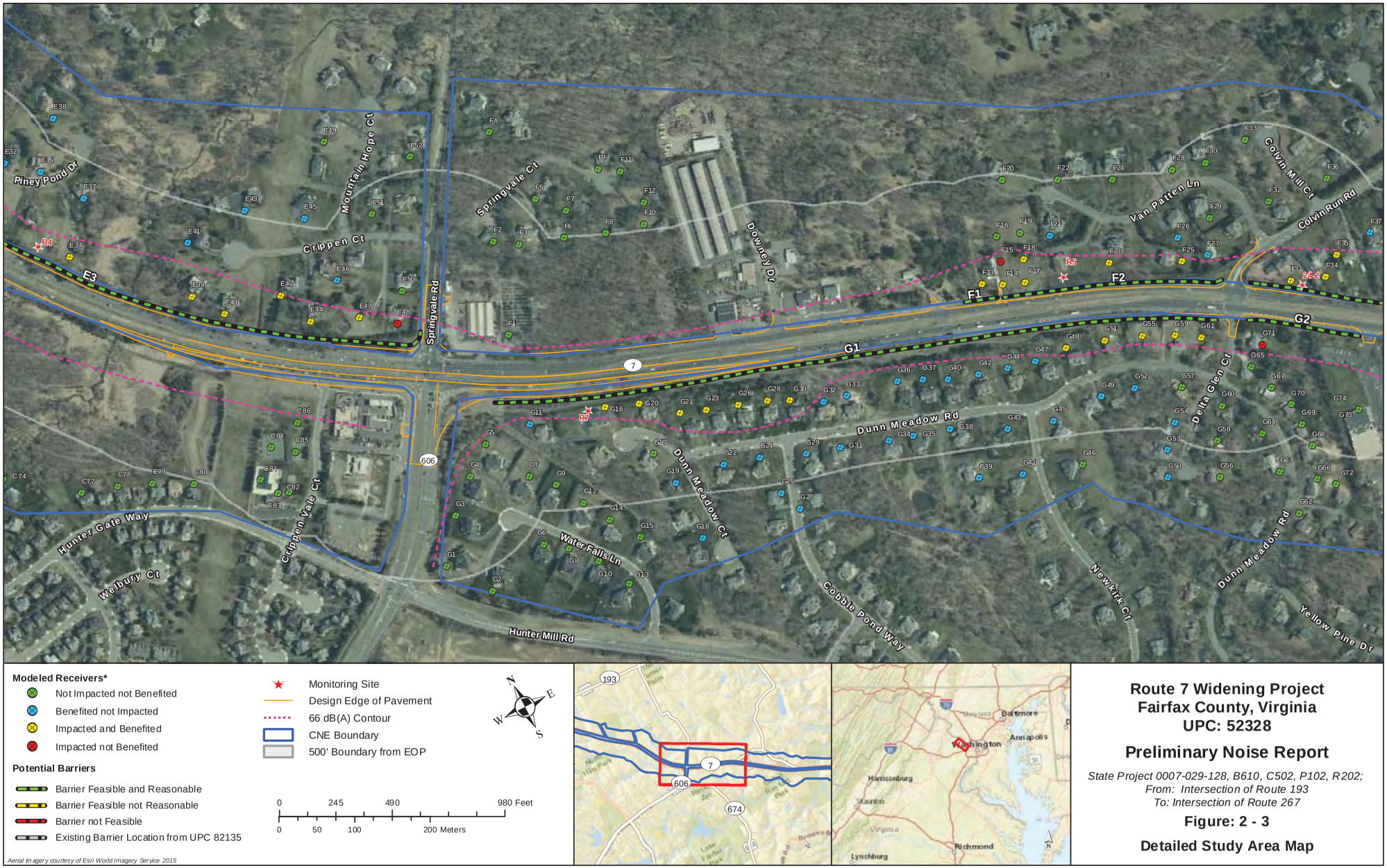
Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 2

Detailed Study Area Map



Modeled Receivers*

- Not Impacted not Benefited
- Benefited not Impacted
- Impacted and Benefited
- Impacted not Benefited

Potential Barriers

- Barrier Feasible and Reasonable
- Barrier Feasible not Reasonable
- Barrier not Feasible
- Existing Barrier Location from UPC 82135

- Monitoring Site
- Design Edge of Pavement
- 66 dB(A) Contour
- CNE Boundary
- 500' Boundary from EOP

0 245 490 980 Feet

0 50 100 200 Meters

Aerial imagery courtesy of Esri World Imagery Service 2015

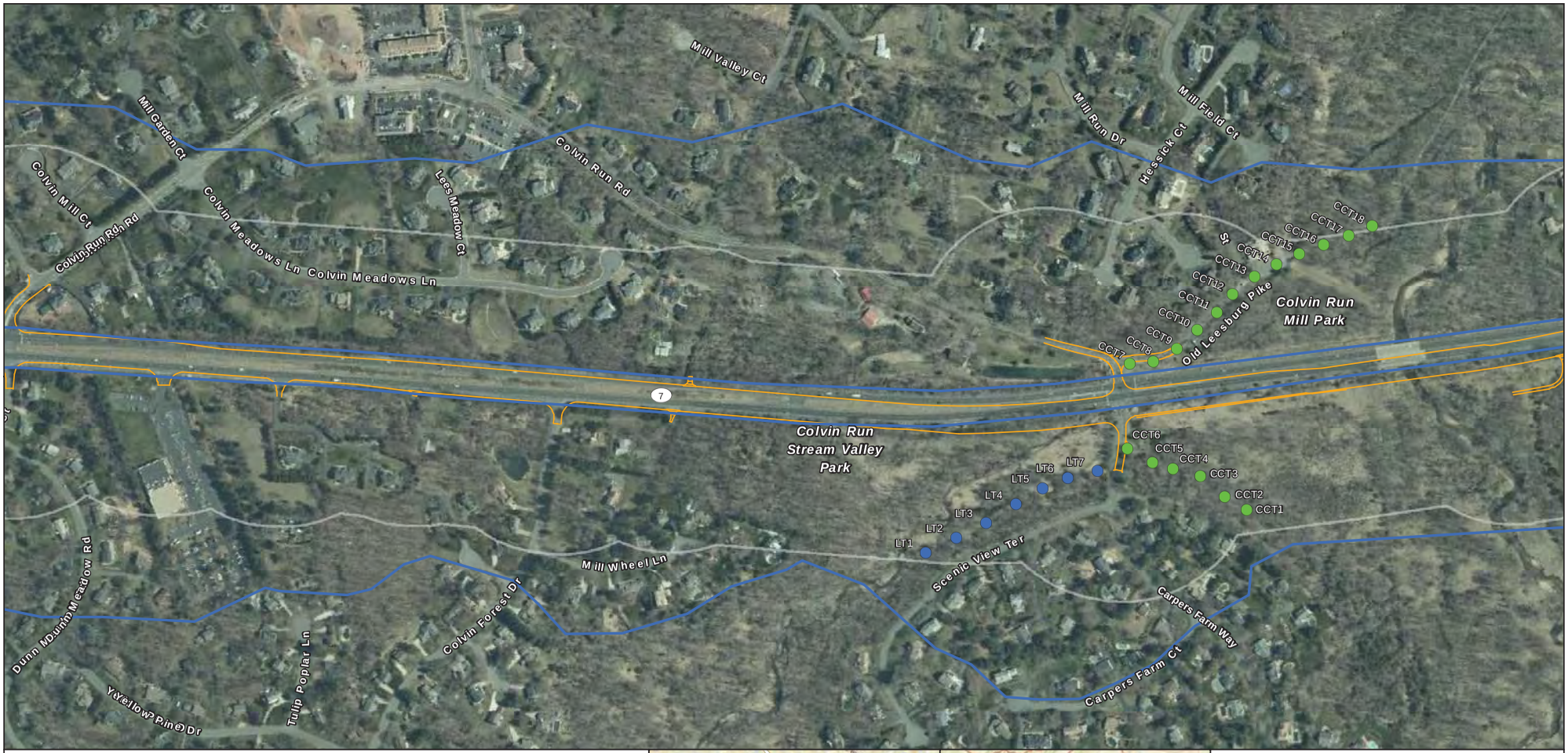
Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 3

Detailed Study Area Map



Modeled Receivers

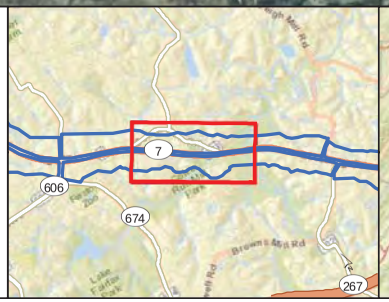
- Existing Cross County Connector Trail
- Existing Local Trail

- Design Edge of Pavement
- CNE Boundary
- 500' Boundary from EOP

0 250 500 1,000 Feet

0 50 100 200 Meters

Aerial imagery courtesy of Esri World Imagery Service 2015



Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

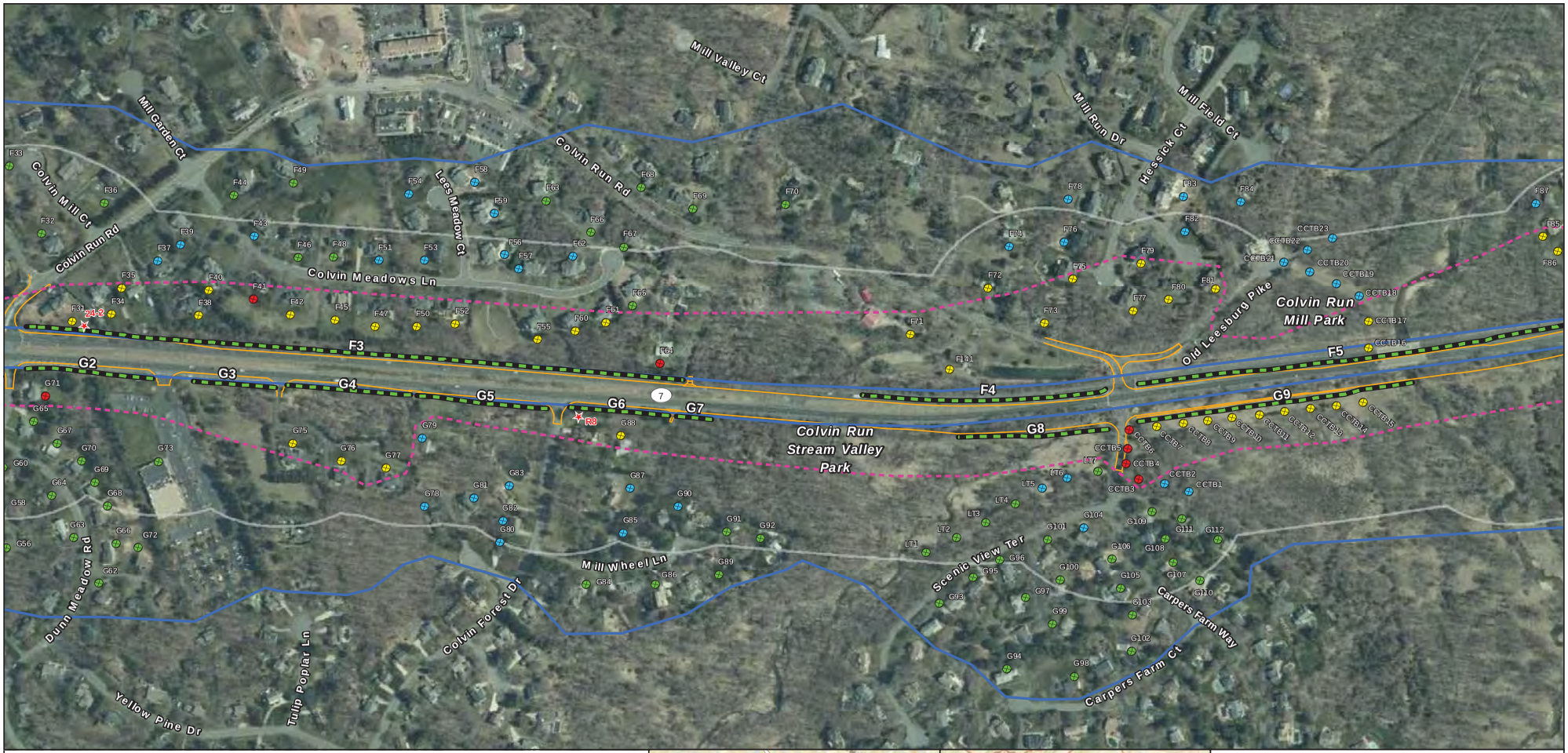
Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 4 (Existing Trail Network)

Detailed Study Area Map

Figure 2-4_Existing Cross County Trail 5/26/2016 1:48:30 PM



Modeled Receivers*

- Not Impacted not Benefited
- Benefited not Impacted
- Impacted and Benefited
- Impacted not Benefited

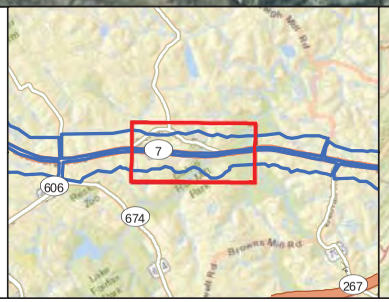
Potential Barriers

- Barrier Feasible and Reasonable
- Barrier Feasible not Reasonable
- Barrier not Feasible
- Existing Barrier Location from UPC 82135

- Monitoring Site
- Design Edge of Pavement
- 66 dB(A) Contour
- CNE Boundary
- 500' Boundary from EOP

0 245 490 980 Feet
0 50 100 200 Meters

Aerial imagery courtesy of Esri World Imagery Service 2015



Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 4

Detailed Study Area Map

Modeled Receivers*

- Not Impacted not Benefited
- Benefited not Impacted
- Impacted and Benefited
- Impacted not Benefited

Potential Barriers

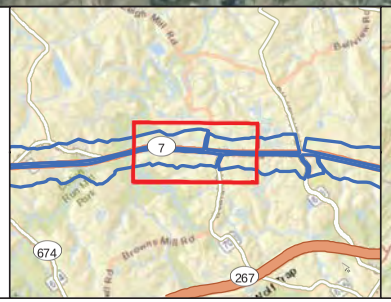
- Barrier Feasible and Reasonable
- Barrier Feasible not Reasonable
- Barrier not Feasible
- Existing Barrier Location from UPC 82135

- Monitoring Site
- Design Edge of Pavement
- 66 dB(A) Contour
- CNE Boundary
- 500' Boundary from EOP

0 250 500 1,000 Feet

0 50 100 200 Meters

Aerial imagery courtesy of Esri World Imagery Service 2015



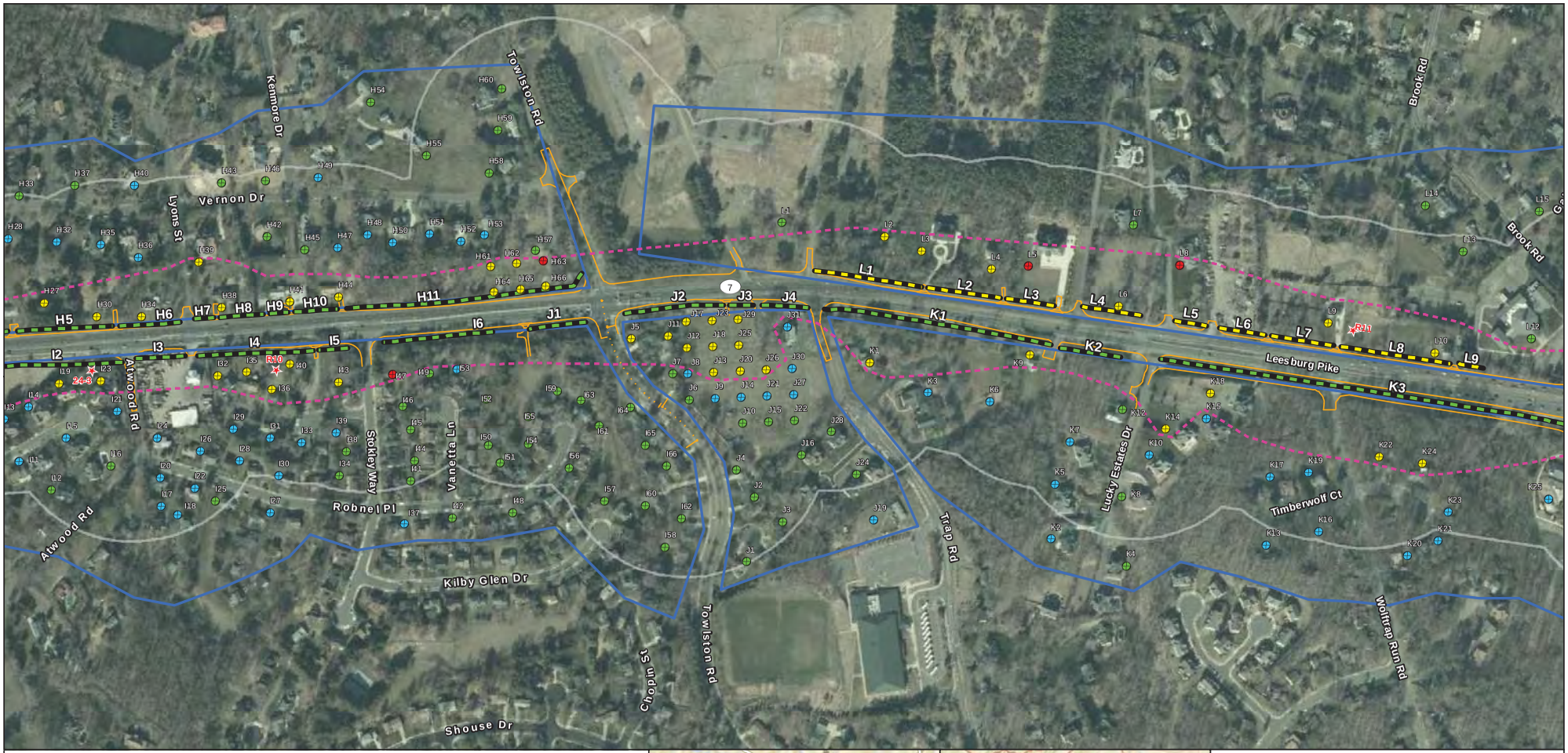
Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 5

Detailed Study Area Map



Modeled Receivers*

- Not Impacted not Benefited
- Benefited not Impacted
- Impacted and Benefited
- Impacted not Benefited

Potential Barriers

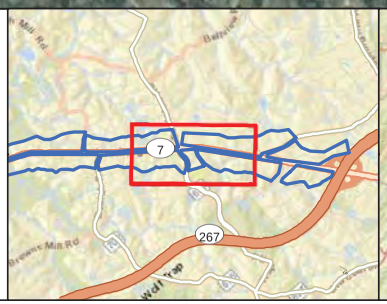
- Barrier Feasible and Reasonable
- Barrier Feasible not Reasonable
- Barrier not Feasible
- Existing Barrier Location from UPC 82135

- Monitoring Site
- Design Edge of Pavement
- 66 dB(A) Contour
- CNE Boundary
- 500' Boundary from EOP

0 245 490 980 Feet

0 50 100 200 Meters

Aerial imagery courtesy of Esri World Imagery Service 2015



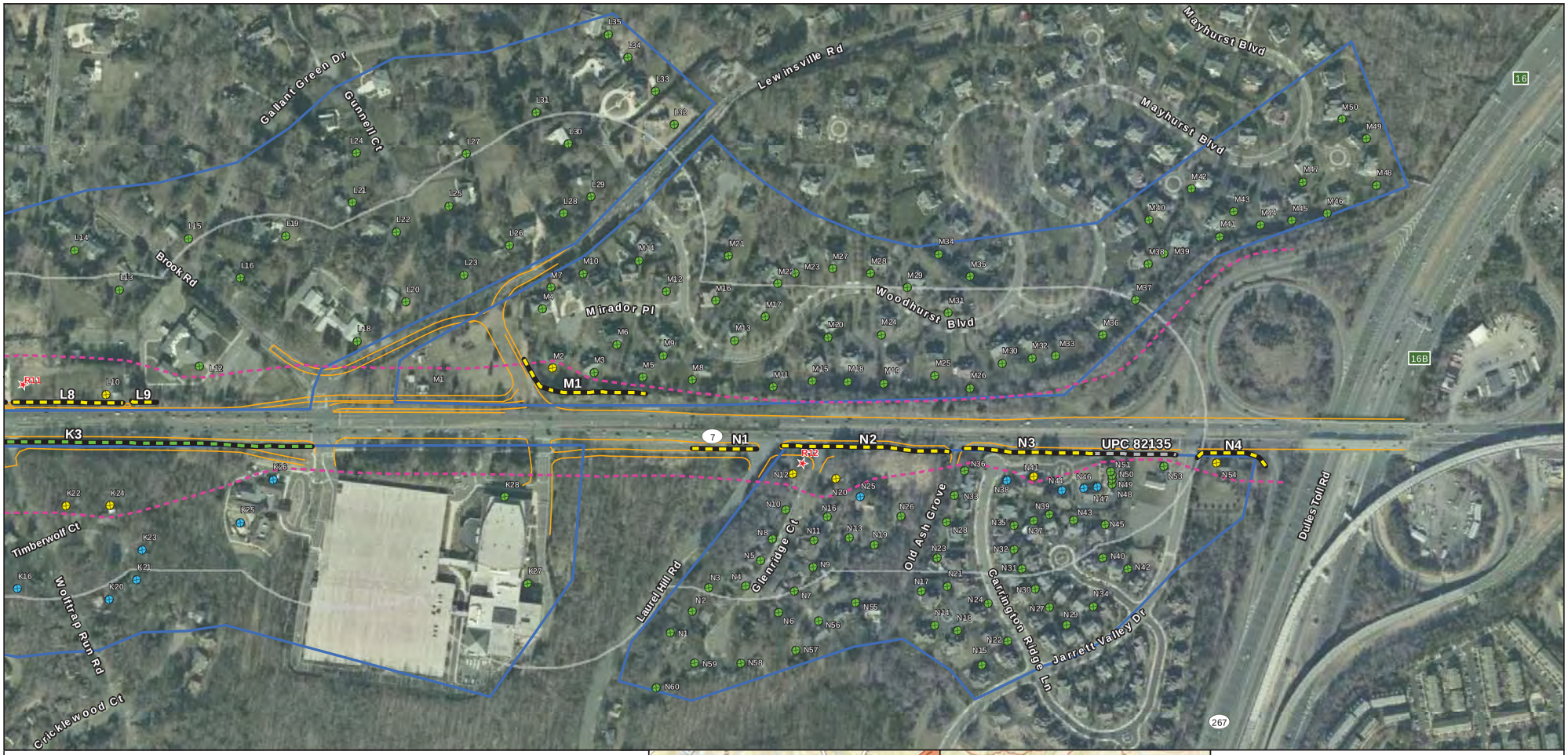
Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 6

Detailed Study Area Map



Modeled Receivers*

- Not Impacted not Benefited
- Benefited not Impacted
- Impacted and Benefited
- Impacted not Benefited

Potential Barriers

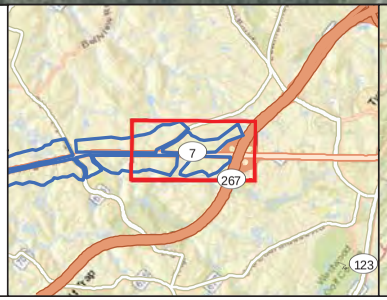
- Barrier Feasible and Reasonable
- Barrier Feasible not Reasonable
- Barrier not Feasible
- Existing Barrier Location from UPC 82135

- Monitoring Site
- Design Edge of Pavement
- 66 dB(A) Contour
- CNE Boundary
- 500' Boundary from EOP

0 245 490 980 Feet

0 50 100 200 Meters

Aerial imagery courtesy of Esri World Imagery Service 2015



Route 7 Widening Project
Fairfax County, Virginia
UPC: 52328

Preliminary Noise Report

State Project 0007-029-128, B610, C502, P102, R202;
From: Intersection of Route 193
To: Intersection of Route 267

Figure: 2 - 7

Detailed Study Area Map

APPENDIX A

NOISE METER AND ACOUSTICAL CALIBRATOR
CALIBRATION CERTIFICATES

RION Supplied Accessories

Model	NC-74	Product Name	Sound Calibrator

Ensure all the items below are in the package.
If there is a missing part, please contact your supplier.

Type	Description	Quantity	Note
NC-74	Main unit	1	#35236431
	Soft case	1	
	Batteries IEC LR6 (size AA)	2	
NC-74-002	1/2-inch microphone adapter	1	mounted on main unit
	Instruction manual	1	
	Inspection certificate	1	This sheet
	Document for China RoHS	1	only to China

Inspection Certificate

INSPECTOR

M. Hidaka

We hereby certify that this product has been tested and calibrated at our factory according to RION specifications and that the product satisfies all relevant requirements.

RION CO., LTD.
3-20-41 Higashimotomachi, Kokubunji,
Tokyo 185-8533,
Japan

Sound and Vibration Measuring Instrument Section Product information and software downloads can be found on our web-site:
http://svmeas.rion.co.jp/.
Please check it out.

№C02040201

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
NVLAP Lab Code: 200625-0

Calibration Certificate No.34210

Instrument: **Sound Level Meter**
Model: **NL42**
Manufacturer: **Rion**
Serial number: **01122580**
Tested with: **Microphone UC52 s/n 144597**
Preamplifier NH24 s/n 22621
Type (class): **2**
Customer: **McCormick Taylor, Inc.**
Tel/Fax: **215-592-4200 ext.1313 /**

Date Calibrated: **7/7/2015** *Cal Due:*

Status:	Received	Sent
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: ___Yes _X_ No
Calibration service: ___ Basic _X_ Standard
Address: **5511 Capital Center Drive, Suite 560 Raleigh, NC 27606**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/22/2012
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

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

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2014	Scantek, Inc./ NVLAP	Oct 7, 2015
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env. / A2LA	Oct 1, 2015
HM30-Thommen	Meteo Station	1040170/39633	Oct 3, 2014	ACR Env./ A2LA	Oct 3, 2015
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2014	Scantek, Inc./ NVLAP	Nov 10, 2015
4226-Brüel&Kjær	Multifunction calibrator	2305103	Jul 28, 2014	Scantek, Inc./ NVLAP	Jul 28, 2015

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

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
24.2	100.25	49.1

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Valentin Buzduga
Signature	Lydon Dawkins	Signature	
Date	7/7/2015	Date	7/07/2015

Meter #2

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
NVLAP Lab Code: 200625-0

Calibration Certificate No.34205

Instrument: **Sound Level Meter**
Model: **NL42**
Manufacturer: **Rion**
Serial number: **01222875_017997**
Tested with: **Microphone UC52 s/n 144499**
Preamplifier NH24 s/n 22922
Type (class): **2**
Customer: **Mccormick Taylor**
Tel/Fax: **717-540-6040 /**

Date Calibrated: **7/2/2015** *Cal Due:*

Status:	Received	Sent
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes _X_ No
Calibration service: ___ Basic _X_ Standard
Address: **5 Capital Drive, Suite 400**
Harrisburg, PA 17110

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/22/2012
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

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

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2014	Scantek, Inc./ NVLAP	Oct 7, 2015
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env. / A2LA	Oct 1, 2015
HM30-Thommen	Meteo Station	1040170/39633	Oct 3, 2014	ACR Env./ A2LA	Oct 3, 2015
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2014	Scantek, Inc./ NVLAP	Nov 10, 2015
4226-Brüel&Kjær	Multifunction calibrator	2305103	Jul 28, 2014	Scantek, Inc./ NVLAP	Jul 28, 2015

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

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.1	99.78	69.1

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Valentin Buzduga
Signature	Lydon Dawkins	Signature	
Date	7/2/2015	Date	7/02/2015

Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP®
NVLAP Lab Code: 200625-0

Calibration Certificate No.34211

Instrument: **Sound Level Meter**
Model: **NL42**
Manufacturer: **Rion**
Serial number: **01222874_017995**
Tested with: **Microphone UC52 s/n 144498**
Preamplifier NH24 s/n 22921
Type (class): **2**
Customer: **McCormick Taylor, Inc.**
Tel/Fax: **215-592-4200 ext.1313 /**

Date Calibrated: **7/7/2015** *Cal Due:*

Status:	Received	Sent
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: ___Yes _X_ No
Calibration service: ___ Basic _X_ Standard
Address: **5511 Capital Center Drive, Suite 560 Raleigh, NC 27606**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/22/2012
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

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

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2014	Scantek, Inc./ NVLAP	Oct 7, 2015
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env. / A2LA	Oct 1, 2015
HM30-Thommen	Meteo Station	1040170/39633	Oct 3, 2014	ACR Env./ A2LA	Oct 3, 2015
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	
1251-Norsonic	Calibrator	30878	Nov 10, 2014	Scantek, Inc./ NVLAP	Nov 10, 2015
4226-Brüel&Kjær	Multifunction calibrator	2305103	Jul 28, 2014	Scantek, Inc./ NVLAP	Jul 28, 2015

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

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
25.0	100.26	44.5

Calibrated by:	Lydon Dawkins	**Authorized signatory:**	Valentin Barduga
Signature	Lydon Dawkins	Signature	
Date	7/7/2015	Date	7/07/2015

9

RION

Supplied Accessories

Model	NL-42	Product Name	Sound Level Meter, Class 2

Ensure all the items below are in the package.
If there is a missing part, please contact your supplier.

Type	Description	Quantity	Note
NL-42	Main unit	1	00345928
NL-42-025	Storage case	1	42·52 - 150627 NH·09 - 36126
WS-10	Windscreen	1	
NL-42-033	Windscreen fall prevention rubber	1	attached to the main unit
VM-63-017	Hand strap	1	
LR6	Size AA alkaline batteries	4	
	CD-ROM (Instruction manual, Serial Interface manual, Technical notes, Program option manual)	1	
	Description for IEC 61672-1	1	
	SD memory card (512 MByte)	1	only when NX-42EX is pre-installed
	Inspection certificate	1	This sheet
	Document for China RoHS	1	only to China

Inspection Certificate

INSPECTOR

M. Hidaka

We hereby certify that this product has been tested and calibrated at our factory according to RION specifications and that the product satisfies all relevant requirements.

RION CO., LTD.
3-20-41 Higashimotomachi, Kokubunji,
Tokyo 185-8533,
Japan

Sound and Vibration Measuring Instrument Section Product information and software downloads can be found on our web-site:
http://svmeas.rion.co.jp/
Please check it out.

№C11030302

APPENDIX B
NOISE MONITORING DATA FORMS

Route 7 Widening Project

Site # R1 **Description :** 11304 Water Pointe Circle, Reston, Virginia 20194

Done By: JJW/KTT

Meter: → 2

Monitoring Data:							
Date	11/17/15						
Start Time	9:35 AM						
End Time	9:50 AM						
Duration	15 MIN						
Leq.	57.2						
Traffic Data							
Roadway	Route 7						
Direction	EB	WB					
Traffic Total:	260	228	0	0	0	0	
Cars	252	202					
MT	7	18					
HT	1	8					
Buses							
Motorcycles							
Weather Conditions							

Atmospheric Data
Wind Speed (mph) 8
Temp. (F) 52
Humidity (%) 63

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes:

McCormick Taylor, Inc

Route 7 Widening Project

Site # R2 **Description :** 11119 Loran Road, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: → 1

Monitoring Data:							
Date	11/17/15						
Start Time	9:35 AM						
End Time	9:50 AM						
Duration	15 MIN						
Leq.	63.2						
Traffic Data							
Roadway	Route 7						
Direction	EB	WB					
Traffic Total:	260	228	0	0	0	0	
Cars	252	202					
MT	7	18					
HT	1	8					
Buses							
Motorcycles							
Weather Conditions							

Atmospheric Data
Wind Speed (mph)
8
Temp. (F)
52
Humidity (%)
63

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes: Time:? Car enters and leaves driveway.

McCormick Taylor, Inc

Route 7 Widening Project

Site # R3 **Description :** 1155 Markell Court, Reston, Virginia 20194

Done By: JJW/KTT

Meter: → 9

Monitoring Data:							
Date	11/17/15						
Start Time	9:35 AM						
End Time	9:50 AM						
Duration	15 MIN						
Leq.	**58.1**						
Traffic Data							
Roadway	Route 7						
Direction	EB	WB					
Traffic Total:	260	228	0	0	0	0	
Cars	252	202					
MT	7	18					
HT	1	8					
Buses							
Motorcycles							
Weather Conditions							

Atmospheric Data
Wind Speed (mph) 8
Temp. (F) 52
Humidity (%) 63

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes:

McCormick Taylor, Inc

Route 7 Widening Project

Site # R4 **Description :** 10805 Piney Pond Drive, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: → 3

Monitoring Data:						
Date	11/17/15					
Start Time	9:35 AM					
End Time	9:50 AM					
Duration	15 MIN					
Leq.	**60.7**					
Traffic Data						
Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	260	228	0	0	0	0
Cars	252	202				
MT	7	18				
HT	1	8				
Buses						
Motorcycles						
Weather Conditions						

Atmospheric Data
Wind Speed (mph) 8
Temp. (F) 52
Humidity (%) 63

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes: 9:42 AM- Lawn mower engine made a loud popping noise.
9:46 AM- Landscaping company across the street mowing and weed wacking.

Route 7 Widening Project

Site # R5 **Description :** 10411 Van Pattern Lane, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: → 1

Monitoring Data:						
Date	11/17/15					
Start Time	10:40 AM					
End Time	10:55 AM					
Duration	15 MIN					
Leq.	**59.5**					
Traffic Data						
Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	357	257			0	0
Cars	329	239				
MT	14	14				
HT	14	4				
Buses						
Motorcycles						
Weather Conditions						

Atmospheric Data
Wind Speed (mph) **10**
Temp. (F) **56**
Humidity (%) **59**

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes: Privacy Fence (8ft)

McCormick Taylor, Inc

Route 7 Widening Project

Site # R6 **Description :** 9629 Locust Hill Drive, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: → 3

Monitoring Data:						
Date	11/17/15					
Start Time	10:40 AM					
End Time	10:55 AM					
Duration	15 MIN					
Leq.	**60.1**					
Traffic Data						
Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	357	257	0	0	0	0
Cars	329	239				
MT	14	14				
HT	14	4				
Buses						
Motorcycles						
Weather Conditions						

Atmospheric Data
Wind Speed (mph) 10
Temp. (F) 56
Humidity (%) 59

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes: Privacy Fence (8ft)

McCormick Taylor, Inc

Route 7 Widening Project

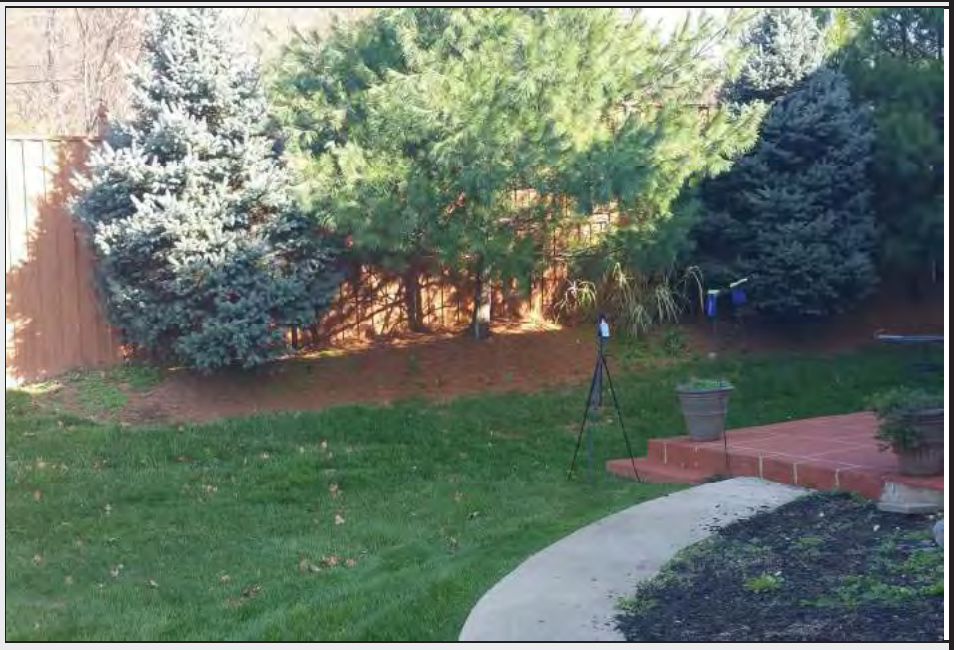
Site # R7 **Description :** 1253 Dunn Meadow Court, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: → 2

Monitoring Data:						
Date	11/17/15					
Start Time	10:40 AM					
End Time	10:55 AM					
Duration	15 MIN					
Leq.	**64.4**					
Traffic Data						
Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	357	257	0	0	0	0
Cars	329	239				
MT	14	14				
HT	14	4				
Buses						
Motorcycles						
Weather Conditions						

Atmospheric Data
Wind Speed (mph) **10**
Temp. (F) **56**
Humidity (%) **59**



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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes:

McCormick Taylor, Inc

Route 7 Widening Project

Site # R8 **Description :** 1293 Colvin Forest Drive, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: → 9

Monitoring Data:							
Date	11/17/15						
Start Time	10:40 AM						
End Time	10:55 AM						
Duration	15 MIN						
Leq.	**63.3**						
Traffic Data							
Roadway	Route 7						
Direction	EB	WB					
Traffic Total:	357	257	0	0	0	0	
Cars	329	239					
MT	14	14					
HT	14	4					
Buses							
Motorcycles							
Weather Conditions							

Atmospheric Data
Wind Speed (mph) **10**
Temp. (F) **56**
Humidity (%) **59**

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes:

McCormick Taylor, Inc

Route 7 Widening Project

Site # R9

Description : 9393 Farmingdale Court, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: → 1

Monitoring Data:						
Date	11/17/15					
Start Time	11:40 AM					
End Time	11:55 AM					
Duration	15 MIN					
Leq.	**58.1**					
Traffic Data						
Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	392	308	0	0	0	0
Cars	375	292				
MT	15	13				
HT	2	3				
Buses						
Motorcycles						
Weather Conditions						

Atmospheric Data
Wind Speed (mph)
10
Temp. (F)
58
Humidity (%)
60

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes:

McCormick Taylor, Inc

Route 7 Widening Project

Site # R10 **Description :** 9356 Mildred Court, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: → 9

Monitoring Data:							
Date	11/17/15						
Start Time	11:40 AM						
End Time	11:55 AM						
Duration	15 MIN						
Leq.	**62.9**						
Traffic Data							
Roadway	Route 7						
Direction	EB	WB					
Traffic Total:	392	308	0	0	0	0	
Cars	375	292					
MT	15	13					
HT	2	3					
Buses							
Motorcycles							
Weather Conditions							

Atmospheric Data
Wind Speed (mph) 10
Temp. (F) 58
Humidity (%) 60

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes:

McCormick Taylor, Inc

Route 7 Widening Project

Site # R11 **Description :** 9026 Leesburg Pike, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: → 3

Monitoring Data:						
Date	11/17/15					
Start Time	11:40 AM					
End Time	11:55 AM					
Duration	15 MIN					
Leq.	**63.4**					
Traffic Data						
Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	392	308	0	0	0	0
Cars	375	292				
MT	15	13				
HT	2	3				
Buses						
Motorcycles						
Weather Conditions						

Atmospheric Data
Wind Speed (mph) **10**
Temp. (F) **58**
Humidity (%) **60**

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes:

McCormick Taylor, Inc

Route 7 Widening Project

Site # R12 **Description :** 8850 Glenridge Court, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: → 2

Monitoring Data:							
Date	11/17/15						
Start Time	11:40 AM						
End Time	11:55 AM						
Duration	15 MIN						
Leq.	**65.2**						
Traffic Data							
Roadway	Route 7						
Direction	EB	WB					
Traffic Total:	392	308	0	0	0	0	
Cars	375	292					
MT	15	13					
HT	2	3					
Buses							
Motorcycles							
Weather Conditions							

Atmospheric Data
Wind Speed (mph) **10**
Temp. (F) **58**
Humidity (%) **60**

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

*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes: Minimal traffic on Leesburg Pike.

APPENDIX C
NOISE MONITORING DATA (2015)

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R1																		57.2
189	11/17/2015	9:35:06	00d	00:10.0	54	64	58.1	51.3	-.-	57.2	55.6	52.3	51.5	51.5	----	-----	251188.6	
190	11/17/2015	9:35:16	00d	00:10.0	57.9	67.9	61.7	53.6	-.-	61.5	61	57.7	54.1	53.9	----	-----	616595.0	
191	11/17/2015	9:35:26	00d	00:10.0	53.1	63.1	54.9	52.2	-.-	54.5	53.9	52.5	52.3	52.3	----	-----	204173.8	
192	11/17/2015	9:35:36	00d	00:10.0	56.4	66.4	58.5	53.9	-.-	57.7	57.5	56.2	54.2	54	----	-----	436515.8	
193	11/17/2015	9:35:46	00d	00:10.0	57	67	60.1	54.6	-.-	59.8	59.7	56.5	54.7	54.7	----	-----	501187.2	
194	11/17/2015	9:35:56	00d	00:10.0	53.6	63.6	54.8	52.9	-.-	54.8	54.7	53.5	53	52.9	----	-----	229086.8	
195	11/17/2015	9:36:06	00d	00:10.0	54.4	64.4	54.9	53.1	-.-	54.9	54.8	54.5	53.2	53.2	----	-----	275422.9	
196	11/17/2015	9:36:16	00d	00:10.0	56	66	56.9	54.5	-.-	56.9	56.8	56.1	54.6	54.6	----	-----	398107.2	
197	11/17/2015	9:36:26	00d	00:10.0	53.9	63.9	55.9	52.2	-.-	55.6	55.4	54.2	52.8	52.5	----	-----	245470.9	
198	11/17/2015	9:36:36	00d	00:10.0	54	64	55.6	52.2	-.-	55.5	55.3	53.3	52.3	52.3	----	-----	251188.6	
199	11/17/2015	9:36:46	00d	00:10.0	64.1	74.1	68.1	55.5	-.-	67.8	67.5	58.6	55.8	55.6	----	-----	2570395.8	
200	11/17/2015	9:36:56	00d	00:10.0	60.3	70.3	63.4	59.9	-.-	62.3	61.9	60.4	60	59.9	----	-----	1071519.3	
201	11/17/2015	9:37:06	00d	00:10.0	60.1	70.1	60.5	59.8	-.-	60.4	60.2	60	59.9	59.9	----	-----	1023293.0	
202	11/17/2015	9:37:16	00d	00:10.0	59.6	69.6	60.8	58.2	-.-	60.8	60.7	59.9	58.3	58.3	----	-----	912010.8	
203	11/17/2015	9:37:26	00d	00:10.0	59.1	69.1	59.7	58.3	-.-	59.6	59.6	59.2	58.4	58.4	----	-----	812830.5	
204	11/17/2015	9:37:36	00d	00:10.0	56.9	66.9	58.8	56.4	-.-	58.2	57.7	56.9	56.6	56.5	----	-----	489778.8	
205	11/17/2015	9:37:46	00d	00:10.0	56.9	66.9	59.3	55	-.-	59.2	58.7	56.2	55.1	55.1	----	-----	489778.8	
206	11/17/2015	9:37:56	00d	00:10.0	59.2	69.2	60.6	56.9	-.-	60.6	60.4	59.5	57.1	57	----	-----	831763.8	
207	11/17/2015	9:38:06	00d	00:10.0	55	65	56.9	53.9	-.-	56.7	56.4	55	54	54	----	-----	316227.8	
208	11/17/2015	9:38:16	00d	00:10.0	52.2	62.2	55.5	50.1	-.-	55.1	54.9	52.1	50.3	50.2	----	-----	165958.7	
209	11/17/2015	9:38:26	00d	00:10.0	50.6	60.6	51.4	50.1	-.-	51.2	50.9	50.4	50.2	50.2	----	-----	114815.4	
210	11/17/2015	9:38:36	00d	00:10.0	52.2	62.2	53.4	50.6	-.-	53.2	53.2	52.2	51	50.9	----	-----	165958.7	
211	11/17/2015	9:38:46	00d	00:10.0	60.2	70.2	62.3	50.9	-.-	62.1	61.9	59.7	52.6	51.3	----	-----	1047128.5	
212	11/17/2015	9:38:56	00d	00:10.0	60	70	62.3	57.2	-.-	62.1	62	60.6	57.7	57.6	----	-----	1000000.0	
213	11/17/2015	9:39:06	00d	00:10.0	57.5	67.5	59.1	56.2	-.-	59	58.7	57.4	56.3	56.3	----	-----	562341.3	
214	11/17/2015	9:39:16	00d	00:10.0	58	68	59.5	56.4	-.-	59.4	59.3	57.5	56.4	56.4	----	-----	630957.3	
215	11/17/2015	9:39:26	00d	00:10.0	60.6	70.6	62.1	59.2	-.-	62	61.9	60.2	59.5	59.5	----	-----	1148153.6	
216	11/17/2015	9:39:36	00d	00:10.0	58.8	68.8	59.7	58.1	-.-	59.5	59.4	58.7	58.3	58.2	----	-----	758577.6	
217	11/17/2015	9:39:46	00d	00:10.0	61.1	71.1	62.1	58.9	-.-	62.1	62	61.1	59.2	59.1	----	-----	1288249.6	
218	11/17/2015	9:39:56	00d	00:10.0	57.1	67.1	60.2	54.9	-.-	59.9	59.7	57.7	55.4	55.3	----	-----	512861.4	
219	11/17/2015	9:40:06	00d	00:10.0	55	65	56.1	53.8	-.-	56	55.9	54.8	54.1	54	----	-----	316227.8	
220	11/17/2015	9:40:16	00d	00:10.0	54	64	54.5	53.7	-.-	54.4	54.3	53.9	53.7	53.7	----	-----	251188.6	
221	11/17/2015	9:40:26	00d	00:10.0	56.4	66.4	57.9	53.8	-.-	57.6	57.2	56.6	54.5	54	----	-----	436515.8	
222	11/17/2015	9:40:36	00d	00:10.0	56.2	66.2	57.4	55.1	-.-	57.3	57.2	56.6	55.2	55.2	----	-----	416869.4	
223	11/17/2015	9:40:46	00d	00:10.0	58.1	68.1	59.5	55.2	-.-	59.1	58.6	57.9	55.8	55.5	----	-----	645654.2	
224	11/17/2015	9:40:56	00d	00:10.0	58.2	68.2	59.7	57.5	-.-	59.6	59.4	58	57.7	57.5	----	-----	660693.4	
225	11/17/2015	9:41:06	00d	00:10.0	58.6	68.6	60.8	56.9	-.-	60.6	60.5	57.4	57	57	----	-----	724436.0	
226	11/17/2015	9:41:16	00d	00:10.0	62.4	72.4	64.3	60.2	-.-	64.1	64	61.9	61.3	60.9	----	-----	1737800.8	
227	11/17/2015	9:41:26	00d	00:10.0	60.2	70.2	61.5	59.3	-.-	61.4	61.4	60	59.6	59.4	----	-----	1047128.5	
228	11/17/2015	9:41:36	00d	00:10.0	58.6	68.6	59.7	56.8	-.-	59.6	59.6	59.2	57.3	57.2	----	-----	724436.0	
229	11/17/2015	9:41:46	00d	00:10.0	55.6	65.6	56.8	55.1	-.-	56.4	56.3	55.5	55.3	55.2	----	-----	363078.1	
230	11/17/2015	9:41:56	00d	00:10.0	54.1	64.1	55.5	52.8	-.-	55.4	55.2	54.3	53	52.9	----	-----	257039.6	
231	11/17/2015	9:42:06	00d	00:10.0	52.8	62.8	53.7	51.8	-.-	53.6	53.5	53	52	51.9	----	-----	190546.1	
232	11/17/2015	9:42:16	00d	00:10.0	52.1	62.1	53.1	51.1	-.-	53	52.9	52	51.2	51.2	----	-----	162181.0	
233	11/17/2015	9:42:26	00d	00:10.0	54.6	64.6	55.5	52.1	-.-	55.4	55.3	54.3	54	53.3	----	-----	288403.2	
234	11/17/2015	9:42:36	00d	00:10.0	55.3	65.3	56.3	53.8	-.-	56.1	56	55.2	54	53.9	----	-----	338844.2	
235	11/17/2015	9:42:46	00d	00:10.0	57.3	67.3	57.7	56.3	-.-	57.6	57.6	57.3	56.9	56.9	----	-----	537031.8	
236	11/17/2015	9:42:56	00d	00:10.0	57.3	67.3	58.2	56.3	-.-	58	57.7	57.3	56.5	56.5	----	-----	537031.8	
237	11/17/2015	9:43:06	00d	00:10.0	58.3	68.3	59.5	57.3	-.-	59.5	59.3	58.3	57.6	57.4	----	-----	676083.0	
238	11/17/2015	9:43:16	00d	00:10.0	57.6	67.6	59	56.4	-.-	58.9	58.7	57.3	56.6	56.5	----	-----	575439.9	
239	11/17/2015	9:43:26	00d	00:10.0	55.7	65.7	57.9	54.5	-.-	57.7	57.2	56	54.7	54.6	----	-----	371535.2	
240	11/17/2015	9:43:36	00d	00:10.0	53.7	63.7	54.9	52.4	-.-	54.9	54.8	53.5	52.8	52.7	----	-----	234422.9	
241	11/17/2015	9:43:46	00d	00:10.0	50.9	60.9	52.5	50.4	-.-	52.3	52.1	50.8	50.5	50.4	----	-----	123026.9	
242	11/17/2015	9:43:56	00d	00:10.0	52.8	62.8	53.6	50.6	-.-	53.4	53.4	52.9	50.8	50.7	----	-----	190546.1	
243	11/17/2015	9:44:06	00d	00:10.0	54.1	64.1	54.4	53.3	-.-	54.4	54.4	54.2	53.5	53.4	----	-----	257039.6	
244	11/17/2015	9:44:16	00d	00:10.0	54.8	64.8	55.6	54.2	-.-	55.5	55.4	54.6	54.3	54.2	----	-----	301995.2	
245	11/17/2015	9:44:26	00d	00:10.0	57.4	67.4	57.8	55.6	-.-	57.7	57.6	57.4	56.4	56	----	-----	549540.9	
246	11/17/2015	9:44:36	00d	00:10.0	58.8	68.8	60.4	57.5	-.-	60.1	60	57.8	57.6	57.5	----	-----	758577.6	
247	11/17/2015	9:44:46	00d	00:10.0	60	70	61.9	58	-.-	61.6	61.4	60.1	58.8	58.4	----	-----	1000000.0	
248	11/17/2015	9:44:56	00d	00:10.0	56.8	66.8	58	55.4	-.-	57.8	57.7	57.1	56.1	55.8	----	-----	478630.1	
249	11/17/2015	9:45:06	00d	00:10.0	55.2	65.2	55.5	54.9	-.-	55.5	55.5	55.2	55	55	----	-----	331131.1	
250	11/17/2015	9:45:16	00d	00:10.0	56.5	66.5	58	55	-.-	57.9	57.8	55.7	55.2	55.1	----	-----	446683.6	
251	11/17/2015	9:45:26	00d	00:10.0	55.6	65.6	56.9	55.1	-.-	56.4	56.2	55.7	55.3	55.2	----	-----	363078.1	
252	11/17/2015	9:45:36	00d	00:10.0	54	64	55.2	52.9	-.-	55.1	55	53.9	53	52.9	----	-----	251188.6	
253	11/17/2015	9:45:46	00d	00:10.0	53	63	54.7	50.9	-.-	54.6	54.6	53.1	51.1	51	----	-----	199526.2	
254	11/17/2015	9:45:56	00d	00:10.0	51.4	61.4	52.8	49.6	-.-	52.8	52.7	51.3	50.5	50	----	-----	138038.4	
255	11/17/2015	9:46:06	00d	00:10.0	49.5	59.5	51.5	48.4	-.-	51.3	50.2	48.9	48.5	48.5	----	-----	89125.1	
256	11/17/2015	9:46:16	00d	00:10.0	54.3	64.3	55.1	51	-.-	55	54.9	54.6	51.6	51.1	----	-----	269153.5	
257	11/17/2015	9:46:26	00d	00:10.0	54.5	64.5	56.3	53.1	-.-	55.9	55.7	54.2	53.5	53.3	----	-----	281838.3	
258	11/17/2015	9:46:36	00d	00:10.0	53.2	63.2	54.6	52	-.-	54.5	54.4	53.3	52.8	52.5	----	-----	208929.6	
259	11/17/2015	9:46:46	00d	00:10.0	54.9	64.9	56.1	51.4	-.-	56	56	55	51.6	51.5	----	-----	309029.5	
260	11/17/2015	9:46:56	00d	00:10.0	54	64	55.6	53.5	-.-	55.5	55.3	54	53.6	53.5	----	-----	251188.6	
261	11/17/2015	9:47:06	00d	00:10.0	54.8	64.8	55.5	54	-.-	55.4	55.3	54.6	54.2	54.1	----	-----	301995.2	
262	11/17/2015	9:47:16	00d	00:10.0	53.7	63.7	55.6	52.7	-.-	55.4	55.1	53.7	52.9	52.7	----	-----	234422.9	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R1																		57.2
263	11/17/2015	9:47:26	00d	00:10.0	52.9	62.9	53.4	52.4	-.-	53.4	53.4	52.8	52.5	52.4	----	-----	194984.5	
264	11/17/2015	9:47:36	00d	00:10.0	54.4	64.4	55.9	53.1	-.-	55.8	55.4	54.2	53.2	53.2	----	-----	275422.9	
265	11/17/2015	9:47:46	00d	00:10.0	56.3	66.3	57	55.3	-.-	56.9	56.9	56.4	55.5	55.4	----	-----	426579.5	
266	11/17/2015	9:47:56	00d	00:10.0	59.1	69.1	60.5	55.5	-.-	60.5	60.3	59	55.6	55.6	----	-----	812830.5	
267	11/17/2015	9:48:06	00d	00:10.0	58.2	68.2	60.2	57.1	-.-	60.2	60.1	58.2	57.3	57.2	----	-----	660693.4	
268	11/17/2015	9:48:16	00d	00:10.0	58.6	68.6	60	57.5	-.-	59.9	59.6	58.1	57.7	57.6	----	-----	724436.0	
269	11/17/2015	9:48:26	00d	00:10.0	60.4	70.4	61.4	58.7	-.-	61.2	61.2	60.8	58.9	58.8	----	-----	1096478.2	
270	11/17/2015	9:48:36	00d	00:10.0	62.2	72.2	64	58.4	-.-	63.9	63.8	61.8	59.3	58.6	----	-----	1659586.9	
271	11/17/2015	9:48:46	00d	00:10.0	54.7	64.7	60.4	52.3	-.-	59.8	59	54.3	52.6	52.5	----	-----	295120.9	
272	11/17/2015	9:48:56	00d	00:10.0	54.5	64.5	55.6	52	-.-	55.6	55.5	54	52.3	52.2	----	-----	281838.3	
273	11/17/2015	9:49:06	00d	00:10.0	54.9	64.9	55.4	54.5	-.-	55.3	55.2	54.9	54.6	54.6	----	-----	309029.5	
274	11/17/2015	9:49:16	00d	00:10.0	57	67	58.4	54.8	-.-	58.4	58.3	56.5	54.8	54.8	----	-----	501187.2	
275	11/17/2015	9:49:26	00d	00:10.0	55.8	65.8	57.6	54.6	-.-	57.4	57.3	55.9	54.8	54.7	----	-----	380189.4	
276	11/17/2015	9:49:36	00d	00:10.0	53.2	63.2	55.1	51.4	-.-	55	54.9	53.5	51.6	51.5	----	-----	208929.6	
277	11/17/2015	9:49:46	00d	00:10.0	55.7	65.7	58.4	51.5	-.-	58.2	57.7	54.9	51.8	51.5	----	-----	371535.2	
278	11/17/2015	9:49:56	00d	00:10.0	57.6	67.6	59	56.1	-.-	58.8	58.6	57.6	56.4	56.3	----	-----	575439.9	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R2																		63.2
191	11/17/2015	9:35:09	00d	00:10.0	59.6	69.6	61.9	58.3	-.-	61.8	61.6	59.8	58.4	58.4	----	-----	912010.8	
192	11/17/2015	9:35:19	00d	00:10.0	58.7	68.7	62.2	55.3	-.-	62.1	61.9	57.7	55.6	55.4	----	-----	741310.2	
193	11/17/2015	9:35:29	00d	00:10.0	56.4	66.4	58	55.2	-.-	57.6	57.2	55.9	55.3	55.2	----	-----	436515.8	
194	11/17/2015	9:35:39	00d	00:10.0	59.7	69.7	61.6	57.8	-.-	61.1	60.3	59.1	58	57.9	----	-----	933254.3	
195	11/17/2015	9:35:49	00d	00:10.0	57.6	67.6	62.1	54.4	-.-	61.9	61.7	56.5	54.6	54.5	----	-----	575439.9	
196	11/17/2015	9:35:59	00d	00:10.0	55.7	65.7	58.1	53.6	-.-	58	58	55.1	53.7	53.6	----	-----	371535.2	
197	11/17/2015	9:36:09	00d	00:10.0	56.5	66.5	58	53.4	-.-	58	57.9	56.6	53.5	53.5	----	-----	446683.6	
198	11/17/2015	9:36:19	00d	00:10.0	63.3	73.3	65	57.9	-.-	64.8	64.4	62.8	59.2	58.6	----	-----	2137962.1	
199	11/17/2015	9:36:29	00d	00:10.0	64.2	74.2	65	63.6	-.-	65	64.9	64.2	63.8	63.7	----	-----	2630268.0	
200	11/17/2015	9:36:39	00d	00:10.0	65.4	75.4	66.8	64.2	-.-	66.7	66.3	65	64.4	64.3	----	-----	3467368.5	
201	11/17/2015	9:36:49	00d	00:10.0	66.9	76.9	69.1	65.1	-.-	69	68.8	66.3	65.3	65.3	----	-----	4897788.2	
202	11/17/2015	9:36:59	00d	00:10.0	63.6	73.6	68.9	60.7	-.-	68.4	67.7	63.1	62	61.4	----	-----	2290867.7	
203	11/17/2015	9:37:09	00d	00:10.0	62.2	72.2	63.9	58.6	-.-	63.9	63.8	61.3	58.8	58.7	----	-----	1659586.9	
204	11/17/2015	9:37:19	00d	00:10.0	68.4	78.4	71.4	63.4	-.-	71.2	71.1	67.5	63.5	63.4	----	-----	6918309.7	
205	11/17/2015	9:37:29	00d	00:10.0	61.8	71.8	68.3	59.2	-.-	67.9	67.2	60.3	59.2	59.2	----	-----	1513561.2	
206	11/17/2015	9:37:39	00d	00:10.0	60.4	70.4	61	59.5	-.-	61	61	60.4	59.6	59.5	----	-----	1096478.2	
207	11/17/2015	9:37:49	00d	00:10.0	59.5	69.5	60.8	58.6	-.-	60.5	60.3	59	58.6	58.6	----	-----	891250.9	
208	11/17/2015	9:37:59	00d	00:10.0	61.4	71.4	62.5	60.3	-.-	62.4	62.3	61.2	60.5	60.4	----	-----	1380384.3	
209	11/17/2015	9:38:09	00d	00:10.0	60.3	70.3	61.8	57.8	-.-	61.7	61.7	60.9	58.1	58	----	-----	1071519.3	
210	11/17/2015	9:38:19	00d	00:10.0	60.7	70.7	62.1	57.4	-.-	62.1	62	60.7	57.8	57.6	----	-----	1174897.6	
211	11/17/2015	9:38:29	00d	00:10.0	65.7	75.7	69.3	60.3	-.-	69.2	68.6	62.6	60.5	60.4	----	-----	3715352.3	
212	11/17/2015	9:38:39	00d	00:10.0	63.8	73.8	69.2	60.3	-.-	68.8	68.6	63.8	60.7	60.5	----	-----	2398832.9	
213	11/17/2015	9:38:49	00d	00:10.0	61.9	71.9	63.1	60.2	-.-	63	62.9	61.4	60.3	60.2	----	-----	1548816.6	
214	11/17/2015	9:38:59	00d	00:10.0	64.7	74.7	65.6	62.3	-.-	65.5	65.5	65	63.1	62.7	----	-----	2951209.2	
215	11/17/2015	9:39:09	00d	00:10.0	63.9	73.9	65.1	62.3	-.-	65	64.4	63.7	62.9	62.5	----	-----	2454708.9	
216	11/17/2015	9:39:19	00d	00:10.0	68.5	78.5	72.4	61.3	-.-	72.3	72.1	67	62.2	61.9	----	-----	7079457.8	
217	11/17/2015	9:39:29	00d	00:10.0	56.9	66.9	61.3	55.5	-.-	60.5	59.6	57.3	55.7	55.6	----	-----	489778.8	
218	11/17/2015	9:39:39	00d	00:10.0	57.1	67.1	60	54.9	-.-	59.7	59	56.9	55.2	55	----	-----	512861.4	
219	11/17/2015	9:39:49	00d	00:10.0	58.1	68.1	59.2	56.5	-.-	59.1	59	57.7	56.6	56.6	----	-----	645654.2	
220	11/17/2015	9:39:59	00d	00:10.0	59.2	69.2	60.9	56.9	-.-	60.8	60.8	58.5	57.1	57	----	-----	831763.8	
221	11/17/2015	9:40:09	00d	00:10.0	64.1	74.1	65.8	60.8	-.-	65.7	65.6	62.9	61.4	61.1	----	-----	2570395.8	
222	11/17/2015	9:40:19	00d	00:10.0	67.8	77.8	69.9	65.5	-.-	69.1	68.8	67.2	65.7	65.6	----	-----	6025595.9	
223	11/17/2015	9:40:29	00d	00:10.0	69.4	79.4	71.1	66.9	-.-	71.1	71	69.8	67.4	67.2	----	-----	8709635.9	
224	11/17/2015	9:40:39	00d	00:10.0	66	76	67.3	64.9	-.-	67	66.6	65.9	65.4	65.1	----	-----	3981071.7	
225	11/17/2015	9:40:49	00d	00:10.0	69.3	79.3	73	66.5	-.-	72	70.4	68.1	66.9	66.7	----	-----	8511380.4	
226	11/17/2015	9:40:59	00d	00:10.0	68.2	78.2	73.7	59.4	-.-	73.7	73.5	66.5	59.6	59.5	----	-----	6606934.5	
227	11/17/2015	9:41:09	00d	00:10.0	61.7	71.7	63.2	59.5	-.-	63.1	63.1	61.3	60.3	60.2	----	-----	1479108.4	
228	11/17/2015	9:41:19	00d	00:10.0	61	71	62.3	59.1	-.-	62.2	62	60.5	59.3	59.1	----	-----	1258925.4	
229	11/17/2015	9:41:29	00d	00:10.0	60.8	70.8	62.4	59.3	-.-	62.3	62.2	60.7	59.6	59.5	----	-----	1202264.4	
230	11/17/2015	9:41:39	00d	00:10.0	60.8	70.8	62.3	59.4	-.-	62.1	62	60.4	59.7	59.5	----	-----	1202264.4	
231	11/17/2015	9:41:49	00d	00:10.0	60.3	70.3	62.3	57.9	-.-	62.2	61.8	60.6	58.7	58.3	----	-----	1071519.3	
232	11/17/2015	9:41:59	00d	00:10.0	59.3	69.3	61.3	57.3	-.-	60.9	60.7	58.2	57.5	57.4	----	-----	851138.0	
233	11/17/2015	9:42:09	00d	00:10.0	64.8	74.8	66.6	61.2	-.-	66.3	66.2	64.5	62.3	61.6	----	-----	3019951.7	
234	11/17/2015	9:42:19	00d	00:10.0	62.1	72.1	64.8	61.1	-.-	64.3	63.6	62.4	61.3	61.2	----	-----	1621810.1	
235	11/17/2015	9:42:29	00d	00:10.0	63	73	65.1	61.2	-.-	65.1	64.9	61.6	61.3	61.3	----	-----	1995262.3	
236	11/17/2015	9:42:39	00d	00:10.0	64	74	65.1	63.3	-.-	64.9	64.6	63.9	63.5	63.4	----	-----	2511886.4	
237	11/17/2015	9:42:49	00d	00:10.0	65.7	75.7	66.6	63.9	-.-	66.5	66.4	65.8	65.2	64.8	----	-----	3715352.3	
238	11/17/2015	9:42:59	00d	00:10.0	61.9	71.9	63.9	60.4	-.-	63.1	62.7	62.2	61.7	61.4	----	-----	1548816.6	
239	11/17/2015	9:43:09	00d	00:10.0	53.5	63.5	60.4	50.3	-.-	59.4	58.5	53.5	50.7	50.4	----	-----	223872.1	
240	11/17/2015	9:43:19	00d	00:10.0	50.1	60.1	50.4	49.6	-.-	50.3	50.3	50.2	49.7	49.6	----	-----	102329.3	
241	11/17/2015	9:43:29	00d	00:10.0	51.6	61.6	54	50.2	-.-	53.3	52.5	50.8	50.4	50.3	----	-----	144544.0	
242	11/17/2015	9:43:39	00d	00:10.0	56.8	66.8	57.3	54	-.-	57.2	57.2	56.8	55.4	55	----	-----	478630.1	
243	11/17/2015	9:43:49	00d	00:10.0	63.4	73.4	65.2	56.8	-.-	65	64.9	63	58	57.5	----	-----	2187761.6	
244	11/17/2015	9:43:59	00d	00:10.0	67.3	77.3	68.7	65.2	-.-	68.6	68.5	66.8	65.4	65.4	----	-----	5370318.0	
245	11/17/2015	9:44:09	00d	00:10.0	65.4	75.4	68.2	63.8	-.-	68	67.5	65.4	64.6	64.1	----	-----	3467368.5	
246	11/17/2015	9:44:19	00d	00:10.0	62	72	63.8	60.4	-.-	63.5	63.4	62.2	61.2	61	----	-----	1584893.2	
247	11/17/2015	9:44:29	00d	00:10.0	60.3	70.3	60.9	59.3	-.-	60.7	60.7	60.4	59.6	59.5	----	-----	1071519.3	
248	11/17/2015	9:44:39	00d	00:10.0	60.5	70.5	61	60	-.-	60.9	60.8	60.4	60.2	60.1	----	-----	1122018.5	
249	11/17/2015	9:44:49	00d	00:10.0	62.1	72.1	63.1	60.9	-.-	63	62.9	62.1	61.3	61.2	----	-----	1621810.1	
250	11/17/2015	9:44:59	00d	00:10.0	59.8	69.8	61	59.4	-.-	60.8	60.5	59.7	59.5	59.4	----	-----	954992.6	
251	11/17/2015	9:45:09	00d	00:10.0	63.7	73.7	65.6	60.9	-.-	65.5	65.3	63.2	62.3	61.8	----	-----	2344228.8	
252	11/17/2015	9:45:19	00d	00:10.0	60.2	70.2	62.5	57.4	-.-	62.2	61.9	60.9	57.9	57.7	----	-----	1047128.5	
253	11/17/2015	9:45:29	00d	00:10.0	57.7	67.7	58.9	56.3	-.-	58.8	58.7	57.2	56.6	56.4	----	-----	588843.7	
254	11/17/2015	9:45:39	00d	00:10.0	58.6	68.6	59.6	58	-.-	59.5	59.4	58.4	58.1	58	----	-----	724436.0	
255	11/17/2015	9:45:49	00d	00:10.0	61.9	71.9	63.5	59.1	-.-	63.4	63.3	61	60	59.6	----	-----	1548816.6	
256	11/17/2015	9:45:59	00d	00:10.0	64.7	74.7	67.3	61.6	-.-	67.2	67	64.2	61.9	61.8	----	-----	2951209.2	
257	11/17/2015	9:46:09	00d	00:10.0	60	70	61.9	58.5	-.-	61.8	61.7	59.5	58.7	58.6	----	-----	1000000.0	
258	11/17/2015	9:46:19	00d	00:10.0	61.7	71.7	62.9	59.4	-.-	62.9	62.7	61.9	60	59.8	----	-----	1479108.4	
259	11/17/2015	9:46:29	00d	00:10.0	59.8	69.8	63.3	55.9	-.-	63.2	63.1	57.7	56.1	56	----	-----	954992.6	
260	11/17/2015	9:46:39	00d	00:10.0	60.2	70.2	62.9	58.6	-.-	62.5	61.8	60.5	58.9	58.7	----	-----	1047128.5	
261	11/17/2015	9:46:49	00d	00:10.0	59.2	69.2	61.6	56.9	-.-	61.5	61.4	59	57.2	57	----	-----	831763.8	
262	11/17/2015	9:46:59	00d	00:10.0	55.9	65.9	57	54.9	-.-	56.9	56.7	55.8	55	55	----	-----	389045.1	
263	11/17/2015	9:47:09	00d	00:10.0	61.5	71.5	65	57	-.-	64.4	63.8	59.7	57.2	57	----	-----	1412537.5	
264	11/17/2015	9:47:19	00d	00:10.0	68	78	71.5	62.3	-.-	71.3	70.9	67.6	63.6	62.9	----	-----	6309573.4	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R2																		63.2
265	11/17/2015	9:47:29	00d	00:10.0	61.2	71.2	62.6	59.7	-.-	62.4	62.3	60.8	59.9	59.8	----	-----	1318256.7	
266	11/17/2015	9:47:39	00d	00:10.0	64.5	74.5	65.9	61.7	-.-	65.8	65.8	64.4	62.7	62.2	----	-----	2818382.9	
267	11/17/2015	9:47:49	00d	00:10.0	64.6	74.6	68.2	61.5	-.-	67.8	67.4	62.5	61.6	61.6	----	-----	2884031.5	
268	11/17/2015	9:47:59	00d	00:10.0	68.3	78.3	71.2	66.1	-.-	70.9	70.7	68	66.3	66.3	----	-----	6760829.8	
269	11/17/2015	9:48:09	00d	00:10.0	63.6	73.6	66.2	61.8	-.-	66	65.8	63.9	62	61.9	----	-----	2290867.7	
270	11/17/2015	9:48:19	00d	00:10.0	64.2	74.2	65.4	62.5	-.-	65.1	65.1	63.9	63	62.7	----	-----	2630268.0	
271	11/17/2015	9:48:29	00d	00:10.0	60.7	70.7	63.7	59.7	-.-	63.3	62.7	60.6	59.8	59.8	----	-----	1174897.6	
272	11/17/2015	9:48:39	00d	00:10.0	60.8	70.8	61.3	60.4	-.-	61.2	61.1	60.8	60.6	60.5	----	-----	1202264.4	
273	11/17/2015	9:48:49	00d	00:10.0	59.7	69.7	60.4	59.2	-.-	60.4	60.3	59.7	59.5	59.3	----	-----	933254.3	
274	11/17/2015	9:48:59	00d	00:10.0	59.7	69.7	61	58.6	-.-	60.9	60.8	59.1	58.7	58.6	----	-----	933254.3	
275	11/17/2015	9:49:09	00d	00:10.0	57.7	67.7	60.3	55.2	-.-	59.9	59.4	58.6	55.6	55.3	----	-----	588843.7	
276	11/17/2015	9:49:19	00d	00:10.0	58.7	68.7	60.7	54.5	-.-	60.6	60.4	58.2	54.8	54.7	----	-----	741310.2	
277	11/17/2015	9:49:29	00d	00:10.0	63.3	73.3	67.5	59.3	-.-	67.3	66.9	60.1	59.5	59.4	----	-----	2137962.1	
278	11/17/2015	9:49:39	00d	00:10.0	63.4	73.4	67	62.5	-.-	66	64.8	63.8	62.6	62.6	----	-----	2187761.6	
279	11/17/2015	9:49:49	00d	00:10.0	59.6	69.6	62.6	58.7	-.-	62.2	61.4	59.7	58.8	58.8	----	-----	912010.8	
280	11/17/2015	9:49:59	00d	00:10.0	60.1	70.1	60.4	59.7	-.-	60.3	60.3	60.2	59.9	59.8	----	-----	1023293.0	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R3																		58.1
189	11/17/2015	9:35:09	00d	00:10.0	52.3	62.3	58.3	50.6	-.-	57.4	56.6	52.2	50.8	50.7	----	-----	169824.4	
190	11/17/2015	9:35:19	00d	00:10.0	52.2	62.2	53.4	51.6	-.-	53	52.6	52	51.7	51.7	----	-----	165958.7	
191	11/17/2015	9:35:29	00d	00:10.0	54.9	64.9	55.8	53.4	-.-	55.7	55.6	54.5	53.7	53.6	----	-----	309029.5	
192	11/17/2015	9:35:39	00d	00:10.0	55.7	65.7	56.4	54.9	-.-	56.3	56.1	55.7	55	55	----	-----	371535.2	
193	11/17/2015	9:35:49	00d	00:10.0	56.9	66.9	57.6	55.6	-.-	57.5	57.5	57	56.4	56.2	----	-----	489778.8	
194	11/17/2015	9:35:59	00d	00:10.0	56.7	66.7	60.9	53.2	-.-	60.7	60.3	54.2	53.3	53.2	----	-----	467735.1	
195	11/17/2015	9:36:09	00d	00:10.0	58.3	68.3	61.1	55.9	-.-	61.1	60.8	57.7	56.2	56	----	-----	676083.0	
196	11/17/2015	9:36:19	00d	00:10.0	54.7	64.7	57	53.5	-.-	56.7	56.6	54.5	53.8	53.7	----	-----	295120.9	
197	11/17/2015	9:36:29	00d	00:10.0	57.2	67.2	58.6	54.5	-.-	58.5	58.4	57.4	54.7	54.6	----	-----	524807.5	
198	11/17/2015	9:36:39	00d	00:10.0	55.9	65.9	57.8	54	-.-	57.7	57.3	55.3	54.4	54.2	----	-----	389045.1	
199	11/17/2015	9:36:49	00d	00:10.0	60.7	70.7	62.1	57.7	-.-	62	61.8	60.1	59	58.4	----	-----	1174897.6	
200	11/17/2015	9:36:59	00d	00:10.0	59.9	69.9	61.9	58.9	-.-	61.5	61.4	60.1	59.2	59	----	-----	977237.2	
201	11/17/2015	9:37:09	00d	00:10.0	61.3	71.3	62.9	59.5	-.-	62.8	62.7	60.9	59.7	59.5	----	-----	1348962.9	
202	11/17/2015	9:37:19	00d	00:10.0	59.4	69.4	62.1	56.2	-.-	61.9	61.8	59.1	56.6	56.3	----	-----	870963.6	
203	11/17/2015	9:37:29	00d	00:10.0	59.6	69.6	61	58.6	-.-	60.7	60.4	59.7	59.1	58.9	----	-----	912010.8	
204	11/17/2015	9:37:39	00d	00:10.0	58	68	60.3	54.9	-.-	60.2	60	58.5	55.4	55.1	----	-----	630957.3	
205	11/17/2015	9:37:49	00d	00:10.0	60.2	70.2	61.8	56.6	-.-	61.5	61.5	60	57.1	56.6	----	-----	1047128.5	
206	11/17/2015	9:37:59	00d	00:10.0	58.1	68.1	61.9	54.4	-.-	61.7	61.4	57.8	55.3	54.9	----	-----	645654.2	
207	11/17/2015	9:38:09	00d	00:10.0	58	68	59.7	54.5	-.-	59.6	59.5	57.8	55.1	55	----	-----	630957.3	
208	11/17/2015	9:38:19	00d	00:10.0	58.8	68.8	60.8	56	-.-	60.6	60.5	59	56.2	56.2	----	-----	758577.6	
209	11/17/2015	9:38:29	00d	00:10.0	59.8	69.8	62.8	56.5	-.-	62.7	62.5	58.2	56.9	56.8	----	-----	954992.6	
210	11/17/2015	9:38:39	00d	00:10.0	60.1	70.1	62.8	58.4	-.-	62.6	62.6	60	59	58.7	----	-----	1023293.0	
211	11/17/2015	9:38:49	00d	00:10.0	58.3	68.3	60.1	56.4	-.-	59.8	59.7	57.7	56.7	56.6	----	-----	676083.0	
212	11/17/2015	9:38:59	00d	00:10.0	62.4	72.4	64.3	59.2	-.-	64.2	64.1	62.4	59.4	59.2	----	-----	1737800.8	
213	11/17/2015	9:39:09	00d	00:10.0	58.9	68.9	61.8	58.2	-.-	61.3	60.7	59	58.4	58.3	----	-----	776247.1	
214	11/17/2015	9:39:19	00d	00:10.0	56.8	66.8	58.4	55.7	-.-	58.1	58	56.9	56	55.8	----	-----	478630.1	
215	11/17/2015	9:39:29	00d	00:10.0	56.5	66.5	57.6	54.8	-.-	57.5	57.4	56.4	55	55	----	-----	446683.6	
216	11/17/2015	9:39:39	00d	00:10.0	58.1	68.1	59	57.1	-.-	58.9	58.6	57.8	57.2	57.1	----	-----	645654.2	
217	11/17/2015	9:39:49	00d	00:10.0	58.8	68.8	60.8	55.4	-.-	60.6	60.4	59.3	56.4	55.8	----	-----	758577.6	
218	11/17/2015	9:39:59	00d	00:10.0	55	65	56.5	53.6	-.-	56.4	56.2	54.2	53.8	53.7	----	-----	316227.8	
219	11/17/2015	9:40:09	00d	00:10.0	56.1	66.1	57.6	53.6	-.-	57.5	57.3	56.1	53.9	53.7	----	-----	407380.3	
220	11/17/2015	9:40:19	00d	00:10.0	59.4	69.4	62.3	54.8	-.-	62.1	62	57.6	54.9	54.9	----	-----	870963.6	
221	11/17/2015	9:40:29	00d	00:10.0	61.6	71.6	62.2	60.9	-.-	62.1	62.1	61.6	61	61	----	-----	1445439.8	
222	11/17/2015	9:40:39	00d	00:10.0	58.9	68.9	61.8	54.6	-.-	61.7	61.4	60.2	54.9	54.8	----	-----	776247.1	
223	11/17/2015	9:40:49	00d	00:10.0	58.1	68.1	60.1	54.8	-.-	60.1	60.1	57.4	55.3	55.1	----	-----	645654.2	
224	11/17/2015	9:40:59	00d	00:10.0	55.9	65.9	59.8	53.8	-.-	59.3	58.9	55.8	54.1	53.9	----	-----	389045.1	
225	11/17/2015	9:41:09	00d	00:10.0	56.7	66.7	57.7	54.8	-.-	57.6	57.6	56.8	55.1	54.9	----	-----	467735.1	
226	11/17/2015	9:41:19	00d	00:10.0	53.4	63.4	57	51.8	-.-	56.6	55.8	52.8	52.1	52	----	-----	218776.2	
227	11/17/2015	9:41:29	00d	00:10.0	59.2	69.2	61	55.4	-.-	60.9	60.8	59.3	56.9	56.7	----	-----	831763.8	
228	11/17/2015	9:41:39	00d	00:10.0	59.2	69.2	60.4	56.9	-.-	60.3	60.2	59.2	57.5	57.1	----	-----	831763.8	
229	11/17/2015	9:41:49	00d	00:10.0	57.7	67.7	59.6	56	-.-	59.4	59.2	57.3	56.5	56.3	----	-----	588843.7	
230	11/17/2015	9:41:59	00d	00:10.0	58.1	68.1	60.2	53.6	-.-	60.1	60	56.6	53.8	53.7	----	-----	645654.2	
231	11/17/2015	9:42:09	00d	00:10.0	54.1	64.1	59.9	51.4	-.-	59.3	58.5	53.2	51.6	51.5	----	-----	257039.6	
232	11/17/2015	9:42:19	00d	00:10.0	59.5	69.5	60	55.8	-.-	59.9	59.8	59.4	57.6	57.4	----	-----	891250.9	
233	11/17/2015	9:42:29	00d	00:10.0	58.9	68.9	61.2	56.8	-.-	61	60.8	58.3	57	56.9	----	-----	776247.1	
234	11/17/2015	9:42:39	00d	00:10.0	59.1	69.1	61.1	57.6	-.-	61	60.8	58.9	57.8	57.7	----	-----	812830.5	
235	11/17/2015	9:42:49	00d	00:10.0	58.8	68.8	60.4	57.2	-.-	60.2	59.9	58.6	57.5	57.4	----	-----	758577.6	
236	11/17/2015	9:42:59	00d	00:10.0	58.3	68.3	59.5	57.3	-.-	59.4	59.2	58.3	57.5	57.4	----	-----	676083.0	
237	11/17/2015	9:43:09	00d	00:10.0	58.5	68.5	59.2	57.6	-.-	59.1	59	58.6	57.7	57.7	----	-----	707945.8	
238	11/17/2015	9:43:19	00d	00:10.0	57.3	67.3	58.6	56.5	-.-	58.4	58.3	57.3	56.7	56.6	----	-----	537031.8	
239	11/17/2015	9:43:29	00d	00:10.0	54.7	64.7	57.3	53.9	-.-	57.2	57	54.4	53.9	53.9	----	-----	295120.9	
240	11/17/2015	9:43:39	00d	00:10.0	53.2	63.2	54.2	52.6	-.-	54.1	54.1	53.3	52.7	52.6	----	-----	208929.6	
241	11/17/2015	9:43:49	00d	00:10.0	53.6	63.6	56.1	50.9	-.-	55.8	55.2	52.4	51.1	51	----	-----	229086.8	
242	11/17/2015	9:43:59	00d	00:10.0	53.2	63.2	56.2	50.8	-.-	56	55.9	54	50.9	50.8	----	-----	208929.6	
243	11/17/2015	9:44:09	00d	00:10.0	54.2	64.2	55.9	50	-.-	55.8	55.8	53.8	50.5	50.3	----	-----	263026.8	
244	11/17/2015	9:44:19	00d	00:10.0	62.8	72.8	65.9	55.1	-.-	65.7	65.3	62.4	55.7	55.3	----	-----	1905460.7	
245	11/17/2015	9:44:29	00d	00:10.0	58	68	59.5	56.3	-.-	59.3	59.3	57.6	56.6	56.4	----	-----	630957.3	
246	11/17/2015	9:44:39	00d	00:10.0	59.3	69.3	60	58.1	-.-	59.9	59.9	59.3	58.4	58.3	----	-----	851138.0	
247	11/17/2015	9:44:49	00d	00:10.0	59.3	69.3	61.2	57.5	-.-	61.1	60.8	59.6	57.9	57.8	----	-----	851138.0	
248	11/17/2015	9:44:59	00d	00:10.0	60.3	70.3	62.5	57.3	-.-	62.4	61.9	59.7	58.2	57.7	----	-----	1071519.3	
249	11/17/2015	9:45:09	00d	00:10.0	56.6	66.6	60.6	54.8	-.-	60.1	59.6	56.8	54.9	54.8	----	-----	457088.2	
250	11/17/2015	9:45:19	00d	00:10.0	57.1	67.1	58.1	54.3	-.-	58.1	58	57.2	54.8	54.4	----	-----	512861.4	
251	11/17/2015	9:45:29	00d	00:10.0	59.5	69.5	60.9	57.8	-.-	60.8	60.6	59.5	58.1	58	----	-----	891250.9	
252	11/17/2015	9:45:39	00d	00:10.0	55.5	65.5	57.9	54.2	-.-	57.2	56.9	55.9	54.4	54.3	----	-----	354813.4	
253	11/17/2015	9:45:49	00d	00:10.0	56.8	66.8	59	52.7	-.-	58.9	58.9	56.5	53	52.8	----	-----	478630.1	
254	11/17/2015	9:45:59	00d	00:10.0	57.5	67.5	60.4	54.1	-.-	60.2	60	56.3	54.3	54.1	----	-----	562341.3	
255	11/17/2015	9:46:09	00d	00:10.0	59.6	69.6	60.7	58.6	-.-	60.4	60.2	59.5	58.8	58.8	----	-----	912010.8	
256	11/17/2015	9:46:19	00d	00:10.0	57.2	67.2	60.5	54.6	-.-	60.4	60.3	57.1	54.8	54.7	----	-----	524807.5	
257	11/17/2015	9:46:29	00d	00:10.0	58.2	68.2	59.2	55.3	-.-	59.1	59.1	58.2	55.8	55.5	----	-----	660693.4	
258	11/17/2015	9:46:39	00d	00:10.0	58.9	68.9	60.8	55.4	-.-	60.7	60.5	59.1	56.2	55.7	----	-----	776247.1	
259	11/17/2015	9:46:49	00d	00:10.0	53.2	63.2	55.4	50.9	-.-	55.1	55	53.5	51.2	51	----	-----	208929.6	
260	11/17/2015	9:46:59	00d	00:10.0	55.2	65.2	56.5	50.9	-.-	56.4	56.2	55.6	52.3	51.8	----	-----	331131.1	
261	11/17/2015	9:47:09	00d	00:10.0	57.1	67.1	58	55	-.-	57.9	57.9	57.4	55.3	55.1	----	-----	512861.4	
262	11/17/2015	9:47:19	00d	00:10.0	55.8	65.8	57.5	53.8	-.-	57.2	57	55.9	54.1	53.9	----	-----	380189.4	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R3																		58.1
263	11/17/2015	9:47:29	00d	00:10.0	56.8	66.8	58.1	55.6	-.-	57.9	57.7	56.7	55.8	55.8	----	-----	478630.1	
264	11/17/2015	9:47:39	00d	00:10.0	58.3	68.3	60.1	55.2	-.-	60	59.8	58.4	56.4	55.7	----	-----	676083.0	
265	11/17/2015	9:47:49	00d	00:10.0	53.5	63.5	55.2	52.9	-.-	54.8	54.7	53.4	53	53	----	-----	223872.1	
266	11/17/2015	9:47:59	00d	00:10.0	57	67	58.3	54	-.-	58.2	58	56.7	55.2	55	----	-----	501187.2	
267	11/17/2015	9:48:09	00d	00:10.0	58.1	68.1	60	56	-.-	59.9	59.8	57.9	56.2	56.2	----	-----	645654.2	
268	11/17/2015	9:48:19	00d	00:10.0	58.3	68.3	59.7	56.7	-.-	59.6	59.5	57.9	57	56.9	----	-----	676083.0	
269	11/17/2015	9:48:29	00d	00:10.0	58.5	68.5	59.5	57.4	-.-	59.4	59.2	58.6	57.7	57.4	----	-----	707945.8	
270	11/17/2015	9:48:39	00d	00:10.0	59.4	69.4	61.7	57.4	-.-	61.6	61.3	59.2	57.7	57.5	----	-----	870963.6	
271	11/17/2015	9:48:49	00d	00:10.0	59.9	69.9	61.1	57.7	-.-	61	60.9	60.1	57.8	57.8	----	-----	977237.2	
272	11/17/2015	9:48:59	00d	00:10.0	58.8	68.8	61.3	55.8	-.-	61.2	60.9	58.1	56.1	56	----	-----	758577.6	
273	11/17/2015	9:49:09	00d	00:10.0	58.6	68.6	60.7	57.3	-.-	60.6	60.6	58.4	57.6	57.5	----	-----	724436.0	
274	11/17/2015	9:49:19	00d	00:10.0	60	70	62.1	58.2	-.-	61.9	61.4	59.8	58.5	58.4	----	-----	1000000.0	
275	11/17/2015	9:49:29	00d	00:10.0	55.2	65.2	58.3	53.1	-.-	58.1	57.7	54.5	53.2	53.1	----	-----	331131.1	
276	11/17/2015	9:49:39	00d	00:10.0	58.5	68.5	60.2	54	-.-	60.1	59.8	58.6	54.2	54.1	----	-----	707945.8	
277	11/17/2015	9:49:49	00d	00:10.0	57.3	67.3	59.6	56.3	-.-	59.3	58.9	57.2	56.4	56.4	----	-----	537031.8	
278	11/17/2015	9:49:59	00d	00:10.0	56.7	66.7	58.4	54.5	-.-	58.3	58.1	57.1	54.7	54.6	----	-----	467735.1	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R4																		60.7
189	11/17/2015	9:35:00	00d	00:10.0	61.9	71.9	62.6	61.4	-.-	62.7	62.7	62	61.3	61.2	----	-----	1548816.6	
190	11/17/2015	9:35:10	00d	00:10.0	61	71	62.2	58.7	-.-	62.2	62.2	61.3	59	58.1	----	-----	1258925.4	
191	11/17/2015	9:35:20	00d	00:10.0	57.7	67.7	59.7	55.8	-.-	59.6	59.6	57.6	55.6	55.5	----	-----	588843.7	
192	11/17/2015	9:35:30	00d	00:10.0	59.3	69.3	60.5	56.6	-.-	60.6	60.6	59.4	58.3	57.5	----	-----	851138.0	
193	11/17/2015	9:35:40	00d	00:10.0	58.5	68.5	60.5	57.5	-.-	59.9	59.9	58.3	57.6	57.3	----	-----	707945.8	
194	11/17/2015	9:35:50	00d	00:10.0	61.2	71.2	63.3	57.6	-.-	63.7	63.7	61.3	58.3	57.4	----	-----	1318256.7	
195	11/17/2015	9:36:00	00d	00:10.0	57.8	67.8	60.2	55.2	-.-	60.2	60.2	57.7	55.3	54.7	----	-----	602559.6	
196	11/17/2015	9:36:10	00d	00:10.0	55.7	65.7	56.5	54.7	-.-	56.8	56.8	55.7	54.8	54.6	----	-----	371535.2	
197	11/17/2015	9:36:20	00d	00:10.0	63	73	66.4	56.2	-.-	67.3	67.3	61.8	57.5	57.2	----	-----	1995262.3	
198	11/17/2015	9:36:30	00d	00:10.0	61.5	71.5	62.7	59.2	-.-	63	63	61.9	60.8	57.8	----	-----	1412537.5	
199	11/17/2015	9:36:40	00d	00:10.0	55.6	65.6	59.2	54.8	-.-	56.5	56.5	55.8	54.9	54.8	----	-----	363078.1	
200	11/17/2015	9:36:50	00d	00:10.0	56.1	66.1	56.6	55.6	-.-	56.8	56.8	56	55.5	55.5	----	-----	407380.3	
201	11/17/2015	9:37:00	00d	00:10.0	61.9	71.9	65.8	55.3	-.-	66.4	66.4	61.1	55	52.7	----	-----	1548816.6	
202	11/17/2015	9:37:10	00d	00:10.0	54.7	64.7	56.6	51.9	-.-	57.3	57.3	55	51.7	51.6	----	-----	295120.9	
203	11/17/2015	9:37:20	00d	00:10.0	59.4	69.4	61	56.6	-.-	61.3	61.3	59.4	57.5	57.4	----	-----	870963.6	
204	11/17/2015	9:37:30	00d	00:10.0	58.5	68.5	60.3	56.5	-.-	59.8	59.8	58.4	56.5	56.2	----	-----	707945.8	
205	11/17/2015	9:37:40	00d	00:10.0	60.3	70.3	62	56.3	-.-	62.3	62.3	60.6	57.9	56.2	----	-----	1071519.3	
206	11/17/2015	9:37:50	00d	00:10.0	65.4	75.4	67.4	62	-.-	67.6	67.6	64.6	63.8	63.8	----	-----	3467368.5	
207	11/17/2015	9:38:00	00d	00:10.0	59.6	69.6	64.8	58.7	-.-	61.5	61.5	59.1	58.7	58.4	----	-----	912010.8	
208	11/17/2015	9:38:10	00d	00:10.0	61.2	71.2	61.9	58.8	-.-	62.1	62.1	61.4	60.3	59.5	----	-----	1318256.7	
209	11/17/2015	9:38:20	00d	00:10.0	65.1	75.1	68.9	60	-.-	69.5	69.5	63.5	60.1	59.9	----	-----	3235936.6	
210	11/17/2015	9:38:30	00d	00:10.0	63.5	73.5	69.4	59	-.-	69.3	69.3	61.2	59.2	58.5	----	-----	2238721.1	
211	11/17/2015	9:38:40	00d	00:10.0	59.6	69.6	60.5	58.5	-.-	60.8	60.8	59.6	58.6	58.5	----	-----	912010.8	
212	11/17/2015	9:38:50	00d	00:10.0	64	74	66.8	60.5	-.-	67	67	63.5	61.6	61.5	----	-----	2511886.4	
213	11/17/2015	9:39:00	00d	00:10.0	59.5	69.5	62.8	58.5	-.-	60.7	60.7	59.6	58.4	58.4	----	-----	891250.9	
214	11/17/2015	9:39:10	00d	00:10.0	63.1	73.1	64.1	59.6	-.-	64.1	64.1	63.1	62.1	60.7	----	-----	2041737.9	
215	11/17/2015	9:39:20	00d	00:10.0	59.3	69.3	63.8	58.1	-.-	61.9	61.9	58.8	58.3	58	----	-----	851138.0	
216	11/17/2015	9:39:30	00d	00:10.0	59.3	69.3	61	57.7	-.-	61.5	61.5	58.9	57.6	57.5	----	-----	851138.0	
217	11/17/2015	9:39:40	00d	00:10.0	60.1	70.1	61.6	58.8	-.-	61.9	61.9	59.6	58.7	58.6	----	-----	1023293.0	
218	11/17/2015	9:39:50	00d	00:10.0	66.9	76.9	71.1	58.9	-.-	71.6	71.6	65.6	62.9	60.1	----	-----	4897788.2	
219	11/17/2015	9:40:00	00d	00:10.0	55.7	65.7	64.6	53.3	-.-	60	60	54.4	53.4	52.8	----	-----	371535.2	
220	11/17/2015	9:40:10	00d	00:10.0	53.9	63.9	56.2	52.2	-.-	56.8	56.8	53.2	52.4	51.8	----	-----	245470.9	
221	11/17/2015	9:40:20	00d	00:10.0	50.1	60.1	53.5	49.1	-.-	52.6	52.6	49.8	49.3	49	----	-----	102329.3	
222	11/17/2015	9:40:30	00d	00:10.0	57.4	67.4	59.9	49.3	-.-	60.1	60.1	58.4	50.1	49.7	----	-----	549540.9	
223	11/17/2015	9:40:40	00d	00:10.0	55.4	65.4	59.7	53	-.-	58.5	58.5	55	53.1	52.5	----	-----	346736.9	
224	11/17/2015	9:40:50	00d	00:10.0	55.2	65.2	57.8	52.6	-.-	58.1	58.1	54.3	52.9	52.2	----	-----	331131.1	
225	11/17/2015	9:41:00	00d	00:10.0	59.3	69.3	60.6	54.2	-.-	60.7	60.7	59.9	56.7	54.1	----	-----	851138.0	
226	11/17/2015	9:41:10	00d	00:10.0	59.8	69.8	62.3	56.8	-.-	62.5	62.5	59.3	57.3	56.1	----	-----	954992.6	
227	11/17/2015	9:41:20	00d	00:10.0	59.3	69.3	60.8	56.3	-.-	61.5	61.5	59.4	57	55.9	----	-----	851138.0	
228	11/17/2015	9:41:30	00d	00:10.0	60.2	70.2	61.7	58.2	-.-	62	62	60.5	58.5	58.1	----	-----	1047128.5	
229	11/17/2015	9:41:40	00d	00:10.0	60.4	70.4	61.7	58.9	-.-	62.1	62.1	60.7	59.2	58.7	----	-----	1096478.2	
230	11/17/2015	9:41:50	00d	00:10.0	61.9	71.9	62.9	60.8	-.-	63	63	61.9	60.8	60.8	----	-----	1548816.6	
231	11/17/2015	9:42:00	00d	00:10.0	61.8	71.8	62.6	61.3	-.-	62.7	62.7	61.7	61.2	61	----	-----	1513561.2	
232	11/17/2015	9:42:10	00d	00:10.0	63	73	63.6	61.2	-.-	63.7	63.7	63.4	61.6	61.3	----	-----	1995262.3	
233	11/17/2015	9:42:20	00d	00:10.0	62.2	72.2	63.4	60.5	-.-	63.2	63.2	62.6	60.8	60.1	----	-----	1659586.9	
234	11/17/2015	9:42:30	00d	00:10.0	60	70	62.1	58	-.-	62.3	62.3	59.7	57.9	57.7	----	-----	1000000.0	
235	11/17/2015	9:42:40	00d	00:10.0	62.7	72.7	65	61.3	-.-	65.5	65.5	62	61.6	61	----	-----	1862087.1	
236	11/17/2015	9:42:50	00d	00:10.0	64.3	74.3	66	62.6	-.-	66.1	66.1	64.6	62.6	62.2	----	-----	2691534.8	
237	11/17/2015	9:43:00	00d	00:10.0	62.9	72.9	63.6	61.9	-.-	63.7	63.7	63.2	62.3	61.4	----	-----	1949844.6	
238	11/17/2015	9:43:10	00d	00:10.0	61.2	71.2	62.3	59.3	-.-	62.6	62.6	61.5	59.3	58.9	----	-----	1318256.7	
239	11/17/2015	9:43:20	00d	00:10.0	56.4	66.4	59.6	54.4	-.-	58.6	58.6	55.5	54.5	54.2	----	-----	436515.8	
240	11/17/2015	9:43:30	00d	00:10.0	57.2	67.2	58	55.6	-.-	57.9	57.9	57.5	55.6	55.2	----	-----	524807.5	
241	11/17/2015	9:43:40	00d	00:10.0	57.6	67.6	58.5	56.8	-.-	58.7	58.7	57.8	57	56.8	----	-----	575439.9	
242	11/17/2015	9:43:50	00d	00:10.0	57.3	67.3	58.4	55.7	-.-	58.3	58.3	57.6	55.9	55.4	----	-----	537031.8	
243	11/17/2015	9:44:00	00d	00:10.0	53.3	63.3	57.4	52	-.-	55.2	55.2	53	52.1	51.8	----	-----	213796.2	
244	11/17/2015	9:44:10	00d	00:10.0	58.9	68.9	61.7	54	-.-	62.5	62.5	57.3	56.1	54.6	----	-----	776247.1	
245	11/17/2015	9:44:20	00d	00:10.0	52.3	62.3	56.4	49.7	-.-	55.5	55.5	51.1	50.3	49.5	----	-----	169824.4	
246	11/17/2015	9:44:30	00d	00:10.0	54	64	56.7	52.4	-.-	57.4	57.4	53.2	52.4	52.3	----	-----	251188.6	
247	11/17/2015	9:44:40	00d	00:10.0	53.1	63.1	55.5	51.1	-.-	55.9	55.9	52.3	51.1	50.9	----	-----	204173.8	
248	11/17/2015	9:44:50	00d	00:10.0	61.3	71.3	65.2	55.4	-.-	65.9	65.9	60.7	55.9	55.7	----	-----	1348962.9	
249	11/17/2015	9:45:00	00d	00:10.0	61.8	71.8	65.3	60.1	-.-	64.5	64.5	61.9	60	59.9	----	-----	1513561.2	
250	11/17/2015	9:45:10	00d	00:10.0	59.3	69.3	61.8	57.9	-.-	61.3	61.3	58.7	58.1	57.8	----	-----	851138.0	
251	11/17/2015	9:45:20	00d	00:10.0	61.1	71.1	62.3	59.6	-.-	62.6	62.6	61	59.5	59.4	----	-----	1288249.6	
252	11/17/2015	9:45:30	00d	00:10.0	59.5	69.5	60.3	58.2	-.-	60.5	60.5	59.7	58.4	57.8	----	-----	891250.9	
253	11/17/2015	9:45:40	00d	00:10.0	60.2	70.2	61	59.2	-.-	61.3	61.3	60.3	59.1	58.9	----	-----	1047128.5	
254	11/17/2015	9:45:50	00d	00:10.0	62.3	72.3	64.2	59.8	-.-	64.4	64.4	62.7	60.3	59.8	----	-----	1698243.7	
255	11/17/2015	9:46:00	00d	00:10.0	65.5	75.5	67.7	63.8	-.-	68.5	68.5	65.2	63.8	63.2	----	-----	3548133.9	
256	11/17/2015	9:46:10	00d	00:10.0	62.4	72.4	63.9	60.5	-.-	63.8	63.8	62.5	61.1	60.1	----	-----	1737800.8	
257	11/17/2015	9:46:20	00d	00:10.0	56.7	66.7	62.2	54.8	-.-	60	60	56.4	54.9	54.9	----	-----	467735.1	
258	11/17/2015	9:46:30	00d	00:10.0	59.6	69.6	61.8	56.8	-.-	62.2	62.2	58.9	58.2	57.5	----	-----	912010.8	
259	11/17/2015	9:46:40	00d	00:10.0	61.8	71.8	62.7	60.7	-.-	63.3	63.3	61.7	61.2	60.5	----	-----	1513561.2	
260	11/17/2015	9:46:50	00d	00:10.0	61.7	71.7	62.9	60.6	-.-	63.1	63.1	61.6	60.7	60.5	----	-----	1479108.4	
261	11/17/2015	9:47:00	00d	00:10.0	63.6	73.6	65.1	60.9	-.-	65.5	65.5	63.3	61.8	61.2	----	-----	2290867.7	
262	11/17/2015	9:47:10	00d	00:10.0	60.2	70.2	62.1	58.2	-.-	62.5	62.5	59.8	58.2	57.9	----	-----	1047128.5	
263	11/17/2015	9:47:20	00d	00:10.0	57.1	67.1	60.9	55.7	-.-	59.5	59.5	56.6	55.8	55.4	----	-----	512861.4	
264	11/17/2015	9:47:30	00d	00:10.0	55.1	65.1	58.1	51.9	-.-	58.1	58.1	54.3	51.7	51.3	----	-----	323593.7	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R4																		60.7
265	11/17/2015	9:47:40	00d	00:10.0	55.4	65.4	56.5	53.3	-.-	56.7	56.7	55.6	54.4	54.2	----	-----	346736.9	
266	11/17/2015	9:47:50	00d	00:10.0	57.5	67.5	59.6	54.4	-.-	60.3	60.3	57.5	55.7	54.3	----	-----	562341.3	
267	11/17/2015	9:48:00	00d	00:10.0	55.6	65.6	57.3	54.5	-.-	57.4	57.4	55.1	54.5	54.5	----	-----	363078.1	
268	11/17/2015	9:48:10	00d	00:10.0	53.8	63.8	55.1	52.9	-.-	55.1	55.1	53.8	53.1	52.6	----	-----	239883.3	
269	11/17/2015	9:48:20	00d	00:10.0	53.2	63.2	54.3	52.3	-.-	54.8	54.8	53.2	52.5	52.3	----	-----	208929.6	
270	11/17/2015	9:48:30	00d	00:10.0	58.6	68.6	59.2	54.3	-.-	59.2	59.2	58.7	58.3	57	----	-----	724436.0	
271	11/17/2015	9:48:40	00d	00:10.0	61.6	71.6	64.9	58.4	-.-	65.2	65.2	60.6	58.5	58.5	----	-----	1445439.8	
272	11/17/2015	9:48:50	00d	00:10.0	63.7	73.7	64.8	62.6	-.-	64.3	64.3	63.8	62.6	62.4	----	-----	2344228.8	
273	11/17/2015	9:49:00	00d	00:10.0	63.8	73.8	67.3	59.9	-.-	67.9	67.9	63.2	59.8	59.8	----	-----	2398832.9	
274	11/17/2015	9:49:10	00d	00:10.0	59.5	69.5	61.7	57.4	-.-	62	62	59.1	57.5	57.4	----	-----	891250.9	
275	11/17/2015	9:49:20	00d	00:10.0	63.3	73.3	64.7	61.7	-.-	64.8	64.8	63.1	61.9	61.5	----	-----	2137962.1	
276	11/17/2015	9:49:30	00d	00:10.0	62.2	72.2	63.7	60.2	-.-	63.8	63.8	62.7	60.3	59.5	----	-----	1659586.9	
277	11/17/2015	9:49:40	00d	00:10.0	61.3	71.3	62.8	59	-.-	63	63	61.3	59.4	58.5	----	-----	1348962.9	
278	11/17/2015	9:49:50	00d	00:10.0	57.5	67.5	59.1	56.3	-.-	59	59	57.5	56.1	55.9	----	-----	562341.3	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R5																		59.5
131	11/17/2015	10:40:06	00d	00:10.0	59.9	69.9	61.4	57.7	-.-	61.3	61.3	60.7	57.9	57.9	----	-----	977237.2	
132	11/17/2015	10:40:16	00d	00:10.0	55.5	65.5	59.5	53.5	-.-	59.1	58.8	55.4	53.7	53.6	----	-----	354813.4	
133	11/17/2015	10:40:26	00d	00:10.0	53.1	63.1	55.8	50.9	-.-	55.3	54.4	52.7	51	51	----	-----	204173.8	
134	11/17/2015	10:40:36	00d	00:10.0	55.5	65.5	56.6	54.4	-.-	56.5	56.5	55.5	54.5	54.4	----	-----	354813.4	
135	11/17/2015	10:40:46	00d	00:10.0	54.7	64.7	56.6	52.4	-.-	56.5	56.4	54.4	52.5	52.5	----	-----	295120.9	
136	11/17/2015	10:40:56	00d	00:10.0	53.3	63.3	55.7	51.9	-.-	55.2	54.8	53.6	52.1	52	----	-----	213796.2	
137	11/17/2015	10:41:06	00d	00:10.0	58.4	68.4	61	52	-.-	60.9	60.8	56.2	52.5	52.3	----	-----	691831.0	
138	11/17/2015	10:41:16	00d	00:10.0	62.5	72.5	64.5	60	-.-	64.1	63.8	61.7	60.1	60.1	----	-----	1778279.4	
139	11/17/2015	10:41:26	00d	00:10.0	62	72	65.6	60.2	-.-	65.5	65.3	61.2	60.3	60.3	----	-----	1584893.2	
140	11/17/2015	10:41:36	00d	00:10.0	62.4	72.4	64.9	60	-.-	64.8	64.5	61.4	60.1	60.1	----	-----	1737800.8	
141	11/17/2015	10:41:46	00d	00:10.0	60.5	70.5	62.1	58.9	-.-	61.6	61.2	60.6	59.1	59	----	-----	1122018.5	
142	11/17/2015	10:41:56	00d	00:10.0	60.3	70.3	62.5	58.3	-.-	62.5	62.4	59.9	58.5	58.4	----	-----	1071519.3	
143	11/17/2015	10:42:06	00d	00:10.0	61.4	71.4	63.8	58.8	-.-	63.4	62.6	60.7	58.9	58.9	----	-----	1380384.3	
144	11/17/2015	10:42:16	00d	00:10.0	59.4	69.4	63.7	52.5	-.-	63.1	62.4	60.7	55	53.7	----	-----	870963.6	
145	11/17/2015	10:42:26	00d	00:10.0	49.8	59.8	52.5	47.5	-.-	51.7	51.6	49.6	47.6	47.6	----	-----	95499.3	
146	11/17/2015	10:42:36	00d	00:10.0	54.3	64.3	56.4	51.7	-.-	56.3	56.1	53.7	52.1	51.9	----	-----	269153.5	
147	11/17/2015	10:42:46	00d	00:10.0	54.6	64.6	56.6	51.8	-.-	56.6	56.4	54.5	52.9	52.4	----	-----	288403.2	
148	11/17/2015	10:42:56	00d	00:10.0	47.9	57.9	51.8	46.8	-.-	51.2	50.6	47.7	46.8	46.8	----	-----	61659.5	
149	11/17/2015	10:43:06	00d	00:10.0	55.2	65.2	58.4	47.1	-.-	58.3	58.2	51.2	47.4	47.2	----	-----	331131.1	
150	11/17/2015	10:43:16	00d	00:10.0	60.2	70.2	61.6	58.3	-.-	61.5	61.3	59.5	58.8	58.6	----	-----	1047128.5	
151	11/17/2015	10:43:26	00d	00:10.0	61.4	71.4	63.5	59.7	-.-	63.4	63.2	61.3	60.1	60	----	-----	1380384.3	
152	11/17/2015	10:43:36	00d	00:10.0	59.2	69.2	61.9	57.3	-.-	60.8	59.6	58.7	57.5	57.3	----	-----	831763.8	
153	11/17/2015	10:43:46	00d	00:10.0	60.1	70.1	63.3	57.1	-.-	63.3	63.1	59.5	57.2	57.2	----	-----	1023293.0	
154	11/17/2015	10:43:56	00d	00:10.0	59.1	69.1	61.2	55.4	-.-	61.1	61	59	56	55.6	----	-----	812830.5	
155	11/17/2015	10:44:06	00d	00:10.0	56.1	66.1	56.8	55.2	-.-	56.5	56.5	56	55.3	55.3	----	-----	407380.3	
156	11/17/2015	10:44:16	00d	00:10.0	57.1	67.1	59.3	55.9	-.-	59.2	58.9	56.6	56	56	----	-----	512861.4	
157	11/17/2015	10:44:26	00d	00:10.0	51.4	61.4	55.9	49.6	-.-	55.5	54.9	51.1	49.7	49.6	----	-----	138038.4	
158	11/17/2015	10:44:36	00d	00:10.0	50.8	60.8	53.1	48.4	-.-	52.4	51.7	50.4	48.5	48.5	----	-----	120226.4	
159	11/17/2015	10:44:46	00d	00:10.0	54.2	64.2	56.1	51.3	-.-	56	55.9	54.5	51.5	51.4	----	-----	263026.8	
160	11/17/2015	10:44:56	00d	00:10.0	60.1	70.1	66.8	51.6	-.-	63.8	60.5	55.3	53.7	52.5	----	-----	1023293.0	
161	11/17/2015	10:45:06	00d	00:10.0	59.4	69.4	67.5	53.7	-.-	67.2	66.4	56.9	54	53.8	----	-----	870963.6	
162	11/17/2015	10:45:16	00d	00:10.0	61.2	71.2	62.1	59.3	-.-	62.1	62	61.3	59.6	59.5	----	-----	1318256.7	
163	11/17/2015	10:45:26	00d	00:10.0	61.4	71.4	62.4	60	-.-	62.3	62.2	61.5	60.7	60.4	----	-----	1380384.3	
164	11/17/2015	10:45:36	00d	00:10.0	55.8	65.8	60	54.5	-.-	59.5	59	55.4	54.6	54.6	----	-----	380189.4	
165	11/17/2015	10:45:46	00d	00:10.0	56	66	56.7	55	-.-	56.7	56.5	55.9	55.1	55.1	----	-----	398107.2	
166	11/17/2015	10:45:56	00d	00:10.0	62.2	72.2	64.7	56.7	-.-	64.7	64.5	61.2	57	56.8	----	-----	1659586.9	
167	11/17/2015	10:46:06	00d	00:10.0	61.3	71.3	62.9	59.7	-.-	62.3	62.1	61.6	60.9	60.4	----	-----	1348962.9	
168	11/17/2015	10:46:16	00d	00:10.0	57.8	67.8	59.7	55.5	-.-	59.5	59.4	57.9	55.8	55.6	----	-----	602559.6	
169	11/17/2015	10:46:26	00d	00:10.0	56.3	66.3	58.9	54.7	-.-	58.8	58.4	56.4	54.9	54.8	----	-----	426579.5	
170	11/17/2015	10:46:36	00d	00:10.0	53.5	63.5	55.7	53	-.-	55.3	54.9	53.4	53	53	----	-----	223872.1	
171	11/17/2015	10:46:46	00d	00:10.0	54.2	64.2	55.4	52.9	-.-	55.3	55.1	54.2	53.1	53.1	----	-----	263026.8	
172	11/17/2015	10:46:56	00d	00:10.0	53.8	63.8	57.6	50.9	-.-	56.8	55.8	52.4	50.9	50.9	----	-----	239883.3	
173	11/17/2015	10:47:06	00d	00:10.0	64.6	74.6	68.7	57.6	-.-	67.7	66.8	61.3	58.5	58.5	----	-----	2884031.5	
174	11/17/2015	10:47:16	00d	00:10.0	64.4	74.4	70.4	60.7	-.-	69.8	69.5	63.3	60.7	60.7	----	-----	2754228.7	
175	11/17/2015	10:47:26	00d	00:10.0	61.4	71.4	62.4	60	-.-	62.3	62.2	61.5	60.7	60.6	----	-----	1380384.3	
176	11/17/2015	10:47:36	00d	00:10.0	59.6	69.6	60.9	58.3	-.-	60.7	60.6	59.3	58.4	58.4	----	-----	912010.8	
177	11/17/2015	10:47:46	00d	00:10.0	62.8	72.8	65.1	60.6	-.-	65	64.8	62.3	60.8	60.7	----	-----	1905460.7	
178	11/17/2015	10:47:56	00d	00:10.0	60.9	70.9	61.6	60.2	-.-	61.5	61.4	60.9	60.4	60.2	----	-----	1230268.8	
179	11/17/2015	10:48:06	00d	00:10.0	62.7	72.7	65.3	60.5	-.-	65.1	64.4	62.2	61.4	61	----	-----	1862087.1	
180	11/17/2015	10:48:16	00d	00:10.0	60.6	70.6	61.5	59.7	-.-	61.4	61.3	60.7	59.8	59.8	----	-----	1148153.6	
181	11/17/2015	10:48:26	00d	00:10.0	54.1	64.1	60.2	51.4	-.-	59.5	58.5	54.5	51.5	51.4	----	-----	257039.6	
182	11/17/2015	10:48:36	00d	00:10.0	53.5	63.5	57	49.8	-.-	56.9	56.6	52.4	50.4	50.2	----	-----	223872.1	
183	11/17/2015	10:48:46	00d	00:10.0	47.5	57.5	49.8	46.5	-.-	49.4	49	47.4	46.7	46.6	----	-----	56234.1	
184	11/17/2015	10:48:56	00d	00:10.0	52.1	62.1	54.7	48.6	-.-	54.3	53.4	51.2	49.9	49.8	----	-----	162181.0	
185	11/17/2015	10:49:06	00d	00:10.0	54.5	64.5	56.9	52	-.-	56.8	56.5	54	52.3	52.2	----	-----	281838.3	
186	11/17/2015	10:49:16	00d	00:10.0	65.6	75.6	69.9	56.6	-.-	69.8	69.4	61.1	56.7	56.6	----	-----	3630780.5	
187	11/17/2015	10:49:26	00d	00:10.0	63.6	73.6	69.4	61.5	-.-	68.5	67.7	63.9	62.1	62	----	-----	2290867.7	
188	11/17/2015	10:49:36	00d	00:10.0	58.3	68.3	61.5	56.5	-.-	60.9	60.4	58	56.9	56.7	----	-----	676083.0	
189	11/17/2015	10:49:46	00d	00:10.0	60.4	70.4	61.3	59.1	-.-	61.2	61.2	60.6	59.3	59.2	----	-----	1096478.2	
190	11/17/2015	10:49:56	00d	00:10.0	60.7	70.7	62.7	57.8	-.-	62.5	62.2	60.3	58.2	58	----	-----	1174897.6	
191	11/17/2015	10:50:06	00d	00:10.0	62.1	72.1	65.5	59	-.-	65.2	64.7	61.2	59.3	59.1	----	-----	1621810.1	
192	11/17/2015	10:50:16	00d	00:10.0	60.5	70.5	63.5	57.6	-.-	63.3	62.9	59.8	58.8	58.6	----	-----	1122018.5	
193	11/17/2015	10:50:26	00d	00:10.0	50.8	60.8	57.6	48.4	-.-	56.8	56	50.1	48.6	48.5	----	-----	120226.4	
194	11/17/2015	10:50:36	00d	00:10.0	53.1	63.1	55.2	49.2	-.-	55	54.5	52.2	50.5	49.9	----	-----	204173.8	
195	11/17/2015	10:50:46	00d	00:10.0	57.9	67.9	59.4	54.9	-.-	59.2	59.1	57.6	55.6	54.9	----	-----	616595.0	
196	11/17/2015	10:50:56	00d	00:10.0	62	72	65.2	58	-.-	65	64.9	59.5	58.2	58.1	----	-----	1584893.2	
197	11/17/2015	10:51:06	00d	00:10.0	61.3	71.3	63.1	59	-.-	62.9	62.9	61.2	59.3	59.2	----	-----	1348962.9	
198	11/17/2015	10:51:16	00d	00:10.0	64	74	66.7	61.9	-.-	66.6	66.3	63.3	62.1	62	----	-----	2511886.4	
199	11/17/2015	10:51:26	00d	00:10.0	60.8	70.8	63	58.5	-.-	62.4	62.3	60.8	58.8	58.7	----	-----	1202264.4	
200	11/17/2015	10:51:36	00d	00:10.0	62.5	72.5	64.6	60.7	-.-	64.5	64.3	61.7	60.9	60.8	----	-----	1778279.4	
201	11/17/2015	10:51:46	00d	00:10.0	57.2	67.2	63.6	54.6	-.-	63	62.3	56.6	55	54.9	----	-----	524807.5	
202	11/17/2015	10:51:56	00d	00:10.0	54.1	64.1	56	52.4	-.-	55.1	54.7	54.4	53.4	52.7	----	-----	257039.6	
203	11/17/2015	10:52:06	00d	00:10.0	56.9	66.9	61.4	51.9	-.-	60.9	59.9	53.4	52.1	52	----	-----	489778.8	
204	11/17/2015	10:52:16	00d	00:10.0	56.8	66.8	61.5	52.8	-.-	61.3	60.7	55.4	53.4	52.9	----	-----	478630.1	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R5																		59.5
205	11/17/2015	10:52:26	00d	00:10.0	57.3	67.3	59.9	54.4	-.-	59.6	59.3	56.8	54.6	54.5	----	-----	537031.8	
206	11/17/2015	10:52:36	00d	00:10.0	56.5	66.5	58.8	53.6	-.-	58.4	58.2	56.4	54.3	54.1	----	-----	446683.6	
207	11/17/2015	10:52:46	00d	00:10.0	56.4	66.4	58.9	53.9	-.-	58.7	58.3	55.8	54.4	54.3	----	-----	436515.8	
208	11/17/2015	10:52:56	00d	00:10.0	59	69	61.4	56.1	-.-	61.3	60.9	58.3	57.2	56.3	----	-----	794328.2	
209	11/17/2015	10:53:06	00d	00:10.0	64.9	74.9	70	57.3	-.-	69.6	69.2	58.1	57.4	57.4	----	-----	3090295.4	
210	11/17/2015	10:53:16	00d	00:10.0	58.1	68.1	67.8	55.8	-.-	66.6	65.1	57.8	56	55.9	----	-----	645654.2	
211	11/17/2015	10:53:26	00d	00:10.0	56.2	66.2	56.9	55.6	-.-	56.9	56.9	56.4	55.6	55.6	----	-----	416869.4	
212	11/17/2015	10:53:36	00d	00:10.0	57.3	67.3	59.1	55.6	-.-	58.4	57.8	56.9	55.7	55.6	----	-----	537031.8	
213	11/17/2015	10:53:46	00d	00:10.0	60.2	70.2	61.2	58.3	-.-	61.1	61.1	60.3	58.9	58.5	----	-----	1047128.5	
214	11/17/2015	10:53:56	00d	00:10.0	57.1	67.1	58.3	56.1	-.-	58.1	58.1	57.2	56.2	56.2	----	-----	512861.4	
215	11/17/2015	10:54:06	00d	00:10.0	59.9	69.9	60.8	56.6	-.-	60.7	60.7	59.9	57.6	57.1	----	-----	977237.2	
216	11/17/2015	10:54:16	00d	00:10.0	60.1	70.1	60.7	59.1	-.-	60.6	60.5	60	59.3	59.2	----	-----	1023293.0	
217	11/17/2015	10:54:26	00d	00:10.0	57.1	67.1	60.3	56	-.-	59.9	59.4	57	56.2	56.2	----	-----	512861.4	
218	11/17/2015	10:54:36	00d	00:10.0	56.3	66.3	57.8	54.2	-.-	57.8	57.7	56.1	55.1	54.5	----	-----	426579.5	
219	11/17/2015	10:54:46	00d	00:10.0	53	63	54.5	51.4	-.-	54.3	54.2	53	51.5	51.5	----	-----	199526.2	
220	11/17/2015	10:54:56	00d	00:10.0	54	64	56.5	50.6	-.-	56.4	56.4	51.9	50.7	50.7	----	-----	251188.6	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R6																		60.1
49	11/17/2015	10:40:01	00d	00:10.0	63.6	73.6	68.1	56.2	-.-	68.9	68.9	61.6	58	57.8	----	-----	2290867.7	
50	11/17/2015	10:40:11	00d	00:10.0	60.2	70.2	62.8	56.8	-.-	63.1	63.1	59.8	57	55.8	----	-----	1047128.5	
51	11/17/2015	10:40:21	00d	00:10.0	61.2	71.2	62.5	58.8	-.-	62.9	62.9	62	59.4	58	----	-----	1318256.7	
52	11/17/2015	10:40:31	00d	00:10.0	63	73	65.1	60.7	-.-	65.5	65.5	62.9	60.7	60.5	----	-----	1995262.3	
53	11/17/2015	10:40:41	00d	00:10.0	63	73	65.1	60.4	-.-	64.8	64.8	63.3	60.4	60.2	----	-----	1995262.3	
54	11/17/2015	10:40:51	00d	00:10.0	58.6	68.6	60.4	57.6	-.-	60.1	60.1	58.5	57.7	57.7	----	-----	724436.0	
55	11/17/2015	10:41:01	00d	00:10.0	58.3	68.3	58.9	57.7	-.-	58.9	58.9	58.3	57.8	57.7	----	-----	676083.0	
56	11/17/2015	10:41:11	00d	00:10.0	61	71	63.1	58.5	-.-	63.4	63.4	61	58.6	58.4	----	-----	1258925.4	
57	11/17/2015	10:41:21	00d	00:10.0	60.3	70.3	62.8	57.4	-.-	62.3	62.3	60.3	57.5	57.1	----	-----	1071519.3	
58	11/17/2015	10:41:31	00d	00:10.0	55.5	65.5	57.5	54.2	-.-	57.5	57.5	55.3	54.1	54	----	-----	354813.4	
59	11/17/2015	10:41:41	00d	00:10.0	61	71	62.7	57	-.-	63.1	63.1	61.3	59.4	59.2	----	-----	1258925.4	
60	11/17/2015	10:41:51	00d	00:10.0	56.5	66.5	62.6	53.6	-.-	59.9	59.9	56	53.8	53.3	----	-----	446683.6	
61	11/17/2015	10:42:01	00d	00:10.0	56.4	66.4	58.6	53.9	-.-	59.4	59.4	56.2	53.6	53.3	----	-----	436515.8	
62	11/17/2015	10:42:11	00d	00:10.0	58.4	68.4	60.9	55.6	-.-	61.3	61.3	59.1	55.5	55.4	----	-----	691831.0	
63	11/17/2015	10:42:21	00d	00:10.0	56.7	66.7	59.2	54.4	-.-	59.5	59.5	56.3	54.2	54.2	----	-----	467735.1	
64	11/17/2015	10:42:31	00d	00:10.0	57.8	67.8	60.2	56.1	-.-	60.3	60.3	57.1	56.2	56	----	-----	602559.6	
65	11/17/2015	10:42:41	00d	00:10.0	60.1	70.1	60.9	57.8	-.-	61	61	60.1	59.1	59	----	-----	1023293.0	
66	11/17/2015	10:42:51	00d	00:10.0	58.9	68.9	61.4	56.1	-.-	61.6	61.6	59	56.1	55.6	----	-----	776247.1	
67	11/17/2015	10:43:01	00d	00:10.0	58.5	68.5	59.4	56.2	-.-	59.6	59.6	58.9	56.9	56.8	----	-----	707945.8	
68	11/17/2015	10:43:11	00d	00:10.0	56.7	66.7	57.3	56.2	-.-	57.3	57.3	56.8	56.5	55.9	----	-----	467735.1	
69	11/17/2015	10:43:21	00d	00:10.0	57.3	67.3	57.9	56.4	-.-	57.9	57.9	57.6	56.5	56.2	----	-----	537031.8	
70	11/17/2015	10:43:31	00d	00:10.0	60	70	60.9	57.8	-.-	61.3	61.3	59.9	59.3	58.5	----	-----	1000000.0	
71	11/17/2015	10:43:41	00d	00:10.0	61.1	71.1	62.1	60.3	-.-	62.2	62.2	61.1	60.2	60	----	-----	1288249.6	
72	11/17/2015	10:43:51	00d	00:10.0	58.8	68.8	60.9	55.8	-.-	60.9	60.9	58.3	56.5	55.3	----	-----	758577.6	
73	11/17/2015	10:44:01	00d	00:10.0	52.4	62.4	55.8	50.3	-.-	54.8	54.8	51.5	50.1	50.1	----	-----	173780.1	
74	11/17/2015	10:44:11	00d	00:10.0	57.8	67.8	61.8	50.3	-.-	62.4	62.4	56.9	52.2	51	----	-----	602559.6	
75	11/17/2015	10:44:21	00d	00:10.0	62.2	72.2	64.2	60.3	-.-	64.4	64.4	61.9	60.8	59.8	----	-----	1659586.9	
76	11/17/2015	10:44:31	00d	00:10.0	60.6	70.6	61.6	59.3	-.-	61.8	61.8	60.6	59.6	58.9	----	-----	1148153.6	
77	11/17/2015	10:44:41	00d	00:10.0	58.9	68.9	59.6	56.8	-.-	59.7	59.7	59.3	57	56.1	----	-----	776247.1	
78	11/17/2015	10:44:51	00d	00:10.0	57.8	67.8	59.2	56.3	-.-	59.5	59.5	58	56.5	56.1	----	-----	602559.6	
79	11/17/2015	10:45:01	00d	00:10.0	58.8	68.8	59.6	57.9	-.-	59.6	59.6	59.2	58	57.6	----	-----	758577.6	
80	11/17/2015	10:45:11	00d	00:10.0	57.3	67.3	58.2	56.5	-.-	58.6	58.6	57.2	56.9	56.4	----	-----	537031.8	
81	11/17/2015	10:45:21	00d	00:10.0	59.8	69.8	61.9	57	-.-	62.3	62.3	60.2	57	57	----	-----	954992.6	
82	11/17/2015	10:45:31	00d	00:10.0	60.8	70.8	62.8	59	-.-	63.1	63.1	60.8	58.8	58.7	----	-----	1202264.4	
83	11/17/2015	10:45:41	00d	00:10.0	59.5	69.5	61.4	56.9	-.-	61.9	61.9	59.3	56.5	56	----	-----	891250.9	
84	11/17/2015	10:45:51	00d	00:10.0	56	66	60.4	51.6	-.-	60.6	60.6	54.3	51.6	51.2	----	-----	398107.2	
85	11/17/2015	10:46:01	00d	00:10.0	61.2	71.2	63.1	54.8	-.-	62.9	62.9	61.3	59.7	57.9	----	-----	1318256.7	
86	11/17/2015	10:46:11	00d	00:10.0	61.1	71.1	63.8	59	-.-	64.4	64.4	60.6	59.3	58.6	----	-----	1288249.6	
87	11/17/2015	10:46:21	00d	00:10.0	60.7	70.7	64.8	58.5	-.-	65.8	65.8	59	58.4	58	----	-----	1174897.6	
88	11/17/2015	10:46:31	00d	00:10.0	62.5	72.5	63.9	58.5	-.-	64	64	62.8	60.4	59.2	----	-----	1778279.4	
89	11/17/2015	10:46:41	00d	00:10.0	60.2	70.2	62.7	59.3	-.-	62.1	62.1	60	59.4	59.1	----	-----	1047128.5	
90	11/17/2015	10:46:51	00d	00:10.0	59.8	69.8	62	58.2	-.-	62.7	62.7	59	58	58	----	-----	954992.6	
91	11/17/2015	10:47:01	00d	00:10.0	56	66	60.4	53.8	-.-	58.7	58.7	55.3	53.7	53.6	----	-----	398107.2	
92	11/17/2015	10:47:11	00d	00:10.0	56.1	66.1	57.1	53.8	-.-	57.3	57.3	55.9	55.7	54.7	----	-----	407380.3	
93	11/17/2015	10:47:21	00d	00:10.0	54.8	64.8	57.1	53	-.-	56.7	56.7	54.4	53.1	52.8	----	-----	301995.2	
94	11/17/2015	10:47:31	00d	00:10.0	59.9	69.9	62.5	56.2	-.-	63.1	63.1	59.4	58.7	57.9	----	-----	977237.2	
95	11/17/2015	10:47:41	00d	00:10.0	64.8	74.8	69	60.2	-.-	69.9	69.9	61.9	60.2	59.4	----	-----	3019951.7	
96	11/17/2015	10:47:51	00d	00:10.0	62.1	72.1	65.4	57.7	-.-	66	66	60.9	57.6	56.8	----	-----	1621810.1	
97	11/17/2015	10:48:01	00d	00:10.0	55.2	65.2	57.8	51.6	-.-	58	58	55.6	51.9	50.8	----	-----	331131.1	
98	11/17/2015	10:48:11	00d	00:10.0	57.8	67.8	59	54.8	-.-	59.3	59.3	57.8	56.5	56.3	----	-----	602559.6	
99	11/17/2015	10:48:21	00d	00:10.0	58.3	68.3	59.7	56.9	-.-	59.6	59.6	58.6	56.6	56.4	----	-----	676083.0	
100	11/17/2015	10:48:31	00d	00:10.0	59.9	69.9	61.9	57.3	-.-	62.4	62.4	60.7	57.4	55.7	----	-----	977237.2	
101	11/17/2015	10:48:41	00d	00:10.0	60.8	70.8	61.6	57.9	-.-	61.8	61.8	60.9	60.1	58.8	----	-----	1202264.4	
102	11/17/2015	10:48:51	00d	00:10.0	59.2	69.2	61	58.3	-.-	61.1	61.1	59.1	58.2	58	----	-----	831763.8	
103	11/17/2015	10:49:01	00d	00:10.0	57.7	67.7	59.2	57	-.-	59.1	59.1	57.7	56.9	56.9	----	-----	588843.7	
104	11/17/2015	10:49:11	00d	00:10.0	57.8	67.8	58.6	56.7	-.-	58.9	58.9	57.5	56.7	56.7	----	-----	602559.6	
105	11/17/2015	10:49:21	00d	00:10.0	57.8	67.8	60	54.3	-.-	60.3	60.3	57.6	54.3	53.6	----	-----	602559.6	
106	11/17/2015	10:49:31	00d	00:10.0	61.2	71.2	65.4	53.4	-.-	66.2	66.2	60.6	53.3	53.2	----	-----	1318256.7	
107	11/17/2015	10:49:41	00d	00:10.0	60.6	70.6	62.8	60	-.-	61.4	61.4	60.5	59.8	59.8	----	-----	1148153.6	
108	11/17/2015	10:49:51	00d	00:10.0	61.2	71.2	62.4	60.2	-.-	62.8	62.8	61.3	60.1	60	----	-----	1318256.7	
109	11/17/2015	10:50:01	00d	00:10.0	57.6	67.6	61	55.8	-.-	59.7	59.7	57.8	55.7	55.7	----	-----	575439.9	
110	11/17/2015	10:50:11	00d	00:10.0	58.9	68.9	61.2	54.7	-.-	61.9	61.9	58.8	54.8	54.4	----	-----	776247.1	
111	11/17/2015	10:50:21	00d	00:10.0	51.5	61.5	57.2	49.6	-.-	54	54	50.9	49.7	49.2	----	-----	141253.8	
112	11/17/2015	10:50:31	00d	00:10.0	56.2	66.2	58.8	53.3	-.-	59.3	59.3	56.1	53.3	52.9	----	-----	416869.4	
113	11/17/2015	10:50:41	00d	00:10.0	62.6	72.6	66.3	58.8	-.-	67.1	67.1	61.3	59.2	58.9	----	-----	1819700.9	
114	11/17/2015	10:50:51	00d	00:10.0	63.1	73.1	67.9	58.6	-.-	67.7	67.7	60.7	58.1	57.9	----	-----	2041737.9	
115	11/17/2015	10:51:01	00d	00:10.0	61.3	71.3	65	56.3	-.-	65.5	65.5	60.6	56.1	55.1	----	-----	1348962.9	
116	11/17/2015	10:51:11	00d	00:10.0	54.4	64.4	56.6	52	-.-	56.8	56.8	53.6	52	51.9	----	-----	275422.9	
117	11/17/2015	10:51:21	00d	00:10.0	61	71	64.3	56.4	-.-	64.9	64.9	61.1	56.8	56.4	----	-----	1258925.4	
118	11/17/2015	10:51:31	00d	00:10.0	67.5	77.5	72.3	63.2	-.-	72.3	72.3	64.2	63.4	62.3	----	-----	5623413.3	
119	11/17/2015	10:51:41	00d	00:10.0	61.9	71.9	64.2	58	-.-	63.8	63.8	62.4	58.1	57.6	----	-----	1548816.6	
120	11/17/2015	10:51:51	00d	00:10.0	56.3	66.3	58.9	53.6	-.-	59.2	59.2	56.3	53.9	51.9	----	-----	426579.5	
121	11/17/2015	10:52:01	00d	00:10.0	49.4	59.4	53.6	47.9	-.-	51.4	51.4	49	48.2	47.8	----	-----	87096.4	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R6																		60.1
122	11/17/2015	10:52:11	00d	00:10.0	55.3	65.3	58.3	50.9	-.-	58.5	58.5	55.1	52.2	52	----	-----	338844.2	
123	11/17/2015	10:52:21	00d	00:10.0	59.5	69.5	61.8	52.8	-.-	62.1	62.1	59.7	55.7	53.9	----	-----	891250.9	
124	11/17/2015	10:52:31	00d	00:10.0	59	69	61.6	55.5	-.-	61.8	61.8	58.4	55.4	54.9	----	-----	794328.2	
125	11/17/2015	10:52:41	00d	00:10.0	61.1	71.1	61.8	60.4	-.-	62	62	61.2	60.6	60.4	----	-----	1288249.6	
126	11/17/2015	10:52:51	00d	00:10.0	62	72	63.7	58.8	-.-	64.1	64.1	62.2	59.1	57.6	----	-----	1584893.2	
127	11/17/2015	10:53:01	00d	00:10.0	56.6	66.6	58.8	56.1	-.-	57.5	57.5	56.5	56.1	55.8	----	-----	457088.2	
128	11/17/2015	10:53:11	00d	00:10.0	58	68	59.3	56.1	-.-	59.9	59.9	57.9	56.7	55.1	----	-----	630957.3	
129	11/17/2015	10:53:21	00d	00:10.0	64.2	74.2	69.6	55.4	-.-	70.1	70.1	61	56.2	55	----	-----	2630268.0	
130	11/17/2015	10:53:31	00d	00:10.0	60.5	70.5	65	59.5	-.-	62.1	62.1	60.2	59.8	59.2	----	-----	1122018.5	
131	11/17/2015	10:53:41	00d	00:10.0	58.1	68.1	59.6	57.8	-.-	58.6	58.6	58.1	57.7	57.6	----	-----	645654.2	
132	11/17/2015	10:53:51	00d	00:10.0	58.9	68.9	61.8	55.7	-.-	62.4	62.4	58.9	55.6	55.5	----	-----	776247.1	
133	11/17/2015	10:54:01	00d	00:10.0	61.1	71.1	63.5	59	-.-	64	64	60.7	59.4	58.3	----	-----	1288249.6	
134	11/17/2015	10:54:11	00d	00:10.0	62	72	64.9	57.8	-.-	65.2	65.2	62.2	57.9	57.4	----	-----	1584893.2	
135	11/17/2015	10:54:21	00d	00:10.0	62.5	72.5	65	60.6	-.-	65.4	65.4	62	60.5	60.5	----	-----	1778279.4	
136	11/17/2015	10:54:31	00d	00:10.0	60.9	70.9	64.5	60	-.-	61.7	61.7	61.1	59.9	59.4	----	-----	1230268.8	
137	11/17/2015	10:54:41	00d	00:10.0	60.8	70.8	61.7	59.6	-.-	61.8	61.8	61.2	59.9	59.3	----	-----	1202264.4	
138	11/17/2015	10:54:51	00d	00:10.0	57.4	67.4	59.6	56.3	-.-	59.2	59.2	57.5	56.5	55.9	----	-----	549540.9	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R7																		64.4
133	11/17/2015	10:40:01	00d	00:10.0	66.7	76.7	69.5	62.2	-.-	69.4	69.3	66.8	62.5	62.3	----	-----	4677351.4	
134	11/17/2015	10:40:11	00d	00:10.0	67	77	68.4	63	-.-	68.3	68.2	66.4	65.7	65.1	----	-----	5011872.3	
135	11/17/2015	10:40:21	00d	00:10.0	67.1	77.1	68.8	65.7	-.-	67.8	67.6	66.8	65.9	65.8	----	-----	5128613.8	
136	11/17/2015	10:40:31	00d	00:10.0	66.8	76.8	70.7	61.1	-.-	70.6	70.4	65.9	61.7	61.4	----	-----	4786300.9	
137	11/17/2015	10:40:41	00d	00:10.0	58.2	68.2	61.9	55.6	-.-	61.8	61.6	57.6	55.8	55.7	----	-----	660693.4	
138	11/17/2015	10:40:51	00d	00:10.0	62.6	72.6	66	57.9	-.-	65.7	65.3	60.6	58	58	----	-----	1819700.9	
139	11/17/2015	10:41:01	00d	00:10.0	64	74	66.6	59.7	-.-	66.5	66.4	65.1	60.1	59.9	----	-----	2511886.4	
140	11/17/2015	10:41:11	00d	00:10.0	64.3	74.3	65.1	60.6	-.-	64.9	64.8	64.3	62.1	61	----	-----	2691534.8	
141	11/17/2015	10:41:21	00d	00:10.0	63.6	73.6	66	61.3	-.-	65.9	65.8	63.7	61.9	61.5	----	-----	2290867.7	
142	11/17/2015	10:41:31	00d	00:10.0	64.9	74.9	66.3	61.4	-.-	66.2	66.2	64.5	62.6	61.5	----	-----	3090295.4	
143	11/17/2015	10:41:41	00d	00:10.0	67.6	77.6	69.5	63.7	-.-	69.4	69.3	66.6	63.9	63.8	----	-----	5754399.4	
144	11/17/2015	10:41:51	00d	00:10.0	64.3	74.3	69.7	59.5	-.-	69.5	69.3	62.9	60.3	60.2	----	-----	2691534.8	
145	11/17/2015	10:42:01	00d	00:10.0	64.3	74.3	65.8	58.1	-.-	65.7	65.6	64.8	58.3	58.1	----	-----	2691534.8	
146	11/17/2015	10:42:11	00d	00:10.0	64.9	74.9	66.2	62.9	-.-	66	65.9	65.1	63.8	63.2	----	-----	3090295.4	
147	11/17/2015	10:42:21	00d	00:10.0	66.8	76.8	69.6	62.5	-.-	69.4	69.3	66	62.6	62.6	----	-----	4786300.9	
148	11/17/2015	10:42:31	00d	00:10.0	63	73	66.5	59.8	-.-	66	65.2	64	60.2	60	----	-----	1995262.3	
149	11/17/2015	10:42:41	00d	00:10.0	58.2	68.2	60.8	55.2	-.-	60.7	60.7	58	55.4	55.3	----	-----	660693.4	
150	11/17/2015	10:42:51	00d	00:10.0	57.2	67.2	57.9	56.5	-.-	57.7	57.5	57.1	56.6	56.6	----	-----	524807.5	
151	11/17/2015	10:43:01	00d	00:10.0	62.7	72.7	63.8	57.9	-.-	63.7	63.7	62.5	60.6	59	----	-----	1862087.1	
152	11/17/2015	10:43:11	00d	00:10.0	59.8	69.8	61.6	57	-.-	61.5	61.4	60.2	57.5	57.2	----	-----	954992.6	
153	11/17/2015	10:43:21	00d	00:10.0	56.6	66.6	59.9	55.1	-.-	59.4	58.8	56.9	55.6	55.3	----	-----	457088.2	
154	11/17/2015	10:43:31	00d	00:10.0	56.9	66.9	60	52.7	-.-	59.8	59.7	55.8	52.9	52.8	----	-----	489778.8	
155	11/17/2015	10:43:41	00d	00:10.0	59.3	69.3	61.7	56.1	-.-	61.6	61.5	57.8	57.1	56.6	----	-----	851138.0	
156	11/17/2015	10:43:51	00d	00:10.0	66	76	68.3	61.5	-.-	68.2	68.1	65.4	61.7	61.6	----	-----	3981071.7	
157	11/17/2015	10:44:01	00d	00:10.0	65.8	75.8	66.8	65.1	-.-	66.8	66.7	65.7	65.2	65.2	----	-----	3801894.0	
158	11/17/2015	10:44:11	00d	00:10.0	63.4	73.4	66.1	59.8	-.-	66	65.9	63.3	60.4	60	----	-----	2187761.6	
159	11/17/2015	10:44:21	00d	00:10.0	67.2	77.2	69.1	64.4	-.-	69	68.8	67	64.9	64.7	----	-----	5248074.6	
160	11/17/2015	10:44:31	00d	00:10.0	66.5	76.5	67.9	64.4	-.-	67.8	67.7	66.5	65.2	64.7	----	-----	4466835.9	
161	11/17/2015	10:44:41	00d	00:10.0	60.6	70.6	64.4	57.9	-.-	64	63.7	60.9	58	57.9	----	-----	1148153.6	
162	11/17/2015	10:44:51	00d	00:10.0	56.9	66.9	60.8	51.1	-.-	60.6	60.4	56.8	51.3	51.2	----	-----	489778.8	
163	11/17/2015	10:45:01	00d	00:10.0	61.3	71.3	63.3	51.4	-.-	62.8	62.4	61.6	52.5	51.8	----	-----	1348962.9	
164	11/17/2015	10:45:11	00d	00:10.0	63.6	73.6	65.4	61.6	-.-	64.7	64.6	63.3	61.8	61.7	----	-----	2290867.7	
165	11/17/2015	10:45:21	00d	00:10.0	64.4	74.4	67	62.1	-.-	66.8	66.6	64.1	62.4	62.2	----	-----	2754228.7	
166	11/17/2015	10:45:31	00d	00:10.0	61.3	71.3	63	59.6	-.-	63	62.9	61.1	59.7	59.7	----	-----	1348962.9	
167	11/17/2015	10:45:41	00d	00:10.0	61.6	71.6	63.4	59.5	-.-	63.3	63.2	61.3	59.5	59.5	----	-----	1445439.8	
168	11/17/2015	10:45:51	00d	00:10.0	67	77	69.2	63	-.-	67.6	67.5	66.5	64.6	63.2	----	-----	5011872.3	
169	11/17/2015	10:46:01	00d	00:10.0	67.8	77.8	71.6	63.5	-.-	71.4	71.4	66.6	64.5	63.9	----	-----	6025595.9	
170	11/17/2015	10:46:11	00d	00:10.0	63.9	73.9	65	62.5	-.-	64.8	64.7	63.7	62.9	62.8	----	-----	2454708.9	
171	11/17/2015	10:46:21	00d	00:10.0	62.7	72.7	64	61.2	-.-	63.8	63.7	62.8	61.4	61.4	----	-----	1862087.1	
172	11/17/2015	10:46:31	00d	00:10.0	65.9	75.9	66.9	62.8	-.-	66.8	66.6	66	63.6	63.1	----	-----	3890451.4	
173	11/17/2015	10:46:41	00d	00:10.0	64	74	65.9	60.7	-.-	65.6	65.4	64.5	61.9	61.3	----	-----	2511886.4	
174	11/17/2015	10:46:51	00d	00:10.0	60	70	61.3	58.3	-.-	61.2	61.1	60	58.5	58.4	----	-----	1000000.0	
175	11/17/2015	10:47:01	00d	00:10.0	62.5	72.5	66.4	58.6	-.-	65.7	65.1	60.1	58.8	58.8	----	-----	1778279.4	
176	11/17/2015	10:47:11	00d	00:10.0	65.3	75.3	67.2	63.5	-.-	67.1	67.1	65.1	63.8	63.8	----	-----	3388441.6	
177	11/17/2015	10:47:21	00d	00:10.0	60.7	70.7	63.5	59	-.-	63.1	62.5	60.8	59.2	59	----	-----	1174897.6	
178	11/17/2015	10:47:31	00d	00:10.0	64.3	74.3	65.7	61.6	-.-	65.7	65.6	63.8	62.9	62.2	----	-----	2691534.8	
179	11/17/2015	10:47:41	00d	00:10.0	65	75	66.1	62.9	-.-	66	66	64.9	63.7	63	----	-----	3162277.7	
180	11/17/2015	10:47:51	00d	00:10.0	66.2	76.2	67.9	63.3	-.-	67.8	67.7	66.4	63.6	63.5	----	-----	4168693.8	
181	11/17/2015	10:48:01	00d	00:10.0	63.1	73.1	64.5	61.1	-.-	64.5	64.5	63	61.6	61.2	----	-----	2041737.9	
182	11/17/2015	10:48:11	00d	00:10.0	65	75	66	62.4	-.-	65.9	65.9	65.4	63.5	62.8	----	-----	3162277.7	
183	11/17/2015	10:48:21	00d	00:10.0	58.7	68.7	62.9	54	-.-	62.7	62.5	57.8	54.7	54.2	----	-----	741310.2	
184	11/17/2015	10:48:31	00d	00:10.0	64.3	74.3	67.7	53.6	-.-	67.6	67.4	60.9	53.8	53.6	----	-----	2691534.8	
185	11/17/2015	10:48:41	00d	00:10.0	67.9	77.9	69.3	65.1	-.-	69.2	69.1	68.4	65.3	65.2	----	-----	6165950.0	
186	11/17/2015	10:48:51	00d	00:10.0	64.4	74.4	68.3	59.6	-.-	67.7	67.2	65.1	61.2	60.3	----	-----	2754228.7	
187	11/17/2015	10:49:01	00d	00:10.0	54.4	64.4	59.6	52.5	-.-	58.8	58.1	54.6	52.9	52.8	----	-----	275422.9	
188	11/17/2015	10:49:11	00d	00:10.0	58.3	68.3	60.8	52.4	-.-	60.6	60.2	58	53	52.6	----	-----	676083.0	
189	11/17/2015	10:49:21	00d	00:10.0	58.3	68.3	61.1	56	-.-	60.3	59.9	57.9	56.1	56	----	-----	676083.0	
190	11/17/2015	10:49:31	00d	00:10.0	63	73	64.5	60.6	-.-	64.2	64.1	63.2	61.4	61.1	----	-----	1995262.3	
191	11/17/2015	10:49:41	00d	00:10.0	63.8	73.8	66	59.7	-.-	65.8	65.7	63.8	60	59.9	----	-----	2398832.9	
192	11/17/2015	10:49:51	00d	00:10.0	64.3	74.3	65.8	62.2	-.-	65.6	65.5	64.3	62.9	62.5	----	-----	2691534.8	
193	11/17/2015	10:50:01	00d	00:10.0	69.3	79.3	71.4	63.6	-.-	71.3	71.3	69.3	63.8	63.8	----	-----	8511380.4	
194	11/17/2015	10:50:11	00d	00:10.0	61.6	71.6	68.6	59	-.-	67.2	65.9	62.6	59.5	59.2	----	-----	1445439.8	
195	11/17/2015	10:50:21	00d	00:10.0	67.9	77.9	69.9	59.3	-.-	69.8	69.7	67.2	63.7	61.1	----	-----	6165950.0	
196	11/17/2015	10:50:31	00d	00:10.0	67.8	77.8	69.7	65.1	-.-	69.6	69.4	67.8	65.7	65.4	----	-----	6025595.9	
197	11/17/2015	10:50:41	00d	00:10.0	61	71	65.1	58.8	-.-	64.7	64.6	60.2	58.9	58.9	----	-----	1258925.4	
198	11/17/2015	10:50:51	00d	00:10.0	61.1	71.1	63.1	59.7	-.-	62.8	61.8	60.5	60	59.9	----	-----	1288249.6	
199	11/17/2015	10:51:01	00d	00:10.0	64.6	74.6	65.3	63.1	-.-	65.3	65.2	64.6	63.5	63.5	----	-----	2884031.5	
200	11/17/2015	10:51:11	00d	00:10.0	63.5	73.5	65.8	59.6	-.-	65.6	65.4	63.8	60	59.7	----	-----	2238721.1	
201	11/17/2015	10:51:21	00d	00:10.0	61.8	71.8	64.6	57.6	-.-	64.5	64.3	62.2	58.6	58	----	-----	1513561.2	
202	11/17/2015	10:51:31	00d	00:10.0	61	71	62.9	57.7	-.-	62.6	62.3	61.2	58.3	57.8	----	-----	1258925.4	
203	11/17/2015	10:51:41	00d	00:10.0	61.2	71.2	62.8	58.6	-.-	62.7	62.6	61.3	58.8	58.7	----	-----	1318256.7	
204	11/17/2015	10:51:51	00d	00:10.0	65.4	75.4	68	60.6	-.-	67.8	67.6	65.1	60.9	60.8	----	-----	3467368.5	
205	11/17/2015	10:52:01	00d	00:10.0	60.2	70.2	65	53.1	-.-	64.4	63.4	58.2	53.3	53.2	----	-----	1047128.5	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R7																		64.4
206	11/17/2015	10:52:11	00d	00:10.0	63.1	73.1	65.1	60.5	-.-	65	64.9	63.2	61.1	60.7	----	-----	2041737.9	
207	11/17/2015	10:52:21	00d	00:10.0	66.4	76.4	67.2	62.7	-.-	67.1	67	66.6	64.8	63.6	----	-----	4365158.3	
208	11/17/2015	10:52:31	00d	00:10.0	66.2	76.2	67	65.3	-.-	66.9	66.7	66.1	65.7	65.5	----	-----	4168693.8	
209	11/17/2015	10:52:41	00d	00:10.0	63.1	73.1	65.9	59.4	-.-	65.4	65	63.4	59.5	59.5	----	-----	2041737.9	
210	11/17/2015	10:52:51	00d	00:10.0	61.2	71.2	65	58.2	-.-	64.5	64	61.8	58.9	58.4	----	-----	1318256.7	
211	11/17/2015	10:53:01	00d	00:10.0	60.4	70.4	63.6	55.6	-.-	63.2	62.9	59	55.9	55.8	----	-----	1096478.2	
212	11/17/2015	10:53:11	00d	00:10.0	57.2	67.2	63.6	51.9	-.-	63.2	62.7	55.6	52.1	52	----	-----	524807.5	
213	11/17/2015	10:53:21	00d	00:10.0	62.6	72.6	65.5	57.8	-.-	65.3	65.1	61.2	59.4	59.2	----	-----	1819700.9	
214	11/17/2015	10:53:31	00d	00:10.0	62.2	72.2	63.9	60.4	-.-	63.8	63.8	61.6	60.6	60.5	----	-----	1659586.9	
215	11/17/2015	10:53:41	00d	00:10.0	62.6	72.6	64.4	61	-.-	64.2	64.1	62.2	61.2	61	----	-----	1819700.9	
216	11/17/2015	10:53:51	00d	00:10.0	63.1	73.1	64.5	61.7	-.-	64.4	64.2	62.9	61.9	61.8	----	-----	2041737.9	
217	11/17/2015	10:54:01	00d	00:10.0	66.4	76.4	67.5	64.5	-.-	67.5	67.4	66.2	65	64.9	----	-----	4365158.3	
218	11/17/2015	10:54:11	00d	00:10.0	69.6	79.6	72.2	64.9	-.-	72.1	72.1	68	65.2	65.1	----	-----	9120108.4	
219	11/17/2015	10:54:21	00d	00:10.0	69.7	79.7	73.3	66.3	-.-	73.1	72.7	68.6	66.6	66.4	----	-----	9332543.0	
220	11/17/2015	10:54:31	00d	00:10.0	67.1	77.1	72.8	60.7	-.-	72.1	70.8	68.9	62.3	61.5	----	-----	5128613.8	
221	11/17/2015	10:54:41	00d	00:10.0	59.5	69.5	63.8	54.6	-.-	63.4	63	57.3	54.9	54.7	----	-----	891250.9	
222	11/17/2015	10:54:51	00d	00:10.0	64.4	74.4	66.4	62.8	-.-	66.3	66.1	63.9	63.1	62.9	----	-----	2754228.7	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R8																		63.3
70	11/17/2015	10:40:06	00d	00:10.0	81	91	86	70.3	-.-	85.7	84.9	78.9	72.4	71.4	----	-----	125892541.2	
71	11/17/2015	10:40:16	00d	00:10.0	67.3	77.3	77.7	61.4	-.-	76.7	75.5	65.7	61.7	61.5	----	-----	5370318.0	
72	11/17/2015	10:40:26	00d	00:10.0	60.3	70.3	61.5	59.6	-.-	61.4	61.3	60.1	59.7	59.7	----	-----	1071519.3	
73	11/17/2015	10:40:36	00d	00:10.0	62.7	72.7	65.6	59.2	-.-	65.5	65.3	62.3	59.7	59.5	----	-----	1862087.1	
74	11/17/2015	10:40:46	00d	00:10.0	60.1	70.1	61.4	59	-.-	61.3	61.3	59.5	59.2	59.2	----	-----	1023293.0	
75	11/17/2015	10:40:56	00d	00:10.0	59.8	69.8	61.6	58.9	-.-	61.3	60.8	59.5	59	58.9	----	-----	954992.6	
76	11/17/2015	10:41:06	00d	00:10.0	59.7	69.7	61.2	58.4	-.-	61	60.9	59.2	58.6	58.5	----	-----	933254.3	
77	11/17/2015	10:41:16	00d	00:10.0	60.4	70.4	61.3	59.7	-.-	61.2	60.9	60.5	60.2	60	----	-----	1096478.2	
78	11/17/2015	10:41:26	00d	00:10.0	60.1	70.1	60.7	59.1	-.-	60.6	60.6	60.2	59.4	59.4	----	-----	1023293.0	
79	11/17/2015	10:41:36	00d	00:10.0	58.9	68.9	59.6	58.2	-.-	59.5	59.3	58.8	58.4	58.4	----	-----	776247.1	
80	11/17/2015	10:41:46	00d	00:10.0	59.1	69.1	60	58.2	-.-	60	59.9	59.1	58.3	58.3	----	-----	812830.5	
81	11/17/2015	10:41:56	00d	00:10.0	58.6	68.6	59.1	58.2	-.-	59	59	58.7	58.3	58.3	----	-----	724436.0	
82	11/17/2015	10:42:06	00d	00:10.0	59.9	69.9	60.7	58.3	-.-	60.6	60.4	59.9	58.6	58.6	----	-----	977237.2	
83	11/17/2015	10:42:16	00d	00:10.0	59.6	69.6	62.1	56.4	-.-	62	61.8	60	56.8	56.5	----	-----	912010.8	
84	11/17/2015	10:42:26	00d	00:10.0	55.3	65.3	56.7	54	-.-	56.6	56.5	55.4	54.5	54.2	----	-----	338844.2	
85	11/17/2015	10:42:36	00d	00:10.0	54.1	64.1	54.6	53.3	-.-	54.6	54.5	53.9	53.5	53.4	----	-----	257039.6	
86	11/17/2015	10:42:46	00d	00:10.0	57.5	67.5	59.1	54.6	-.-	59	58.9	57.2	54.8	54.7	----	-----	562341.3	
87	11/17/2015	10:42:56	00d	00:10.0	57.9	67.9	58.9	56.6	-.-	58.9	58.8	57.5	56.7	56.6	----	-----	616595.0	
88	11/17/2015	10:43:06	00d	00:10.0	60.2	70.2	62.3	58.2	-.-	62.2	62	60	58.3	58.3	----	-----	1047128.5	
89	11/17/2015	10:43:16	00d	00:10.0	57.1	67.1	60.2	55.6	-.-	59.5	59.1	57.5	55.8	55.8	----	-----	512861.4	
90	11/17/2015	10:43:26	00d	00:10.0	55.4	65.4	56.9	54.6	-.-	56.5	56.2	55.3	54.7	54.7	----	-----	346736.9	
91	11/17/2015	10:43:36	00d	00:10.0	55.9	65.9	56.9	54.7	-.-	56.9	56.7	55.6	55.1	55	----	-----	389045.1	
92	11/17/2015	10:43:46	00d	00:10.0	56.6	66.6	57.5	55.7	-.-	57.4	57.3	56.3	56	55.8	----	-----	457088.2	
93	11/17/2015	10:43:56	00d	00:10.0	56.8	66.8	58.3	55.3	-.-	58.1	58	56.9	55.5	55.4	----	-----	478630.1	
94	11/17/2015	10:44:06	00d	00:10.0	55.7	65.7	56.8	54.4	-.-	56.7	56.5	55.9	54.9	54.5	----	-----	371535.2	
95	11/17/2015	10:44:16	00d	00:10.0	55.2	65.2	56.5	53.8	-.-	56.4	56.3	55.1	53.9	53.9	----	-----	331131.1	
96	11/17/2015	10:44:26	00d	00:10.0	53.6	63.6	54.9	53.2	-.-	54.6	54.2	53.6	53.3	53.3	----	-----	229086.8	
97	11/17/2015	10:44:36	00d	00:10.0	62.8	72.8	65.7	53.6	-.-	65.1	65	62.1	54.3	53.8	----	-----	1905460.7	
98	11/17/2015	10:44:46	00d	00:10.0	63.6	73.6	67.2	61.1	-.-	67	66.7	62.8	61.3	61.2	----	-----	2290867.7	
99	11/17/2015	10:44:56	00d	00:10.0	58.1	68.1	61.5	56.2	-.-	61.1	60.6	58.4	56.6	56.4	----	-----	645654.2	
100	11/17/2015	10:45:06	00d	00:10.0	57.7	67.7	59	56.2	-.-	58.9	58.9	56.8	56.5	56.3	----	-----	588843.7	
101	11/17/2015	10:45:16	00d	00:10.0	59.7	69.7	61.5	58.6	-.-	61.4	61.1	58.9	58.7	58.6	----	-----	933254.3	
102	11/17/2015	10:45:26	00d	00:10.0	60.6	70.6	63.2	58.1	-.-	63.1	63.1	60.4	58.2	58.2	----	-----	1148153.6	
103	11/17/2015	10:45:36	00d	00:10.0	58	68	59.4	56.9	-.-	59.2	59	58.1	57.1	57	----	-----	630957.3	
104	11/17/2015	10:45:46	00d	00:10.0	55.5	65.5	57.6	53.6	-.-	57.3	57.1	56.2	53.9	53.9	----	-----	354813.4	
105	11/17/2015	10:45:56	00d	00:10.0	54.3	64.3	55.4	53.5	-.-	55.3	55.3	53.9	53.6	53.6	----	-----	269153.5	
106	11/17/2015	10:46:06	00d	00:10.0	57.9	67.9	59.2	55	-.-	59.2	59	57.8	55.1	55.1	----	-----	616595.0	
107	11/17/2015	10:46:16	00d	00:10.0	58.1	68.1	59.3	57.1	-.-	59.2	59.2	58.2	57.5	57.2	----	-----	645654.2	
108	11/17/2015	10:46:26	00d	00:10.0	56.9	66.9	57.7	55.9	-.-	57.6	57.5	57.1	56.2	56	----	-----	489778.8	
109	11/17/2015	10:46:36	00d	00:10.0	57	67	58.6	55.5	-.-	58.5	58.4	56.1	55.7	55.6	----	-----	501187.2	
110	11/17/2015	10:46:46	00d	00:10.0	58.3	68.3	59.2	57.6	-.-	59	59	58.2	57.7	57.7	----	-----	676083.0	
111	11/17/2015	10:46:56	00d	00:10.0	57	67	58	56.4	-.-	57.9	57.6	57	56.5	56.5	----	-----	501187.2	
112	11/17/2015	10:47:06	00d	00:10.0	58.3	68.3	58.8	57	-.-	58.6	58.6	58.4	57.2	57.1	----	-----	676083.0	
113	11/17/2015	10:47:16	00d	00:10.0	60.3	70.3	62.2	58.2	-.-	62.2	62	59.9	58.6	58.5	----	-----	1071519.3	
114	11/17/2015	10:47:26	00d	00:10.0	56.9	66.9	58.2	56.6	-.-	57.8	57.4	56.9	56.7	56.7	----	-----	489778.8	
115	11/17/2015	10:47:36	00d	00:10.0	59.4	69.4	61.9	56.5	-.-	61.7	61.2	58.9	56.9	56.6	----	-----	870963.6	
116	11/17/2015	10:47:46	00d	00:10.0	57.8	67.8	59.4	56.3	-.-	59.4	59.1	57.2	56.6	56.4	----	-----	602559.6	
117	11/17/2015	10:47:56	00d	00:10.0	55.6	65.6	58.6	53.7	-.-	58.2	58	55.9	54.3	53.9	----	-----	363078.1	
118	11/17/2015	10:48:06	00d	00:10.0	53.2	63.2	55	51.8	-.-	54.7	54.7	53	51.9	51.8	----	-----	208929.6	
119	11/17/2015	10:48:16	00d	00:10.0	52.5	62.5	53.4	51.8	-.-	53.3	53.1	52.4	51.9	51.9	----	-----	177827.9	
120	11/17/2015	10:48:26	00d	00:10.0	52.6	62.6	53.7	51.3	-.-	53.7	53.6	52.5	51.5	51.4	----	-----	181970.1	
121	11/17/2015	10:48:36	00d	00:10.0	52.6	62.6	54	51.3	-.-	53.8	53.4	52.1	51.4	51.3	----	-----	181970.1	
122	11/17/2015	10:48:46	00d	00:10.0	59.1	69.1	61.7	54	-.-	61.6	61.4	58	54.9	54.5	----	-----	812830.5	
123	11/17/2015	10:48:56	00d	00:10.0	61.9	71.9	64.1	57.5	-.-	64	63.9	60.8	57.7	57.6	----	-----	1548816.6	
124	11/17/2015	10:49:06	00d	00:10.0	66.9	76.9	74.1	59.5	-.-	73.6	72.2	61.8	60.2	60	----	-----	4897788.2	
125	11/17/2015	10:49:16	00d	00:10.0	57.8	67.8	59.5	56.9	-.-	59.3	59.2	57.6	57	57	----	-----	602559.6	
126	11/17/2015	10:49:26	00d	00:10.0	58.6	68.6	61.7	55.7	-.-	59.7	59.6	57.7	56.1	56	----	-----	724436.0	
127	11/17/2015	10:49:36	00d	00:10.0	60.1	70.1	64	57.1	-.-	63.7	62.8	59.5	57.6	57.3	----	-----	1023293.0	
128	11/17/2015	10:49:46	00d	00:10.0	58.7	68.7	59.7	55.9	-.-	59.7	59.6	59	57.2	56.5	----	-----	741310.2	
129	11/17/2015	10:49:56	00d	00:10.0	52.8	62.8	55.9	51	-.-	55.2	54.8	53.3	51.9	51.5	----	-----	190546.1	
130	11/17/2015	10:50:06	00d	00:10.0	56.2	66.2	58.5	50.6	-.-	58.4	57.9	54.7	50.9	50.8	----	-----	416869.4	
131	11/17/2015	10:50:16	00d	00:10.0	55.5	65.5	58.5	53.9	-.-	58.1	57.8	55.4	54.2	54	----	-----	354813.4	
132	11/17/2015	10:50:26	00d	00:10.0	56.8	66.8	57.4	55.5	-.-	57.3	57.2	56.7	56.2	56	----	-----	478630.1	
133	11/17/2015	10:50:36	00d	00:10.0	55.4	65.4	58.8	52.8	-.-	58.4	58.1	54.4	53.1	53	----	-----	346736.9	
134	11/17/2015	10:50:46	00d	00:10.0	55.1	65.1	56.2	52.3	-.-	56.1	56.1	55.2	52.4	52.4	----	-----	323593.7	
135	11/17/2015	10:50:56	00d	00:10.0	57.9	67.9	60.5	55.4	-.-	60.1	59.2	56.2	55.6	55.5	----	-----	616595.0	
136	11/17/2015	10:51:06	00d	00:10.0	62.7	72.7	65.2	60.4	-.-	64.6	64	62.3	61.5	61.4	----	-----	1862087.1	
137	11/17/2015	10:51:16	00d	00:10.0	59.3	69.3	62	57.5	-.-	61.6	61.1	59.5	57.6	57.6	----	-----	851138.0	
138	11/17/2015	10:51:26	00d	00:10.0	57.8	67.8	58.3	56.9	-.-	58.2	58.2	57.8	57.2	57	----	-----	602559.6	
139	11/17/2015	10:51:36	00d	00:10.0	56.1	66.1	56.9	55.7	-.-	56.7	56.6	56	55.8	55.8	----	-----	407380.3	
140	11/17/2015	10:51:46	00d	00:10.0	56.2	66.2	57.6	55.6	-.-	57.5	57.4	56.1	55.8	55.7	----	-----	416869.4	
141	11/17/2015	10:51:56	00d	00:10.0	60.7	70.7	65.8	55.3	-.-	65.2	64.5	59	55.4	55.4	----	-----	1174897.6	
142	11/17/2015	10:52:06	00d	00:10.0	56.2	66.2	58.3	54.7	-.-	57.7	57.5	56.2	54.9	54.7	----	-----	416869.4	
143	11/17/2015	10:52:16	00d	00:10.0	55.1	65.1	57.4	53.8	-.-	57.3	57.2	55	54.6	54.1	----	-----	323593.7	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R8																		63.3
144	11/17/2015	10:52:26	00d	00:10.0	54	64	55.6	53.2	-.-	55.4	55	53.8	53.4	53.4	----	-----	251188.6	
145	11/17/2015	10:52:36	00d	00:10.0	52.8	62.8	54	51.8	-.-	53.9	53.6	52.9	52.2	51.9	----	-----	190546.1	
146	11/17/2015	10:52:46	00d	00:10.0	55	65	56.5	51.7	-.-	56.5	56.4	54.3	52	51.8	----	-----	316227.8	
147	11/17/2015	10:52:56	00d	00:10.0	56	66	56.6	55.3	-.-	56.6	56.5	56	55.4	55.4	----	-----	398107.2	
148	11/17/2015	10:53:06	00d	00:10.0	60.3	70.3	62.9	55.4	-.-	62.8	62.4	58.3	56	55.7	----	-----	1071519.3	
149	11/17/2015	10:53:16	00d	00:10.0	61.5	71.5	63.5	58.8	-.-	63.5	63.4	61.8	59.4	59.1	----	-----	1412537.5	
150	11/17/2015	10:53:26	00d	00:10.0	57.6	67.6	58.9	57.3	-.-	58.7	58.3	57.6	57.4	57.3	----	-----	575439.9	
151	11/17/2015	10:53:36	00d	00:10.0	57.5	67.5	58	56.9	-.-	57.9	57.8	57.4	57.1	57	----	-----	562341.3	
152	11/17/2015	10:53:46	00d	00:10.0	60.2	70.2	62.6	57.2	-.-	62.5	61.9	59.1	57.8	57.5	----	-----	1047128.5	
153	11/17/2015	10:53:56	00d	00:10.0	58.6	68.6	61.9	56.2	-.-	61.7	61.4	58	56.8	56.6	----	-----	724436.0	
154	11/17/2015	10:54:06	00d	00:10.0	55.5	65.5	56.5	54.2	-.-	56.3	56.2	56	54.4	54.3	----	-----	354813.4	
155	11/17/2015	10:54:16	00d	00:10.0	53.6	63.6	55.3	52.3	-.-	54.5	54.3	53.6	52.6	52.4	----	-----	229086.8	
156	11/17/2015	10:54:26	00d	00:10.0	54.4	64.4	55.3	53.7	-.-	55.2	55.1	54.3	53.8	53.7	----	-----	275422.9	
157	11/17/2015	10:54:36	00d	00:10.0	55	65	56	54	-.-	56	55.9	54.8	54.2	54	----	-----	316227.8	
158	11/17/2015	10:54:46	00d	00:10.0	56.8	66.8	57.5	54.7	-.-	57.3	57.2	57	55	55	----	-----	478630.1	
159	11/17/2015	10:54:56	00d	00:10.0	59	69	61.2	57.4	-.-	60.9	60.1	58.1	57.8	57.7	----	-----	794328.2	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R9																		58.1
85	11/17/2015	11:40:04	00d	00:10.0	53	63	55.1	52.4	-.-	54.3	53.6	53	52.7	52.6	----	-----	199526.2	
86	11/17/2015	11:40:14	00d	00:10.0	55	65	55.9	53.6	-.-	55.6	55.5	54.8	54	53.7	----	-----	316227.8	
87	11/17/2015	11:40:24	00d	00:10.0	57	67	58.7	54.8	-.-	58.6	58.4	57.1	55.4	55.1	----	-----	501187.2	
88	11/17/2015	11:40:34	00d	00:10.0	55.5	65.5	56.5	54	-.-	56.4	56.3	55.2	54.3	54.2	----	-----	354813.4	
89	11/17/2015	11:40:44	00d	00:10.0	53.9	63.9	56.7	50.2	-.-	56.6	56.3	54.1	51.1	50.7	----	-----	245470.9	
90	11/17/2015	11:40:54	00d	00:10.0	52.1	62.1	53.3	49.9	-.-	53.1	52.8	52	50.1	50	----	-----	162181.0	
91	11/17/2015	11:41:04	00d	00:10.0	55.1	65.1	57.6	52	-.-	57.5	57.4	53.3	52.3	52.1	----	-----	323593.7	
92	11/17/2015	11:41:14	00d	00:10.0	59	69	59.8	57.6	-.-	59.6	59.5	58.8	58	58	----	-----	794328.2	
93	11/17/2015	11:41:24	00d	00:10.0	62.4	72.4	65.2	58.9	-.-	65	64.8	60.9	59.1	59	----	-----	1737800.8	
94	11/17/2015	11:41:34	00d	00:10.0	61	71	64.5	56.5	-.-	64.1	64	60.9	57.7	57	----	-----	1258925.4	
95	11/17/2015	11:41:44	00d	00:10.0	56.2	66.2	56.7	55.1	-.-	56.7	56.6	56.2	55.3	55.2	----	-----	416869.4	
96	11/17/2015	11:41:54	00d	00:10.0	59.2	69.2	59.9	56.7	-.-	59.8	59.7	59.1	57.9	57.6	----	-----	831763.8	
97	11/17/2015	11:42:04	00d	00:10.0	60	70	61.7	58.7	-.-	61.6	61.4	59.6	58.9	58.8	----	-----	1000000.0	
98	11/17/2015	11:42:14	00d	00:10.0	58.8	68.8	60.1	55.8	-.-	59.9	59.8	59.3	56.8	56.3	----	-----	758577.6	
99	11/17/2015	11:42:24	00d	00:10.0	53.8	63.8	55.8	52.4	-.-	55.2	54.9	53.9	52.6	52.5	----	-----	239883.3	
100	11/17/2015	11:42:34	00d	00:10.0	57.1	67.1	58.6	54.9	-.-	58.5	58.4	57	55.3	55.1	----	-----	512861.4	
101	11/17/2015	11:42:44	00d	00:10.0	52.6	62.6	54.9	49.3	-.-	54.7	54.3	53.4	50.3	49.8	----	-----	181970.1	
102	11/17/2015	11:42:54	00d	00:10.0	47.9	57.9	49.3	47.3	-.-	48.9	48.7	48.1	47.5	47.4	----	-----	61659.5	
103	11/17/2015	11:43:04	00d	00:10.0	51.1	61.1	55.3	47.1	-.-	54.3	53.4	48.4	47.2	47.2	----	-----	128825.0	
104	11/17/2015	11:43:14	00d	00:10.0	59	69	60.4	55.3	-.-	60.3	60.3	58.8	57.5	56.9	----	-----	794328.2	
105	11/17/2015	11:43:24	00d	00:10.0	60.5	70.5	63.6	55.8	-.-	63.5	63.3	60	56	55.9	----	-----	1122018.5	
106	11/17/2015	11:43:34	00d	00:10.0	56.1	66.1	58.3	54	-.-	57.3	56.7	55.9	54.3	54.1	----	-----	407380.3	
107	11/17/2015	11:43:44	00d	00:10.0	65.1	75.1	69.3	58.3	-.-	69.2	68.7	62.3	59.8	59.1	----	-----	3235936.6	
108	11/17/2015	11:43:54	00d	00:10.0	61.1	71.1	65.8	60.4	-.-	64.7	63.7	61.3	60.7	60.6	----	-----	1288249.6	
109	11/17/2015	11:44:04	00d	00:10.0	59.2	69.2	61.8	57.4	-.-	61.3	60.6	58.6	57.6	57.5	----	-----	831763.8	
110	11/17/2015	11:44:14	00d	00:10.0	58.5	68.5	62.3	56	-.-	62.3	62.1	57.5	56.2	56.2	----	-----	707945.8	
111	11/17/2015	11:44:24	00d	00:10.0	55.1	65.1	56.8	53.1	-.-	56.7	56.7	55.5	53.3	53.2	----	-----	323593.7	
112	11/17/2015	11:44:34	00d	00:10.0	55.7	65.7	57.4	52.4	-.-	57.3	57.2	54.9	52.6	52.5	----	-----	371535.2	
113	11/17/2015	11:44:44	00d	00:10.0	51	61	56.7	47.3	-.-	56.4	56	50.5	47.6	47.4	----	-----	125892.5	
114	11/17/2015	11:44:54	00d	00:10.0	53.2	63.2	56	47.2	-.-	56	55.8	52.1	47.3	47.3	----	-----	208929.6	
115	11/17/2015	11:45:04	00d	00:10.0	51.5	61.5	54.9	50.6	-.-	53.8	52.7	52	50.7	50.7	----	-----	141253.8	
116	11/17/2015	11:45:14	00d	00:10.0	54.4	64.4	55.9	50.5	-.-	55.7	55.2	54.6	51	50.6	----	-----	275422.9	
117	11/17/2015	11:45:24	00d	00:10.0	59.8	69.8	62.1	55.8	-.-	62	61.7	58.7	56	55.9	----	-----	954992.6	
118	11/17/2015	11:45:34	00d	00:10.0	60.8	70.8	63	59.2	-.-	62.9	62.7	60.6	59.4	59.3	----	-----	1202264.4	
119	11/17/2015	11:45:44	00d	00:10.0	58.6	68.6	60.2	56.9	-.-	60	59.7	58.6	57	56.9	----	-----	724436.0	
120	11/17/2015	11:45:54	00d	00:10.0	56.9	66.9	60.3	55.5	-.-	60.2	60.2	56.3	55.7	55.6	----	-----	489778.8	
121	11/17/2015	11:46:04	00d	00:10.0	57.2	67.2	58.2	56	-.-	58.1	58	56.9	56.2	56.2	----	-----	524807.5	
122	11/17/2015	11:46:14	00d	00:10.0	55.7	65.7	57.6	54	-.-	57.6	57.4	55.9	54.1	54	----	-----	371535.2	
123	11/17/2015	11:46:24	00d	00:10.0	54	64	54.5	53.2	-.-	54.4	54.4	54.1	53.4	53.3	----	-----	251188.6	
124	11/17/2015	11:46:34	00d	00:10.0	54.6	64.6	57.1	52.9	-.-	56.8	56.3	53.5	53	53	----	-----	288403.2	
125	11/17/2015	11:46:44	00d	00:10.0	59.2	69.2	60	57.1	-.-	59.8	59.7	59.2	57.7	57.4	----	-----	831763.8	
126	11/17/2015	11:46:54	00d	00:10.0	57.5	67.5	59.8	54.9	-.-	59.6	59.5	57.5	55.1	55	----	-----	562341.3	
127	11/17/2015	11:47:04	00d	00:10.0	57.2	67.2	58.3	55	-.-	58.1	58	57.3	55.5	55.2	----	-----	524807.5	
128	11/17/2015	11:47:14	00d	00:10.0	59.3	69.3	62	55.1	-.-	61.8	61.7	57.6	55.5	55.5	----	-----	851138.0	
129	11/17/2015	11:47:24	00d	00:10.0	60.4	70.4	61.6	58.8	-.-	61.5	61.4	60.8	58.9	58.9	----	-----	1096478.2	
130	11/17/2015	11:47:34	00d	00:10.0	58.9	68.9	59.7	58.1	-.-	59.6	59.5	59	58.3	58.2	----	-----	776247.1	
131	11/17/2015	11:47:44	00d	00:10.0	60.1	70.1	61.2	58.9	-.-	61.1	61	59.7	59	58.9	----	-----	1023293.0	
132	11/17/2015	11:47:54	00d	00:10.0	58.7	68.7	60.9	57	-.-	60.8	60.8	58.4	57.1	57.1	----	-----	741310.2	
133	11/17/2015	11:48:04	00d	00:10.0	57.8	67.8	59.2	56.1	-.-	59.1	59	58.1	56.6	56.2	----	-----	602559.6	
134	11/17/2015	11:48:14	00d	00:10.0	55.8	65.8	56.6	55.1	-.-	56.5	56.4	55.9	55.2	55.2	----	-----	380189.4	
135	11/17/2015	11:48:24	00d	00:10.0	54	64	55.2	52.8	-.-	54.9	54.8	54.5	53.1	53.1	----	-----	251188.6	
136	11/17/2015	11:48:34	00d	00:10.0	52.6	62.6	55.1	50	-.-	54.6	53.9	52.2	50.1	50	----	-----	181970.1	
137	11/17/2015	11:48:44	00d	00:10.0	55.4	65.4	56.2	54.6	-.-	56.1	56.1	55.3	54.7	54.7	----	-----	346736.9	
138	11/17/2015	11:48:54	00d	00:10.0	53.9	63.9	55.2	51.7	-.-	55.1	55	54.7	52.2	52	----	-----	245470.9	
139	11/17/2015	11:49:04	00d	00:10.0	56.1	66.1	58.3	51.6	-.-	58.2	58.1	54.9	51.8	51.7	----	-----	407380.3	
140	11/17/2015	11:49:14	00d	00:10.0	56.8	66.8	58.6	54.8	-.-	58.3	58.1	56.6	54.9	54.9	----	-----	478630.1	
141	11/17/2015	11:49:24	00d	00:10.0	58.9	68.9	59.3	58.4	-.-	59.2	59.2	59	58.6	58.6	----	-----	776247.1	
142	11/17/2015	11:49:34	00d	00:10.0	59.5	69.5	61.1	57.2	-.-	61	60.9	59.8	57.5	57.3	----	-----	891250.9	
143	11/17/2015	11:49:44	00d	00:10.0	60.3	70.3	61.5	59.5	-.-	61.3	61.1	60.2	59.6	59.5	----	-----	1071519.3	
144	11/17/2015	11:49:54	00d	00:10.0	59.4	69.4	61	58.3	-.-	60.5	60.1	59.3	58.4	58.4	----	-----	870963.6	
145	11/17/2015	11:50:04	00d	00:10.0	58	68	61.3	54.1	-.-	61.1	61	58	54.2	54.2	----	-----	630957.3	
146	11/17/2015	11:50:14	00d	00:10.0	56.1	66.1	57.1	54.1	-.-	57	56.9	56.4	54.6	54.2	----	-----	407380.3	
147	11/17/2015	11:50:24	00d	00:10.0	54.5	64.5	56.6	52.8	-.-	56.2	55.8	54	53	52.9	----	-----	281838.3	
148	11/17/2015	11:50:34	00d	00:10.0	59.8	69.8	62.1	55.6	-.-	62	62	59.3	57.1	56.6	----	-----	954992.6	
149	11/17/2015	11:50:44	00d	00:10.0	58.3	68.3	60	54.5	-.-	59.9	59.6	58.3	54.7	54.6	----	-----	676083.0	
150	11/17/2015	11:50:54	00d	00:10.0	58.3	68.3	59.4	57.2	-.-	59.3	59.3	58.2	57.5	57.3	----	-----	676083.0	
151	11/17/2015	11:51:04	00d	00:10.0	54.4	64.4	59	51	-.-	58.7	58	54.3	51.4	51.2	----	-----	275422.9	
152	11/17/2015	11:51:14	00d	00:10.0	56.9	66.9	58.3	52.7	-.-	58.3	58.2	55.6	54.3	53.4	----	-----	489778.8	
153	11/17/2015	11:51:24	00d	00:10.0	59.4	69.4	61.1	56.1	-.-	61	60.9	59	56.3	56.2	----	-----	870963.6	
154	11/17/2015	11:51:34	00d	00:10.0	62.9	72.9	66.8	59.7	-.-	66.4	66.3	60.9	59.8	59.8	----	-----	1949844.6	
155	11/17/2015	11:51:44	00d	00:10.0	62	72	64.8	60.9	-.-	64.1	64	62.1	61.1	61	----	-----	1584893.2	
156	11/17/2015	11:51:54	00d	00:10.0	56	66	61	54.4	-.-	60.3	59.7	55.5	54.6	54.5	----	-----	398107.2	
157	11/17/2015	11:52:04	00d	00:10.0	58.8	68.8	61.3	55.9	-.-	61.1	61.1	57.6	56.1	56	----	-----	758577.6	
158	11/17/2015	11:52:14	00d	00:10.0	57.7	67.7	58.9	56.6	-.-	58.5	58.3	57.9	56.8	56.7	----	-----	588843.7	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R9																		58.1
159	11/17/2015	11:52:24	00d	00:10.0	54.3	64.3	57.6	51.5	-.-	57.2	57.1	53.8	51.7	51.6	----	-----	269153.5	
160	11/17/2015	11:52:34	00d	00:10.0	52.8	62.8	53.8	51.6	-.-	53.6	53.5	52.9	51.9	51.7	----	-----	190546.1	
161	11/17/2015	11:52:44	00d	00:10.0	54.3	64.3	54.8	53.3	-.-	54.7	54.7	54.4	53.8	53.7	----	-----	269153.5	
162	11/17/2015	11:52:54	00d	00:10.0	56.4	66.4	60	53	-.-	59.4	59	54.6	53.2	53.1	----	-----	436515.8	
163	11/17/2015	11:53:04	00d	00:10.0	60.5	70.5	63.8	54.5	-.-	63.7	63.5	60.4	55.4	54.8	----	-----	1122018.5	
164	11/17/2015	11:53:14	00d	00:10.0	56.6	66.6	57.5	54.5	-.-	57.5	57.4	56.8	54.9	54.8	----	-----	457088.2	
165	11/17/2015	11:53:24	00d	00:10.0	63	73	66.2	55.9	-.-	66	65.7	60.9	56.4	56.1	----	-----	1995262.3	
166	11/17/2015	11:53:34	00d	00:10.0	60.8	70.8	65	59.4	-.-	64.7	64.6	59.9	59.5	59.4	----	-----	1202264.4	
167	11/17/2015	11:53:44	00d	00:10.0	59	69	60	57.9	-.-	59.8	59.7	59	58.1	58	----	-----	794328.2	
168	11/17/2015	11:53:54	00d	00:10.0	60.6	70.6	61	59.2	-.-	60.9	60.9	60.6	60	59.7	----	-----	1148153.6	
169	11/17/2015	11:54:04	00d	00:10.0	56	66	59.4	55.3	-.-	58.9	58.3	56	55.4	55.4	----	-----	398107.2	
170	11/17/2015	11:54:14	00d	00:10.0	55.7	65.7	57.2	53.9	-.-	57.1	57	55.9	54.2	54.1	----	-----	371535.2	
171	11/17/2015	11:54:24	00d	00:10.0	54.4	64.4	55.4	53.6	-.-	55.3	55.2	54	53.6	53.6	----	-----	275422.9	
172	11/17/2015	11:54:34	00d	00:10.0	52.4	62.4	55.3	50.9	-.-	55.1	54.8	52	51.2	51.1	----	-----	173780.1	
173	11/17/2015	11:54:44	00d	00:10.0	52.4	62.4	55.2	49.5	-.-	55.1	55	50.8	49.8	49.7	----	-----	173780.1	
174	11/17/2015	11:54:54	00d	00:10.0	52.2	62.2	54.7	51.5	-.-	53.7	53	52.4	51.6	51.5	----	-----	165958.7	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R10																		62.9
107	11/17/2015	11:40:09	00d	00:10.0	65.6	75.6	67.3	63.2	-.-	67.2	67.1	65.7	63.8	63.5	----	-----	3630780.5	
108	11/17/2015	11:40:19	00d	00:10.0	59.3	69.3	63.2	57.5	-.-	62.7	62.3	59.5	58.4	57.8	----	-----	851138.0	
109	11/17/2015	11:40:29	00d	00:10.0	59.8	69.8	61.4	56.4	-.-	61.3	61.2	59.4	57	56.6	----	-----	954992.6	
110	11/17/2015	11:40:39	00d	00:10.0	63.6	73.6	66.5	57.1	-.-	66.4	66.3	60.8	57.3	57.2	----	-----	2290867.7	
111	11/17/2015	11:40:49	00d	00:10.0	64.7	74.7	66.4	64	-.-	66.1	65.8	64.6	64.2	64.1	----	-----	2951209.2	
112	11/17/2015	11:40:59	00d	00:10.0	66	76	67.5	64.3	-.-	67.4	67.3	65.9	64.6	64.5	----	-----	3981071.7	
113	11/17/2015	11:41:09	00d	00:10.0	63.2	73.2	64.6	61.3	-.-	64.3	64.3	64	61.5	61.4	----	-----	2089296.1	
114	11/17/2015	11:41:19	00d	00:10.0	60.1	70.1	61.8	58.8	-.-	61.7	61.5	60.2	59	58.9	----	-----	1023293.0	
115	11/17/2015	11:41:29	00d	00:10.0	62.1	72.1	63.1	58.8	-.-	63	62.9	62.4	59	58.9	----	-----	1621810.1	
116	11/17/2015	11:41:39	00d	00:10.0	62.2	72.2	63.3	59.8	-.-	63.2	63.2	62.5	60.2	60	----	-----	1659586.9	
117	11/17/2015	11:41:49	00d	00:10.0	61.8	71.8	63	59.7	-.-	62.9	62.9	62.1	60	59.9	----	-----	1513561.2	
118	11/17/2015	11:41:59	00d	00:10.0	63.6	73.6	65.2	60.3	-.-	65.1	64.9	63.5	60.7	60.5	----	-----	2290867.7	
119	11/17/2015	11:42:09	00d	00:10.0	63.8	73.8	64.9	62.3	-.-	64.8	64.8	63.7	62.5	62.4	----	-----	2398832.9	
120	11/17/2015	11:42:19	00d	00:10.0	62	72	63.8	58.8	-.-	63.6	63.4	62.8	59.2	59	----	-----	1584893.2	
121	11/17/2015	11:42:29	00d	00:10.0	64.4	74.4	65.1	60.9	-.-	65	64.9	64.5	63.2	62.3	----	-----	2754228.7	
122	11/17/2015	11:42:39	00d	00:10.0	64	74	66.9	61.2	-.-	66.8	66.7	62.5	61.7	61.5	----	-----	2511886.4	
123	11/17/2015	11:42:49	00d	00:10.0	63.5	73.5	66.8	62	-.-	66.5	66.1	63.2	62.2	62.1	----	-----	2238721.1	
124	11/17/2015	11:42:59	00d	00:10.0	60.6	70.6	62.9	58.5	-.-	62.8	62.8	59.9	58.9	58.8	----	-----	1148153.6	
125	11/17/2015	11:43:09	00d	00:10.0	59.3	69.3	60.6	57.5	-.-	60.5	60.5	59.2	57.7	57.6	----	-----	851138.0	
126	11/17/2015	11:43:19	00d	00:10.0	64.4	74.4	66	60.5	-.-	65.9	65.8	64.6	61.8	61.4	----	-----	2754228.7	
127	11/17/2015	11:43:29	00d	00:10.0	60.7	70.7	62.2	59.3	-.-	62.1	62	60.6	59.6	59.4	----	-----	1174897.6	
128	11/17/2015	11:43:39	00d	00:10.0	61.6	71.6	63.8	59.9	-.-	63.7	63.2	61	60.1	60	----	-----	1445439.8	
129	11/17/2015	11:43:49	00d	00:10.0	60.8	70.8	61.8	60.2	-.-	61.7	61.7	60.6	60.3	60.3	----	-----	1202264.4	
130	11/17/2015	11:43:59	00d	00:10.0	60.1	70.1	63.2	56.2	-.-	63	63	59.5	56.4	56.4	----	-----	1023293.0	
131	11/17/2015	11:44:09	00d	00:10.0	62.2	72.2	65	59.4	-.-	64.2	63.5	60.9	59.7	59.6	----	-----	1659586.9	
132	11/17/2015	11:44:19	00d	00:10.0	65.4	75.4	66.2	63.4	-.-	66.1	66	65.7	64.5	64	----	-----	3467368.5	
133	11/17/2015	11:44:29	00d	00:10.0	63.9	73.9	65.5	61.7	-.-	65.4	65.3	63.9	62.2	61.9	----	-----	2454708.9	
134	11/17/2015	11:44:39	00d	00:10.0	63.1	73.1	66	60.5	-.-	65.8	65.3	61.8	60.8	60.6	----	-----	2041737.9	
135	11/17/2015	11:44:49	00d	00:10.0	63.1	73.1	66.1	60.7	-.-	65.9	65.7	63.4	61.6	61.1	----	-----	2041737.9	
136	11/17/2015	11:44:59	00d	00:10.0	60.9	70.9	62.1	59.8	-.-	62	61.9	60.6	60.3	60	----	-----	1230268.8	
137	11/17/2015	11:45:09	00d	00:10.0	58.7	68.7	61.2	57.2	-.-	60.8	60.2	58.7	57.4	57.3	----	-----	741310.2	
138	11/17/2015	11:45:19	00d	00:10.0	56.8	66.8	59.7	54.4	-.-	59.6	59.4	56.7	55.4	54.8	----	-----	478630.1	
139	11/17/2015	11:45:29	00d	00:10.0	53.6	63.6	55.5	52.2	-.-	55.2	54.8	53.2	52.5	52.3	----	-----	229086.8	
140	11/17/2015	11:45:39	00d	00:10.0	58.5	68.5	61.5	54.6	-.-	61.3	61.2	56.8	54.7	54.7	----	-----	707945.8	
141	11/17/2015	11:45:49	00d	00:10.0	63.5	73.5	64.9	60.9	-.-	64.8	64.6	63.4	61.1	61	----	-----	2238721.1	
142	11/17/2015	11:45:59	00d	00:10.0	64.7	74.7	66.9	62.7	-.-	66.7	66.5	64.3	63.2	62.9	----	-----	2951209.2	
143	11/17/2015	11:46:09	00d	00:10.0	63.6	73.6	65.6	61	-.-	65.5	65.5	62.7	61.2	61.1	----	-----	2290867.7	
144	11/17/2015	11:46:19	00d	00:10.0	65.8	75.8	67.2	64.3	-.-	67.1	66.9	65.6	64.5	64.4	----	-----	3801894.0	
145	11/17/2015	11:46:29	00d	00:10.0	66.5	76.5	67.2	65.3	-.-	67.1	67	66.5	66	65.9	----	-----	4466835.9	
146	11/17/2015	11:46:39	00d	00:10.0	63.5	73.5	66.7	59.8	-.-	66.5	66.3	63	61.1	60.6	----	-----	2238721.1	
147	11/17/2015	11:46:49	00d	00:10.0	60.5	70.5	62.4	56.5	-.-	62.3	62.2	60.4	56.8	56.7	----	-----	1122018.5	
148	11/17/2015	11:46:59	00d	00:10.0	62.4	72.4	63.7	61.3	-.-	63.5	63	62.3	61.5	61.4	----	-----	1737800.8	
149	11/17/2015	11:47:09	00d	00:10.0	65.5	75.5	68.8	61.2	-.-	68.3	67.7	64.1	61.6	61.4	----	-----	3548133.9	
150	11/17/2015	11:47:19	00d	00:10.0	66.7	76.7	70.1	64.2	-.-	70	69.9	65.6	64.4	64.2	----	-----	4677351.4	
151	11/17/2015	11:47:29	00d	00:10.0	60.7	70.7	64.7	58.4	-.-	64.7	64.5	60.2	58.8	58.6	----	-----	1174897.6	
152	11/17/2015	11:47:39	00d	00:10.0	62.4	72.4	64.6	58.4	-.-	64.5	64.2	62	59.5	58.6	----	-----	1737800.8	
153	11/17/2015	11:47:49	00d	00:10.0	65.2	75.2	67.8	60.8	-.-	67.7	67.5	63.1	61.9	61.2	----	-----	3311311.2	
154	11/17/2015	11:47:59	00d	00:10.0	63	73	66.3	60	-.-	66	65.7	63.5	60.7	60.4	----	-----	1995262.3	
155	11/17/2015	11:48:09	00d	00:10.0	64	74	64.9	60	-.-	64.8	64.8	64.1	60.7	60.2	----	-----	2511886.4	
156	11/17/2015	11:48:19	00d	00:10.0	62.3	72.3	64.2	60.1	-.-	64	63.9	62.6	60.3	60.3	----	-----	1698243.7	
157	11/17/2015	11:48:29	00d	00:10.0	64.6	74.6	65.6	62	-.-	65.5	65.4	65	62.3	62.2	----	-----	2884031.5	
158	11/17/2015	11:48:39	00d	00:10.0	62.7	72.7	64.4	59.1	-.-	64.3	64.2	62.9	59.4	59.2	----	-----	1862087.1	
159	11/17/2015	11:48:49	00d	00:10.0	63	73	64.9	61.7	-.-	64.8	64.8	62.6	62.2	62	----	-----	1995262.3	
160	11/17/2015	11:48:59	00d	00:10.0	60.2	70.2	61.7	58.8	-.-	61.3	61.2	60.2	59	58.9	----	-----	1047128.5	
161	11/17/2015	11:49:09	00d	00:10.0	60.6	70.6	61.9	59.9	-.-	61.8	61.7	60.3	60.1	60	----	-----	1148153.6	
162	11/17/2015	11:49:19	00d	00:10.0	68.5	78.5	71.9	60.1	-.-	71.8	71.6	64.8	60.6	60.3	----	-----	7079457.8	
163	11/17/2015	11:49:29	00d	00:10.0	63.4	73.4	71.3	60.9	-.-	70.7	69.4	62.5	61.4	61.3	----	-----	2187761.6	
164	11/17/2015	11:49:39	00d	00:10.0	58.6	68.6	60.9	54.5	-.-	60.7	60.4	59.3	56.1	55.3	----	-----	724436.0	
165	11/17/2015	11:49:49	00d	00:10.0	61.4	71.4	63.9	54.1	-.-	63.7	63.6	60.6	54.2	54.1	----	-----	1380384.3	
166	11/17/2015	11:49:59	00d	00:10.0	64.4	74.4	65	63.4	-.-	64.9	64.8	64.4	63.7	63.5	----	-----	2754228.7	
167	11/17/2015	11:50:09	00d	00:10.0	63.5	73.5	64.3	62.7	-.-	64.3	64.2	63.2	62.9	62.8	----	-----	2238721.1	
168	11/17/2015	11:50:19	00d	00:10.0	64.5	74.5	65.3	63.7	-.-	65.2	65.2	64.5	63.9	63.8	----	-----	2818382.9	
169	11/17/2015	11:50:29	00d	00:10.0	61.6	71.6	64.2	60.5	-.-	63.6	63.5	61.6	60.8	60.7	----	-----	1445439.8	
170	11/17/2015	11:50:39	00d	00:10.0	63.1	73.1	64.8	61.5	-.-	64.7	64.4	63	61.8	61.7	----	-----	2041737.9	
171	11/17/2015	11:50:49	00d	00:10.0	61.4	71.4	62.6	59.7	-.-	62.5	62.3	61.7	60.1	59.9	----	-----	1380384.3	
172	11/17/2015	11:50:59	00d	00:10.0	64.1	74.1	66	61.3	-.-	65.8	65.6	63.6	62.6	62.4	----	-----	2570395.8	
173	11/17/2015	11:51:09	00d	00:10.0	63.1	73.1	64.4	61.7	-.-	64.4	64.2	63.1	61.9	61.8	----	-----	2041737.9	
174	11/17/2015	11:51:19	00d	00:10.0	63.3	73.3	65.4	60.5	-.-	64.9	64.1	63.2	61	60.8	----	-----	2137962.1	
175	11/17/2015	11:51:29	00d	00:10.0	58.4	68.4	64.4	53.9	-.-	63.3	62.5	58.1	54.4	54.1	----	-----	691831.0	
176	11/17/2015	11:51:39	00d	00:10.0	58.7	68.7	61.8	53.3	-.-	61.7	61.6	57.5	53.6	53.4	----	-----	741310.2	
177	11/17/2015	11:51:49	00d	00:10.0	63.6	73.6	64.7	61.5	-.-	64.6	64.6	63.1	62.2	61.8	----	-----	2290867.7	
178	11/17/2015	11:51:59	00d	00:10.0	61.8	71.8	64.1	58.4	-.-	64	63.9	62	59.4	58.8	----	-----	1513561.2	
179	11/17/2015	11:52:09	00d	00:10.0	60.1	70.1	63.8	54.7	-.-	63.2	62.8	58.5	55.1	54.8	----	-----	1023293.0	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R10																		62.9
180	11/17/2015	11:52:19	00d	00:10.0	61.5	71.5	64.5	59.4	-.-	64.4	64.3	60.8	59.7	59.6	----	-----	1412537.5	
181	11/17/2015	11:52:29	00d	00:10.0	64.5	74.5	67.1	60.4	-.-	66.6	65.9	62.9	60.7	60.5	----	-----	2818382.9	
182	11/17/2015	11:52:39	00d	00:10.0	65.7	75.7	68.5	59.4	-.-	68.4	68.3	66.6	60.8	60.2	----	-----	3715352.3	
183	11/17/2015	11:52:49	00d	00:10.0	58.3	68.3	60.1	57.1	-.-	60	59.8	58.2	57.4	57.3	----	-----	676083.0	
184	11/17/2015	11:52:59	00d	00:10.0	59	69	59.9	57.6	-.-	59.8	59.7	59	58	57.9	----	-----	794328.2	
185	11/17/2015	11:53:09	00d	00:10.0	57	67	58	55.4	-.-	57.7	57.5	57.2	55.8	55.6	----	-----	501187.2	
186	11/17/2015	11:53:19	00d	00:10.0	59	69	59.3	57.4	-.-	59.3	59.2	58.9	58.1	57.9	----	-----	794328.2	
187	11/17/2015	11:53:29	00d	00:10.0	61.2	71.2	62.7	59.2	-.-	62.6	62.4	60.9	60	59.4	----	-----	1318256.7	
188	11/17/2015	11:53:39	00d	00:10.0	59.4	69.4	62.2	54.9	-.-	62.2	61.8	58.9	55.2	55	----	-----	870963.6	
189	11/17/2015	11:53:49	00d	00:10.0	64.4	74.4	66.3	61.1	-.-	66.2	66.2	64.4	61.4	61.3	----	-----	2754228.7	
190	11/17/2015	11:53:59	00d	00:10.0	63.5	73.5	64.8	58.9	-.-	64.7	64.7	64.3	59.3	59.1	----	-----	2238721.1	
191	11/17/2015	11:54:09	00d	00:10.0	64.1	74.1	65.9	62.1	-.-	65.8	65.7	64.2	62.3	62.2	----	-----	2570395.8	
192	11/17/2015	11:54:19	00d	00:10.0	62.5	72.5	64.6	60.4	-.-	63.9	63.7	63	61	60.6	----	-----	1778279.4	
193	11/17/2015	11:54:29	00d	00:10.0	63.2	73.2	64	62.3	-.-	64	63.8	63.2	62.4	62.3	----	-----	2089296.1	
194	11/17/2015	11:54:39	00d	00:10.0	61.7	71.7	63.5	60.8	-.-	63.3	63.1	61.6	61.1	60.9	----	-----	1479108.4	
195	11/17/2015	11:54:49	00d	00:10.0	62	72	63.2	61	-.-	63.1	63	61.9	61.1	61.1	----	-----	1584893.2	
196	11/17/2015	11:54:59	00d	00:10.0	60.5	70.5	61.6	59.7	-.-	61.4	61.3	60.4	59.8	59.8	----	-----	1122018.5	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R11																		63.4
12	11/17/2015	11:40:05	00d	00:10.0	66.5	76.5	69.5	61.9	-.-	69.4	69.4	65.9	62.3	61.5	----	-----	4466835.9	
13	11/17/2015	11:40:15	00d	00:10.0	64.3	74.3	66.2	62.2	-.-	66.3	66.3	64.4	62	61.9	----	-----	2691534.8	
14	11/17/2015	11:40:25	00d	00:10.0	62.6	72.6	63.1	62	-.-	63.1	63.1	62.6	62.1	61.9	----	-----	1819700.9	
15	11/17/2015	11:40:35	00d	00:10.0	62	72	64.2	60	-.-	64.5	64.5	61.6	60	60	----	-----	1584893.2	
16	11/17/2015	11:40:45	00d	00:10.0	62.8	72.8	63.9	60.9	-.-	64.2	64.2	63.2	60.9	60.5	----	-----	1905460.7	
17	11/17/2015	11:40:55	00d	00:10.0	61.5	71.5	64.2	60	-.-	64	64	60.8	60.2	59.1	----	-----	1412537.5	
18	11/17/2015	11:41:05	00d	00:10.0	62.7	72.7	66	57.3	-.-	66.3	66.3	61.6	57.4	56.7	----	-----	1862087.1	
19	11/17/2015	11:41:15	00d	00:10.0	62.6	72.6	66.1	58.8	-.-	66.1	66.1	62.7	60	57	----	-----	1819700.9	
20	11/17/2015	11:41:25	00d	00:10.0	57.9	67.9	60.9	55.1	-.-	61.9	61.9	57.7	55	54.7	----	-----	616595.0	
21	11/17/2015	11:41:35	00d	00:10.0	59.3	69.3	60.5	58.4	-.-	60.7	60.7	59.4	58.4	58	----	-----	851138.0	
22	11/17/2015	11:41:45	00d	00:10.0	60.2	70.2	62.6	58.4	-.-	63	63	59.2	58.7	58.5	----	-----	1047128.5	
23	11/17/2015	11:41:55	00d	00:10.0	65.8	75.8	66.7	62.6	-.-	67	67	65.8	64.8	63.6	----	-----	3801894.0	
24	11/17/2015	11:42:05	00d	00:10.0	64.9	74.9	67.4	63	-.-	67.6	67.6	64.5	62.9	62.1	----	-----	3090295.4	
25	11/17/2015	11:42:15	00d	00:10.0	64.6	74.6	66.1	61.8	-.-	66.3	66.3	65.3	61.8	61.8	----	-----	2884031.5	
26	11/17/2015	11:42:25	00d	00:10.0	69.9	79.9	73.8	64.5	-.-	74.5	74.5	68.4	64.7	64.1	----	-----	9772372.2	
27	11/17/2015	11:42:35	00d	00:10.0	64.8	74.8	66.1	63.5	-.-	66.6	66.6	64.5	64	63.5	----	-----	3019951.7	
28	11/17/2015	11:42:45	00d	00:10.0	62.6	72.6	65.4	61.7	-.-	63.8	63.8	62.6	61.6	61.2	----	-----	1819700.9	
29	11/17/2015	11:42:55	00d	00:10.0	62.8	72.8	64.3	59.8	-.-	64.4	64.4	63.3	60	59.1	----	-----	1905460.7	
30	11/17/2015	11:43:05	00d	00:10.0	60.9	70.9	62.8	57.9	-.-	63	63	61.4	57.9	57.8	----	-----	1230268.8	
31	11/17/2015	11:43:15	00d	00:10.0	61	71	63.1	57.7	-.-	63.5	63.5	60.9	57.5	57.3	----	-----	1258925.4	
32	11/17/2015	11:43:25	00d	00:10.0	58.9	68.9	61.3	55.9	-.-	61.9	61.9	58.4	55.9	55.8	----	-----	776247.1	
33	11/17/2015	11:43:35	00d	00:10.0	60.9	70.9	63.4	59.1	-.-	64	64	60.3	58.8	57.5	----	-----	1230268.8	
34	11/17/2015	11:43:45	00d	00:10.0	61.4	71.4	63.3	58.1	-.-	63.8	63.8	60.8	58.7	57.8	----	-----	1380384.3	
35	11/17/2015	11:43:55	00d	00:10.0	63.5	73.5	65.1	61.7	-.-	65.4	65.4	63.3	61.7	61	----	-----	2238721.1	
36	11/17/2015	11:44:05	00d	00:10.0	64.8	74.8	68.3	60.3	-.-	68.6	68.6	63.6	60.3	59.6	----	-----	3019951.7	
37	11/17/2015	11:44:15	00d	00:10.0	60.7	70.7	68.7	52.5	-.-	66.9	66.9	59.4	52.2	52	----	-----	1174897.6	
38	11/17/2015	11:44:25	00d	00:10.0	64.2	74.2	66.4	52.1	-.-	66.5	66.5	65.4	54.8	53.1	----	-----	2630268.0	
39	11/17/2015	11:44:35	00d	00:10.0	64.6	74.6	66.1	63.1	-.-	66.2	66.2	64.9	63	62.7	----	-----	2884031.5	
40	11/17/2015	11:44:45	00d	00:10.0	63.7	73.7	66.5	61.2	-.-	66.5	66.5	63.6	61.3	60.2	----	-----	2344228.8	
41	11/17/2015	11:44:55	00d	00:10.0	61.4	71.4	65.6	52.8	-.-	65.4	65.4	59.1	52.5	52.2	----	-----	1380384.3	
42	11/17/2015	11:45:05	00d	00:10.0	60.7	70.7	63.2	52.4	-.-	63.3	63.3	62.1	54.2	52.4	----	-----	1174897.6	
43	11/17/2015	11:45:15	00d	00:10.0	62.8	72.8	64.1	61.5	-.-	64.4	64.4	62.6	61.7	61.2	----	-----	1905460.7	
44	11/17/2015	11:45:25	00d	00:10.0	63.4	73.4	65.9	60.5	-.-	65.7	65.7	63.4	60.4	60.1	----	-----	2187761.6	
45	11/17/2015	11:45:35	00d	00:10.0	63.2	73.2	65.2	61.1	-.-	65.1	65.1	63.5	61	60.7	----	-----	2089296.1	
46	11/17/2015	11:45:45	00d	00:10.0	61.8	71.8	63.2	60.1	-.-	63.6	63.6	61.9	60	59.8	----	-----	1513561.2	
47	11/17/2015	11:45:55	00d	00:10.0	65.1	75.1	66.5	62.9	-.-	66.9	66.9	65	63.7	63.2	----	-----	3235936.6	
48	11/17/2015	11:46:05	00d	00:10.0	64.6	74.6	65.3	63.6	-.-	65.6	65.6	64.6	64.1	62.5	----	-----	2884031.5	
49	11/17/2015	11:46:15	00d	00:10.0	64.7	74.7	66.1	62.9	-.-	66.4	66.4	64.5	63.4	62.6	----	-----	2951209.2	
50	11/17/2015	11:46:25	00d	00:10.0	65.7	75.7	66.4	64.5	-.-	66.6	66.6	66	64.4	64.2	----	-----	3715352.3	
51	11/17/2015	11:46:35	00d	00:10.0	66.8	76.8	68.6	64.8	-.-	68.8	68.8	66.9	64.9	64.1	----	-----	4786300.9	
52	11/17/2015	11:46:45	00d	00:10.0	59	69	64.8	57.4	-.-	61.6	61.6	58.5	57.7	56.5	----	-----	794328.2	
53	11/17/2015	11:46:55	00d	00:10.0	58.5	68.5	60.7	56.6	-.-	61.1	61.1	57.7	56.7	56.4	----	-----	707945.8	
54	11/17/2015	11:47:05	00d	00:10.0	59.2	69.2	60.9	56.5	-.-	61.3	61.3	59.4	56.9	56.7	----	-----	831763.8	
55	11/17/2015	11:47:15	00d	00:10.0	56.9	66.9	60.8	55.5	-.-	59	59	57.1	55	55	----	-----	489778.8	
56	11/17/2015	11:47:25	00d	00:10.0	61.5	71.5	63.6	58.4	-.-	64.1	64.1	61.2	58.9	58.9	----	-----	1412537.5	
57	11/17/2015	11:47:35	00d	00:10.0	62.2	72.2	63.6	60.5	-.-	63.8	63.8	63	60.5	60.4	----	-----	1659586.9	
58	11/17/2015	11:47:45	00d	00:10.0	59.9	69.9	61.6	58.2	-.-	61.5	61.5	59.9	58	57.9	----	-----	977237.2	
59	11/17/2015	11:47:55	00d	00:10.0	65.5	75.5	66.4	61	-.-	66.6	66.6	65.5	64.6	63.7	----	-----	3548133.9	
60	11/17/2015	11:48:05	00d	00:10.0	65.6	75.6	67	63.6	-.-	67.4	67.4	65.9	63.8	63.3	----	-----	3630780.5	
61	11/17/2015	11:48:15	00d	00:10.0	65.5	75.5	67.3	63.9	-.-	67.3	67.3	65.3	64.3	64	----	-----	3548133.9	
62	11/17/2015	11:48:25	00d	00:10.0	66.6	76.6	67.8	64.1	-.-	68	68	66.9	65.6	64.3	----	-----	4570881.9	
63	11/17/2015	11:48:35	00d	00:10.0	67.5	77.5	68.6	66.4	-.-	68.9	68.9	67.4	66.5	66.1	----	-----	5623413.3	
64	11/17/2015	11:48:45	00d	00:10.0	64	74	67	61.5	-.-	67.1	67.1	63.2	61.8	61.3	----	-----	2511886.4	
65	11/17/2015	11:48:55	00d	00:10.0	61.3	71.3	63.5	58.1	-.-	63.9	63.9	61.1	57.7	57.6	----	-----	1348962.9	
66	11/17/2015	11:49:05	00d	00:10.0	62	72	62.9	59.5	-.-	63	63	62.3	60.3	59.1	----	-----	1584893.2	
67	11/17/2015	11:49:15	00d	00:10.0	61.6	71.6	63.8	57.8	-.-	64.1	64.1	61.1	57.7	57.3	----	-----	1445439.8	
68	11/17/2015	11:49:25	00d	00:10.0	59.1	69.1	60.6	57.8	-.-	61	61	58.7	58	58	----	-----	812830.5	
69	11/17/2015	11:49:35	00d	00:10.0	57.3	67.3	58.3	56.6	-.-	58.7	58.7	57.2	56.9	56.4	----	-----	537031.8	
70	11/17/2015	11:49:45	00d	00:10.0	56.4	66.4	58.8	54.5	-.-	59.1	59.1	56.1	54.7	54.4	----	-----	436515.8	
71	11/17/2015	11:49:55	00d	00:10.0	62.7	72.7	65.1	55	-.-	65.3	65.3	63.3	56.6	55.7	----	-----	1862087.1	
72	11/17/2015	11:50:05	00d	00:10.0	64.6	74.6	66.6	61.6	-.-	66.7	66.7	64.6	62.5	60.8	----	-----	2884031.5	
73	11/17/2015	11:50:15	00d	00:10.0	64.2	74.2	65.5	62.2	-.-	66	66	64.1	62.6	61.9	----	-----	2630268.0	
74	11/17/2015	11:50:25	00d	00:10.0	66.8	76.8	69.2	60.8	-.-	69.3	69.3	68.3	61.2	60.6	----	-----	4786300.9	
75	11/17/2015	11:50:35	00d	00:10.0	63.3	73.3	68.8	60.6	-.-	67.2	67.2	61.8	60.5	60.3	----	-----	2137962.1	
76	11/17/2015	11:50:45	00d	00:10.0	60.6	70.6	62.7	58.6	-.-	63.3	63.3	60	58.6	58.3	----	-----	1148153.6	
77	11/17/2015	11:50:55	00d	00:10.0	60.6	70.6	63.3	59.3	-.-	63.3	63.3	60.4	59.4	59.1	----	-----	1148153.6	
78	11/17/2015	11:51:05	00d	00:10.0	65.9	75.9	70.2	59.7	-.-	71	71	62.8	60.1	59.5	----	-----	3890451.4	
79	11/17/2015	11:51:15	00d	00:10.0	64.7	74.7	70	59.5	-.-	70.2	70.2	62.7	59.4	58.7	----	-----	2951209.2	
80	11/17/2015	11:51:25	00d	00:10.0	59.5	69.5	60.2	58.8	-.-	60.3	60.3	59.4	59.2	58.4	----	-----	891250.9	
81	11/17/2015	11:51:35	00d	00:10.0	59.3	69.3	62	57.8	-.-	62.6	62.6	58.6	57.8	57.7	----	-----	851138.0	
82	11/17/2015	11:51:45	00d	00:10.0	57.8	67.8	59.7	56.1	-.-	60.3	60.3	57.7	56.3	56	----	-----	602559.6	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R11																		63.4
83	11/17/2015	11:51:55	00d	00:10.0	60.5	70.5	63.5	58	-.-	64.1	64.1	59.8	57.8	57.5	----	-----	1122018.5	
84	11/17/2015	11:52:05	00d	00:10.0	64.8	74.8	65.7	63.5	-.-	66.1	66.1	64.4	64	64	----	-----	3019951.7	
85	11/17/2015	11:52:15	00d	00:10.0	60.1	70.1	64.6	59.3	-.-	61.5	61.5	60.1	59.1	59.1	----	-----	1023293.0	
86	11/17/2015	11:52:25	00d	00:10.0	63.2	73.2	65.3	60.6	-.-	65.4	65.4	62.3	61.5	60.4	----	-----	2089296.1	
87	11/17/2015	11:52:35	00d	00:10.0	65.7	75.7	67.4	63	-.-	67.5	67.5	65.2	63.1	62.8	----	-----	3715352.3	
88	11/17/2015	11:52:45	00d	00:10.0	63.5	73.5	67.5	56.3	-.-	67.2	67.2	62.4	56.3	55.6	----	-----	2238721.1	
89	11/17/2015	11:52:55	00d	00:10.0	62.6	72.6	66.7	55.6	-.-	66.8	66.8	59.5	56.5	55.2	----	-----	1819700.9	
90	11/17/2015	11:53:05	00d	00:10.0	63.5	73.5	67.8	58.8	-.-	68.2	68.2	62.4	59.1	58.8	----	-----	2238721.1	
91	11/17/2015	11:53:15	00d	00:10.0	56.3	66.3	60.3	52.3	-.-	60.5	60.5	54.6	52.2	52.1	----	-----	426579.5	
92	11/17/2015	11:53:25	00d	00:10.0	55.4	65.4	58.1	53.2	-.-	57.8	57.8	54.8	53.3	53.3	----	-----	346736.9	
93	11/17/2015	11:53:35	00d	00:10.0	62.8	72.8	64.4	57.3	-.-	64.6	64.6	62.7	62	58.3	----	-----	1905460.7	
94	11/17/2015	11:53:45	00d	00:10.0	60.9	70.9	63	59.2	-.-	63.1	63.1	60.8	59.5	59.1	----	-----	1230268.8	
95	11/17/2015	11:53:55	00d	00:10.0	65.2	75.2	66.5	60.6	-.-	67	67	65.1	64	63.1	----	-----	3311311.2	
96	11/17/2015	11:54:05	00d	00:10.0	69.1	79.1	71.7	65.6	-.-	72.2	72.2	69.3	65.7	65.4	----	-----	8128305.2	
97	11/17/2015	11:54:15	00d	00:10.0	63.5	73.5	71.1	61.6	-.-	66.2	66.2	63.4	62	61.4	----	-----	2238721.1	
98	11/17/2015	11:54:25	00d	00:10.0	62.9	72.9	64.6	61.3	-.-	64.6	64.6	62.9	61.2	60.6	----	-----	1949844.6	
99	11/17/2015	11:54:35	00d	00:10.0	61.3	71.3	63.1	59.8	-.-	63.9	63.9	61.1	59.9	59.1	----	-----	1348962.9	
100	11/17/2015	11:54:45	00d	00:10.0	60.9	70.9	62.2	59.2	-.-	62.3	62.3	61.3	59.6	58.2	----	-----	1230268.8	
101	11/17/2015	11:54:55	00d	00:10.0	59.8	69.8	61.7	56.7	-.-	61.9	61.9	60.1	57	56	----	-----	954992.6	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R12																		65.2
56	11/17/2015	11:40:03	00d	00:10.0	66.7	76.7	68.4	65.5	-.-	68.3	68.1	66.5	65.8	65.7	----	-----	4677351.4	
57	11/17/2015	11:40:13	00d	00:10.0	65.1	75.1	67.1	63.3	-.-	67	66.8	65.2	64	63.9	----	-----	3235936.6	
58	11/17/2015	11:40:23	00d	00:10.0	63	73	64.3	61.4	-.-	64.1	64.1	62.9	61.8	61.5	----	-----	1995262.3	
59	11/17/2015	11:40:33	00d	00:10.0	61.8	71.8	63.7	60.3	-.-	63.1	62.9	62.2	60.7	60.5	----	-----	1513561.2	
60	11/17/2015	11:40:43	00d	00:10.0	60.7	70.7	62.1	58.7	-.-	61.9	61.9	60.9	59.1	58.9	----	-----	1174897.6	
61	11/17/2015	11:40:53	00d	00:10.0	60.9	70.9	62.3	60	-.-	62.1	61.8	61	60.2	60.1	----	-----	1230268.8	
62	11/17/2015	11:41:03	00d	00:10.0	60.2	70.2	63.1	56.7	-.-	62.9	62.4	59.7	57.1	56.9	----	-----	1047128.5	
63	11/17/2015	11:41:13	00d	00:10.0	62.8	72.8	64.7	60.4	-.-	64.6	64.4	61.7	61.3	61	----	-----	1905460.7	
64	11/17/2015	11:41:23	00d	00:10.0	65.3	75.3	66.5	63.5	-.-	66.4	66.3	65.4	64.2	64.1	----	-----	3388441.6	
65	11/17/2015	11:41:33	00d	00:10.0	65.8	75.8	68.7	60.8	-.-	68.5	68.4	63.8	60.9	60.9	----	-----	3801894.0	
66	11/17/2015	11:41:43	00d	00:10.0	69.6	79.6	70.9	68.4	-.-	70.8	70.6	69.5	68.5	68.5	----	-----	9120108.4	
67	11/17/2015	11:41:53	00d	00:10.0	66	76	68.5	63.2	-.-	68.4	68.3	66.2	63.4	63.3	----	-----	3981071.7	
68	11/17/2015	11:42:03	00d	00:10.0	62.7	72.7	65.7	56.9	-.-	65.4	65.3	63.5	57.3	57.1	----	-----	1862087.1	
69	11/17/2015	11:42:13	00d	00:10.0	64.4	74.4	66.6	58.7	-.-	66.4	66.2	64.1	60.4	60.2	----	-----	2754228.7	
70	11/17/2015	11:42:23	00d	00:10.0	63.8	73.8	64.5	63.2	-.-	64.5	64.4	63.8	63.5	63.4	----	-----	2398832.9	
71	11/17/2015	11:42:33	00d	00:10.0	64.2	74.2	66	61	-.-	65.9	65.9	63.5	61.4	61.2	----	-----	2630268.0	
72	11/17/2015	11:42:43	00d	00:10.0	65.4	75.4	67.2	61.4	-.-	67.2	67.1	65.9	63.2	62.3	----	-----	3467368.5	
73	11/17/2015	11:42:53	00d	00:10.0	58.9	68.9	61.4	56	-.-	60.8	60.6	59.1	56.4	56.1	----	-----	776247.1	
74	11/17/2015	11:43:03	00d	00:10.0	62.6	72.6	65.2	57.8	-.-	64.9	64.7	62.5	59.4	59	----	-----	1819700.9	
75	11/17/2015	11:43:13	00d	00:10.0	57.2	67.2	59.2	55.2	-.-	59.1	58.8	56.2	55.3	55.2	----	-----	524807.5	
76	11/17/2015	11:43:23	00d	00:10.0	61.1	71.1	62.9	59.2	-.-	62.7	62.4	60.8	59.5	59.5	----	-----	1288249.6	
77	11/17/2015	11:43:33	00d	00:10.0	65.7	75.7	68.9	59.3	-.-	68.7	68.6	63.2	59.6	59.4	----	-----	3715352.3	
78	11/17/2015	11:43:43	00d	00:10.0	68.7	78.7	69.9	67.7	-.-	69.8	69.6	68.8	67.8	67.8	----	-----	7413102.4	
79	11/17/2015	11:43:53	00d	00:10.0	67.6	77.6	68.4	66.9	-.-	68.1	68	67.7	67.4	67.1	----	-----	5754399.4	
80	11/17/2015	11:44:03	00d	00:10.0	65.2	75.2	66.9	63.8	-.-	66.6	66.5	65.6	64	63.9	----	-----	3311311.2	
81	11/17/2015	11:44:13	00d	00:10.0	64.1	74.1	65.6	62.8	-.-	65.1	64.9	64.4	63.7	63.2	----	-----	2570395.8	
82	11/17/2015	11:44:23	00d	00:10.0	63.7	73.7	64.7	62.1	-.-	64.6	64.5	63.6	62.3	62.2	----	-----	2344228.8	
83	11/17/2015	11:44:33	00d	00:10.0	64.8	74.8	68.3	63.3	-.-	66.8	65.4	63.9	63.4	63.4	----	-----	3019951.7	
84	11/17/2015	11:44:43	00d	00:10.0	65.1	75.1	68.4	62.7	-.-	68	67.7	65	63	62.8	----	-----	3235936.6	
85	11/17/2015	11:44:53	00d	00:10.0	62.7	72.7	65.8	57.5	-.-	65.6	65.4	62.9	58.2	57.8	----	-----	1862087.1	
86	11/17/2015	11:45:03	00d	00:10.0	56.2	66.2	58	55.1	-.-	57.9	57.8	56.2	55.3	55.2	----	-----	416869.4	
87	11/17/2015	11:45:13	00d	00:10.0	57.1	67.1	59.7	53.6	-.-	59.3	59.1	54.9	53.7	53.7	----	-----	512861.4	
88	11/17/2015	11:45:23	00d	00:10.0	58.9	68.9	61.7	55.9	-.-	61.5	61.1	58.4	56.2	56.1	----	-----	776247.1	
89	11/17/2015	11:45:33	00d	00:10.0	66.1	76.1	67.5	58.4	-.-	67.4	67.3	65.9	62.2	60.5	----	-----	4073802.8	
90	11/17/2015	11:45:43	00d	00:10.0	65.5	75.5	67.1	64.2	-.-	66.9	66.4	65.1	64.3	64.3	----	-----	3548133.9	
91	11/17/2015	11:45:53	00d	00:10.0	65.6	75.6	67.1	63.9	-.-	67.1	67	66.3	64.1	64	----	-----	3630780.5	
92	11/17/2015	11:46:03	00d	00:10.0	66.3	76.3	68.2	63.2	-.-	68.1	67.9	66.1	63.8	63.3	----	-----	4265795.2	
93	11/17/2015	11:46:13	00d	00:10.0	64.8	74.8	66.1	62.3	-.-	66	66	64.9	62.6	62.4	----	-----	3019951.7	
94	11/17/2015	11:46:23	00d	00:10.0	65.7	75.7	67	62.7	-.-	67	66.9	66.3	63	62.8	----	-----	3715352.3	
95	11/17/2015	11:46:33	00d	00:10.0	63.4	73.4	66.3	59.7	-.-	66.2	66	64.2	60.3	59.9	----	-----	2187761.6	
96	11/17/2015	11:46:43	00d	00:10.0	66	76	68	59.7	-.-	67.9	67.7	65.7	61.6	60.1	----	-----	3981071.7	
97	11/17/2015	11:46:53	00d	00:10.0	65.5	75.5	66.9	63.4	-.-	66.8	66.7	65.2	63.8	63.6	----	-----	3548133.9	
98	11/17/2015	11:47:03	00d	00:10.0	64.4	74.4	66.5	62.9	-.-	66.3	66	64.1	63.1	63	----	-----	2754228.7	
99	11/17/2015	11:47:13	00d	00:10.0	64.1	74.1	66.1	62.2	-.-	66	65.7	63.8	62.4	62.3	----	-----	2570395.8	
100	11/17/2015	11:47:23	00d	00:10.0	62.7	72.7	65.6	61	-.-	64.8	64.2	61.4	61.1	61	----	-----	1862087.1	
101	11/17/2015	11:47:33	00d	00:10.0	66.9	76.9	67.6	65.6	-.-	67.5	67.5	66.8	66.4	66.2	----	-----	4897788.2	
102	11/17/2015	11:47:43	00d	00:10.0	66.1	76.1	68	64.1	-.-	67.8	67.6	66.4	64.5	64.2	----	-----	4073802.8	
103	11/17/2015	11:47:53	00d	00:10.0	67.7	77.7	70	64.1	-.-	69.9	69.8	67.7	64.6	64.5	----	-----	5888436.6	
104	11/17/2015	11:48:03	00d	00:10.0	68.3	78.3	69.5	64.4	-.-	69.4	69.4	68.2	66.3	65.4	----	-----	6760829.8	
105	11/17/2015	11:48:13	00d	00:10.0	67.5	77.5	68.4	66.1	-.-	68.2	68.1	67.6	66.3	66.3	----	-----	5623413.3	
106	11/17/2015	11:48:23	00d	00:10.0	66.6	76.6	68.3	65	-.-	68.2	68.2	66.7	65.1	65.1	----	-----	4570881.9	
107	11/17/2015	11:48:33	00d	00:10.0	64	74	66.6	60.2	-.-	66.5	66.5	63.9	62.1	61.3	----	-----	2511886.4	
108	11/17/2015	11:48:43	00d	00:10.0	60.8	70.8	63.3	56.7	-.-	62.8	62.4	60.5	57.4	56.9	----	-----	1202264.4	
109	11/17/2015	11:48:53	00d	00:10.0	58.9	68.9	63.4	55.7	-.-	63.2	63	57.7	55.9	55.8	----	-----	776247.1	
110	11/17/2015	11:49:03	00d	00:10.0	59.1	69.1	62.4	54.3	-.-	62.3	62.2	59.4	54.5	54.4	----	-----	812830.5	
111	11/17/2015	11:49:13	00d	00:10.0	61.7	71.7	66.4	54.6	-.-	66	65.4	56.2	54.8	54.7	----	-----	1479108.4	
112	11/17/2015	11:49:23	00d	00:10.0	65.9	75.9	67.9	63.2	-.-	67.8	67.7	66.4	63.4	63.3	----	-----	3890451.4	
113	11/17/2015	11:49:33	00d	00:10.0	66.7	76.7	67.7	64.5	-.-	67.5	67.5	66.2	65.7	64.9	----	-----	4677351.4	
114	11/17/2015	11:49:43	00d	00:10.0	71.4	81.4	74.3	67.7	-.-	74.2	74	70.8	68.3	68.1	----	-----	13803842.6	
115	11/17/2015	11:49:53	00d	00:10.0	68.5	78.5	69.5	67.4	-.-	69.2	69.1	68.2	67.7	67.6	----	-----	7079457.8	
116	11/17/2015	11:50:03	00d	00:10.0	69.1	79.1	70.8	66.9	-.-	70.7	70.6	68.4	67.2	67.1	----	-----	8128305.2	
117	11/17/2015	11:50:13	00d	00:10.0	67.8	77.8	70.7	66.5	-.-	70.3	69.9	67.9	66.9	66.7	----	-----	6025595.9	
118	11/17/2015	11:50:23	00d	00:10.0	66	76	67.6	64.1	-.-	67.5	67.3	66.3	64.5	64.2	----	-----	3981071.7	
119	11/17/2015	11:50:33	00d	00:10.0	61.2	71.2	64.7	57.9	-.-	64.5	64	60.9	58.1	58	----	-----	1318256.7	
120	11/17/2015	11:50:43	00d	00:10.0	64.4	74.4	65.1	62.4	-.-	65.1	64.9	64.4	63.5	63.4	----	-----	2754228.7	
121	11/17/2015	11:50:53	00d	00:10.0	63.4	73.4	65.2	61.3	-.-	65.1	65.1	63.2	61.8	61.5	----	-----	2187761.6	
122	11/17/2015	11:51:03	00d	00:10.0	62.1	72.1	63.4	60.9	-.-	63.3	63.1	62	61.4	61.2	----	-----	1621810.1	
123	11/17/2015	11:51:13	00d	00:10.0	58.7	68.7	61.8	55.1	-.-	61.7	61.4	58	55.3	55.1	----	-----	741310.2	
124	11/17/2015	11:51:23	00d	00:10.0	57.4	67.4	61.3	54.2	-.-	61.2	61.1	56.8	54.3	54.3	----	-----	549540.9	
125	11/17/2015	11:51:33	00d	00:10.0	65.3	75.3	66.5	55.4	-.-	66.4	66.3	65.5	59.5	57.1	----	-----	3388441.6	
126	11/17/2015	11:51:43	00d	00:10.0	66.2	76.2	67	65.4	-.-	66.6	66.4	66.2	65.5	65.5	----	-----	4168693.8	
127	11/17/2015	11:51:53	00d	00:10.0	67.2	77.2	68.1	65.9	-.-	68	67.9	66.8	66.3	66.1	----	-----	5248074.6	
128	11/17/2015	11:52:03	00d	00:10.0	68.7	78.7	69.6	68	-.-	69.5	69.3	68.8	68.1	68	----	-----	7413102.4	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R12																		65.2
129	11/17/2015	11:52:13	00d	00:10.0	67.5	77.5	68.5	65.6	-.-	68.3	68.3	67.7	66.1	65.8	----	-----	5623413.3	
130	11/17/2015	11:52:23	00d	00:10.0	66	76	68.4	64.4	-.-	68	67.8	65.5	64.6	64.5	----	-----	3981071.7	
131	11/17/2015	11:52:33	00d	00:10.0	67.4	77.4	69.4	61.9	-.-	69.3	69.2	68	63.7	62.9	----	-----	5495408.7	
132	11/17/2015	11:52:43	00d	00:10.0	63.2	73.2	66.3	55.6	-.-	66.2	65.8	63.3	57.5	56.4	----	-----	2089296.1	
133	11/17/2015	11:52:53	00d	00:10.0	58.4	68.4	59.3	55.2	-.-	59.2	59	58.7	55.8	55.3	----	-----	691831.0	
134	11/17/2015	11:53:03	00d	00:10.0	59	69	61.2	56.3	-.-	61.2	61	58.9	57	56.7	----	-----	794328.2	
135	11/17/2015	11:53:13	00d	00:10.0	55.3	65.3	56.3	54.1	-.-	56.1	56	55.5	54.2	54.2	----	-----	338844.2	
136	11/17/2015	11:53:23	00d	00:10.0	58.8	68.8	60.2	55.4	-.-	60	59.5	58.8	55.6	55.5	----	-----	758577.6	
137	11/17/2015	11:53:33	00d	00:10.0	61.7	71.7	63.8	58.1	-.-	63.7	63.5	62	58.3	58.2	----	-----	1479108.4	
138	11/17/2015	11:53:43	00d	00:10.0	64.3	74.3	66.3	61.4	-.-	65.7	65.3	63.6	61.7	61.5	----	-----	2691534.8	
139	11/17/2015	11:53:53	00d	00:10.0	67.4	77.4	69.9	64.5	-.-	69.8	69.7	67.2	64.8	64.6	----	-----	5495408.7	
140	11/17/2015	11:54:03	00d	00:10.0	67.3	77.3	68.5	65	-.-	68.4	68.3	67.1	65.3	65.1	----	-----	5370318.0	
141	11/17/2015	11:54:13	00d	00:10.0	67.7	77.7	69.8	66.2	-.-	69.7	69.4	67.5	66.4	66.3	----	-----	5888436.6	
142	11/17/2015	11:54:23	00d	00:10.0	67.3	77.3	68.1	65.7	-.-	68	67.9	67.5	66.3	65.8	----	-----	5370318.0	
143	11/17/2015	11:54:33	00d	00:10.0	64.2	74.2	65.9	62.6	-.-	65.8	65.3	64.4	62.9	62.7	----	-----	2630268.0	
144	11/17/2015	11:54:43	00d	00:10.0	62.8	72.8	64.4	62.1	-.-	64.2	63.9	62.8	62.2	62.2	----	-----	1905460.7	
145	11/17/2015	11:54:53	00d	00:10.0	65.5	75.5	66.9	62.6	-.-	66.8	66.7	65.2	63.4	63.4	----	-----	3548133.9	

APPENDIX D

TRAFFIC DATA SUMMARY

(CD)

Route 7 Loudest Hour Traffic Volumes (By Link)

Link	Direction	Loudest Hour	Total Cars	Total Medium Trucks	Total Heavy Trucks	Speed
Reston Parkway to Baren Cameron Ave	EB*	6:00 AM	3337	136	51	55
	WB		790	62	14	
	WB*	3:00 PM	2652	103	131	55
	EB		1750	103	52	
Baren Cameron Ave to Towlston Rd	EB*	6:00 AM	4645	190	71	55
	WB		1100	87	19	
	WB*	3:00 PM	3692	143	183	55
	EB		2436	143	72	
Towlston Rd to Lewinsville Rd	EB*	6:00 AM	4284	175	66	55
	WB		1015	80	18	
	WB*	3:00 PM	3405	132	169	55
	EB		2247	132	67	
Lewinsville Rd to Jarret Valley Dr	EB*	6:00 AM	3698	151	57	45
	WB		876	69	15	
	WB*	3:00 PM	2939	114	146	45
	EB		1939	114	57	
Westbound Dulles Toll off-ramp to Route 7 Eeastbound	EB*	6:00 AM	146	23	5	35
	WB*	3:00 PM	484	26	11	
Westbound Route 7 to Westbound Dulles Toll on-ramp	EB*	6:00 AM	475	10	3	25
	WB*	3:00 PM	1556	43	40	
Eastbound Route 7 to Westbound Dulles Toll on-ramp	EB*	6:00 AM	33	2	0	20
	WB*	3:00 PM	89	2	2	
Dulles Access Rd	EB*	6:00 AM	758	54	27	57
	WB		922	31	20	
	WB*	3:00 PM	2032	45	56	55
	EB		1738	60	22	
Dulles Toll Rd	EB*	6:00 AM	5037	244	179	55
	WB		2497	254	137	62
	WB*	3:00 PM	5197	1650	146	62
	EB		3612	157	154	55

* Indicates the direction of Route 7 in which the loudest hour correspondes to for that specific TNM model.

Cross Streets	Direction	Hour	Total Cars	Total Med Trucks	Total Heavy Trucks	Speed
Reston Parkway	NB	6:00 AM	746	5	5	45
	SB		177	4	2	47
Baron Cameron Ave	NB	6:00 AM	2141	15	15	45
	SB		507	13	5	47
Springvale Ave	NB	3:00 PM	207	4	2	40
	SB		318	4	2	39
Colvin Run Rd	EB	3:00 PM	182	3	2	40
	WB		277	3	1	39
Beaulah Rd	NB	6:00 AM	398	3	3	38
	SB		95	2	1	40
Towlston Rd Northbound	NB	3:00 AM	155	3	2	40
	SB		238	3	1	39
Towlston Rd Southbound	NB	6:00 AM	248	2	2	39
	SB		59	1	1	40
Lewinsville Rd	NB	3:00 PM	388	7	4	38
	SB		595	7	3	35

APPENDIX E

TNM NOISE MODELING DATA

(CD)

APPENDIX F
HB2577 DOCUMENTATION

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
4975 Alliance Drive
Fairfax, VA 22030

CHARLES A. KILPATRICK, P.E.
COMMISSIONER

March 17, 2016

MEMORANDUM

TO: William Dunn PE, Project Manager
Regina Newman, Environmental Contact

FROM: LJ Muchenje PE, Noise Abatement

SUBJECT: Route 7 Corridor Improvements Project, UPC 52328

The 2009 General Assembly passed Chapter 120 (HB 2577, as amended by HB2025), which amends the Code of Virginia by adding in Article 15 of Chapter 1 of Title 33.1 a section numbered 33.1-223.2:21, relating to highway noise abatement.

House Bill 2025 States: Requires that whenever the Commonwealth Transportation Board or the Department plan for or undertake any highway construction or improvement project and such project includes or may include the requirement for the mitigation of traffic noise impacts, first consideration should be given to the use of noise reducing design and low noise pavement materials and techniques in lieu of construction of noise walls or sound barriers. Vegetative screening, such as the planting of appropriate conifers, in such a design would be utilized to act as a visual screen if visual screening is required.

In an effort to honor the intent of HB 2025 we are asking for your input (per Chapter VI of Materials Division's Manual of Instruction and Section 2B-3 Determination of Roadway Design of the VDOT Road Design manual (pages 2B-5 and 2B-6)). As part of the Noise Technical Report and technical files, we are seeking your professional opinion by providing comments for the project noted above. Please distribute this memorandum to the appropriate District staff and combine all responses into one response.

Should you have any questions, please contact me at (804) xxx-xxxx. Thank you for your time and consideration regarding this request.

Comment: Is noise reducing design feasible in lieu of construction of noise walls or sound barriers? For example, the roadway alignment can be shifted away from noise sensitive receptors or the roadway can be placed in deep cut (Location & Design to address)

Response: The horizontal alignment for this project was developed with the intent of limiting the right of way impacts to the properties fronting Route 7 while preserving the existing median for safety. The current design, arrived at through alternative studies and public input, provides the best solution to meet these goals. Shifting the horizontal alignment to the outside or inside will create undesirable impacts such as additional right-of-way/easement acquisitions, and potential median width reductions or eliminations and, in turn, leading to decreased safety.

The vertical alignment for this project was developed with the intent of holding the existing grade as much as possible. The current design holds closely to the existing grade and provides room for milling/overlaying operations and cross slope correction. Placing the roadway in a deep cut is not feasible given that it would require total pavement reconstruction through the corridor as well as triggering substantial utility relocation impacts.

It should however be noted that at Route 7's intersection with Baron Cameron Ave a partial interchange is to be constructed to replace what is currently an at-grade intersection. Initially the design proposed taking the EB lanes of Route 7 over Baron Cameron Ave which would have created significant noise and visual impacts to the surrounding communities/properties. This design has been modified so that the EB Route 7 through lanes will now go beneath Baron Cameron Ave with only a minor increase in the elevation of the existing intersection. This redesign eliminates what could have been a considerable noise and visual impact. (William Dunn, NOVA Location & Design)

Comment: Can the project support the use of low noise pavement in lieu of construction of noise walls or sound barriers?

Response: The Virginia Department of Transportation is not authorized by the Federal Highway Administration to use "quiet pavement" at this time as a form of noise mitigation. Upon completion of the Quiet Pavement Pilot Program and approval from FHWA, the use of "quiet pavement" will be given additional consideration.

Comment: Can landscaping be utilized to act as a visual screen if visual screening is required? (Location & Design to address)

Response: Landscaping can be used as a visual screen if required. The landscaping must be placed outside of the clear zone, must not decrease driver sight distance, and must not require additional right-of-way. (William Dunn, NOVA Location & Design)

Note: Please provide the name of each responder.

APPENDIX G

WARRANTED, FEASIBLE, AND REASONABLE WORKSHEETS

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	13-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	A1
Community Name and/or CNE#	A
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	1
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	1
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	22,626 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	8
d.	Total number of benefited receptors.	9
e.	Surface Area per benefited receptor unit. (ft^2/BR)	2,514 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	No
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	1,257 ft
b.	Height range of the proposed noise barrier. (ft)	18-18 ft
c.	Average height of the proposed noise barrier. (ft)	18 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$701,406
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	13-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	B1 - B5 and D1 System
Community Name and/or CNE#	CNE B and CNE D
Noise Abatement Category(s)	B and C
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	18
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	18
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	78,624 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	18
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	41
d.	Total number of benefited receptors.	59
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,333 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	5,616 ft
b.	Height range of the proposed noise barrier. (ft)	14-14 ft
c.	Average height of the proposed noise barrier. (ft)	14 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$2,437,344
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	C1 - C4 System
Community Name and/or CNE#	CNE C
Noise Abatement Category(s)	B
Design phase:	Preliminary design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	18
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	17
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	94%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	113,238 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	17
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	58
d.	Total number of benefited receptors.	75
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,510 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	6,291 ft
b.	Height range of the proposed noise barrier. (ft)	18-18 ft
c.	Average height of the proposed noise barrier. (ft)	18 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$3,510,378
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	D2
Community Name and/or CNE#	CNE D
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	1
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	1
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	17,442 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
d.	Total number of benefited receptors.	2
e.	Surface Area per benefited receptor unit. (ft^2/BR)	8,721 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	No
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	969 ft
b.	Height range of the proposed noise barrier. (ft)	18-18 ft
c.	Average height of the proposed noise barrier. (ft)	18 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$540,702
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	E1 - E3 System
Community Name and/or CNE#	CNE E
Noise Abatement Category(s)	B
Design phase:	Preliminary design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	16
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	15
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	94%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	50,078 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	15
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	20
d.	Total number of benefited receptors.	35
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,431 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	3,577 ft
b.	Height range of the proposed noise barrier. (ft)	14-14 ft
c.	Average height of the proposed noise barrier. (ft)	14 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$1,552,418
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	13-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	F1 - F3 System
Community Name and/or CNE#	CNE F
Noise Abatement Category(s)	B & C
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	23
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	20
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	87%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	43,644 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	20
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	15
d.	Total number of benefited receptors.	35
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,247 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	3,637 ft
b.	Height range of the proposed noise barrier. (ft)	12-12 ft
c.	Average height of the proposed noise barrier. (ft)	12 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$1,352,964
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	30-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	F4 - F9 System
Community Name and/or CNE#	CNE F
Noise Abatement Category(s)	B & C
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	22
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	22
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	96,280 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	22
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	52
d.	Total number of benefited receptors.	74
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,301 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	4,814 ft
b.	Height range of the proposed noise barrier. (ft)	20-20 ft
c.	Average height of the proposed noise barrier. (ft)	20 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$2,984,680
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	G1 - G7
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	18
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	17
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	94%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	65,736 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	17
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	42
d.	Total number of benefited receptors.	59
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,114 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	5,478 ft
b.	Height range of the proposed noise barrier. (ft)	12-12 ft
c.	Average height of the proposed noise barrier. (ft)	12 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$2,037,816
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	G8 - G9 System
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	C
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	13
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	9
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	69%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	20,513 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	9
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	5
d.	Total number of benefited receptors.	14
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,465 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	1,643 ft
b.	Height range of the proposed noise barrier. (ft)	10-14 ft
c.	Average height of the proposed noise barrier. (ft)	13 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$635,903
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	G10 - G16 System
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B & C
Design phase:	Preliminary design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	21
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	19
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	90%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	39,250 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	19
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	3
d.	Total number of benefited receptors.	22
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,784 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	3,690 ft
b.	Height range of the proposed noise barrier. (ft)	10-12 ft
c.	Average height of the proposed noise barrier. (ft)	11 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$1,216,750
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	6-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	G10 - G13 System
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	18
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	16
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	89%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	28,185 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	16
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	2
d.	Total number of benefited receptors.	18
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,566 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	2,661 ft
b.	Height range of the proposed noise barrier. (ft)	10-12 ft
c.	Average height of the proposed noise barrier. (ft)	11 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$873,735
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	6-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	G14 - G16 System
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B and C
Design phase:	Preliminary design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	3
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	2
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	67%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	11,080 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	2
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
d.	Total number of benefited receptors.	3
e.	Surface Area per benefited receptor unit. (ft^2/BR)	3,693 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	1,108 ft
b.	Height range of the proposed noise barrier. (ft)	10-10 ft
c.	Average height of the proposed noise barrier. (ft)	10 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$343,480
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	26-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	H1 - H2 System
Community Name and/or CNE#	CNE H
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	3
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	3
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	7,380 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	3
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	0
d.	Total number of benefited receptors.	3
e.	Surface Area per benefited receptor unit. (ft^2/BR)	2,460 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	738 ft
b.	Height range of the proposed noise barrier. (ft)	10-10 ft
c.	Average height of the proposed noise barrier. (ft)	10 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$228,780
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier** Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	26-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	H3 - H11 System
Community Name and/or CNE#	CNE H
Noise Abatement Category(s)	B and C
Design phase:	Preliminary design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	19
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	18
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	95%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	40,896 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	18
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	19
d.	Total number of benefited receptors.	37
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,105 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	3,408 ft
b.	Height range of the proposed noise barrier. (ft)	12-12 ft
c.	Average height of the proposed noise barrier. (ft)	12 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$1,267,776
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	13-Sep-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	I1-I6, J1 - J4 and K1 - K3 System
Community Name and/or CNE#	CNE I, J and K
Noise Abatement Category(s)	B & C
Design phase:	Preliminary design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	26
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	25
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	96%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	87,388 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	25
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	55
d.	Total number of benefited receptors.	80
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,092 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	6,242 ft
b.	Height range of the proposed noise barrier. (ft)	14-14 ft
c.	Average height of the proposed noise barrier. (ft)	14 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$2,709,028
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	L1 - L9 System
Community Name and/or CNE#	CNE L
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	8
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	6
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	75%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	21,810 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	6
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	0
d.	Total number of benefited receptors.	6
e.	Surface Area per benefited receptor unit. (ft^2/BR)	3,635 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	2,181 ft
b.	Height range of the proposed noise barrier. (ft)	10-10 ft
c.	Average height of the proposed noise barrier. (ft)	10 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$676,110
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	L6 - L9 System
Community Name and/or CNE#	CNE L
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	4
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	4
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	10,644 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	4
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	0
d.	Total number of benefited receptors.	4
e.	Surface Area per benefited receptor unit. (ft^2/BR)	2,661 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	887 ft
b.	Height range of the proposed noise barrier. (ft)	12-12 ft
c.	Average height of the proposed noise barrier. (ft)	12 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$329,964
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	M1
Community Name and/or CNE#	CNE M
Noise Abatement Category(s)	B
Design phase:	Preliminary design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	1
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	1
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	6,360 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	
d.	Total number of benefited receptors.	1
e.	Surface Area per benefited receptor unit. (ft^2/BR)	6,360 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	530 ft
b.	Height range of the proposed noise barrier. (ft)	12-12 ft
c.	Average height of the proposed noise barrier. (ft)	12 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$197,160
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier** Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	N1 - N3 System
Community Name and/or CNE#	N
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	3
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	3
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	14,080 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	3
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	5
d.	Total number of benefited receptors.	8
e.	Surface Area per benefited receptor unit. (ft^2/BR)	1,760 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	1,408 ft
b.	Height range of the proposed noise barrier. (ft)	10-10 ft
c.	Average height of the proposed noise barrier. (ft)	10 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$436,480
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	29-Aug-16
Project No. and UPC:	0007-029-128, B610, C502, P102, R202; UPC# 52328
County:	Fairfax County
District:	
Barrier System ID:	N4
Community Name and/or CNE#	CNE N
Noise Abatement Category(s)	B
Design phase:	Preliminary design

	Warranted	
1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
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."	NA
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

	Feasibility	
1	Impacted receptor units	
a.	Number of impacted receptor units:	1
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	1
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	NA
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	NA
4	Will placement of the noise barrier conflict with existing utility locations?	NA

	Reasonableness	
1	**Surface Area (Square foot)-Benefit Factors**	
a.	Surface Area (Total square foot) of the proposed noise barrier. (ft^2)	3,480 SF
b.	Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
c.	Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	0
d.	Total number of benefited receptors.	1
e.	Surface Area per benefited receptor unit. (ft^2/BR)	3,480 SF/BR
f.	Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g.	Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes
2	**Additional Noise Barrier Details**	
a.	Length of the proposed noise barrier. (ft)	290 ft
b.	Height range of the proposed noise barrier. (ft)	12-12 ft
c.	Average height of the proposed noise barrier. (ft)	12 ft
d.	Cost per square foot. ($/$ft^2$)	$31/SF
e.	Total Barrier Cost ($)	$107,880
f.	Barrier Material	Absorptive
3	**Community Desires Related to the Barrier**	
	Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier 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 impacted receptor unit owners do not desire the barrier.”	

Decision	
Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

APPENDIX H
SOUND LEVELS TABLE

Route 7 Widening Project
Sound Level Summary

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE A	A1	1 Residential	66	50	51
	A2	5 Residential	66	48	50
	A3	2 Residential	66	52	53
	A4	2 Residential	66	55	57
	A5	4 Residential	66	53	55
	A6	4 Residential	66	50	52
	A7	3 Residential	66	55	56
	A8	1 Residential	66	60	62
	A9	1 Residential	66	57	58
	A10	1 Residential	66	61	62
	A11	1 Residential	66	55	57
	A12	1 Residential	66	57	59
	A13	2 Residential	66	52	54
	A14	1 Residential	66	63	63
	A15	1 Residential	66	48	51
	A16	1 School	66	53	56
	A17	1 Residential	66	57	60
	A18	1 Residential	66	63	64
	A19	1 School (Interior)	51	29	31
	A20	2 Residential	66	51	53
	A21	1 Fire Station	66	60	63
	A22	2 Residential	66	49	53
	A23	1 Assisted Living Center (Interior)	51	32	35
	A26	3 Residential	66	50	54
	A27	1 Church (Interior)	51	32	35
	A28	2 Residential	66	52	55
	A29	1 Residential	66	57	60
	A30	3 Residential	66	50	54
	A31	1 Residential	66	49	54
	A32	1 Residential	66	55	58
	A33	1 Residential	66	61	66
	A34	2 Residential	66	55	59
	A35	3 Residential	66	49	53
	A36	1 Residential	66	49	55
	A37	2 Residential	66	55	60
	A38	3 Residential	66	49	55
	A39	3 Residential	66	55	60
	A40	2 Residential	66	48	57
	A41	3 Residential	66	53	58
	A42	1 Residential	66	61	64
	A43	2 Residential	66	57	63
	A44	1 Residential	66	52	58
	A45	1 Residential	66	54	60
	A46	2 Residential	66	57	61

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE B	B1	1 Animal Hospital (Interior)	51	44	46
	B2	1 Animal Hospital (Exterior)	66	56	60
	B4	1 Church (Interior)	51	37	40
	B5	1 Residential	66	66	69
	B6	1 Residential	66	58	62
	B7	1 Residential	66	65	68
	B8	1 Residential	66	52	56
	B9	1 Residential	66	52	56
	B10	1 Residential	66	68	71
	B11	1 Residential	66	54	59
	B12	1 Residential	66	52	56
	B13	1 Residential	66	56	61
	B14	1 Residential	66	66	70
	B15	1 Residential	66	53	57
	B16	1 Residential	66	51	55
	B17	1 Residential	66	58	62
	B18	1 Residential	66	68	71
	B19	2 Residential	66	53	58
	B21	1 School (Interior)	51	25	31
	B22	1 Residential	66	65	66
	B23	1 Residential	66	56	62
	B24	1 Residential	66	53	59
	B25	1 Residential	66	63	68
	B26	1 Residential	66	50	55
	B27	1 Residential	66	55	60
	B28	1 Residential	66	53	58
	B29	1 Commercial	71	62	66
	B30	1 Residential	66	65	69
	B31	1 Residential	66	62	67
	B32	1 Residential	66	62	67
	B33	1 Residential	66	56	62
	B34	2 Residential	66	51	57
	B35	1 Residential	66	54	60
	B36	1 Residential	66	56	62
	B37	1 Residential	66	66	70
	B38	1 Residential	66	57	62
	B39	1 Residential	66	61	65
	B40	2 Residential	66	50	56
	B41	1 Residential	66	51	57
	B42	1 Residential	66	64	66
	B43	1 Residential	66	59	64
	B44	1 Residential	66	66	70
	B45	1 Residential	66	51	56
	B46	1 Residential	66	59	64
	B47	1 Residential	66	66	71
	B48	2 Residential	66	53	58
	B49	1 Residential	66	55	61

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE B	B50	1 Residential	66	57	64
	B51	2 Residential	66	51	57
	B52	1 Residential	66	55	62
	B53	1 Residential	66	58	65
	B54	1 Residential	66	62	68
	B55	2 Residential	66	52	58
	B56	1 Residential	66	67	72
	B57	1 Residential	66	50	56
	B58	2 Residential	66	53	60
	B59	1 Residential	66	56	63
	B60	1 Residential	66	58	65
CNE C	C1	1 Residential	66	48	57
	C2	1 Residential	66	51	57
	C3	2 Residential	66	48	53
	C4	1 Residential	66	53	58
	C5	1 Residential	66	59	63
	C6	2 Residential	66	49	54
	C7	1 Residential	66	58	61
	C8	3 Residential	66	57	60
	C9	1 Residential	66	60	63
	C10	1 Residential	66	64	66
	C11	1 Residential	66	64	64
	C12	1 Residential	66	45	48
	C13	2 Residential	66	49	53
	C14	2 Residential	66	54	57
	C15	1 Residential	66	64	66
	C16	4 Residential	66	48	52
	C17	1 Residential	66	50	53
	C18	1 Residential	66	65	69
	C19	1 Residential	66	54	57
	C20	1 Residential	66	55	59
	C21	1 Residential	66	60	64
	C22	1 Residential	66	57	61
	C23	1 Residential	66	53	57
	C24	1 Residential	66	50	53
	C25	1 Residential	66	55	58
	C26	1 Residential	66	62	66
	C27	1 Residential	66	51	54
	C28	1 Residential	66	64	68
	C29	1 Residential	66	49	53
	C30	1 Residential	66	58	61
	C31	1 Residential	66	51	54
	C32	1 Residential	66	55	58
	C33	2 Residential	66	47	51
	C34	1 Residential	66	67	68
	C35	1 Residential	66	65	67
	C36	3 Residential	66	53	56

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE C	C37	1 Residential	66	60	62
	C38	2 Residential	66	56	59
	C39	1 Residential	66	59	62
	C40	1 Residential	66	56	57
	C41	1 Residential	66	53	55
	C42	2 Residential	66	64	64
	C43	1 Residential	66	55	56
	C44	2 Residential	66	64	68
	C45	1 Residential	66	54	57
	C46	1 Residential	66	60	62
	C47	1 Residential	66	58	62
	C48	1 Residential	66	51	54
	C49	1 Residential	66	61	65
	C50	3 Residential	66	51	54
	C51	1 Residential	66	53	56
	C52	1 Residential	66	63	67
	C53	1 Residential	66	50	53
	C54	1 Residential	66	55	59
	C55	3 Residential	66	49	53
	C56	1 Residential	66	65	71
	C57	1 Residential	66	50	55
	C58	1 Residential	66	58	61
	C59	1 Residential	66	64	67
	C60	1 Residential	66	48	52
	C61	1 Residential	66	62	65
	C62	1 Residential	66	58	62
	C63	1 Residential	66	58	63
	C64	1 Residential	66	58	62
	C65	3 Residential	66	48	52
	C66	1 Residential	66	58	63
	C67	1 Residential	66	66	70
	C68	1 Residential	66	68	70
	C69	1 Residential	66	61	66
	C70	1 Residential	66	56	58
	C71	1 Residential	66	65	67
	C72	2 Residential	66	51	55
	C73	1 Residential	66	57	59
	C74	2 Residential	66	50	54
	C75	1 Residential	66	65	67
	C76	1 Residential	66	65	67
	C77	2 Residential	66	51	54
	C78	2 Residential	66	52	55
	C79	2 Residential	66	52	56
	C80	1 Residential	66	52	56
	C81	1 Swimming Pool	66	54	57
	C82	1 Community Center (Interior)	51	28	31
	C83	1 Playground	66	53	56
	C84	2 Tennis Courts	66	57	59

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE C	C85	1 Basketball Court	66	57	59
	C86	1 Picnic Area	66	62	64
CNE D	D1	1 Soccer Field	66	54	59
	D2	1 Soccer Field	66	53	60
	D3	1 Soccer Field	66	56	62
	D4	1 Soccer Field	66	58	65
	D5	1 Soccer Field	66	62	69
	D6	1 Soccer Field	66	52	57
	D7	1 Soccer Field	66	51	56
	D8	1 Soccer Field	66	49	55
	D9	1 Soccer Field	66	52	58
	D10	1 Soccer Field	66	54	60
	D11	1 Soccer Field	66	55	61
	D12	1 Soccer Field	66	57	63
	D13	1 Soccer Field	66	60	66
	D14	1 Soccer Field	66	51	57
	D15	1 Soccer Field	66	50	56
	D16	1 Soccer Field	66	49	54
	D17	1 Soccer Field	66	52	57
	D18	1 Soccer Field	66	53	59
	D19	1 Soccer Field	66	53	60
	D20	1 Soccer Field	66	55	62
	D21	1 Soccer Field	66	57	64
	D22	1 Soccer Field	66	51	56
	D23	1 Soccer Field	66	50	55
	D24	1 Soccer Field	66	49	54
	D25	1 Softball Field	66	54	61
	D26	1 Softball Field	66	56	63
	D27	1 Softball Field	66	53	59
	D28	1 Softball Field	66	54	60
	D29	1 Softball Field	66	55	62
	D30	1 Softball Field	66	53	59
	D31	1 Residential	66	53	59
	D32	1 Residential	66	60	66
	D33	1 Residential	66	62	65
	D34	1 Residential	66	53	58
	D35	1 Residential	66	51	56
	D36	1 Residential	66	51	56
	D37	1 Residential	66	53	58
CNE E	E1	1 Residential	66	60	63
	E2	1 Residential	66	55	60
	E3	1 Residential	66	52	57
	E4	1 Residential	66	59	64
	E5	1 Residential	66	62	66
	E6	1 Residential	66	64	66
	E7	1 Residential	66	61	64

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE E	E8	2 Residential	66	53	57
	E9	2 Residential	66	50	54
	E10	1 Residential	66	49	54
	E11	1 Residential	66	62	67
	E12	1 Residential	66	66	70
	E13	1 Residential	66	54	59
	E14	1 Residential	66	58	63
	E15	1 Residential	66	60	66
	E16	1 Residential	66	55	60
	E17	1 Residential	66	50	54
	E18	1 Residential	66	61	67
	E19	1 Residential	66	56	61
	E20	1 Residential	66	59	65
	E21	1 Residential	66	68	73
	E22	2 Residential	66	48	53
	E23	1 Residential	66	55	62
	E24	2 Residential	66	51	56
	E25	3 Residential	66	52	58
	E26	2 Residential	66	70	74
	E27	2 Residential	66	52	57
	E28	1 Residential	66	53	59
	E29	1 Residential	66	56	63
	E30	1 Residential	66	51	57
	E31	1 Residential	66	52	59
	E32	1 Residential	66	55	61
	E33	1 Residential	66	49	55
	E34	1 Residential	66	63	69
	E35	1 Residential	66	53	60
	E36	1 Residential	66	48	54
	E37	1 Residential	66	54	60
	E38	2 Residential	66	50	56
	E39	1 Residential	66	68	72
	E40	1 Residential	66	69	74
	E41	1 Residential	66	61	65
	E42	1 Residential	66	62	68
	E43	2 Residential	66	53	58
	E44	1 Residential	66	66	72
	E45	1 Residential	66	51	56
	E46	2 Residential	66	56	62
	E47	1 Residential	66	61	67
	E48	1 Residential	66	62	67
	E49	2 Residential	66	48	54
	E50	1 Residential	66	55	62
	E51	2 Residential	66	53	58
	E52	2 Residential	66	50	58
CNE F	CCT7	1 Existing Trail (Being relocated)	66	70	-
	CCT8	1 Existing Trail (Being relocated)	66	71	-

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE F	CCT9	1 Existing Trail (Being relocated)	66	68	-
	CCT10	1 Existing Trail (Being relocated)	66	64	-
	CCT11	1 Existing Trail (Being relocated)	66	62	-
	CCT12	1 Existing Trail (Being relocated)	66	60	-
	CCT13	1 Existing Trail (Being relocated)	66	59	-
	CCT14	1 Existing Trail (Being relocated)	66	59	-
	CCT15	1 Existing Trail (Being relocated)	66	58	-
	CCT16	1 Existing Trail (Being relocated)	66	57	-
	CCT17	1 Existing Trail (Being relocated)	66	57	-
	CCT18	1 Existing Trail (Being relocated)	66	56	-
	CCTB16	1 Proposed Trail Unit	66	-	72
	CCTB17	1 Proposed Trail Unit	66	-	66
	CCTB18	1 Proposed Trail Unit	66	-	64
	CCTB19	1 Proposed Trail Unit	66	-	63
	CCTB20	1 Proposed Trail Unit	66	-	62
	CCTB21	1 Proposed Trail Unit	66	-	63
	CCTB22	1 Proposed Trail Unit	66	-	62
	CCTB23	1 Proposed Trail Unit	66	-	62
	F1	1 Commercial	71	64	67
	F2	1 Residential	66	52	57
	F3	1 Residential	66	53	58
	F4	1 Residential	66	47	53
	F5	1 Residential	66	50	55
	F6	1 Residential	66	52	57
	F7	1 Residential	66	51	55
	F8	1 Residential	66	52	57
	F9	1 Residential	66	50	54
	F10	1 Residential	66	53	59
	F11	1 Residential	66	49	55
	F12	1 Residential	66	52	58
	F13	1 Residential	66	64	68
	F14	1 Cemetery	66	70	74
	F15	1 Cemetery	66	62	68
	F16	1 Cemetery	66	57	63
	F17	1 Cemetery	66	71	75
	F18	1 Cemetery	66	63	69
	F19	1 Cemetery	66	55	62
	F20	1 Residential	66	52	57
	F21	1 Residential	66	55	62
	F22	1 Residential	66	49	55
	F23	2 Residential	66	67	73
	F24	1 Residential	66	47	55
	F25	1 Residential	66	61	66
	F26	1 Residential	66	57	63
	F27	1 Residential	66	60	65
	F28	1 Residential	66	50	57
	F29	1 Residential	66	54	60
	F30	1 Residential	66	52	57

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE F	F31	1 Residential	66	70	76
	F32	1 Residential	66	54	61
	F33	1 Residential	66	49	55
	F34	1 Residential	66	65	74
	F35	1 Residential	66	60	68
	F36	2 Residential	66	51	60
	F37	1 Residential	66	57	64
	F38	1 Residential	66	64	71
	F39	1 Residential	66	55	62
	F40	1 Residential	66	59	67
	F41	1 Residential	66	61	67
	F42	1 Residential	66	64	70
	F43	1 Residential	66	54	61
	F44	1 Residential	66	48	57
	F45	1 Residential	66	65	71
	F46	1 Residential	66	54	61
	F47	1 Residential	66	66	71
	F48	1 Residential	66	54	61
	F49	1 Residential	66	46	54
	F50	1 Residential	66	65	71
	F51	1 Residential	66	53	61
	F52	1 Residential	66	63	66
	F53	2 Residential	66	52	59
	F54	1 Residential	66	50	57
	F55	1 Residential	66	65	68
	F56	1 Residential	66	55	61
	F57	1 Residential	66	56	62
	F58	1 Residential	66	51	58
	F59	1 Residential	66	53	60
	F60	1 Residential	66	64	70
	F61	1 Residential	66	62	68
	F62	1 Residential	66	57	63
	F63	1 Residential	66	53	60
	F64	1 Residential	66	70	75
	F65	1 Residential	66	58	65
	F66	1 Residential	66	54	61
	F67	1 Residential	66	53	61
	F68	2 Residential	66	49	62
	F69	1 Residential	66	49	61
	F70	1 Residential	66	49	58
	F71	1 Residential	66	64	69
	F72	1 Residential	66	59	66
	F73	1 Residential	66	61	68
	F74	1 Residential	66	58	64
	F75	1 Residential	66	62	67
	F76	1 Residential	66	58	63
	F77	1 Residential	66	65	69
	F78	1 Residential	66	55	61

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE F	F79	1 Residential	66	61	66
	F80	1 Residential	66	64	68
	F81	1 Residential	66	63	67
	F82	1 Residential	66	56	61
	F83	1 Residential	66	53	59
	F84	1 Residential	66	55	61
	F85	1 Residential	66	62	66
	F86	1 Residential	66	63	67
	F87	1 Residential	66	58	63
	F88	1 Residential	66	65	69
	F89	1 Residential	66	57	62
	F90	1 Residential	66	70	73
	F91	1 Residential	66	57	62
	F92	1 Residential	66	56	61
	F93	1 Residential	66	57	62
	F94	1 Residential	66	68	71
	F95	1 Residential	66	54	61
	F96	1 Residential	66	48	55
	F97	1 Residential	66	54	61
	F98	1 Residential	66	52	58
	F99	1 Residential	66	51	58
	F100	1 Residential	66	53	60
	F101	1 Residential	66	50	57
	F102	1 Residential	66	51	58
	F103	2 Residential	66	66	70
	F104	1 Residential	66	50	57
	F105	1 Residential	66	68	74
	F106	1 Residential	66	50	56
	F107	1 Residential	66	50	57
	F108	1 Residential	66	53	60
	F109	1 Residential	66	55	63
	F110	1 Residential	66	48	55
	F111	1 Residential	66	49	57
	F112	1 Residential	66	61	67
	F113	1 Residential	66	50	57
	F114	1 Residential	66	51	58
	F115	1 Residential	66	52	59
	F116	1 Residential	66	61	67
	F117	1 Residential	66	54	61
	F118	1 Residential	66	50	56
	F119	1 Residential	66	51	58
	F120	1 Residential	66	53	60
	F121	1 Residential	66	55	61
	F122	1 Residential	66	52	59
	F123	1 Residential	66	56	62
	F124	1 Residential	66	50	56
	F125	1 Residential	66	55	60
	F126	1 Residential	66	52	58

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE F	F127	1 Residential	66	53	60
	F128	1 Residential	66	63	67
	F129	1 Residential	66	51	57
	F130	1 Residential	66	53	60
	F131	2 Residential	66	50	56
	F132	2 Residential	66	52	58
	F133	2 Residential	66	53	59
	F134	3 Residential	66	50	57
	F135	2 Residential	66	50	57
	F136	2 Residential	66	49	55
	F137	1 Residential	66	53	59
	F138	2 Residential	66	49	56
	F139	1 Residential	66	51	57
	F140	2 Residential	66	48	55
	F141	1 Historic Site	66	63	68
CNE G	CCT1	1 Existing Trail (Being relocated)	66	56	-
	CCT2	1 Existing Trail (Being relocated)	66	57	-
	CCT3	1 Existing Trail (Being relocated)	66	59	-
	CCT4	1 Existing Trail (Being relocated)	66	60	-
	CCT5	1 Existing Trail (Being relocated)	66	60	-
	CCT6	1 Existing Trail (Being relocated)	66	64	-
	CCTB1	1 Proposed Trail Unit	66	-	64
	CCTB2	1 Proposed Trail Unit	66	-	65
	CCTB3	1 Proposed Trail Unit	66	-	66
	CCTB4	1 Proposed Trail Unit	66	-	68
	CCTB5	1 Proposed Trail Unit	66	-	71
	CCTB6	1 Proposed Trail Unit	66	-	75
	CCTB7	1 Proposed Trail Unit	66	-	71
	CCTB8	1 Proposed Trail Unit	66	-	71
	CCTB9	1 Proposed Trail Unit	66	-	71
	CCTB10	1 Proposed Trail Unit	66	-	70
	CCTB11	1 Proposed Trail Unit	66	-	70
	CCTB12	1 Proposed Trail Unit	66	-	69
	CCTB13	1 Proposed Trail Unit	66	-	69
	CCTB14	1 Proposed Trail Unit	66	-	69
	CCTB15	1 Proposed Trail Unit	66	-	69
	LT1	1 Existing Trail (Not being relocated)	66	56	59
	LT2	1 Existing Trail (Not being relocated)	66	57	60
	LT3	1 Existing Trail (Not being relocated)	66	59	61
	LT4	1 Existing Trail (Not being relocated)	66	60	63
	LT5	1 Existing Trail (Not being relocated)	66	62	64
	LT6	1 Existing Trail (Not being relocated)	66	62	65
	LT7	1 Existing Trail (Not being relocated)	66	61	65
	G1	1 Residential	66	50	62
	G2	1 Residential	66	49	54
	G3	1 Residential	66	52	63
	G4	1 Residential	66	52	57

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE G	G5	1 Residential	66	60	61
	G6	1 Residential	66	48	52
	G7	1 Residential	66	55	55
	G8	1 Residential	66	47	51
	G9	1 Residential	66	52	53
	G10	1 Residential	66	47	50
	G11	1 Residential	66	65	64
	G12	1 Residential	66	48	51
	G13	1 Residential	66	47	50
	G14	1 Residential	66	48	51
	G15	1 Residential	66	49	53
	G16	1 Residential	66	66	69
	G17	1 Residential	66	56	59
	G18	2 Residential	66	51	56
	G19	1 Residential	66	53	57
	G20	1 Residential	66	66	70
	G21	1 Residential	66	63	68
	G22	1 Residential	66	55	60
	G23	1 Residential	66	63	68
	G24	1 Residential	66	57	61
	G25	1 Residential	66	55	60
	G26	1 Residential	66	63	68
	G27	1 Residential	66	55	59
	G28	1 Residential	66	62	67
	G29	1 Residential	66	57	59
	G30	1 Residential	66	63	67
	G31	1 Residential	66	57	59
	G32	1 Residential	66	59	60
	G33	1 Residential	66	60	60
	G34	1 Residential	66	56	58
	G35	1 Residential	66	56	57
	G36	1 Residential	66	61	61
	G37	1 Residential	66	61	61
	G38	1 Residential	66	56	58
	G39	1 Residential	66	54	57
	G40	1 Residential	66	60	61
	G41	1 Residential	66	51	54
	G42	1 Residential	66	60	63
	G43	1 Residential	66	55	59
	G44	1 Residential	66	59	64
	G45	1 Residential	66	52	56
	G46	1 Residential	66	48	53
	G47	1 Residential	66	56	63
	G48	1 Residential	66	57	70
	G49	2 Residential	66	54	61
	G50	1 Residential	66	50	55
	G51	1 Residential	66	65	72
	G52	1 Residential	66	57	62

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE G	G53	1 Residential	66	52	58
	G54	1 Residential	66	54	59
	G55	1 Residential	66	67	73
	G56	1 Residential	66	50	55
	G57	1 Residential	66	57	62
	G58	1 Residential	66	51	55
	G59	1 Residential	66	67	72
	G60	1 Residential	66	53	58
	G61	1 Residential	66	67	72
	G62	1 Residential	66	50	55
	G63	1 Residential	66	51	56
	G64	1 Residential	66	52	57
	G65	1 Residential	66	58	63
	G66	1 Residential	66	51	56
	G67	1 Residential	66	56	61
	G68	1 Residential	66	53	58
	G69	2 Residential	66	54	60
	G70	1 Residential	66	55	60
	G71	1 Residential	66	64	69
	G72	1 Residential	66	52	57
	G73	1 Church (Interior)	51	32	38
	G75	1 Residential	66	64	68
	G76	1 Residential	66	63	67
	G77	1 Residential	66	63	67
	G78	1 Residential	66	59	64
	G79	1 Residential	66	60	63
	G80	1 Residential	66	55	59
	G81	1 Residential	66	59	62
	G82	1 Residential	66	57	60
	G83	1 Residential	66	58	61
	G84	3 Residential	66	52	57
	G85	2 Residential	66	55	59
	G86	2 Residential	66	53	57
	G87	1 Residential	66	56	61
	G88	2 Residential	66	65	71
	G89	1 Residential	66	53	58
	G90	2 Residential	66	58	63
	G91	1 Residential	66	57	61
	G92	1 Residential	66	56	61
	G93	1 Residential	66	55	59
	G94	1 Residential	66	56	60
	G95	1 Residential	66	56	60
	G96	1 Residential	66	56	60
	G97	1 Residential	66	56	61
	G98	2 Residential	66	55	59
	G99	2 Residential	66	55	60
	G100	1 Residential	66	56	61
	G101	1 Residential	66	56	62

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE G	G102	2 Residential	66	54	58
	G103	1 Residential	66	56	60
	G104	1 Residential	66	59	65
	G105	1 Residential	66	57	61
	G106	1 Residential	66	57	62
	G107	1 Residential	66	57	61
	G108	1 Residential	66	58	62
	G109	1 Residential	66	59	64
	G110	1 Residential	66	55	59
	G111	1 Residential	66	57	62
	G112	1 Residential	66	55	60
	G113	1 Residential	66	59	62
	G114	1 Residential	66	68	70
	G115	1 Residential	66	58	61
	G116	1 Residential	66	69	74
	G117	1 Residential	66	49	53
	G118	2 Residential	66	50	54
	G119	1 Residential	66	54	57
	G120	1 Residential	66	57	60
	G121	1 Residential	66	49	53
	G122	1 Residential	66	68	71
	G123	1 Residential	66	66	66
	G124	1 Residential	66	50	53
	G125	1 Residential	66	51	55
	G126	1 Residential	66	53	57
	G127	1 Residential	66	65	69
	G128	1 Residential	66	48	52
	G129	1 Residential	66	64	67
	G130	1 Residential	66	60	63
	G131	1 Residential	66	49	53
	G132	1 Residential	66	51	54
	G133	1 Residential	66	55	58
	G134	1 Residential	66	50	54
	G135	1 Residential	66	50	54
	G136	1 Residential	66	48	52
	G137	1 Residential	66	68	72
	G138	1 Residential	66	62	65
	G139	1 Residential	66	49	53
	G140	1 Residential	66	52	55
	G141	1 Residential	66	49	53
	G142	1 Residential	66	44	48
	G143	1 Residential	66	61	66
	G144	1 Residential	66	53	56
	G145	1 Residential	66	54	57
	G146	1 Residential	66	55	58
	G147	1 Residential	66	63	67
	G148	1 Residential	66	45	49
	G149	1 Residential	66	50	55

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE G	G150	1 Residential	66	58	60
	G151	1 Residential	66	66	69
	G152	1 Residential	66	49	53
	G153	1 Residential	66	52	56
	G154	1 Residential	66	58	61
	G155	1 Residential	66	68	72
	G156	1 Residential	66	51	55
	G157	1 Residential	66	57	60
	G158	1 Residential	66	69	72
	G159	1 Residential	66	60	64
	G160	1 Residential	66	55	59
	G161	1 Residential	66	68	72
	G162	1 Residential	66	69	73
	G163	1 Residential	66	59	63
	G164	1 Residential	66	59	62
	G165	1 Residential	66	69	73
	G166	1 Residential	66	58	62
	G167	1 Residential	66	69	73
	G168	1 Residential	66	60	63
	G169	1 Residential	66	66	70
	G170	1 Residential	66	64	68
	G171	1 Preschool (Interior)	51	31	36
	G172	1 Residential	66	67	72
	G173	1 Residential	66	50	56
	G174	1 Playground	66	63	68
	G175	1 Residential	66	55	60
	G176	1 Residential	66	62	67
	G177	1 Dentist Office (Interior)	51	46	49
CNE H	H1	1 Residential	66	64	72
	H2	1 Residential	66	70	76
	H3	1 Residential	66	66	72
	H4	1 Residential	66	52	58
	H5	3 Residential	66	52	60
	H6	1 Residential	66	51	57
	H7	1 Residential	66	53	60
	H8	1 Residential	66	52	58
	H9	1 Residential	66	53	59
	H10	1 Residential	66	55	63
	H11	1 Residential	66	53	59
	H12	2 Residential	66	62	70
	H13	1 Residential	66	54	59
	H14	1 Residential	66	57	64
	H15	1 Residential	66	66	70
	H16	1 Residential	66	52	59
	H17	1 Residential	66	56	62
	H18	1 Residential	66	56	61
	H19	1 Residential	66	60	63

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE H	H20	1 Residential	66	66	67
	H21	1 Residential	66	56	60
	H22	1 Residential	66	55	59
	H23	1 Residential	66	53	58
	H24	1 Residential	66	72	77
	H25	1 Residential	66	62	64
	H26	1 Residential	66	59	64
	H27	2 Residential	66	67	72
	H28	2 Residential	66	58	64
	H29	1 Residential	66	54	59
	H30	1 Residential	66	72	76
	H31	1 Residential	66	55	61
	H32	1 Residential	66	59	64
	H33	2 Residential	66	54	60
	H34	1 Residential	66	72	76
	H35	1 Residential	66	59	65
	H36	2 Residential	66	59	64
	H37	1 Residential	66	55	59
	H38	1 Residential	66	70	74
	H39	1 Residential	66	61	66
	H40	1 Residential	66	55	60
	H41	1 Residential	66	70	74
	H42	1 Residential	66	58	61
	H43	1 Residential	66	54	59
	H44	1 Residential	66	70	74
	H45	1 Residential	66	59	63
	H46	1 Residential	66	55	60
	H47	1 Residential	66	60	65
	H48	1 Residential	66	59	64
	H49	1 Residential	66	56	61
	H50	1 Residential	66	59	65
	H51	1 Residential	66	57	63
	H52	1 Residential	66	58	64
	H53	1 Residential	66	57	64
	H54	1 Residential	66	54	60
	H55	1 Residential	66	56	62
	H57	1 School (Interior)	51	36	43
	H58	1 Residential	66	52	58
	H59	1 Residential	66	52	58
	H60	1 Residential	66	51	61
	H61	1 Playground Unit	66	64	70
	H62	1 Playground Unit	66	62	69
	H63	1 Playground Unit	66	61	68
	H64	1 Playground Unit	66	73	78
	H65	1 Playground Unit	66	73	78
	H66	1 Playground Unit	66	73	78
CNE I	I1	1 Fire Station	66	57	62

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE I	I2	1 Residential	66	51	56
	I3	1 Residential	66	59	64
	I4	1 Residential	66	53	56
	I5	1 Residential	66	54	58
	I6	1 Nursery	71	67	70
	I7	1 Residential	66	55	59
	I8	2 Residential	66	55	58
	I9	1 Residential	66	60	67
	I10	1 Residential	66	61	65
	I11	2 Residential	66	56	61
	I12	1 Residential	66	53	57
	I13	1 Residential	66	60	64
	I14	1 Residential	66	62	65
	I15	1 Residential	66	57	61
	I16	1 Residential	66	53	57
	I17	1 Residential	66	55	59
	I18	1 Residential	66	53	57
	I19	1 Residential	66	64	67
	I20	1 Residential	66	56	59
	I21	1 Residential	66	61	64
	I22	1 Residential	66	54	58
	I23	1 Residential	66	67	68
	I24	1 Residential	66	58	62
	I25	1 Residential	66	52	56
	I26	2 Residential	66	55	59
	I27	2 Residential	66	53	58
	I28	2 Residential	66	54	59
	I29	1 Residential	66	57	62
	I30	1 Residential	66	53	59
	I31	1 Residential	66	57	62
	I32	1 Residential	66	65	70
	I33	2 Residential	66	57	62
	I34	2 Residential	66	51	55
	I35	1 Residential	66	66	71
	I36	1 Residential	66	62	67
	I37	2 Residential	66	52	56
	I38	1 Residential	66	54	58
	I39	1 Residential	66	55	61
	I40	1 Residential	66	69	74
	I41	2 Residential	66	52	58
	I42	3 Residential	66	52	56
	I43	1 Residential	66	63	68
	I44	2 Residential	66	53	58
	I45	2 Residential	66	55	60
	I46	2 Residential	66	55	60
	I47	1 Residential	66	57	67
	I48	2 Residential	66	53	57
	I49	1 Residential	66	58	64

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE I	I50	2 Residential	66	56	60
	I51	3 Residential	66	55	59
	I52	1 Residential	66	58	62
	I53	1 Residential	66	59	65
	I54	1 Residential	66	55	59
	I55	1 Residential	66	56	59
	I56	3 Residential	66	53	56
	I57	2 Residential	66	52	54
	I58	1 Residential	66	47	51
	I59	1 Residential	66	55	58
	I60	1 Residential	66	49	52
	I61	1 Residential	66	53	56
	I62	2 Residential	66	49	53
	I63	1 Residential	66	55	57
	I64	1 Residential	66	52	55
	I65	1 Residential	66	53	56
	I66	2 Residential	66	54	58
CNE J	J1	2 Residential	66	49	55
	J2	1 Residential	66	51	56
	J3	2 Residential	66	51	53
	J4	1 Residential	66	53	60
	J5	1 Residential	66	69	70
	J6	1 Cemetery	66	59	63
	J7	1 Residential	66	60	62
	J8	1 Cemetery	66	62	65
	J9	1 Cemetery	66	60	63
	J10	1 Cemetery	66	58	60
	J11	1 Residential	66	66	67
	J12	1 Cemetery	66	67	68
	J13	1 Cemetery	66	63	66
	J14	1 Cemetery	66	61	63
	J15	1 Cemetery	66	55	57
	J16	1 Residential	66	52	54
	J17	1 Cemetery	66	70	69
	J18	1 Cemetery	66	67	69
	J19	1 Residential	66	54	56
	J20	1 Cemetery	66	63	66
	J21	1 Cemetery	66	59	61
	J22	1 Cemetery	66	55	57
	J23	1 Cemetery	66	74	74
	J24	2 Residential	66	54	57
	J25	1 Cemetery	66	66	69
	J26	1 Cemetery	66	64	67
	J27	1 Cemetery	66	59	60
	J28	1 Residential	66	55	56
	J29	1 Cemetery	66	73	74
	J30	1 Cemetery	66	62	65

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE J	J31	1 Church (Interior)	51	45	47
CNE K	K1	1 Residential	66	65	67
	K2	1 Pre-school (Interior)	66	37	37
	K3	1 Pre-school (Exterior)	51	61	61
	K4	1 Residential	66	67	66
	K5	1 Residential	66	54	55
	K6	1 Residential	66	55	55
	K7	1 Residential	66	57	58
	K8	1 Church (Interior)	66	39	42
	K9	1 Residential	66	68	70
	K10	1 Residential	66	61	64
	K11	1 Residential	66	62	66
	K12	1 Residential	51	60	63
	K13	1 Residential	66	54	55
	K14	1 Residential	66	48	50
	K15	1 Residential	66	56	59
	K16	2 Residential	66	57	59
	K17	1 Residential	66	61	63
	K18	2 Residential	66	56	59
	K19	1 Residential	66	64	66
	K20	1 Residential	66	57	59
	K21	1 Residential	66	58	61
	K22	1 Residential	66	60	62
	K23	1 Residential	66	65	67
	K24	1 Non-Profit Organization (Exterior)	66	58	59
	K25	1 Non-Profit Organization (Interior)	66	42	43
	K26	1 Church (Interior)	51	24	24
	K27	1 Church (Exterior)	66	52	52
CNE L	L1	1 Laboratory (Interior)	51	38	43
	L2	1 Residential	66	63	68
	L3	1 Residential	66	65	69
	L4	1 Residential	66	67	71
	L5	1 Residential	66	66	70
	L6	1 Residential	66	72	76
	L7	1 Residential	66	59	63
	L8	1 Residential	66	61	66
	L9	1 Residential	66	68	72
	L10	1 Residential	66	72	75
	L12	1 Church (Interior)	51	38	40
	L13	1 Residential	66	56	60
	L14	1 Residential	66	55	59
	L15	1 Residential	66	54	56
	L16	2 Residential	66	56	59
	L18	1 Pre-school (Interior)	51	35	38
	L19	1 Residential	66	54	57
	L20	1 Residential	66	57	60

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE L	L21	1 Residential	66	51	54
	L22	1 Residential	66	52	55
	L23	1 Residential	66	55	60
	L24	1 Residential	66	49	52
	L25	1 Residential	66	50	54
	L26	1 Residential	66	54	60
	L27	1 Residential	66	49	53
	L28	1 Residential	66	55	60
	L29	1 Residential	66	54	60
	L30	1 Residential	66	50	55
	L31	1 Residential	66	49	53
	L32	1 Residential	66	52	61
	L33	1 Residential	66	51	56
	L34	1 Residential	66	49	52
	L35	1 Residential	66	48	51
CNE M	M1	Proposed Aqusition	N/A	N/A	N/A
	M2	1 Residential	66	64	67
	M3	1 Residential	66	63	64
	M4	1 Residential	66	57	62
	M5	1 Residential	66	60	61
	M6	1 Residential	66	61	62
	M7	1 Residential	66	57	64
	M8	1 Residential	66	62	62
	M9	1 Residential	66	62	62
	M10	1 Residential	66	57	62
	M11	1 Residential	66	60	60
	M12	1 Residential	66	59	59
	M13	1 Residential	66	61	61
	M14	2 Residential	66	57	59
	M15	1 Residential	66	58	59
	M16	1 Residential	66	59	60
	M17	1 Residential	66	59	59
	M18	1 Residential	66	57	58
	M19	1 Residential	66	59	60
	M20	1 Residential	66	59	59
	M21	2 Residential	66	56	57
	M22	1 Residential	66	58	58
	M23	1 Residential	66	57	57
	M24	1 Residential	66	57	57
	M25	1 Residential	66	58	58
	M26	1 Residential	66	58	60
	M27	1 Residential	66	56	57
	M28	1 Residential	66	56	57
	M29	1 Residential	66	56	57
	M30	1 Residential	66	58	60
	M31	1 Residential	66	57	58
	M32	1 Residential	66	59	61

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE M	M33	1 Residential	66	59	61
	M34	1 Residential	66	54	55
	M35	1 Residential	66	54	55
	M36	1 Residential	66	56	59
	M37	1 Residential	66	53	57
	M38	1 Residential	66	53	57
	M39	1 Residential	66	53	57
	M40	1 Residential	66	52	56
	M41	1 Residential	66	55	59
	M42	1 Residential	66	53	56
	M43	1 Residential	66	55	58
	M44	1 Residential	66	56	60
	M45	1 Residential	66	57	60
	M46	1 Residential	66	58	60
	M47	1 Residential	66	57	60
	M48	1 Residential	66	58	59
	M49	1 Residential	66	57	60
	M50	1 Residential	66	55	58
CNE N	N1	2 Residential	66	54	53
	N2	2 Residential	66	56	55
	N3	2 Residential	66	57	56
	N4	1 Residential	66	57	58
	N5	1 Residential	66	58	59
	N6	1 Residential	66	54	54
	N7	1 Residential	66	52	53
	N8	1 Residential	66	59	61
	N9	2 Residential	66	52	53
	N10	1 Residential	66	61	63
	N11	1 Residential	66	54	55
	N12	1 Residential	66	62	66
	N13	1 Residential	66	55	55
	N14	1 Residential	66	51	50
	N15	1 Residential	66	49	49
	N16	1 Residential	66	56	56
	N17	1 Residential	66	52	50
	N18	1 Residential	66	51	50
	N19	1 Residential	66	55	53
	N20	1 Residential	66	59	66
	N21	1 Residential	66	53	51
	N22	2 Residential	66	50	50
	N23	1 Residential	66	54	51
	N24	1 Residential	66	51	51
	N25	1 Residential	66	60	61
	N26	1 Residential	66	59	56
	N27	2 Residential	66	50	50
	N28	1 Residential	66	57	55
	N29	3 Residential	66	51	51

CNE	1 Receptor Site	2 Site Representation	3 Criteria*	4 Existing 2015	5 Future Build 2040
CNE N	N30	2 Residential	66	49	50
	N31	2 Residential	66	49	49
	N32	1 Residential	66	49	49
	N33	1 Residential	66	60	59
	N34	2 Residential	66	53	52
	N35	2 Residential	66	51	50
	N36	1 Residential	66	66	64
	N37	1 Residential	66	52	53
	N38	1 Residential	66	55	63
	N39	1 Residential	66	47	55
	N40	1 Residential	66	56	55
	N41	1 Residential	66	56	67
	N42	2 Residential	66	56	55
	N43	1 Residential	66	55	54
	N44	1 Residential	66	54	64
	N45	1 Residential	66	57	55
	N46	1 Residential	66	57	64
	N47	1 Residential	66	56	62
	N48	1 Residential	66	64	56
	N49	1 Residential	66	65	58
	N50	1 Residential	66	65	59
	N51	1 Residential	66	65	59
	N53	1 Church (Interior)	51	47	40
	N54	1 Residential	66	73	72
	N55	2 Residential	66	51	50
	N56	1 Residential	66	50	49
	N57	1 Residential	66	49	48
	N58	2 Residential	66	53	54
	N59	1 Residential	66	55	55
	N60	2 Residential	66	53	53

Impacted Receptor

- Noise Levels not available forthis particular scenario

APPENDIX I
INSERTION LOSS TABLE

Insertion Loss Table
Route 7 Widening Project
Barrier Analysis by CNE

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
A	A1	A22	2 Residential	53	52	1
		A26	3 Residential	54	51	2
		A27	1 Church (Interior)	35	33	1
		A28	2 Residential	55	53	2
		A29	1 Residential	60	58	1
		A30	3 Residential	54	52	2
		A31	1 Residential	54	51	2
		A32	1 Residential	58	56	3
		A33	1 Residential	66	59	7
		A34	2 Residential	59	55	4
		A35	3 Residential	53	52	1
		A36	1 Residential	55	54	1
		A37	2 Residential	60	54	6
		A38	3 Residential	55	54	1
		A39	3 Residential	60	54	5
		A40	2 Residential	57	56	1
		A41	3 Residential	58	56	2
		A42	1 Residential	64	58	7
		A43	2 Residential	63	58	5
		A44	1 Residential	58	56	2
		A45	1 Residential	60	58	2
		A46	2 Residential	61	59	2
B and D	B1 - B5 and D1 System	B1	1 Animal Hospital (Interior)	46	46	1
		B2	1 Animal Hospital (Exterior)	60	60	1
		B4	1 Church (Interior)	40	38	2
		B5	1 Residential	69	65	5
		B6	1 Residential	62	60	2
		B7	1 Residential	68	62	6
		B8	1 Residential	56	53	3
		B9	1 Residential	56	52	5
		B10	1 Residential	71	59	11
		B11	1 Residential	59	53	6
		B12	1 Residential	56	52	4
		B13	1 Residential	61	55	6
		B14	1 Residential	70	64	6
		B15	1 Residential	57	54	3
		B16	1 Residential	55	53	3
		B17	1 Residential	62	58	4
		B18	1 Residential	71	63	9
		B19	2 Residential	58	54	3
		B21	1 School (Interior)	31	27	4
		B22	1 Residential	66	59	8
		B23	1 Residential	62	56	6
		B24	1 Residential	59	54	5
		B25	1 Residential	68	60	7
		B26	1 Residential	55	51	4
		B27	1 Residential	60	54	6
		B28	1 Residential	58	53	5
		B29	1 Commercial	66	60	6
		B30	1 Residential	69	60	8
		B31	1 Residential	67	59	8
		B32	1 Residential	67	58	9
		B33	1 Residential	62	56	6
		B34	2 Residential	57	52	5
		B35	1 Residential	60	54	6
		B36	1 Residential	62	55	7
		B37	1 Residential	70	59	11
		B38	1 Residential	62	55	8
		B39	1 Residential	65	56	9
		B40	2 Residential	56	50	6
		B41	1 Residential	57	51	6
		B42	1 Residential	66	59	6
		B43	1 Residential	64	57	7
		B44	1 Residential	70	65	5
		B45	1 Residential	56	50	6

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
B and D	B1 - B5 and D1 System	B46	1 Residential	64	57	6
		B47	1 Residential	71	65	6
		B48	2 Residential	58	53	6
		B49	1 Residential	61	55	6
		B50	1 Residential	64	58	5
		B51	2 Residential	57	52	4
		B52	1 Residential	62	56	5
		B53	1 Residential	65	59	5
		B54	1 Residential	68	61	7
		B55	2 Residential	58	54	5
		B56	1 Residential	72	63	8
		B57	1 Residential	56	52	4
		B58	2 Residential	60	55	5
		B59	1 Residential	63	59	5
		B60	1 Residential	65	60	5
		D1	1 Soccer Field	59	55	4
		D2	1 Soccer Field	60	55	5
		D3	1 Soccer Field	62	57	4
		D4	1 Soccer Field	65	61	4
		D5	1 Soccer Field	69	64	5
		D6	1 Soccer Field	57	53	4
		D7	1 Soccer Field	56	52	4
		D8	1 Soccer Field	55	51	4
		D9	1 Soccer Field	58	54	4
		D10	1 Soccer Field	60	56	4
		D11	1 Soccer Field	61	57	4
		D12	1 Soccer Field	63	59	5
		D13	1 Soccer Field	66	60	6
		D14	1 Soccer Field	57	53	4
		D15	1 Soccer Field	56	52	4
		D16	1 Soccer Field	54	51	3
		D17	1 Soccer Field	57	53	4
		D18	1 Soccer Field	59	55	4
		D19	1 Soccer Field	60	56	5
		D20	1 Soccer Field	62	57	5
		D21	1 Soccer Field	64	58	6
		D22	1 Soccer Field	56	52	4
		D23	1 Soccer Field	55	51	4
		D24	1 Soccer Field	54	50	4
		D26	1 Softball Field	61	56	5
		D25	1 Softball Field	63	58	6
		D27	1 Softball Field	59	55	4
		D28	1 Softball Field	60	56	4
		D29	1 Softball Field	62	57	5
		D30	1 Softball Field	59	56	4
C	C1 - C4 System	C1	1 Residential	57	57	1
		C2	1 Residential	57	56	1
		C3	2 Residential	53	51	2
		C4	1 Residential	58	56	2
		C5	1 Residential	63	60	3
		C6	2 Residential	54	49	4
		C7	1 Residential	61	56	5
		C8	3 Residential	60	52	8
		C9	1 Residential	63	56	7
		C10	1 Residential	66	55	11
		C11	1 Residential	64	54	10
		C12	1 Residential	48	44	3
		C13	2 Residential	53	47	5
		C14	2 Residential	57	49	8
		C15	1 Residential	66	55	10
		C16	4 Residential	52	47	5
		C17	1 Residential	53	48	6
		C18	1 Residential	69	55	14
		C19	1 Residential	57	50	8
		C20	1 Residential	59	51	8
		C21	1 Residential	64	52	12
		C22	1 Residential	61	53	8
		C23	1 Residential	57	50	8
		C24	1 Residential	53	48	6

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
C	C1 - C4 System	C25	1 Residential	58	51	7
		C26	1 Residential	66	56	10
		C27	1 Residential	54	48	6
		C28	1 Residential	68	56	11
		C29	1 Residential	53	48	6
		C30	1 Residential	61	52	9
		C31	1 Residential	54	48	6
		C32	1 Residential	58	50	8
		C33	2 Residential	51	46	5
		C34	1 Residential	68	60	8
		C35	1 Residential	67	55	12
		C36	3 Residential	56	49	7
		C37	1 Residential	62	51	11
		C38	2 Residential	59	50	9
		C39	1 Residential	62	54	9
		C40	1 Residential	57	51	6
		C41	1 Residential	55	50	6
		C42	2 Residential	64	55	9
		C43	1 Residential	56	51	5
		C44	2 Residential	68	58	10
		C45	1 Residential	57	51	5
		C46	1 Residential	62	55	7
		C47	1 Residential	62	56	6
		C48	1 Residential	54	50	4
		C49	1 Residential	65	57	8
		C50	3 Residential	54	49	5
		C51	1 Residential	56	51	6
		C52	1 Residential	67	57	10
		C53	1 Residential	53	49	5
		C54	1 Residential	59	52	7
		C55	3 Residential	53	49	4
		C56	1 Residential	71	58	13
		C57	1 Residential	55	50	5
		C58	1 Residential	61	52	9
		C59	1 Residential	67	54	13
		C60	1 Residential	52	49	3
		C61	1 Residential	65	54	11
		C62	1 Residential	62	54	8
		C63	1 Residential	63	54	9
		C64	1 Residential	62	54	8
		C65	3 Residential	52	49	3
		C66	1 Residential	63	56	7
		C67	1 Residential	70	57	13
		C68	1 Residential	70	59	11
		C69	1 Residential	66	59	7
		C70	1 Residential	58	54	4
		C71	1 Residential	67	64	3
		C72	2 Residential	55	54	1
		C73	1 Residential	59	55	4
		C74	2 Residential	54	53	1
		C75	1 Residential	67	59	9
		C76	1 Residential	67	60	7
D	D2	D31	1 Residential	59	56	3
		D32	1 Residential	66	59	7
		D33	1 Residential	65	55	10
		D34	1 Residential	58	55	3
		D35	1 Residential	56	54	2
		D36	1 Residential	56	53	3
		D37	1 Residential	58	55	3
E	E1 - E3 System	E1	1 Residential	63	60	3
		E2	1 Residential	60	59	2
		E3	1 Residential	57	55	2
		E4	1 Residential	64	59	5
		E5	1 Residential	66	59	7
		E6	1 Residential	66	60	7
		E7	1 Residential	64	58	6
		E8	2 Residential	57	53	4
		E9	2 Residential	54	50	3
		E10	1 Residential	54	51	2

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
E	E1 - E3 System	E11	1 Residential	67	62	5
		E12	1 Residential	70	62	9
		E13	1 Residential	59	55	4
		E14	1 Residential	63	58	5
		E15	1 Residential	66	60	7
		E16	1 Residential	60	56	4
		E17	1 Residential	54	50	4
		E18	1 Residential	67	60	7
		E19	1 Residential	61	57	4
		E20	1 Residential	65	60	5
		E21	1 Residential	73	66	7
		E22	2 Residential	53	49	3
		E23	1 Residential	62	56	5
		E24	2 Residential	56	53	3
		E25	3 Residential	58	54	4
		E26	2 Residential	74	61	13
		E27	2 Residential	57	54	3
		E28	1 Residential	59	54	5
		E29	1 Residential	63	58	5
		E30	1 Residential	57	52	5
		E31	1 Residential	59	54	5
		E32	1 Residential	61	56	5
		E33	1 Residential	55	51	4
		E34	1 Residential	69	58	11
		E35	1 Residential	60	55	5
		E36	1 Residential	54	50	4
		E37	1 Residential	60	53	7
		E38	2 Residential	56	50	5
		E39	1 Residential	72	60	12
		E40	1 Residential	74	61	13
		E41	1 Residential	65	56	9
		E42	1 Residential	68	60	8
		E43	2 Residential	58	51	7
		E44	1 Residential	72	61	11
		E45	1 Residential	56	51	5
		E46	2 Residential	62	55	7
		E47	1 Residential	67	59	8
		E48	1 Residential	67	63	3
		E49	2 Residential	54	49	4
		E50	1 Residential	62	60	3
		E51	2 Residential	58	55	3
		E52	2 Residential	58	57	1
F	F1 - F3 System	F13	1 Residential	68	63	5
		F14	1 Cemetery	74	68	6
		F15	1 Cemetery	68	64	4
		F16	1 Cemetery	63	61	3
		F17	1 Cemetery	75	67	8
		F18	1 Cemetery	69	64	6
		F19	1 Cemetery	62	59	3
		F20	1 Residential	57	54	3
		F21	1 Residential	62	58	5
		F22	1 Residential	55	52	2
		F23	2 Residential	73	63	9
		F24	1 Residential	55	51	3
		F25	1 Residential	66	59	7
		F26	1 Residential	63	57	5
		F27	1 Residential	65	60	5
		F28	1 Residential	57	53	4
		F29	1 Residential	60	56	4
		F30	1 Residential	57	53	4
		F31	1 Residential	76	66	10
		F32	1 Residential	61	58	3
		F33	1 Residential	55	52	3
		F34	1 Residential	74	65	9
		F35	1 Residential	68	62	7
		F36	2 Residential	60	58	2
		F37	1 Residential	64	59	5
		F38	1 Residential	71	61	9
		F39	1 Residential	62	58	5

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
F	F1 - F3 System	F40	1 Residential	67	61	6
		F41	1 Residential	67	63	4
		F42	1 Residential	70	64	5
		F43	1 Residential	61	56	5
		F44	1 Residential	57	54	3
		F45	1 Residential	71	64	7
		F46	1 Residential	61	57	4
		F47	1 Residential	71	62	9
		F48	1 Residential	61	57	4
		F49	1 Residential	54	51	3
		F50	1 Residential	71	61	10
		F51	1 Residential	61	55	5
		F52	1 Residential	66	59	7
		F53	2 Residential	59	54	5
		F54	1 Residential	57	52	6
		F55	1 Residential	68	60	8
		F56	1 Residential	61	55	6
		F57	1 Residential	62	55	7
		F58	1 Residential	58	54	5
		F59	1 Residential	60	54	6
		F60	1 Residential	70	62	7
		F61	1 Residential	68	63	5
		F62	1 Residential	63	58	5
		F63	1 Residential	60	57	4
		F64	1 Residential	75	72	4
		F65	1 Residential	65	62	3
		F66	1 Residential	61	58	3
		F67	1 Residential	61	59	3
		F68	2 Residential	62	62	0
		F69	1 Residential	61	60	1
		F70	1 Residential	58	57	1
	F4 - F9 System	CTB16	1 Proposed Trail Unit	72	60	12
		CTB17	1 Proposed Trail Unit	66	57	9
		CTB18	1 Proposed Trail Unit	64	56	8
		CTB19	1 Proposed Trail Unit	63	56	7
		CTB20	1 Proposed Trail Unit	62	55	7
		CTB21	1 Proposed Trail Unit	63	55	9
		CTB22	1 Proposed Trail Unit	62	54	8
		CTB23	1 Proposed Trail Unit	62	53	8
		F71	1 Residential	69	63	5
		F72	1 Residential	66	57	9
		F73	1 Residential	68	60	7
		F74	1 Residential	64	56	8
		F75	1 Residential	67	60	6
		F76	1 Residential	63	56	7
		F77	1 Residential	69	64	5
		F78	1 Residential	61	54	7
		F79	1 Residential	66	60	6
		F80	1 Residential	68	62	7
		F81	1 Residential	67	59	8
		F82	1 Residential	61	55	6
		F83	1 Residential	59	53	7
		F84	1 Residential	61	55	6
		F85	1 Residential	66	56	10
		F86	1 Residential	67	57	10
		F87	1 Residential	63	54	9
		F88	1 Residential	69	62	8
		F89	1 Residential	62	54	8
		F90	1 Residential	73	64	8
		F91	1 Residential	62	56	6
		F92	1 Residential	61	54	7
		F93	1 Residential	62	56	7
		F94	1 Residential	71	59	12
		F95	1 Residential	61	55	6
		F96	1 Residential	55	49	5
		F97	1 Residential	61	56	5
		F98	1 Residential	58	53	6
		F99	1 Residential	58	52	6
		F100	1 Residential	60	54	5

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
F	F4 - F9 System	F101	1 Residential	57	51	6
		F102	1 Residential	58	53	5
		F103	2 Residential	70	60	10
		F104	1 Residential	57	50	6
		F105	1 Residential	74	69	6
		F106	1 Residential	56	50	7
		F107	1 Residential	57	51	6
		F108	1 Residential	60	54	6
		F109	1 Residential	63	57	6
		F110	1 Residential	55	50	6
		F111	1 Residential	57	51	6
		F112	1 Residential	67	57	10
		F113	1 Residential	57	51	6
		F114	1 Residential	58	52	6
		F115	1 Residential	59	53	6
		F116	1 Residential	67	58	9
		F117	1 Residential	61	54	7
		F118	1 Residential	56	50	6
		F119	1 Residential	58	51	6
		F120	1 Residential	60	54	6
		F121	1 Residential	61	56	5
		F122	1 Residential	59	52	6
		F123	1 Residential	62	58	4
		F124	1 Residential	56	53	3
		F125	1 Residential	60	56	4
		F126	1 Residential	58	53	5
		F127	1 Residential	60	55	4
		F128	1 Residential	67	61	7
		F129	1 Residential	57	52	5
		F130	1 Residential	60	54	6
		F131	2 Residential	56	51	5
		F132	2 Residential	58	52	5
		F133	2 Residential	59	54	5
		F134	3 Residential	57	52	5
		F135	2 Residential	57	53	4
		F136	2 Residential	55	51	4
		F137	1 Residential	59	56	2
		F138	2 Residential	56	51	4
		F139	1 Residential	57	54	3
		F140	2 Residential	55	51	4
		F141	1 Historic Site	68	59	8
G	G1 - G7 System	G1	1 Residential	62	62	0
		G2	1 Residential	54	53	1
		G3	1 Residential	63	63	0
		G4	1 Residential	57	57	0
		G5	1 Residential	61	60	1
		G6	1 Residential	52	51	1
		G7	1 Residential	55	54	1
		G8	1 Residential	51	49	1
		G9	1 Residential	53	52	1
		G10	1 Residential	50	49	2
		G11	1 Residential	64	59	5
		G12	1 Residential	51	50	1
		G13	1 Residential	50	48	2
		G14	1 Residential	51	49	2
		G15	1 Residential	53	50	3
		G16	1 Residential	69	62	7
		G17	1 Residential	59	55	4
		G18	2 Residential	56	50	5
		G19	1 Residential	57	52	5
		G20	1 Residential	70	63	8
		G21	1 Residential	68	59	9
		G22	1 Residential	60	54	6
		G23	1 Residential	68	59	9
		G24	1 Residential	61	54	7
		G25	1 Residential	60	52	8
		G26	1 Residential	68	59	10
		G27	1 Residential	59	52	8
		G28	1 Residential	67	58	9

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
G	G1 - G7 System	G29	1 Residential	59	53	6
		G30	1 Residential	67	58	10
		G31	1 Residential	59	53	6
		G32	1 Residential	60	54	6
		G33	1 Residential	60	55	5
		G34	1 Residential	58	52	6
		G35	1 Residential	57	51	6
		G36	1 Residential	61	56	5
		G37	1 Residential	61	55	5
		G38	1 Residential	58	52	6
		G39	1 Residential	57	51	6
		G40	1 Residential	61	56	5
		G41	1 Residential	54	50	5
		G42	1 Residential	63	57	7
		G43	1 Residential	59	53	6
		G44	1 Residential	64	57	7
		G45	1 Residential	56	52	5
		G46	1 Residential	53	49	4
		G47	1 Residential	63	57	6
		G48	1 Residential	70	58	12
		G49	2 Residential	61	53	7
		G50	1 Residential	55	51	5
		G51	1 Residential	72	61	11
		G52	1 Residential	62	56	6
		G53	1 Residential	58	53	5
		G54	1 Residential	59	55	5
		G55	1 Residential	73	63	10
		G56	1 Residential	55	51	4
		G57	1 Residential	62	58	4
		G58	1 Residential	55	53	3
		G59	1 Residential	72	62	10
		G60	1 Residential	58	56	2
		G61	1 Residential	72	66	7
		G62	1 Residential	55	51	4
		G63	1 Residential	56	52	3
		G64	1 Residential	57	55	3
		G65	1 Residential	63	61	2
		G66	1 Residential	56	53	3
		G67	1 Residential	61	58	3
		G68	1 Residential	58	55	3
		G69	2 Residential	60	56	3
		G70	1 Residential	60	57	3
		G71	1 Residential	69	66	3
		G72	1 Residential	57	54	4
		G73	1 Church (Interior)	38	34	3
		G75	1 Residential	68	61	7
		G76	1 Residential	67	60	7
		G77	1 Residential	67	60	7
		G78	1 Residential	64	59	5
		G79	1 Residential	63	57	5
		G80	1 Residential	59	54	5
		G81	1 Residential	62	57	6
		G82	1 Residential	60	55	5
		G83	1 Residential	61	56	6
		G84	3 Residential	57	53	4
		G85	2 Residential	59	54	5
		G86	2 Residential	57	53	4
		G87	1 Residential	61	56	5
		G88	2 Residential	71	63	8
		G89	1 Residential	58	54	4
		G90	2 Residential	63	58	5
		G91	1 Residential	61	57	4
		G92	1 Residential	61	58	3
	G8 - G9 System	LT1	1 Existing Trail (Not being relocated)	59	57	2
		LT2	1 Existing Trail (Not being relocated)	60	58	3
		LT3	1 Existing Trail (Not being relocated)	61	58	3
		LT4	1 Existing Trail (Not being relocated)	63	58	4
		LT5	1 Existing Trail (Not being relocated)	64	59	5
		LT6	1 Existing Trail (Not being relocated)	65	59	5

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
G	G8 - G9 System	LT7	1 Existing Trail (Not being relocated)	65	61	4
		CTB1	1 Proposed Trail Unit	64	59	5
		CTB2	1 Proposed Trail Unit	65	60	5
		CTB3	1 Proposed Trail Unit	66	62	4
		CTB4	1 Proposed Trail Unit	68	64	4
		CTB5	1 Proposed Trail Unit	71	68	3
		CTB6	1 Proposed Trail Unit	75	74	1
		CTB7	1 Proposed Trail Unit	71	63	8
		CTB8	1 Proposed Trail Unit	71	62	9
		CTB9	1 Proposed Trail Unit	71	61	9
		CTB10	1 Proposed Trail Unit	70	61	9
		CTB11	1 Proposed Trail Unit	70	61	9
		CTB12	1 Proposed Trail Unit	69	61	8
		CTB13	1 Proposed Trail Unit	69	61	8
		CTB14	1 Proposed Trail Unit	69	62	7
		CTB15	1 Proposed Trail Unit	69	62	7
		G93	1 Residential	59	57	2
		G94	1 Residential	60	57	2
		G95	1 Residential	60	58	2
		G96	1 Residential	60	57	4
		G97	1 Residential	61	57	3
		G98	2 Residential	59	56	2
		G99	2 Residential	60	57	3
		G100	1 Residential	61	57	3
		G101	1 Residential	62	58	4
		G102	2 Residential	58	56	3
		G103	1 Residential	60	57	3
		G104	1 Residential	65	60	5
		G105	1 Residential	61	58	3
		G106	1 Residential	62	58	3
		G107	1 Residential	61	58	3
		G108	1 Residential	62	59	3
		G109	1 Residential	64	60	4
		G110	1 Residential	59	57	3
		G111	1 Residential	62	59	4
		G112	1 Residential	60	57	4
	G10 - G13 System	G113	1 Residential	62	61	2
		G114	1 Residential	70	65	6
		G115	1 Residential	61	58	3
		G116	1 Residential	74	69	5
		G117	1 Residential	53	50	4
		G118	2 Residential	54	51	4
		G119	1 Residential	57	54	3
		G120	1 Residential	60	57	3
		G121	1 Residential	53	50	3
		G122	1 Residential	71	63	8
		G123	1 Residential	66	59	7
		G124	1 Residential	53	51	2
		G125	1 Residential	55	52	2
		G126	1 Residential	57	54	2
		G127	1 Residential	69	60	8
		G128	1 Residential	52	49	3
		G129	1 Residential	67	59	8
		G130	1 Residential	63	56	6
		G131	1 Residential	53	50	3
		G132	1 Residential	54	52	3
		G133	1 Residential	58	56	2
		G134	1 Residential	54	52	2
		G135	1 Residential	54	51	3
		G136	1 Residential	52	50	2
		G137	1 Residential	72	68	4
		G138	1 Residential	65	60	5
		G139	1 Residential	53	51	2
		G140	1 Residential	55	53	2
		G141	1 Residential	53	52	2
		G142	1 Residential	48	46	2
		G143	1 Residential	66	60	6
		G144	1 Residential	56	55	2
		G145	1 Residential	57	55	2

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
G	G10 - G13 System	G146	1 Residential	58	56	2
		G147	1 Residential	67	60	7
		G148	1 Residential	49	48	2
		G149	1 Residential	55	53	2
		G150	1 Residential	60	58	2
		G151	1 Residential	69	61	9
		G152	1 Residential	53	51	2
		G153	1 Residential	56	54	2
		G154	1 Residential	61	59	2
		G155	1 Residential	72	64	8
		G156	1 Residential	55	54	2
		G157	1 Residential	60	58	3
		G158	1 Residential	72	65	7
		G159	1 Residential	64	61	3
		G160	1 Residential	59	57	3
		G161	1 Residential	72	64	8
		G162	1 Residential	73	64	8
		G163	1 Residential	63	60	3
		G164	1 Residential	62	59	3
		G165	1 Residential	73	66	7
		G166	1 Residential	62	59	3
		G167	1 Residential	73	68	5
		G168	1 Residential	63	60	2
		G169	1 Residential	70	64	6
		G170	1 Residential	68	64	4
	G14 - G16 System	G171	1 Preschool (Interior)	36	33	3
		G172	1 Residential	72	65	7
		G173	1 Residential	56	55	2
		G174	1 Playground	68	64	5
		G175	1 Residential	60	58	2
		G176	1 Residential	67	63	4
		G177	1 Dentist Office (Interior)	49	43	6
H	H1 - H2 System	H1	1 Residential	72	67	5
		H2	1 Residential	76	69	7
		H3	1 Residential	72	65	6
		H4	1 Residential	58	57	1
		H5	3 Residential	60	57	2
		H6	1 Residential	57	56	1
		H7	1 Residential	60	59	1
		H8	1 Residential	58	56	2
		H9	1 Residential	59	57	2
		H10	1 Residential	63	61	1
		H11	1 Residential	59	58	1
		H13	2 Residential	59	58	1
	H3 - H11 System	H12	1 Residential	70	61	9
		H14	1 Residential	64	60	4
		H15	1 Residential	70	61	9
		H16	1 Residential	59	56	3
		H17	1 Residential	62	57	5
		H18	1 Residential	61	57	5
		H19	1 Residential	63	58	5
		H20	1 Residential	67	60	7
		H21	1 Residential	60	56	4
		H22	1 Residential	59	55	4
		H23	1 Residential	58	54	4
		H24	1 Residential	77	68	9
		H25	1 Residential	64	60	5
		H26	1 Residential	64	59	6
		H27	2 Residential	72	66	6
		H28	2 Residential	64	59	5
		H29	1 Residential	59	55	4
		H30	1 Residential	76	68	8
		H31	1 Residential	61	56	4
		H32	1 Residential	64	59	5
		H33	2 Residential	60	56	4
		H34	1 Residential	76	67	9
		H35	1 Residential	65	59	6
		H36	2 Residential	64	59	5
		H37	1 Residential	59	55	4

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
H	H3 - H11 System	H38	1 Residential	74	68	6
		H39	1 Residential	66	61	5
		H40	1 Residential	60	55	5
		H41	1 Residential	74	69	5
		H42	1 Residential	61	57	4
		H43	1 Residential	59	55	4
		H44	1 Residential	74	69	5
		H45	1 Residential	63	59	4
		H46	1 Residential	60	56	4
		H47	1 Residential	65	60	5
		H48	1 Residential	64	59	5
		H49	1 Residential	61	56	5
		H50	1 Residential	65	59	6
		H51	1 Residential	63	58	5
		H52	1 Residential	64	59	5
		H53	1 Residential	64	58	6
		H54	1 Residential	60	56	4
		H55	1 Residential	62	58	4
		H57	1 School (Interior)	43	39	4
		H58	1 Residential	58	55	3
		H59	1 Residential	58	56	2
		H60	1 Residential	61	60	1
		H61	1 Playground Unit	70	62	8
		H62	1 Playground Unit	69	63	7
		H63	1 Playground Unit	68	64	4
		H64	1 Playground Unit	78	63	15
		H65	1 Playground Unit	78	63	16
		H66	1 Playground Unit	78	66	12
I/J/K	I1 - I6, J1 - J4, and K1 - K3 System	I2	1 Residential	56	52	3
		I3	1 Residential	64	60	4
		I4	1 Residential	56	53	4
		I5	1 Residential	58	54	4
		I6	1 Nursery	70	64	7
		I7	1 Residential	59	55	4
		I8	2 Residential	58	54	5
		I9	1 Residential	67	59	9
		I10	1 Residential	65	57	8
		I11	2 Residential	61	54	7
		I12	1 Residential	57	53	4
		I13	1 Residential	64	56	8
		I14	1 Residential	65	57	9
		I15	1 Residential	61	57	5
		I16	1 Residential	57	53	4
		I17	1 Residential	59	54	5
		I18	1 Residential	57	53	5
		I19	1 Residential	67	58	9
		I20	1 Residential	59	54	5
		I21	1 Residential	64	59	5
		I22	1 Residential	58	53	5
		I23	1 Residential	68	61	7
		I24	1 Residential	62	57	5
		I25	1 Residential	56	52	4
		I26	2 Residential	59	55	5
		I27	2 Residential	58	52	6
		I28	2 Residential	59	54	5
		I29	1 Residential	62	56	6
		I30	1 Residential	59	53	5
		I31	1 Residential	62	56	6
		I32	1 Residential	70	61	9
		I33	2 Residential	62	57	5
		I34	2 Residential	55	52	3
		I35	1 Residential	71	60	11
		I36	1 Residential	67	60	7
		I37	2 Residential	56	52	5
		I38	1 Residential	58	54	3
		I39	1 Residential	61	57	5
		I40	1 Residential	74	64	10
		I41	2 Residential	58	53	4
		I42	3 Residential	56	52	4

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
I/J/K	I1 - I6, J1 - J4, and K1 - K3 System	I43	1 Residential	68	63	5
		I44	2 Residential	58	54	4
		I45	2 Residential	60	56	4
		I46	2 Residential	60	56	4
		I47	1 Residential	67	64	3
		I48	2 Residential	57	52	4
		I49	1 Residential	64	60	3
		I50	2 Residential	60	56	4
		I51	3 Residential	59	55	4
		I52	1 Residential	62	58	4
		I53	1 Residential	65	58	6
		I54	1 Residential	59	55	4
		I55	1 Residential	59	56	4
		I56	3 Residential	56	52	4
		I57	2 Residential	54	51	4
		I58	1 Residential	51	49	2
		I59	1 Residential	58	56	3
		I60	1 Residential	52	49	2
		I61	1 Residential	56	52	4
		I62	2 Residential	53	52	2
		I63	1 Residential	57	54	3
		I64	1 Residential	55	52	3
		I65	1 Residential	56	53	3
		I66	2 Residential	58	54	4
		J1	2 Residential	55	54	1
		J2	1 Residential	56	54	1
		J3	2 Residential	53	51	2
		J4	1 Residential	60	59	1
		J5	1 Residential	70	65	5
		J6	1 Cemetery	63	60	3
		J7	1 Residential	62	58	4
		J8	1 Cemetery	65	59	7
		J9	1 Cemetery	63	58	5
		J10	1 Cemetery	60	56	4
		J11	1 Residential	67	59	8
		J12	1 Cemetery	68	60	8
		J13	1 Cemetery	66	60	6
		J14	1 Cemetery	63	58	5
		J15	1 Cemetery	57	53	4
		J16	1 Residential	54	51	3
		J17	1 Cemetery	69	61	8
		J18	1 Cemetery	69	62	7
		J19	1 Residential	56	52	5
		J20	1 Cemetery	66	61	6
		J21	1 Cemetery	61	56	5
		J22	1 Cemetery	57	53	4
		J23	1 Cemetery	74	65	9
		J24	2 Residential	57	52	4
		J25	1 Cemetery	69	63	6
		J26	1 Cemetery	67	61	6
		J27	1 Cemetery	60	55	5
		J28	1 Residential	56	52	4
		J29	1 Cemetery	74	68	6
		J30	1 Cemetery	65	59	6
		J31	1 Church (Interior)	47	41	6
		K1	1 Residential	67	59	8
		K2	1 Pre-school (Interior)	37	30	7
		K3	1 Pre-school (Exterior)	61	55	7
		K4	1 Residential	66	59	6
		K5	1 Residential	55	50	5
		K6	1 Residential	55	51	5
		K7	1 Residential	58	53	5
		K8	1 Church (Interior)	42	38	4
		K9	1 Residential	70	62	9
		K10	1 Residential	64	57	7
		K11	1 Residential	66	60	5
		K12	1 Residential	63	58	6
		K13	1 Residential	55	50	4
		K14	1 Residential	50	46	4

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
I/J/K	I1 - I6, J1 - J4, and K1 - K3 System	K15	1 Residential	59	52	7
		K16	2 Residential	59	52	7
		K17	1 Residential	63	54	9
		K18	2 Residential	59	52	7
		K19	1 Residential	66	58	9
		K20	1 Residential	59	53	6
		K21	1 Residential	61	54	6
		K22	1 Residential	62	56	7
		K23	1 Residential	67	59	8
		K24	1 Non-Profit Organization (Exterior)	59	53	6
		K25	1 Non-Profit Organization (Interior)	43	35	8
L	L1 - L9 System	L2	1 Residential	68	63	5
		L3	1 Residential	70	64	6
		L4	1 Residential	72	67	5
		L5	1 Residential	71	66	4
		L6	1 Residential	77	68	8
		L7	1 Residential	64	61	3
		L8	1 Residential	67	64	3
		L9	1 Residential	73	68	5
		L10	1 Residential	76	67	9
		L13	1 Residential	61	58	3
		L14	1 Residential	59	57	3
		L15	1 Residential	57	56	1
M	M1	M2	1 Residential	67	60	7
		M3	1 Residential	64	60	4
		M4	1 Residential	62	62	1
		M5	1 Residential	61	60	1
		M6	1 Residential	62	61	1
		M7	1 Residential	64	63	0
		M8	1 Residential	62	61	1
		M9	1 Residential	62	61	1
		M10	1 Residential	62	62	0
N	N1 - N3 System	N1	2 Residential	53	52	1
		N2	2 Residential	55	54	1
		N3	2 Residential	56	55	1
		N4	1 Residential	58	56	2
		N5	1 Residential	59	57	2
		N6	1 Residential	54	53	1
		N7	1 Residential	53	52	1
		N8	1 Residential	61	58	2
		N9	2 Residential	53	52	1
		N10	1 Residential	63	60	3
		N11	1 Residential	55	53	2
		N12	1 Residential	66	61	5
		N13	1 Residential	55	53	2
		N14	1 Residential	50	49	1
		N15	1 Residential	49	48	1
		N16	1 Residential	56	54	2
		N17	1 Residential	50	49	1
		N18	1 Residential	50	49	1
		N19	1 Residential	53	51	2
		N20	1 Residential	66	60	6
		N21	1 Residential	51	50	1
		N22	2 Residential	50	49	1
		N23	1 Residential	51	50	1
		N24	1 Residential	51	50	1
		N25	1 Residential	61	57	5
		N26	1 Residential	56	54	2
		N27	2 Residential	50	49	1
		N28	1 Residential	55	53	2
		N29	3 Residential	51	50	1
		N30	2 Residential	50	49	1
		N31	2 Residential	49	49	1
		N32	1 Residential	49	48	1
		N33	1 Residential	59	57	2
		N34	2 Residential	52	52	0
		N35	2 Residential	50	49	2

1	2	3	4	5	6	7
CNE Descriptor	Barrier	Site Descriptor	Site Representation	Build (2040) Noise Level	Abated (2040) Noise Level	Net Insertion Loss
N	N1 - N3 System	N36	1 Residential	64	62	2
		N37	1 Residential	53	49	3
		N38	1 Residential	63	57	6
		N39	1 Residential	55	53	3
		N40	1 Residential	55	54	0
		N41	1 Residential	67	58	8
		N42	2 Residential	55	55	0
		N43	1 Residential	54	52	2
		N44	1 Residential	64	57	7
		N45	1 Residential	55	55	1
		N46	1 Residential	64	59	5
		N47	1 Residential	62	57	6
		N48	1 Residential	56	56	0
		N49	1 Residential	58	58	0
		N50	1 Residential	59	59	0
		N51	1 Residential	59	58	0
		N53	1 Church (Interior)	40	39	0
		N55	2 Residential	50	48	2
		N56	1 Residential	49	47	2
		N57	1 Residential	48	47	1
		N58	2 Residential	54	53	1
		N59	1 Residential	55	54	1
		N60	2 Residential	53	52	1
	N4	N54	1 Residential	72	64	7
	Noise Levels approach or exceed FHWA/VDOT Noise Abatement Criteria					
	Insertion Losses are considered "feasible".					
	Insertion Losses are 7 dB(A) or greater					

APPENDIX J
REFERENCES

References

- Procedures for Abatement of Highway Traffic Noise and Construction Noise 23 CFR 772. 2011.

- U.S. Department of Transportation, Federal Highway Administration, *Highway Traffic Noise: Analysis and Abatement Guidance*, FHWA Report No. FHWA-HEP-10-025, December 2011.

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

- Virginia State Noise Abatement Policy

- Code of Virginia Noise Abatement Practices and technologies, Section 33.1-223.2:21. 2013, (HB 2577).

- Virginia Department of Transportation, *Highway Traffic Noise Impact Analysis Guidance Manual*, approved March 15, 2011, effective July 13, 2011, updated July 14th, 2015.

- Virginia Department of Transportation, 2007 *Road and Bridge Specifications*, Section 107.16(b.3) “Noise.”

APPENDIX K
LIST OF PREPARERS AND REVIEWERS

List of Preparers / Reviewers

McCormick Taylor, Inc.

Josh J. Wilson
Senior Transportation Noise Analyst
Education: B.S., Geo-Environmental Studies
M.S., Geo-Environmental Studies
Professional Experience: 15 Years
Role: Project Coordination, Noise Monitoring, Report Preparation & QA/QC

Jack Cramer
Senior Air Quality & Acoustical Scientist
Education: B.S., Geo-Environmental Studies
Professional Experience: 16 Years
Role: Report Preparation & QA/QC

Adam Diltz
Air Quality & Acoustical Scientist
Education: B.A., Geography & Environmental Planning
Professional Experience: 3 Years
Role: Noise Modeling, Report Preparation & QA/QC

Virginia Department of Transportation (VDOT)

Lovejoy Muchenje P.E
Noise Abatement Specialist
B.S Mechanical Engineering
Years of Professional Experience: 8
Role in the project: Reviewer/Noise Study Project Manager