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Federal Highway Administration

Brent Spence Bridge
Replacement/Rehabilitation Project

KENTUCKY TRANSPORTATION CABINET

Noise Study: Kentucky

KYTC Project Item No. 6-17

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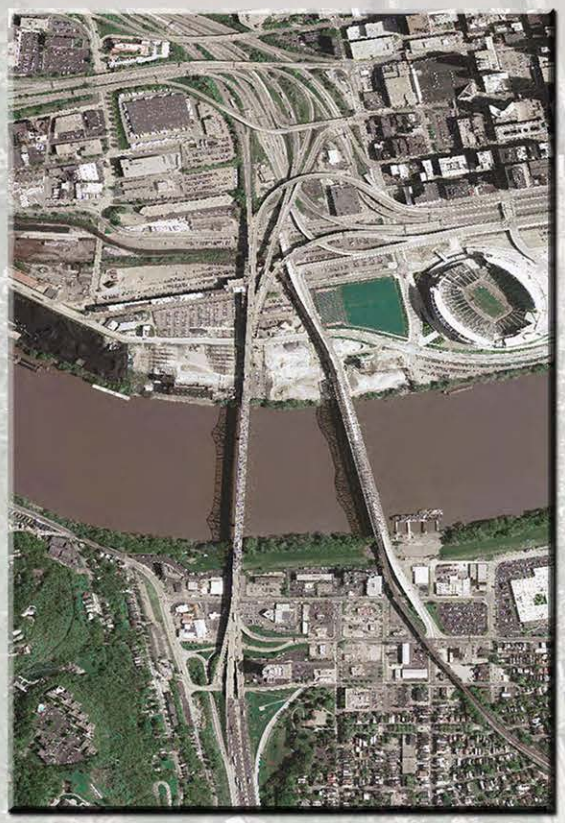

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Table of Contents

1.0 INTRODUCTION....1
1.1 Project Description....1
1.2 Purpose and Need....1
1.3 Study Corridor....2
1.4 Feasible Alternatives....2
1.4.1 Alternative E....2
1.4.2 Alternative I....3
1.5 No Build Alternative....3
2.0 NOISE....4
2.1 The A-Weighted Noise Level....4
2.2 Traffic Noise Descriptors....4
3.0 FHWA NOISE IMPACT AND ABATEMENT CRITERIA....5
3.1 Description of Each Activity Category....7
3.2 Establishing Exterior Areas of Frequent Human Use and Determination of Equivalent Receptors....9
4.0 NOISE ANALYSIS METHODOLGY....11
4.1 Land Uses....11
4.2 Traffic Data....11
4.2.1 Traffic Volumes....11
4.2.2 Development of Traffic Data....12
4.3 Traffic Noise Model....13
4.4 Noise Measurements....13
4.4.1 Field Data Collection....13
4.5 TNM Model Validation....15
5.0 FUTURE NOISE LEVELS....20
5.1 Future 2035 No Build Noise Levels....20
5.2 Alternative E....20
5.3 Alternative I....20
5.4 Alternative E and I Permitted Vacant Undeveloped Parcels Findings....21
6.0 NOISE ABATEMENT....123
6.1 KYTC Noise Barrier Feasibility and Reasonableness Factors....123
6.2 Noise Barrier Analysis Findings....124
6.3 Parallel Barrier Consideration....127
6.4 Noise Abatement Likelihood Statement....127
7.0 HIGHWAY CONSTRUCTION-RELATED NOISE....131
7.1 Noise Effects during Construction....131
7.2 Construction Noise Abatement Measures....131
8.0 CONCLUSIONS AND RECOMMENDATIONS....133
9.0 REFERENCES....134

List of Tables

Table 1. FHWA Noise Abatement Criteria for Highway Projects In units of A-Weighted Sound Level – Decibels (dB(A)) 6
Table 2. Building Noise Reduction Factors 8
Table 3A. Summary of Measured Peak Hour Noise Levels (L_{eq} [1hr]) dB(A) 16
Table 3B. Summary and Comparison of Weekday Daily Average Noise Measurements(L_{eq} [1hr]) dB(A) Collected in Goebel Park with the Community Pool Open and Closed 18
Table 4. TNM Validation: Summary of Ambient Noise Measurements and TNM Predicted Existing Noise Levels 19
Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels 22
Table 6. Summary of Impacts by FHWA Activity Category[1] 64
Table 7. Alternative E Noise Levels 65
Table 8. Alternative I Noise Levels 94
Table 9. Summary of Noise Abatement Analysis Findings for Alternative E 129
Table 10. Summary of Noise Abatement Analysis for Alternative I 130
Table 11. Typical Roadway Construction Equipment Noise Levels 132

List of Exhibits

Exhibit 1. Study Area
Exhibit 2. Sound Pressure Levels
Exhibit 3A-O. Noise Measurement and Prediction Sites
Exhibit 4. Alternative E Barrier B1 (22 feet) and Barrier B2 (24 feet)
Exhibit 5. Alternative E Barrier B3 (24 feet) and Barrier B4 (24 feet)
Exhibit 6. Alternative E Barrier B5 (24 feet)
Exhibit 7. Alternative E Barrier B6 (24 feet)
Exhibit 8. Alternative E Barrier B7 (20 feet)
Exhibit 9. Alternative E Barrier B8 (20 feet)
Exhibit 10. Alternative E Barrier B9 (24 feet)
Exhibit 11. Alternative E Barrier B10 (22 feet)
Exhibit 12. Alternative E Barrier B11 (20 feet)
Exhibit 13. Alternative I Barrier B12 (24 feet) and Barrier B13 (24 feet)
Exhibit 14. Alternative I Barrier B14 (24 feet) and Barrier B15 (24 feet)
Exhibit 15. Alternative I Barrier B16 (24 feet)
Exhibit 16. Alternative I Barrier B17 (24 feet)
Exhibit 17. Alternative I Barrier B18 (20 feet)
Exhibit 18. Alternative I Barrier B19 (20 feet)
Exhibit 19. Alternative I Barrier B20 (24 feet)
Exhibit 20. Alternative I Barrier B21 (22 feet)
Exhibit 21. Alternative I Barrier B22A (26 feet) and Barrier B22B (30 feet)

List of Appendices

Appendix A Traffic Data
Appendix B Field Measurements Datasheets
Appendix C TNM Files (Existing, No Build, Build & Build with Abatement)
Appendix D Alternative E: Sound Barrier Cost Effectiveness Analysis & Equivalent Benefiting Receptor Calculations
Appendix E Alternative I: Sound Barrier Cost Effectiveness Analysis & Equivalent Benefiting Receptor Calculations

Note: Appendix C consists of software files and is available upon request.

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1.0 INTRODUCTION

This Noise Study Technical Report: Kentucky has been prepared in support of the Brent Spence Bridge Replacement/Rehabilitation Project. The objective of this report is to assess and document the potential for the project to cause or increase the annoyance from traffic noise at adjacent residential communities. The noise study consists of the following primary elements:

- existing peak hour noise measurements were collected at exterior areas of representative properties,
- future (2035) peak hour noise levels without the project were estimated,
- future (2035) peak hour noise levels with the proposed Build Alternatives were estimated,
- properties that will experience noise levels above the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) impact threshold were identified, and
- determine if feasible and reasonable noise abatement can be provided at impacted properties in accordance with the Kentucky Transportation Cabinet's (KYTC) traffic noise policy guidelines effective July 13, 2011.

1.1 Project Description

Interstate 75 (I-75) Corridor within the Greater Cincinnati/Northern Kentucky region is a major thoroughfare for local and regional mobility. Locally, it connects to I-71, I-74, and US Route 50. The Brent Spence Bridge provides an interstate connection over the Ohio River and carries both I-71 and I-75 traffic (Exhibit 1). The bridge also facilitates local travel by providing access to downtown Cincinnati, Ohio and Covington, Kentucky. Safety, congestion and geometric problems exist on the structure and its approaches. The Brent Spence Bridge, which opened to traffic in 1963, was designed to carry 80,000 vehicles per day. Currently, approximately 160,000 vehicles per day use the Brent Spence Bridge and traffic volumes are projected to increase to approximately 233,000 vehicles per day in 2035 for the No Build Alternative.

The I-75 Corridor within the Greater Cincinnati/Northern Kentucky region is experiencing problems, which threaten the overall efficiency and flexibility of this vital trade corridor. Areas of concern include, but are not limited to, growing demand and congestion, land use pressures, environmental concerns, adequate safety margins, and maintaining linkage in key mobility, trade, and national defense highways.

The I-75 Corridor has been the subject of numerous planning and engineering studies over the years and is a strategic link in the region's and the nation's highway network. As such, the KYTC and Ohio Department of Transportation (ODOT), in cooperation with the FHWA, are proposing to improve the operational characteristics of I-75 and the Brent Spence Bridge in the Greater Cincinnati/Northern Kentucky region through a major transportation project.

1.2 Purpose and Need

The Brent Spence Bridge Replacement/Rehabilitation Project is intended to improve the operational characteristics within the I-71/I-75 corridor for both local and through traffic. In the Greater Cincinnati/Northern Kentucky region, the I-71/I-75 corridor suffers from congestion and safety–related issues as a result of inadequate capacity to accommodate current traffic demand.

The objectives of this project are to:

- improve traffic flow and level of service,
- improve safety,
- correct geometric deficiencies, and
- maintain connections to key regional and national transportation corridors.

1.3 Study Corridor

The overall project corridor is located along a 7.8-mile segment of I-75 within the Commonwealth of Kentucky (state line mile 186.7) and the State of Ohio (state line mile 2.7). The southern limit of the project is 5,000 feet south of the midpoint of the Dixie Highway Interchange on I-71/I-75 in Fort Wright, south of Covington, Kentucky. The northern limit of the project is 1,500 feet north of the midpoint of the Western Hills Viaduct Interchange on I-75 in Cincinnati, Ohio. The eastern and western limits of the study area generally follow the existing alignment of I-75. A depiction of the project study area is provided in Exhibit 1.

1.4 Feasible Alternatives

The Brent Spence Bridge Rehabilitation/Reconstruction project is currently in Steps 6 and 7 of the ODOT Project Development Process (PDP). Two feasible alternatives and the No Build Alternative are being developed and studied in more detail. The two alternatives selected for the Step 6 and 7 are Alternative E and Alternative I, which is a combination of conceptual Alternatives C and D from Step 5 of the PDP.

1.4.1 Alternative E

In Kentucky, Alternative E utilizes the existing I-71/I-75 alignment from the southern project limits at the Dixie Highway Interchange north to the Kyles Lane Interchange. The Dixie Highway and Kyles Lane interchanges will be modified slightly to accommodate a collector-distributor (C-D) roadway, which will be constructed along both sides of I-71/I-75 between the two interchanges. North of the Kyles Lane Interchange, the alignment shifts to the west to accommodate additional I-71/I-75 travel lanes. Between Kyles Lane and KY 12th Street, six lanes will be provided in each direction for a total of 12 travel lanes.

Near KY 12th Street, the northbound alignment separates into two routes; one for interstate traffic and one for a local C-D roadway. Between Pike Street and KY 9th Street, the interstate separates into I-71 and I-75 only routes. The C-D roadway will carry local traffic northbound and provide access to Covington at KY 12th and 5th streets and access from KY 9th and 4th streets. The southbound C-D roadway will carry traffic from Ohio and cross over I-71 and I-75 and provide access to both the interstate and into Covington at KY 9th Street.

A portion of Crescent Avenue will be closed with a new connection to Bullock Street. Access from Covington for southbound interstate traffic is located at KY 12th Street. Bullock Street will be extended north from Pike Street to KY 9th, 5th, and 4th streets and Jillians Way will be extended north from Pike Street to KY 9th and 5th, and 4th streets. Bullock Street and Jillians Way will function as one way pair local frontage roadways.

A new double deck bridge, the new Ohio River Bridge, will be built west of the existing Brent Spence Bridge to carry northbound and southbound I-71 and I-75 traffic. On the upper deck,

I-71 southbound will have three lanes and I-71 northbound will have two lanes. On the lower deck, I-75 will have three northbound and three southbound lanes. The existing Brent Spence Bridge will be rehabilitated to carry northbound and southbound local traffic with two lanes in the southbound direction and three lanes in the northbound direction.

1.4.2 Alternative I

In Kentucky, Alternative I is a combination of Alternatives C and D with certain design elements of Alternative G. Alternative I utilizes the existing I-71/I-75 alignment from the southern project limits at the Dixie Highway Interchange north to the Kyles Lane Interchange. The Dixie Highway and Kyles Lane interchanges will be modified slightly to accommodate a C-D roadway, which will be constructed along both sides of I-71/I-75 between the two interchanges. North of the Kyles Lane Interchange, the alignment shifts to the west to accommodate additional I-71/I-75 travel lanes. Between Kyles Lane and KY 12th Street, six lanes will be provided in each direction for a total of 12 travel lanes. Near KY 12th Street, the alignment northbound separates into three routes for I-71, I-75 and a local C-D roadway.

In Alternative I, access into Covington from the interstate will be provided by the local C-D roadway; at KY 12th Street for northbound traffic and at KY 5th and 9th streets for southbound traffic. Access from Covington for northbound traffic will be provided by a ramp located between Pike Street and KY 9th Street from Jillians Way. The ramp will provide direct access to I-71 from Covington and provide access to I-75 northbound using the C-D roadway through downtown Cincinnati and connecting at the merge near Ezzard Charles Drive. Access from Covington will also be provided at KY 4th Street to the northbound C-D roadway. Access from Covington for southbound interstate traffic is located at KY 12th Street. Bullock Street will be extended north from Pike Street to KY 9th, and 4th streets and Jillians Way will be extended north from Pike Street to KY 9th and 5th streets. Bullock Street and Jillians way will function as one way pair local frontage roadways.

A new double deck bridge will be built just west of the existing Brent Spence Bridge to carry northbound and southbound I-75 (three lanes in each direction), two lanes for southbound I-71 and three lanes for southbound local traffic. The existing Brent Spence Bridge will be rehabilitated to carry two lanes for northbound I-71 and three lanes for northbound local traffic.

Alternative I re-configures I-75 through the I-71/I-75/US 50 Interchange and eliminates all access to and from I-75 from KY 12th Street to the Freeman Avenue overpass in the northbound direction. Alternative I eliminates access to I-75 southbound between the Freeman Avenue exit and KY 9th Street. Alternative I also eliminates access from I-75 southbound between the US 50/6th Street overpass and Kyles Lane.

1.5 No Build Alternative

The No Build Alternative consists of minor, short-term safety and maintenance improvements to the Brent Spence Bridge and I-75 corridor, which would maintain continuing operations all within existing right-of-way.

The No Build Alternative does not meet the purpose and need for this project; however, the alternative is retained as a baseline alternative to compare with the feasible Build Alternatives.

2.0 NOISE

Noise is unwanted sound that causes annoyance to listeners. On a physical molecular level, sound is the vibration of air molecules that propagate as waves through the air, which results in the stimulation of the nerve endings in the human ear creating the sensation of hearing. Sounds occur in the human and natural environment at all times. Some sounds are necessary or desirable for communication or pleasure, while other sounds are unwanted causing disturbance to the people living or working nearby. Noise varies from place to place and also in intensity as the cycle of human activity changes over the course of the day. For reference and orientation to the decibel scale, representative noise sources and their respective decibel levels are shown in Exhibit 2.

2.1 The A-Weighted Noise Level

While a variety of methods can be used to describe and quantify noise conditions, sound levels in decibels (dB) are presented in this report. Decibels are a unit of measure on a logarithmic scale used to quantify the amount of sound pressure at a given location from the general outdoor environment or specific sources. The most commonly used measure of noise level is the A-weighted sound level (dB(A)). From many experiments with human listeners, scientists have found that unlike animals the human ear is more sensitive to midrange frequencies than it is to either low or very high frequencies. At the same sound level, midrange frequencies are therefore heard as louder than other low or very high frequencies. These physical characteristics of the human ear are taken into account by adjusting or weighting the octave band spectrum of the measured or predicted sound for the sensitivity of human hearing range. The A-weighted sound scale is a measure of sound that corresponds well to human subjective response to noise. The A-weighted sound level is widely accepted by the Federal Highway Administration (FHWA) and Kentucky Transportation Cabinet (KYTC) as the preferred sound weighting method for assessing human exposure and annoyance from traffic noise.

An understanding of the following relationships is helpful in providing a subjective impression of the human response to changes in the A-weighted sound level:

- an increase of only 1 dB(A) cannot be perceived,
- a 3 dB(A) increase is considered just at the threshold of a noticeable difference,
- a 5 dB(A) increase is considered readily perceived change in noise level, and
- a 10 dB(A) increase is subjectively heard as approximately a doubling (or halving) in loudness, independent of the existing noise level.

2.2 Traffic Noise Descriptors

Because environmental noise fluctuations vary from moment to moment, it is common practice to condense all of the information into a single number, called the “equivalent” sound level. Traffic noise levels applicable to transportation projects are often expressed in terms of an hourly equivalent noise level or L_{eq} (1-hr) dB(A). The L_{eq} is a measure of the average sound energy during a specified period of time (typically 1-hour duration) and is defined as the steady-state sound level that typically in a 1-hour period contains the logarithmic sum of the acoustic energy generated by the time-varying sound during that hour. Studies have shown that the L_{eq} (1-hr) descriptor correlates well with human response and annoyance to changes in noise levels. The L_{eq} during the noisiest traffic hour, expressed as L_{eq} (1-hr), is used by FHWA and KYTC as a descriptor for estimating traffic noise exposure.

3.0 FHWA NOISE IMPACT AND ABATEMENT CRITERIA

The National Environmental Policy Act (NEPA) of 1969 provides broad authority and responsibility for evaluating and mitigating adverse environmental effects including highway traffic noise. The NEPA directs federal agencies to use all practical means and measures to promote the general welfare and foster a healthy environment. The Federal-Aid Highway Act of 1970 specifically involves abatement of highway traffic noise and mandates Federal Highway Administration (FHWA) to develop noise standards for mitigating highway traffic noise.

In addition, Congress enacted standards and procedures for assessing the impact and abatement of highway traffic noise. These noise exposure standards and abatement procedures for establishing mitigation feasibility are covered under the United States Code of Federal Regulations Part 772 (23 CFR 772) *Procedures for Abatement of Highway Traffic Noise and Construction Noise.* The 23 CFR 772 regulations were updated in July 2011 in accordance with the FHWA 772 Final Rule and are described in detail in the document entitled *Highway Traffic Noise: Analysis and Abatement Guideline* (revised January 2011). The regulations establish traffic noise-level criteria for various land use activities and further provide that FHWA not approve plans and specifications for a federal-aid highway project unless adequate highway traffic noise abatement measures to implement the appropriate noise level standards are addressed.

The regulations contain noise abatement criteria, which represent the upper limit of acceptable highway traffic noise exposure levels for different types of land uses and human activities. The regulations do not require that the abatement criteria be met in every instance. Rather, they require that every reasonable and feasible effort be made to provide noise mitigation when the criteria are approached or exceeded. The FHWA guidelines apply to freeways and major arterial roads where traffic flows relatively freely. The regulations require the following during the planning and design of a highway project:

- Identification of traffic noise impacts.
- Examination and evaluation of potential mitigation measures.
- Incorporation of all identified reasonable and feasible noise mitigation measures into the highway project.
- Coordination with local officials and the affected residences to provide helpful information on compatible future land use planning, noise control and the recommended noise abatement measures identified in this study.

For FHWA Type I improvements, such as the Brent Spence Bridge Replacement/Rehabilitation Project, where substantial changes to both the vertical and horizontal alignment are proposed, compliance with FHWA mandates is required. Detailed noise modeling is required to a distance of 500 feet away from the proposed project edge of pavement for noise sensitive land uses. At a minimum, noise modeling must be completed at a distance that covers the extent of noise impacts identified from the proposed roadway improvements for each land use category. The minimum information required is the distance to the impact threshold of each land use category.

To determine if noise levels near highways are compatible with various land uses, FHWA has developed noise abatement criteria (NAC) and procedures to be used in the planning and design of highways. The basic goals of the criteria, as they apply to highway projects, are to minimize potential adverse noise impacts on communities and, where necessary and

appropriate, to provide feasible and reasonable abatement measures to either reduce or eliminate projected future build noise impacts.

The Kentucky Transportation Cabinet (KYTC) has developed procedures for assessing traffic noise impact and abatement feasibility and reasonableness which comply with the FHWA mandates. These impact and procedures are described in detail in the document entitled: *Noise Analysis and Abatement Policy,* effective July 13, 2011. A summary of the FHWA NAC for various land uses is presented in Table 1. These NAC levels represent the upper acceptable limit of traffic noise levels for exterior land uses and activities, and also for certain indoor activities. KYTC defines approach noise levels as being 1 decibel in A-weighted noise level (dB(A)) less than the NAC levels shown in Table 1. For example, an "approach" exterior noise level threshold of 66 dB(A) L_{eq} (1-hr) has been established for NAC for FHWA Category B and NAC Category C sites.

Table 1. FHWA Noise Abatement Criteria for Highway Projects
In units of A-Weighted Sound Level – Decibels (dB(A))

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

Source: *Federal Highway Administration Code of Federal Regulations, (23 CFR 772, effective July 13, 2011)*
Note: These sound levels are only to be used to determine impact. These are the absolute levels above which abatement must be considered. Noise abatement is designed to achieve a substantial noise reduction. Noise abatement is not designed to achieve the noise abatement criteria.

Independent of the approach level impact thresholds shown in Table 1, KYTC also considers a noise impact to occur when a substantial increase in noise level is predicted. Current KYTC traffic noise policy guidelines defines a substantial noise level change as an increase of 10 dB(A) or more in future build noise level over comparable existing noise levels. Either an approach level impact or the significant noise level increase constitutes a noise impact.

3.1 Description of Each Activity Category

A description of each of the FHWA NAC activity categories is provided below.

Activity Category A: Includes 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. Some examples of lands that have been analyzed as Activity Category A include the Tomb of the Unknown Soldier, a monastery, an outdoor prayer area of a facility for nuns, and an amphitheater. KYTC will consider Category A sites on a case-by-case basis, as these land uses are not typically encountered. Documentation of the land use shall be submitted to the KYTC Noise Specialist, who will contact the FHWA to seek concurrence with the Category A designation.

Activity Category B: Includes exterior areas for residential use. Noise measurements are taken in exterior areas of frequent human use where traffic noise would interfere with normal conversation such as on balconies, patios or in the backyard of the residence. In the case of multifamily buildings balconies that have potential outdoor use should be modeled as frequent human receptor points and assessed for impact. In addition other receptor locations which should be modeled include shared common outdoor areas such as patios, club houses, and pools. For these shared uses the equivalent number of residences should be used to determine the total number if equivalent residences for each multifamily building. KYTC has a defined methodology to determine the equivalent number of receptors these common shared outdoor areas based on usage factors and capacity limits for each type of activity area. The methodology used to estimate equivalent residences is described in Section 3.2.

Activity Category C: Includes exterior areas of non-residential lands as listed in Table 1 under Activity Category C such as, schools, parks, cemeteries, etc. These land uses are analyzed for traffic noise impacts by taking exterior readings in areas of frequent human use such as in school playgrounds, sports fields and similar areas. KYTC has developed a standard method to establish the number of equivalent receptors for these non-residential land uses. The methodology used to estimate equivalent residences is described in Section 3.2.

Activity Category D: includes certain land use facilities listed in Activity Category C that may have noise sensitivity to the interior spaces of these uses. These land uses shall be analyzed for traffic noise impacts per procedures found in FHWA's *Measurement of Highway Related Noise* (May 1996). Each structure is generally considered one receptor site for areas of frequent human use such as libraries, hospitals and public meeting rooms. Interior noise abatement measures are considered only after exhausting all outdoor mitigation options.

Determining the interior noise level for Activity Category D land uses, can be achieved by subtracting the predicted Traffic Noise Model Version 2.5 (TNM) exterior levels for using the noise reduction factors contained in Table 2. However during the noise abatement analysis, interior noise measurements should be collected at locations where KYTC considers noise insulation as the only reasonable abatement measure. The procedures to follow when collecting

interior noise measurements are contained in the FHWA's*, Measurement of Highway Related Noise (May 1996)*.

Table 2. Building Noise Reduction Factors

Building Type	Window Condition*	Noise Reduction Due to Exterior of the Structure
All	Open	10 dB
Light Frame	Ordinary Sash (closed)	20 dB
	Storm Windows	25 dB
Masonry	Single Glazed	25 dB
	Double Glazed	35 dB

Source: *Highway Traffic Noise: Analysis and Abatement Guidance*, Revised January 2011

***** The windows shall be considered open unless there is firm knowledge that the windows are in fact kept closed almost every day of the year.

Activity Category E: Includes exterior areas of developed lands that are less sensitive to highway noise. These land uses include motels, hotels, offices and other developed lands not included in Activity Categories A-D or F. In the case of motels and hotels, outdoor pool areas or courtyards are considered shared exterior areas of frequent human use. The number of equivalent residences for Activity Category E land uses should be determined in a similar manner as that used for multi-family buildings. For example, balconies, outdoor pools or other areas of exterior frequent human use of motels and hotels identified and usage factors or capacity limits for each activity determined to estimate equivalent residential units. The methodology used to estimate equivalent residences is described in Section 3.2.

Activity Category F: Includes a number of land uses that are not sensitive to noise. No noise analysis is required for these locations.

Activity Category G: Includes undeveloped lands. Although consideration of mitigation is not required under 23 CFR 772, noise levels under the future build condition must be determined and documented. Furthermore, noise levels on undeveloped lands are to be made available to potential future land developers and local officials. Depending on the size of the undeveloped land, and if the vacant property has been issued permits the minimum information to be provided under future build conditions consists of either the distance to the impact threshold of each land use category or noise level estimates at discrete receptor points on the vacant parcels.

For undeveloped lands without a permit, the FHWA TNM modeling should be completed for vacant parcels at 50 feet from the edge of pavement or the right-of-way line at 100 feet and at every additional 100 feet (not to exceed 800 feet) until an impact zone is established that would identify potential impact for all potential future development. If non-permitted vacant land is not permitted by the date of public knowledge, the noise level information will be provided to the appropriate local government office for planning purposes in accordance with 23 CFR 772.17(a).

For undeveloped lands with a permit the area should be analyzed for traffic noise impacts by collecting sound measurements and conducting modeling, as described in the previous section,

using the activity category that best describes the future intended land use. Noise impacts and abatement consideration should be completed consistent with the permitted future intended land use for that particular activity category. In cases where the land is not permitted prior to the date of public knowledge, noise abatement is not required nor is abatement eligible for federal aid at a future date. The date of public knowledge is the date the NEPA document is approved.

3.2 Establishing Exterior Areas of Frequent Human Use and Determination of Equivalent Receptors

A noise receiver location is an area where noise is measured and/or determined. The receiver locations are normally restricted to "exterior areas of frequent human use." Exterior receivers are typically:

- at or near the highway right-of-way line,
- at or near a building in residential or commercial areas,
- at an area between the right-of-way line and a building where ground level frequent human activity occurs, such as a patio, pool, or play area in the yard of a single family home,
- at public community facilities such as playgrounds, pools, parks, campgrounds, trails, picnic areas, active recreation areas such as basketball courts, baseball and football fields,
- at multi-story multi-family apartment or condominium building's exterior balconies or decks are considered suitable elevated receiver locations of frequent human use. In addition ground floor exterior areas shared by the members of the multi-family building are also suitable modeling receiver locations, and
- at schools, day-care facilities, retirement homes, churches, cemeteries, hospitals and other types of medical facilities.

Determining the equivalent number of receptors is an important step in properly establishing the number of potentially impacted people exposed to traffic noise generated from the Build Alternatives and the effectiveness of a proposed noise wall. Along those lines, KYTC has developed a set of guidelines and procedures for determine the number of equivalent number of residences for many of the land uses listed above. Determining the equivalent number of residences is necessary in establishing the feasibility and reasonableness of a proposed noise barrier in providing cost and acoustically effective abatement. The following formula is used in determining the equivalent number of residences:

Equivalent Residences = (# of Persons/2.5 Persons Per Average Household) x (Usage Factor)

Where:

Usage Factor = (Average Daily Hours of Use/24 hours per Day)

Or

Usage Factor = (Average Weekly Hours of Use/168 hours per Week)

"# of Persons" are those people who use the facility within 500 feet of the proposed edge of pavement. The numbers of persons were established through consultation with the school, church, daycare, etc. and are based upon the greater of either the number enrolled or capacity

of the facility. Where use involved a park, trail, or other exterior activity, the facility official was consulted to determine the use that occurs within 500 feet of the proposed edge of pavement for the Build Alternatives, and the extent of that use.

"Average Daily Hours of Use" or **"Average Weekly Hours of Use"** is the average number of hours during which the "# Persons" use the facility within the 500 foot of the proposed Build Alternative. The average should account for time that the facility is not in use such as nights and weekends.

4.0 NOISE ANALYSIS METHODOLGY

The purpose of the noise analysis is to:

- Identify existing and potential noise sensitive areas within a 500 foot envelope from the proposed project edge of pavement for the Build Alternatives.
- Group identified land uses into one of the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) land use activity categories.
- Estimate existing and future noise levels with and without the proposed Build Alternatives at each land use using the FHWA Traffic Noise Model Version 2.5 (TNM).
- Identify all properties where future build noise levels are projected to exceed FHWA traffic noise impact criteria up to a distance where there are no impacts caused from the proposed Build Alternatives.
- Evaluate the feasibility and reasonableness of providing noise abatement at locations where impacts are predicted to occur in accordance Kentucky Transportation Cabinet (KYTC) traffic noise policy guidelines.

4.1 Land Uses

In order to identify noise sensitive receptors within the study area, the following tasks were conducted:

- aerial photography of the study area was reviewed,
- Geographic Information System (GIS) data of the study area was analyzed, and
- field reconnaissance.

In Kentucky, the study area includes mostly industrial and commercial land uses with a few small areas of residential uses. Several historic structures, schools, and parks are found within the study area. Based on these findings, land uses in the study area are categorized as Activity Categories B (residential) and C (commercial). Sites listed on the National Register of Historic Places (NRHP) are categorized as Activity Category B.

4.2 Traffic Data

Travel demand model and traffic count data were utilized to develop traffic projections for the No Build Alternative and Alternatives E and I in the 2035 design year. Traffic data used for this analysis are provided in Appendix A.

4.2.1 Traffic Volumes

Traffic counts were taken as follows:

- Existing weekday traffic volumes on the roadways within the project study area in September, October, and November of 2005,
- Traffic data at the Dixie Highway Interchange, on I-71 near the I-471 Interchange area and on I-71 near the I-471 Interchange area were collected in January 2008, and
- Traffic volumes at at-grade intersections were collected using turning movement counts, while ramp and mainline volumes on I-71, I-75, and US 50 were collected using portable machine counters. Peak morning (7:30 to 8:30 AM) and afternoon (4:30 to 5:30 PM)

hours were identified from the traffic counts and were used to estimate existing conditions (2005).

Design year (2035) traffic volumes were estimated using the Ohio Kentucky Indiana Regional Council of Government (OKI)'s regional travel demand model and existing year (2005) volumes. In order to coordinate the traffic projections within the I-75 corridor and the region, traffic projections for three adjoining I-75 projects (HAM-71/75-0.00/0.22 Brent Spence Bridge, HAM-75-2.30 Mill Creek Expressway, and HAM-75-10.10 Thru the Valley) were incorporated into the OKI regional travel demand model. In addition to future No Build, the OKI demand model was used to predict 2035 design hour traffic volumes for the proposed Build Alternatives. The demand model was re-run for each of the alternatives because differences in freeway access points affect local streets and freeway traffic patterns.

Truck percentages for the study area were calculated based on existing traffic counts and growth rates generated from the travel demand model.

4.2.2 Development of Traffic Data

Traffic data were developed as follows:

- Existing 4-hour turning movement counts were factored to average daily traffic (ADT) volumes using hourly distributions and seasonal adjustment factors;
- 72-hour and 48-hour ramp counts were converted to ADTs by applying seasonal adjustment factors;
- Calculated ADT volumes were compared to historical count information and ramp counts and existing traffic counts were adjusted along the mainline and between intersections as appropriate for the AM, PM, and calculated ADT volumes; and
- AM and PM volumes were factored to design hours by applying a factor of 1.056 (as was done for the HAM-75-2.30 PID 76257 [Mill Creek Expressway] Project; which is located at the northern limits of the project corridor).

The OKI regional travel demand model was also used to develop traffic assignments for the 2035 design year. Using the methods described in the National Cooperative Highway Research Program (NCHRP) 255 report, 24-hour model assignments were post-processed by comparing ADT count data to the base year (2005) model assignments and applying the same over/under estimation to the future year (2035) model assignment. A hybrid mix of the ratio and delta methods were applied to each link. Finally, 2035 ADT volumes were calculated by applying a straight line extrapolation between the 2005 counts and the post-processed 2035 ADT.

A growth factor was calculated for each link by dividing the 2035 ADT by the 2005 traffic count. This factor was then applied to the AM and PM peak hour count data to get 2035 AM and PM peak hour data.

Turning movement forecasts for the 2035 AM, PM, and ADT were made using the NCHRP 255 iterative proportional method. Interchanges were treated as single point intersections, where possible, to determine the mainline, cross street, and ramp volumes. Finally, all 2035 traffic volumes on the mainline and between intersections were adjusted as appropriate for the AM, PM, and ADT time periods. The results of this process provided the existing and future traffic networks that were approved (certified) for use on this project by KYTC.

4.3 Traffic Noise Model

The noise analysis process included the development of a three-dimensional geometric representation of the study area utilizing the FHWA TNM version 2.5. This involved computer coding of the physical roadway configurations and major geographic features such as tree zones, pavement surfaces, terrain lines and adjacent noise sensitive properties (described as receptor sites).

The TNM file coding process was completed using electronic based Micro-station design plans of the study area, which depict the existing I-71 and I-75 highways, service roads, primary intersecting streets and proposed improvements. For each roadway segment, traffic volumes and vehicle travel speeds were inputted into the TNM file. The TNM program was then executed and noise levels were predicted at applicable receptor sites.

The resultant noise levels were tabulated and noise impacts associated with the proposed roadway improvements identified. In residential areas where noise impacts were projected to occur, a noise barrier analysis was completed to determine if noise reductions can be achieved while satisfying KYTC feasibility and reasonableness requirements. Noise barrier heights and lengths were optimized for this analysis to provide the maximum noise reduction achievable at the lowest possible cost per benefiting property.

4.4 Noise Measurements

This section provides a summary of activities associated with the ambient noise monitoring survey. Noise measurements were collected using noise monitoring equipment, which is in conformance with the American National Standards Institute (ANSI) requirements. Field measurements were collected consistent with guidelines contained in the FHWA's *Measurements of Highway Related Noise* (May 1996).

4.4.1 Field Data Collection

Noise monitoring sites were selected in residential communities fronting the I-75 Corridor, which would result in maximum exposure to future traffic noise generated by the proposed Build Alternatives and to provide adequate geographic coverage within the study area.

Noise measurements were collected in January and February 2010, at 48 representative noise sensitive properties spanning the entire project study area between Ohio and Kentucky. The 16 noise measurement sites in Ohio are identified as sites M-1 through M-16 (see Ohio Department of Transportation (ODOT) PID 75119 Noise Study Technical Report for further details) and the 32 monitoring sites in Kentucky are labeled M-17 thru M-48. To provide continuity with the *Brent Spence Bridge Noise Screening Report* completed in February 2009, the former noise receptor identification numbers are provided in parenthesis adjacent to the new identification numbers. In addition to the 2009 receptor locations new receptors were added to provide adequate geographic coverage of the study area as required under the revised KYTC traffic noise policy (July 2011).

At each representative site, noise measurements were made during the 7:00 to 9:00 AM and 4:00 to 6:00 PM peak hours for 20-minute periods. Noise measurements were collected using several Brüel & Kjær (B&K) Type 2231 and 2238 sound level meters fitted with a B&K Type

5155 condenser microphone and windshield. Calibration of the noise equipment was performed before and after each reading. Noise measurements were collected on rain-free days with wind speeds of less than 12 miles per hour (Appendix B). A summary of measured peak hour ambient noise levels is provided in Table 3A and the locations of each of these monitoring sites are provided in Exhibits 3A through 3N. In addition to the 32 noise measurement sites, the exhibits depict the location of 926 additional noise prediction locations derived from the land use survey. On the exhibit plan sheets, the noise measurement sites are depicted by a yellow colored dot and noise prediction receptor sites are depicted by the red colored dot.

The predominate source of noise in the study area is generated from motor vehicles traveling on the I-75, service roads and connecting roadways. Residential areas and community facilities adjacent to these roadways are exposed to moderate to high levels of existing road traffic noise. Noise levels which approach or exceed the NAC impact thresholds are shown in bold type in Table 3A. Existing peak-hour noise levels approached or exceeded the FHWA Category B impact threshold of 66 dB(A) at a total of 23 out of the 32 monitoring locations. Noise measurements ranged from a low reading of 53.8 dB(A) at Site M-34 during the peak AM time period to a high monitored level of 76.1 dB(A) at Site M-43 during the peak PM time period. Noise levels above the NAC impact thresholds are shown in bold in Table 3A.

Due to concerns regarding current and proposed noise levels within Goebel Park, 24 hour noise measurements in August of 2011 at three locations were collected. The three monitoring locations are shown in Exhibit 3O. The readings were done in early August when the pool was open to the public and late August after the pool had been closed for the year to determine if activities associated the pool contributed to the overall diurnal noise cycle. In addition, the 24 hour noise monitoring was collected to discern if there were other hours of the day where ambient noise levels were significantly higher than the peak AM and PM traffic hours used for the traffic noise modeling. A summary of the noise measurements are provided in Table 3B.

The noise levels shown in Table 3B represent the average hourly noise levels for each hour of the day the noise readings were collected. In addition to the hourly L_{eq} noise levels. The other noise indices are shown in Table 3A. The table includes the “Lday” level which is a measure of the noise level during the time period of 7:00 AM to 10:00 PM. Similarly, the “Lnight” noise level is a measure of the noise level in during the nighttime hours covering the period of 10:00 PM to 7:00 AM. The last noise descriptor shown in Table 3B is the day-night noise level or “Ldn” which is a measure of the noise level over a 24 hour time period. The Ldn noise descriptor is generally used to determine annoyance during nighttime hours when people are sleeping and there is greater sensitivity to noise. These noise descriptors are used by federal transportation agencies to measure noise, its annoyance and impact on people over longer time interval duration than the single hour L_{eq} measure. However all these noise level descriptors are derived from measured hourly L_{eq} levels.

The noise measurements with the pool open were collected over a four day continuous time period and the resulting hourly noise levels for each hour represents a four day logarithmic average for that hour of the day. For example, at measurement Site 2 which is closest to the pool area (Exhibit 3O), the four day average noise level between the hours of between 5:00 and 6:00 PM with the pool open was 68.1 dB(A) where as the three day average noise level during the same hour with the pool closed was 3.3 dB(A) lower reaching only 64.8 dB(A). In general the diurnal hourly noise levels with the pool open were higher than those with the pool closed. This was particularly true at noise measurement Sites 1 and 2. The noise levels during the hours of the day the pool is open are generally 1 to 4 dB(A) higher than the corresponding

measurement with the pool closed. The dominate noise source in the study area was traffic movements along the I-71/I-75 mainline roadways, however local noise generated by people using the pool likely contributed to some of the higher noise levels observed at Site 2. Furthermore, the Lday, Lnight and Ldn levels at Sites 1 and 2 were found to be between one and three dB(A) higher with the pool open than closed. Noise monitoring Site 3 was generally higher with the pool closed, however this monitoring site is far away from the pool area and noise levels in this area may have been influenced more by fluctuations in local traffic movements on West KY 9th Street than by any other noise source. With regard to diurnal noise patterns, the findings indicate no significant statistical variation from hour to hour in peak noise levels during the daytime hours. In general, the measurements show minor peak clustering occurring around the AM and PM peak travel time periods. Moreover, by modeling both the AM and PM peak time travel time periods, any directional influence in traffic noise patterns on residential areas located one side of the highway versus the other would be captured in the noise modeling effort.

4.5 TNM Model Validation

A TNM model validation was completed at three of the 32 representative noise monitoring locations where noise measurements were originally collected in January and February 2010. The validation process is necessary to verify if the existing ambient noise conditions measured in the field are reproducible within the TNM model. Simultaneous traffic counts and noise measurements where collected in August 2, 2011 at Sites M-21 (Exhibit 3B), M-27(Exhibit 3E) and M-45 (Exhibit 3L). Each noise measurement was recorded for a 30 minute continuous duration using a calibrated B & K Model 2231 sound level meter (SLM) fitted with a windshield. In addition, prior to each noise measurement the SLM was calibrated for accuracy using a B & K 4230 calibrator. The B&K 2231 SLM and 4230 Calibrator are annually laboratory certified pieces of calibrated monitoring equipment satisfying the ANSI Type I precision for noise measurement sampling accuracy. All measurements were performed under acceptable climatic and street surface conditions (i.e., dry road surface and low wind speeds).

At each noise measurement location the collected traffic count data is normalized to a single hour time period and the resulting vehicle count is then input into the FHWA noise model along with the existing site geometry of each noise monitoring location. The predicted noise levels are compared to the ambient measured noise levels to establish if the roadway geometrics and physical ground terrain characteristics of each monitoring location are properly captured in the TNM modeling files. The TNM model validation is completed to ensure good association between measured and predicted noise levels can be achieved through the modeling process. Thereby providing a good measure of the accuracy of future predicted noise levels. A summary of the short-term noise measurement and TNM model predicted noise levels are provided in Table 4. TNM predicted noise levels for both peak hour time periods were estimated to be within KYTC defined acceptable range of plus or minus 3 dB(A) of the corresponding measured noise level at all three of the noise monitoring locations and therefore providing reasonable correlation and validation.

Table 3A. Summary of Measured Peak Hour Noise Levels (L_{eq} [1hr]) dB(A)

Site Number	Address of Measurement Site	Land Use	NAC Category	AM	PM
				L_{eq} (1hr) dB(A)	L_{eq} (1hr) dB(A)
M-17(K161)	881 Highway Avenue, Covington	Residential	Category B	63.6	63.0
M-18(K190)	407 Western Avenue, Covington	Residential	Category B	65.3	**65.5**
M-19(K25)	514 Western Avenue, Covington	Residential	Category B	**67.0**	64.5
M-20(K309)	Goebel Park, (north) near Philadelphia Street, Covington	Recreational	Category C	**66.2**	**69.5**
M-21(K304)	641Crescent Ave, Covington	Residential	Category B	**70.8**	**68.5**
M-22(K484)	818 Crescent Avenue, Covington	Residential	Category B	**73.5**	**69.6**
M-23(K506)	Goebel Park, (southern) near West 9th and Philadelphia streets, Covington	Recreational	Category C	**67.0**	**65.6**
M-24(K655)	619 West Pike Street, Covington	Residential	Category B	**71.7**	**71.2**
M-25(K707)	605 West 11th Street, Covington	Residential	Category B	**70.9**	**70.7**
M-26(K697)	522 West 12th Street, Covington	Commercial	Category E	**71.3**	**71.5**
M-27(K1007)	536 West 13th Street, Covington	Residential	Category B	**70.9**	**74.1**
M-28(K879)	1304 Hinde Street, Covington	Residential	Category B	**71.7**	**69.5**
M-29(K1148)	625 Edgecliff Road, Covington	Residential	Category B	61.1	64.5
M-30(K1176)	506 Scenic Drive, Park Hills	Residential	Category B	65.1	**68.1**
M-31(K1979)	1132 Cedar Ridge Lane, Park Hills	Residential	Category B	**66.6**	**68.9**
M-32(K1983)	500 Highland Avenue, Covington	Nursing Home	Category B	61.1	62.2
M-33(K1581)	1000 Emery Drive, Covington	Residential	Category B	**69.9**	**75.0**
M-34(K1604)	1042 Emery Drive, Covington	Residential	Category B	53.8	55.5
M-35(K1503)	502 St Joseph Lane, Park Hills	Residential	Category B	**67.3**	**68.7**
M-36(K1573)	Notre Dame Academy, 1699 Hilton Drive, Park Hills	School	Category D	**67.7**	**67.3**
M-37(K1616)	1565 Saint Anthony Street, Fort Wright	Residential	Category B	**69.8**	**70.6**
M-38(K1609)	1586 Marcella Drive, Fort Wright	Residential	Category B	**70.3**	**72.6**
M-39(K2037)	101 Kyles Lane, Fort Wright	Residential	Category B	**68.1**	64.6

Table 3A. Summary of Measured Peak Hour Noise Levels (L_{eq} [1hr]) dB(A)

Site Number	Address of Measurement Site	Land Use	NAC Category	AM	PM
				L_{eq} (1hr) dB(A)	L_{eq} (1hr) dB(A)
M-40(K1315)	1 Lake Street, Fort Wright	Residential	Category B	61.2	61.0
M-41(K1318)	15 Highview Drive, Fort Wright	Residential	Category B	**70.7**	**72.1**
M-42(K1348)	1 Highview Drive, Fort Wright	Residential	Category B	**66.4**	**70.7**
M-43(K1349)	Days Inn, 1945 Dixie Highway, Fort Wright	Commercial	Category E	**74.4**	**76.1**
M-44(K75)	1971 Pieck Drive, Fort Mitchell	Residential	Category B	**68.1**	**72.3**
M-45(K1484)	Central Church of Nazarene, 2006 Pieck Drive, Fort Wright	Church	Category D	**70.4**	**73.7**
M-46(K1469)	15 Leslie Avenue, Fort Mitchell	Residential	Category B	**68.3**	**69.2**
M-47(K2141)	Beechwood Elementary and High schools, 54 Beechwood Road, Fort Mitchell	School	Category C	56.8	59.1
M-48(K37)	102 West Maple Avenue, Fort Mitchell	Residential	Category B	62.1	63.7

[1] Noise measurements collected in January and February 2010 for duration of 20 minutes per noise measurement.

Table 3B. Summary and Comparison of Weekday Daily Average Noise Measurements(L_{eq} [1hr]) dB(A) Collected in Goebel Park with the Community Pool Open and Closed

Time	Site 1 Noise Measurement Comparison[1]			Site 2 Noise Measurement Comparison			Site 3 Noise Measurement Comparison		
	4 Day Average with Pool Open L_{eq} (1hr) dB(A)	3 Day Average with Pool Closed L_{eq} (1 hr) dB(A)	Comparison of Pool Open Minus Pool Closed	4 Day Average with Pool Open L_{eq} (1hr) dB(A)	3 Day Average with Pool Closed L_{eq} (1 hr) dB(A)	Comparison of Pool Open Minus Pool Closed	4 Day Average with Pool Open L_{eq} (1hr) dB(A)	3 Day Average with Pool Closed L_{eq} (1 hr) dB(A)	Comparison of Pool Open Minus Pool Closed
12-1 AM	65.9	63.9	2.0	64.1	64.0	0.1	61.2	64.0	-2.8
1-2 AM	64.9	63.0	1.9	63.6	63.8	-0.2	60.3	64.2	-3.9
2-3 AM	64.7	62.3	2.4	64.2	63.3	0.9	59.8	64.7	-4.9
3-4 AM	65.7	62.7	3.0	64.1	63.5	0.6	60.0	63.3	-3.3
4-5 AM	67.5	63.4	4.1	66.1	64.1	2.0	61.1	63.9	-2.8
5-6 AM	68.8	65.3	3.5	67.5	65.9	1.6	63.8	65.9	-2.1
6-7 AM	68.7	65.9	2.8	66.9	66.4	0.5	64.5	66.6	-2.1
7-8 AM	69.3	65.2	4.1	68.5	65.0	3.5	63.3	65.3	-2.0
8-9 AM	66.8	64.6	2.2	66.6	64.4	2.2	62.8	64.3	-1.5
9-10 AM	67.6	66.2	1.4	66.1	66.5	-0.4	64.1	67.4	-3.3
10-11 AM	68.4	67.1	1.3	65.8	67.3	-1.5	64.5	67.4	-2.9
11-12 PM	69.6	67.1	2.5	66.6	67.0	-0.4	64.5	66.9	-2.4
12-1 PM	69.6	66.9	2.7	67.0	66.7	0.3	64.6	66.3	-1.7
1-2 PM	69.2	66.9	2.3	67.1	67.6	-0.5	64.7	65.1	-0.4
2-3 PM	70.1	67.7	2.4	67.5	65.7	1.8	65.0	66.1	-1.1
3-4 PM	69.7	66.7	3.0	67.1	65.3	1.8	66.0	64.7	1.3
4-5 PM	68.9	65.6	3.3	67.2	65.7	1.5	64.2	62.1	2.1
5-6 PM	69.3	65.3	4.0	68.1	64.8	3.3	64.2	63.8	0.4
6-7 PM	69.7	65.9	3.8	68.4	70.1	-1.7	64.9	65.5	-0.6
7-8 PM	70.1	66.4	3.7	68.3	71.2	-2.9	65.2	65.7	-0.5
8-9 PM	69.6	66.1	3.5	67.9	66.0	1.9	65.2	66.9	-1.7
9-10 PM	68.7	65.2	3.5	67.2	65.7	1.5	65.3	65.4	-0.1
10-11 PM	67.2	64.7	2.5	66.3	65.6	0.7	63.3	65.2	-1.9
11-12 PM	66.4	64.0	2.4	65.4	64.6	0.8	62.4	64.6	-2.2
Lday	69.2	66.3	2.9	67.4	67.1	0.3	64.6	65.7	-1.1
Lnight	66.9	64.1	2.8	65.6	64.7	0.9	62.1	64.8	-2.7
Ldn	68.5	65.6	2.9	66.8	66.3	0.5	63.9	65.4	-1.5

[1] Hourly noise measurements with the pool open were collected on 8/1/11 through 8/4/11 and from 8/30/11 to 9/1/11 when the pool was closed. The Goebel Park pool is open to the public from Noon to 7:00 PM from mid June to mid August.

Table 4. TNM Validation: Summary of Ambient Noise Measurements and TNM Predicted Existing Noise Levels

Site Number	Address of Measurement Site	Land Use	NAC Category	Date of Noise Reading	7-11 AM Time Period			2-6 PM Time Period		
					Noise[1] Measurement	TNM Model	Delta * L_{eq} (1-hr) dB(A)	Noise[1] Measurement	TNM Model	Delta * L_{eq} (1-hr) dB(A)
KY-V1 (M-21)	725 Crescent Avenue, Covington	Residential	B	8/2/11	64.5	67.7	3.2	64.5	67.8	3.3
KY-V2 (M-27)	536 West 13th Street, Covington	Residential	B	8/2/11	69.4	70.5	1.1	72.1	71.8	-0.3
KY-V3 (M-45)	Church of The Nazarene, 2006 Pieck Drive, Fort Wright	Church	C	8/2/11	72.8	70.4	-2.4	73.4	73.0	-0.4

[1] Noise measurements collected on August 2nd 2011 for duration of 30 minutes per noise measurement.
[2] Delta L_{eq} (1-hr) dB(A) = TNM predicted minus Measured Noise Level

5.0 FUTURE NOISE LEVELS

5.1 Future 2035 No Build Noise Levels

Future (2035) No Build noise levels were estimated at 959 noise modeling receiver locations using the Traffic Noise Model Version 2.5 (TNM). These modeling locations consist of 32 noise measurement sites and 951 prediction sites as depicted in Exhibits 3A through 3N). A summary of peak hour predicted existing and future No Build Alternative noise levels at each modeling point is provided in Table 5. Table 6 presents a summary of the future No Build Alternative impacts by activity category. TNM files are provided in Appendix C.

The PM peak period has a slightly higher number of impacts than the AM peak hour. Under the 2035 No Build Alternative, the total number of projected impacts is expected to increase by about 15 percent. There are 478 future 2035 No Build PM peak hour receiver impacts comprised of 1,262 equivalent residences as compared to 416 receiver impacts equating to 1,178 equivalent residential receptors under the PM peak hour existing conditions. The largest impact by activity category is projected to occur for Category B uses where 554 equivalent receptor impacts represented by 429 TNM receiver points are expected during the PM peak period. In addition, a fairly large number of Category C noise impacts were identified within the project corridor due to the presence of schools, playgrounds and parks within the project study area which generally equate to a significant number of equivalent residential units.

5.2 Alternative E

Alternative E noise levels were determined at 959 TNM receiver modeling locations (see Exhibits 3A through 3N). Table 7 presents Alternative E predicted noise levels by receiver. Table 6 presents a summary of Alternative E impacts by activity category. TNM files are provided in Appendix C.

In general, the number of PM peak period impacts is slightly greater than the corresponding AM peak projections. Under Alternative E, the total number of PM peak hour impacts is expected to increase by approximately 12 percent (537 versus 478 impacts) from the 2035 future No Build conditions and increase by 29 percent (537 versus 416 impacts) when compared to existing (2010) noise levels. In terms of equivalent residential receptor impacts, there is a 12 percent increase (1,316 versus 1,178) under the Alternative E PM peak hour compared to the 2010 existing conditions. The largest number of impacts by activity category is for Activity Category B residential uses, where 491 receivers exceed the impact threshold representing 631 equivalent residences during the PM peak period. The 631 equivalent receptor impacts yield a 29 percent increase from the existing (2010) PM conditions (483 equivalent residences). In addition, a fairly large number of Category C noise impacts were identified within the project corridor due to the presence of schools, playgrounds and parks within the project study area which generally equate to a significant number of equivalent residential units.

5.3 Alternative I

For Alternative I, noise levels were determined at 959 locations (Exhibits 3A through 3N). Table 8 presents Alternative I predicted noise levels by receiver. Table 6 presents a summary of Alternative I impacts by activity category. TNM files are provided in Appendix C.

In general, the PM peak period has a slightly higher number of impacts than the AM peak hour. Under Alternative I, the PM peak hour impacts increase by approximately 18 percent (565 versus 478 impacts) from 2035 future No Build conditions and increase by 36 percent (565

versus 416 impacts) when compared to the existing (2010) noise levels. In terms of equivalent residential unit impacts, there is a 28 percent increase (1,385 versus 1,078) compared to the existing (2010) conditions. The largest number of impacts by activity category is for Activity Category B residential uses; where 512 receivers representing 659 equivalent residential units exceed impact thresholds during the PM peak period. The 659 equivalent receptor impacts represent a 36 percent increase over comparable existing (2010) conditions (483 equivalent residences). In addition, a fairly large number of Category C noise impacts were identified within the project corridor due to the presence of schools, playgrounds and parks within the project study area which generally equate to a significant number of equivalent residential units.

5.4 Alternative E and I Permitted Vacant Undeveloped Parcels Findings

Within the project study area, the land use survey did not identify non-permitted undeveloped lands. Therefore all vacant parcels were modeled for noise impacts in accordance with their intended permitted activity category. These types of receptors are indicated as vacant with their intended land use designation shown in Table 5, Table 7, and Table 8. Most of the vacant parcels are residential lots, which were considered for noise abatement in accordance with KYTC traffic noise abatement feasibility and reasonableness requirements for their permitted use. The noise abatement analysis findings are included in Chapter 6 of this report. The remaining lots consisted of primarily permitted commercial uses which were evaluated under NAC Activity Category E.

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
M-17(K161)	Single-Family	B	61.5	61.8	0.3	61.7	62.0	0.3
R1(K177)	Single-Family	B	62.9	63.9	1.0	63.4	64.4	1.0
R2(K163)	Single-Family	B	62.0	62.7	0.7	62.2	62.9	0.7
R3(K166)	Single-Family	B	62.7	63.6	0.9	62.8	63.8	1.0
R4(K173)	Single-Family	B	62.9	63.9	1.0	63.1	64.0	0.9
R5(K165)	Single-Family	B	62.3	63.1	0.8	62.6	63.4	0.8
R6(K169)	Single-Family	B	62.7	63.6	0.9	62.8	63.8	1.0
R7(K183)	Single-Family	B	65.0	65.9	0.9	65.4	66.3	0.9
R8(K176)	Single-Family	B	63.1	64.0	0.9	63.2	64.2	1.0
R9(K185)	Single-Family	B	65.1	66.0	0.9	65.4	66.4	1.0
R10(K192)	Single-Family	B	64.0	64.9	0.9	64.3	65.3	1.0
R11(K188)	Single-Family	B	65.1	66.1	1.0	65.5	66.5	1.0
R12(K195)	Single-Family	B	65.1	66.1	1.0	65.5	66.5	1.0
R13(K184 R-40)	Single-Family	B	65.5	66.4	0.9	65.6	66.6	1.0
R14(K199)	Single-Family	B	65.5	66.4	0.9	65.8	66.8	1.0
R15(K198)	Single-Family	B	66.4	67.4	1.0	66.6	67.6	1.0
M-18(K190)	Single-Family	B	66.4	67.4	1.0	66.5	67.5	1.0
R16(K205)	Single-Family	B	67.0	68.0	1.0	67.4	68.4	1.0
R17(K207)	Single-Family	B	67.1	68.1	1.0	67.5	68.5	1.0
R18(K201)	Single-Family	B	67.0	68.0	1.0	67.2	68.2	1.0
R19(K210)	Single-Family	B	67.2	68.2	1.0	67.6	68.6	1.0
R20(K211 R-42)	Single-Family	B	67.3	68.3	1.0	67.7	68.7	1.0
R21(K175 R-37)	Hotel	E	66.1	67.0	0.9	66.3	67.3	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R22(K213)	Single-Family	B	67.3	68.3	1.0	67.7	68.7	1.0
R23(K214)	Single-Family	B	67.3	68.3	1.0	67.8	68.8	1.0
R24(K215)	Single-Family	B	67.3	68.3	1.0	67.7	68.8	1.1
R25(K220)	Single-Family	B	66.1	67.1	1.0	66.7	67.7	1.0
R26(KV220)	Vacant	B	68.0	69.0	1.0	68.4	69.5	1.1
R27(K225)	Restaurant/Bar	E	63.6	64.5	0.9	64.4	65.4	1.0
R28(K234)	Multi-Family	B	66.2	67.2	1.0	66.6	67.6	1.0
R29(KV235)	Vacant	B	68.0	69.0	1.0	68.4	69.4	1.0
R30(K235)	Single-Family	B	63.6	64.6	1.0	63.9	64.9	1.0
R31(K237)	Single-Family	B	60.9	61.9	1.0	61.3	62.4	1.1
R32(K27)	Single-Family	B	63.9	64.9	1.0	64.3	65.4	1.1
R33(K240)	Single-Family	B	64.4	65.3	0.9	64.9	65.9	1.0
R34(K248)	Single-Family	B	63.6	64.6	1.0	64.2	65.2	1.0
R35(K238A)	Multi-Family	B	69.3	70.3	1.0	69.8	70.9	1.1
R36(K252)	Single-Family	B	64.8	65.8	1.0	65.2	66.3	1.1
M-19(K25)	Multi-Family	B	69.9	71.0	1.1	70.5	71.6	1.1
R37(K238)	Multi-Family	B	69.7	70.8	1.1	70.3	71.4	1.1
R38(K257)	Single-Family	B	64.2	65.2	1.0	64.6	65.7	1.1
R39(K247)	Multi-Family	B	69.9	70.9	1.0	70.4	71.4	1.0
R40(K261)	Single-Family	B	64.1	65.1	1.0	64.5	65.6	1.1
R41(K265)	Single-Family	B	64.8	65.8	1.0	65.2	66.2	1.0
R42(K254)	Single-Family	B	67.6	68.6	1.0	68.0	69.1	1.1
R43(K269)	Single-Family	B	64.8	65.9	1.1	65.2	66.3	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R44(K285)	Single-Family	B	62.5	63.6	1.1	62.9	64.0	1.1
R45(K256)	Single-Family	B	65.4	66.4	1.0	65.9	66.9	1.0
R46(KV256)	Vacant	B	70.1	71.2	1.1	70.6	71.7	1.1
R47(K275)	Single-Family	B	65.7	66.7	1.0	66.1	67.2	1.1
R48(K296)	Single-Family	B	64.8	65.9	1.1	65.2	66.3	1.1
R49(K266)	Single-Family	B	65.1	66.1	1.0	65.5	66.6	1.1
R50(KV266)	Vacant	B	71.0	72.0	1.0	71.4	72.5	1.1
R51(K276)	Single-Family	B	68.9	69.9	1.0	69.3	70.4	1.1
R52(K255)	Single-Family	B	71.5	72.6	1.1	72.4	73.5	1.1
R53(K287)	Single-Family	B	70.3	71.3	1.0	70.7	71.8	1.1
R54(K294)	Single-Family	B	70.2	71.2	1.0	70.6	71.7	1.1
R55(K112)	Single-Family	B	72.4	73.5	1.1	73.1	74.2	1.1
R56(K403)	Recreation	C	66.7	67.8	1.1	67.1	68.2	1.1
R57(K302)	Single-Family	B	69.7	70.7	1.0	70.1	71.2	1.1
R58(K267)	Single-Family	B	72.6	73.8	1.2	73.3	74.4	1.1
R59(K270)	Single-Family	B	72.8	73.9	1.1	73.5	74.6	1.1
R60(K307)	Single-Family	B	69.5	70.6	1.1	69.9	71.0	1.1
R61(K312)	Single-Family	B	69.8	70.9	1.1	70.2	71.3	1.1
R62(K280 R-45)	Single-Family	B	72.9	74.0	1.1	73.6	74.7	1.1
R63(KV312)	Vacant	B	71.2	72.2	1.0	71.7	72.8	1.1
R64(K10)	Single-Family	B	73.1	74.2	1.1	73.7	74.8	1.1
R65(KV304)	Vacant	B	73.1	74.1	1.0	73.6	74.7	1.1
M-21(K304)	Single-Family	B	73.1	74.1	1.0	73.7	74.8	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R66(K111)	Razed	B	73.0	74.1	1.1	73.6	74.7	1.1
R67(KV111)	Vacant	B	73.3	74.3	1.0	73.8	74.9	1.1
R68(K179 R-38)	Hotel	E	71.0	72.0	1.0	71.4	72.4	1.0
R69(K407)	Multi-Family	B	68.6	69.6	1.0	69.0	70.1	1.1
R70(K229)	Hotel	E	70.8	71.8	1.0	71.0	72.0	1.0
R71(K440)	Single-Family	B	67.6	68.6	1.0	68.1	69.2	1.1
R72(K18)	Single-Family	B	67.8	68.8	1.0	68.4	69.5	1.1
R73(K194)	Restaurant/Bar	E	62.5	63.3	0.8	62.8	63.6	0.8
R74(K456)	Single-Family	B	67.5	68.5	1.0	68.0	69.1	1.1
R75(K229 R-43)	Commercial	E	66.2	67.2	1.0	66.2	67.3	1.1
R76(K418)	Multi-Family	B	69.6	70.8	1.2	70.3	71.5	1.2
R77(KV418)	Vacant	B	72.5	73.5	1.0	73.2	74.3	1.1
R78(K470)	Single-Family	B	66.1	67.2	1.1	66.7	67.8	1.1
R79(K127)	Hotel	E	62.0	62.9	0.9	62.4	63.4	1.0
R80(KV460)	Vacant	B	71.9	72.9	1.0	72.5	73.6	1.1
R81(K485)	Single-Family	B	65.5	66.5	1.0	66.1	67.2	1.1
R82(KV460)	Vacant	B	71.4	72.4	1.0	72.0	73.1	1.1
R83(K513)	Single-Family	B	64.1	65.1	1.0	64.8	65.8	1.0
R84(K437)	Single-Family	B	74.6	75.6	1.0	75.3	76.4	1.1
R85(K494)	Single-Family	B	65.0	66.0	1.0	65.6	66.7	1.1
R86(K460)	Single-Family	B	65.1	66.4	1.3	66.3	67.6	1.3
R87(K467)	Single-Family	B	63.1	64.6	1.5	64.6	66.1	1.5
R88(K474)	Single-Family	B	60.9	62.6	1.7	62.5	64.1	1.6

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R89(K446)	Multi-Family	B	74.8	75.8	1.0	75.6	76.7	1.1
R90(K532)	Single-Family	B	66.2	67.2	1.0	66.9	68.0	1.1
R91(K488)	Single-Family	B	60.3	62.1	1.8	62.4	64.2	1.8
M-20(K309)	Single-Family	B	68.3	69.3	1.0	68.6	69.6	1.0
R92(K518)	Single-Family	B	67.4	68.6	1.2	68.3	69.5	1.2
R93(K455)	Single-Family	B	74.6	75.7	1.1	75.4	76.5	1.1
R94(K465)	Single-Family	B	74.1	75.1	1.0	74.8	75.9	1.1
R95(K314 R-46)	Single-Family	B	70.5	71.5	1.0	71.0	72.1	1.1
R96(K526)	Single-Family	B	62.9	64.3	1.4	64.2	65.6	1.4
R97(K115)	Recreation	C	66.1	67.1	1.0	66.5	67.6	1.1
R97a(K115)	Recreation	C	71.0	72.0	1.0	71.5	72.6	1.1
R97b(K115)	Recreation	C	69.9	71.0	1.1	70.4	71.5	1.1
R97c(K115)	Recreation	C	67.1	68.1	1.0	67.6	68.7	1.1
R97d(K115)	Recreation	C	66.7	67.7	1.0	67.0	68.1	1.1
R97e(K115)	Recreation	C	65.5	66.5	1.0	65.9	66.9	1.0
R97f(K115)	Recreation	C	62.3	62.9	0.6	62.4	63.2	0.8
R97g(K115)	Recreation	C	70.9	71.7	0.8	71.0	71.9	0.9
R97h(K115)	Recreation	C	70.0	71.0	1.0	70.2	71.3	1.1
R97i(K115)	Recreation	C	68.6	69.6	1.0	68.7	69.8	1.1
R97j(K115)	Recreation	C	68.7	69.7	1.0	69.0	70.0	1.0
R97k(K115)	Recreation	C	65.4	66.4	1.0	65.8	66.8	1.0
R97l(K115)	Recreation	C	64.4	65.4	1.0	64.9	66.0	1.1
R97m(K115)	Recreation	C	66.8	67.8	1.0	67.1	68.1	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R97n(K115)	Recreation	C	68.7	69.8	1.1	69.3	70.4	1.1
R97o(K115)	Recreation	C	69.4	70.5	1.1	69.9	71.0	1.1
R97p(K115)	Recreation	C	67.5	68.6	1.1	68.0	69.1	1.1
R97q(K115)	Recreation	C	66.2	67.2	1.0	66.6	67.7	1.1
R97r(K115)	Recreation	C	66.3	67.3	1.0	66.8	67.9	1.1
R97s(K115)	Recreation	C	68.0	69.0	1.0	68.6	69.7	1.1
R97t(K115)	Recreation	C	68.9	69.9	1.0	69.4	70.5	1.1
R97u(K115)	Recreation	C	69.7	70.8	1.1	70.1	71.2	1.1
R97v(K115)	Recreation	C	66.2	67.2	1.0	66.6	67.7	1.1
R97w(K115)	Recreation	C	67.4	68.4	1.0	67.7	68.7	1.0
R97x(K115)	Recreation	C	65.4	66.4	1.0	65.8	66.9	1.1
R97y(K115)	Recreation	C	74.4	75.0	0.6	74.3	75.0	0.7
R97z(K115)	Recreation	C	71.9	72.9	1.0	72.0	73.0	1.0
R97aa(K115)	Recreation	C	68.9	69.9	1.0	69.4	70.5	1.1
R98(K480)	Single-Family	B	73.7	74.8	1.1	74.5	75.6	1.1
M-22(K484)	Single-Family	B	73.6	74.7	1.1	74.4	75.5	1.1
R99(K473)	Single-Family	B	74.2	75.2	1.0	75.0	76.1	1.1
R100(K318)	Single-Family	B	70.0	71.0	1.0	70.5	71.6	1.1
R101(K492)	Single-Family	B	73.5	74.5	1.0	74.2	75.3	1.1
R102(K15)	Razed	B	72.0	73.0	1.0	72.8	73.9	1.1
R103(K1771)	Single-Family	B	65.3	66.4	1.1	66.0	67.1	1.1
R104(K1832)	Single-Family	B	65.1	66.1	1.0	65.8	66.8	1.0
R105(K524)	Multi-Family	B	71.7	72.7	1.0	72.5	73.6	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R106(KV492)	Vacant	B	73.4	74.4	1.0	74.1	75.2	1.1
R107(K541)	Single-Family	B	63.4	64.7	1.3	64.6	66.0	1.4
R108(K354)	Single-Family	B	69.5	70.5	1.0	70.0	71.1	1.1
R109(K349)	Single-Family	B	69.1	70.1	1.0	69.6	70.7	1.1
R110(K361)	Single-Family	B	68.8	69.9	1.1	69.3	70.4	1.1
R111(K527)	Single-Family	B	70.9	71.9	1.0	71.7	72.8	1.1
R112(K1841)	Single-Family	B	65.4	66.5	1.1	66.1	67.2	1.1
R113(K548)	Single-Family	B	65.2	66.4	1.2	66.4	67.7	1.3
R114(K1846)	Single-Family	B	65.5	66.6	1.1	66.2	67.3	1.1
R115(KV536)	Vacant	B	72.2	73.2	1.0	72.9	74.0	1.1
R116(K1816)	Single-Family	B	66.4	67.4	1.0	67.1	68.2	1.1
R117(KV1846)	Vacant	B	66.5	67.5	1.0	67.1	68.2	1.1
R118(K335)	Single-Family	B	67.0	68.0	1.0	67.5	68.6	1.1
R119(K322)	Single-Family	B	64.4	65.4	1.0	64.9	65.9	1.0
R120(KV1795)	Vacant	B	70.2	71.3	1.1	71.0	72.2	1.2
R121(K194 R-39)	Restaurant/Bar	E	61.2	62.1	0.9	61.7	62.6	0.9
R122(K365)	Single-Family	B	68.1	69.1	1.0	68.6	69.7	1.1
R123(K536)	Multi-Family	B	69.3	70.4	1.1	70.1	71.2	1.1
R124(K364)	Single-Family	B	66.4	67.5	1.1	66.9	68.0	1.1
R125(K1795)	Single-Family	B	65.1	66.5	1.4	66.4	67.8	1.4
R126(K370)	Multi-Family	B	68.1	69.2	1.1	68.6	69.7	1.1
R127(K1800)	Single-Family	B	66.3	67.5	1.2	67.4	68.6	1.2
R128(K1877)	Single-Family	B	65.9	66.9	1.0	66.6	67.6	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

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			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R129(K340)	Single-Family	B	60.5	61.5	1.0	61.1	62.2	1.1
R130(K308)	Multi-Family	B	63.7	64.7	1.0	64.2	65.2	1.0
R131(K299)	Single-Family	B	64.1	65.1	1.0	64.6	65.6	1.0
R132(K545)	Single-Family	B	68.3	69.4	1.1	69.2	70.3	1.1
R133(K1811)	Single-Family	B	62.1	63.5	1.4	63.7	65.1	1.4
R134(K313)	Single-Family	B	63.2	64.2	1.0	63.7	64.8	1.1
R135(K346)	Single-Family	B	62.1	63.2	1.1	62.8	63.9	1.1
R136(K326)	Office	E	61.6	62.6	1.0	62.1	63.1	1.0
R137(K194 R-41)	Restaurant/Bar	E	62.8	63.8	1.0	63.9	64.8	0.9
R138(K552)	Single-Family	B	69.0	70.0	1.0	69.9	70.9	1.0
R139(K409 R-47)	Recreation	C	66.2	67.2	1.0	66.5	67.6	1.1
R140(K352)	Single-Family	B	61.7	62.8	1.1	62.4	63.5	1.1
R141(K317)	Single-Family	B	62.6	63.6	1.0	63.0	64.1	1.1
R142(K368)	Single-Family	B	64.6	65.7	1.1	65.2	66.3	1.1
R143(K562)	Single-Family	B	69.1	70.1	1.0	69.9	71.0	1.1
R144(K1784)	Single-Family	B	69.3	70.4	1.1	70.2	71.3	1.1
R145(K229 R-44)	Commercial	E	63.6	64.5	0.9	63.4	64.3	0.9
R146(K1772)	Single-Family	B	62.0	63.4	1.4	63.6	65.0	1.4
R147(KV1801)	Vacant	B	70.5	71.5	1.0	71.3	72.4	1.1
R148(K360)	Single-Family	B	60.9	62.0	1.1	61.6	62.6	1.0
R149(K1790 R-48)	Single-Family	B	69.5	70.5	1.0	70.3	71.4	1.1
R150(K353)	Multi-Family	B	57.0	58.0	1.0	57.7	58.8	1.1
R151(K337)	Multi-Family	B	52.4	53.4	1.0	53.1	54.2	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

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R152(K373)	Single-Family	B	65.5	66.5	1.0	66.1	67.2	1.1
R153(K379)	Single-Family	B	65.9	66.9	1.0	66.5	67.6	1.1
R154(K358)	Multi-Family	B	54.6	55.6	1.0	55.2	56.3	1.1
R155(K362)	Single-Family	B	57.7	58.7	1.0	58.3	59.4	1.1
R156(K344)	Single-Family	B	57.0	58.0	1.0	57.6	58.7	1.1
R157(K347)	Single-Family	B	57.8	58.8	1.0	58.4	59.5	1.1
R158(K367)	Single-Family	B	55.3	56.4	1.1	56.0	57.1	1.1
R159(K401)	Single-Family	B	63.4	64.5	1.1	64.1	65.2	1.1
R160(K382)	Single-Family	B	66.4	67.5	1.1	67.1	68.2	1.1
R161(K1777)	Single-Family	B	59.9	61.6	1.7	61.9	63.5	1.6
R162(K386)	Single-Family	B	67.0	68.1	1.1	67.7	68.8	1.1
R163(K1801)	Single-Family	B	68.2	69.2	1.0	69.1	70.2	1.1
R164(K332)	Studio	C	57.4	58.4	1.0	58.0	59.1	1.1
R165(K1885)	Single-Family	B	65.4	66.2	0.8	65.9	66.7	0.8
R166(K1828)	Single-Family	B	59.9	61.8	1.9	62.2	63.9	1.7
R167(K1883)	Single-Family	B	65.1	65.9	0.8	65.6	66.5	0.9
R168(K396)	Single-Family	B	67.4	68.4	1.0	67.9	69.0	1.1
R169(K388)	Single-Family	B	67.2	68.2	1.0	67.8	68.9	1.1
R170(K1812)	Single-Family	B	67.7	68.7	1.0	68.6	69.7	1.1
R171(K402)	Single-Family	B	63.2	64.2	1.0	63.8	64.9	1.1
R172(K1839)	Single-Family	B	59.6	61.5	1.9	61.9	63.5	1.6
R173(K1882)	Single-Family	B	65.4	66.3	0.9	66.0	66.9	0.9
R174(K1765)	Single-Family	B	66.3	67.1	0.8	66.9	67.8	0.9

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R175(K1915)	Single-Family	B	66.8	67.6	0.8	67.3	68.1	0.8
R176(K1759)	Single-Family	B	64.5	65.2	0.7	64.9	65.7	0.8
R177(K1770)	Single-Family	B	67.6	68.6	1.0	68.5	69.6	1.1
R178(K371)	Single-Family	B	51.8	52.8	1.0	52.5	53.6	1.1
R179(K1879)	Single-Family	B	63.7	64.4	0.7	64.3	65.2	0.9
R180(K1909)	Single-Family	B	67.0	67.8	0.8	67.5	68.4	0.9
R181(K381)	Multi-Family	B	51.2	52.3	1.1	51.9	53.0	1.1
R182(K378)	Single-Family	B	49.5	50.5	1.0	50.1	51.2	1.1
R183(K384)	Single-Family	B	58.6	59.6	1.0	59.3	60.4	1.1
R184(K389)	Single-Family	B	58.4	59.4	1.0	59.1	60.2	1.1
R185(K1820)	Single-Family	B	66.6	67.6	1.0	67.4	68.4	1.0
R186(K369)	Single-Family	B	58.2	59.5	1.3	58.4	59.6	1.2
R187(K1755)	Razed	B	63.5	64.3	0.8	64.1	65.0	0.9
R188(K1903)	Single-Family	B	61.5	62.3	0.8	62.2	63.0	0.8
R189(K1873)	Single-Family	B	63.9	64.7	0.8	64.6	65.5	0.9
R190(K1834)	Single-Family	B	66.7	67.7	1.0	67.5	68.6	1.1
R191(K1871)	Single-Family	B	64.4	65.2	0.8	65.1	66.0	0.9
R192(K427)	Single-Family	B	63.8	64.9	1.1	64.5	65.6	1.1
R193(K387)	Multi-Family	B	59.0	60.3	1.3	59.2	60.4	1.2
R194(K1864)	Single-Family	B	64.1	65.0	0.9	65.0	66.0	1.0
R195(K1844)	Single-Family	B	66.7	67.7	1.0	67.4	68.5	1.1
R196(K400)	Multi-Family	B	61.1	62.2	1.1	61.6	62.8	1.2
R197(K380)	Multi-Family	B	56.4	57.7	1.3	56.7	57.9	1.2

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R198(K1850)	Single-Family	B	67.0	68.0	1.0	67.7	68.8	1.1
R199(K397)	Razed	B	59.1	60.3	1.2	59.5	60.7	1.2
R200(K432)	Single-Family	B	64.6	65.7	1.1	65.2	66.3	1.1
R201(K383)	Multi-Family	B	56.1	57.4	1.3	56.4	57.6	1.2
R202(K413)	Multi-Family	B	62.1	63.3	1.2	62.7	63.8	1.1
R203(K1913)	Single-Family	B	56.3	57.2	0.9	57.0	57.9	0.9
R204(K1891)	Single-Family	B	65.1	66.0	0.9	65.9	67.0	1.1
R205(K1861)	Multi-Family	B	67.2	68.1	0.9	67.9	68.9	1.0
R206(K445)	Multi-Family	B	63.9	64.9	1.0	64.4	65.5	1.1
R207(K420)	Multi-Family	B	62.0	63.2	1.2	62.5	63.6	1.1
R208(K1764)	Day Care	C	66.1	67.0	0.9	66.8	67.7	0.9
M-23(K506)	Recreation	C	68.1	69.1	1.0	68.5	69.6	1.1
R209(K1897)	Single-Family	B	62.2	63.2	1.0	63.1	64.2	1.1
R210(K425)	Single-Family	B	59.3	60.6	1.3	59.6	60.8	1.2
R211(K1761)	Single-Family	B	67.7	68.7	1.0	68.5	69.5	1.0
R212(K454)	Multi-Family	B	63.8	64.9	1.1	64.4	65.5	1.1
R213(K1905)	Single-Family	B	62.8	63.8	1.0	63.7	64.8	1.1
R214(K435)	Single-Family	B	58.9	60.2	1.3	59.2	60.4	1.2
R215(K1926)	Multi-Family	B	57.7	58.7	1.0	58.6	59.7	1.1
R216(K422)	Single-Family	B	57.8	59.0	1.2	58.4	59.5	1.1
R217(K1932)	Single-Family	B	56.4	57.4	1.0	57.2	58.3	1.1
R218(K461)	Single-Family	B	64.1	65.2	1.1	64.7	65.8	1.1
R219(K1910)	Single-Family	B	62.9	63.9	1.0	63.8	64.9	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R220(K457)	Single-Family	B	62.1	63.3	1.2	62.6	63.7	1.1
R221(K1938)	Single-Family	B	59.5	60.6	1.1	60.3	61.4	1.1
R222(K439)	Multi-Family	B	56.2	57.4	1.2	56.8	57.9	1.1
R223(K444)	Single-Family	B	57.5	58.7	1.2	58.1	59.2	1.1
R224(K1919)	Multi-Family	B	64.4	65.5	1.1	65.3	66.4	1.1
R225(K412)	Single-Family	B	48.1	49.2	1.1	48.6	49.7	1.1
R226(K447)	Single-Family	B	57.9	59.1	1.2	58.4	59.6	1.2
R227(K1944)	Single-Family	B	59.3	60.3	1.0	60.1	61.2	1.1
R228(K419)	Single-Family	B	43.9	44.8	0.9	44.5	45.5	1.0
R229(K430)	Single-Family	B	50.5	51.6	1.1	51.0	52.2	1.2
R230(K1927)	Multi-Family	B	64.6	65.6	1.0	65.5	66.6	1.1
R231(K626)	Multi-Family	B	58.1	59.1	1.0	58.8	59.9	1.1
R232(K452)	Single-Family	B	55.7	56.8	1.1	56.2	57.4	1.2
R233(K466)	Multi-Family	B	62.9	64.1	1.2	63.6	64.7	1.1
R234(K477)	Razed	B	64.0	65.2	1.2	64.7	65.8	1.1
R235(K495)	Single-Family	B	64.9	66.1	1.2	65.6	66.7	1.1
R236(K1937)	Single-Family	B	64.0	65.1	1.1	65.0	66.1	1.1
R237(K620)	Single-Family	B	63.4	64.4	1.0	64.2	65.3	1.1
R238(K451)	Single-Family	B	49.5	50.5	1.0	50.2	51.2	1.0
R239(K649)	Single-Family	B	50.3	51.3	1.0	50.5	51.6	1.1
R240(K1954)	Single-Family	B	61.3	62.3	1.0	62.3	63.4	1.1
R241(K478)	Single-Family	B	59.3	60.4	1.1	60.1	61.2	1.1
R242(K644)	Single-Family	B	50.3	51.3	1.0	50.3	51.5	1.2

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R243(K1948)	Single-Family	B	63.4	64.4	1.0	64.4	65.5	1.1
R244(K458)	Single-Family	B	51.1	52.1	1.0	51.9	52.9	1.0
R245(K525)	Single-Family	B	65.3	66.4	1.1	66.0	67.1	1.1
R246(K1963)	Single-Family	B	60.6	61.7	1.1	61.6	62.7	1.1
R247(K643)	Single-Family	B	50.1	51.1	1.0	50.2	51.3	1.1
R248(K519)	Multi-Family	B	64.3	65.4	1.1	65.0	66.1	1.1
R249(K1947)	Restaurant/Bar	E	65.3	66.3	1.0	66.3	67.4	1.1
R250(K642)	Single-Family	B	52.8	53.7	0.9	53.2	54.3	1.1
R251(K1966)	Commercial	E	59.6	60.6	1.0	60.4	61.5	1.1
R252(K469)	Single-Family	B	54.1	55.1	1.0	54.7	55.8	1.1
R253(K499)	Single-Family	B	61.5	62.5	1.0	62.2	63.3	1.1
R254(K534)	Restaurant/Bar	E	65.4	66.5	1.1	66.0	67.1	1.1
R255(K510)	Multi-Family	B	62.0	63.1	1.1	62.8	63.9	1.1
R256(K641)	Single-Family	B	55.4	56.4	1.0	56.1	57.2	1.1
R257(K475)	Razed	B	52.3	53.2	0.9	52.9	54.0	1.1
R258(K614)	Single-Family	B	65.2	66.2	1.0	66.1	67.1	1.0
R259(K639)	Multi-Family	B	62.3	63.3	1.0	63.2	64.3	1.1
R260(K486)	Single-Family	B	54.7	55.7	1.0	55.4	56.4	1.0
R261(K491)	Single-Family	B	54.3	55.3	1.0	54.9	56.0	1.1
R262(K613)	Single-Family	B	65.8	66.8	1.0	66.7	67.8	1.1
R263(K498)	Single-Family	B	51.0	51.9	0.9	51.6	52.6	1.0
R264(K1781)	Office	E	68.3	69.4	1.1	68.9	69.9	1.0
R265(K503)	Single-Family	B	49.4	50.3	0.9	50.0	51.0	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R266(K610)	Single-Family	B	66.1	67.2	1.1	67.0	68.1	1.1
R267(K608)	Single-Family	B	67.2	68.2	1.0	68.1	69.2	1.1
R268(K559)	Commercial	E	65.1	66.0	0.9	65.6	66.5	0.9
R269(K607)	Single-Family	B	68.2	69.2	1.0	69.1	70.2	1.1
R270(K606 R-50)	Razed	B	69.2	70.2	1.0	70.1	71.2	1.1
R271(K515)	Single-Family	B	55.3	56.3	1.0	56.3	57.3	1.0
R272(K722)	Single-Family	B	68.7	69.3	0.6	66.3	67.4	1.1
R273(K729)	Multi-Family	B	67.5	68.4	0.9	65.9	67.0	1.1
R274(K1791)	Multi-Family	B	62.1	63.1	1.0	62.7	63.8	1.1
R275(K720)	Church	C	64.3	65.3	1.0	64.5	65.6	1.1
R276(K522)	Single-Family	B	58.0	58.7	0.7	58.5	59.3	0.8
R277(K680)	School	D	70.9	71.9	1.0	71.2	72.2	1.0
R278(K555)	Multi-Family	B	62.2	62.7	0.5	62.5	63.2	0.7
R279(K1796)	Single-Family	B	62.2	63.2	1.0	62.7	63.8	1.1
R280(K554)	Multi-Family	B	60.9	61.4	0.5	61.3	61.9	0.6
M-24(K655)	Single-Family	B	72.4	73.4	1.0	72.8	73.9	1.1
R281(K1802)	Single-Family	B	61.6	62.6	1.0	62.2	63.2	1.0
R282(K730)	Single-Family	B	56.6	57.7	1.1	57.5	58.6	1.1
R283(K735)	Single-Family	B	55.8	56.8	1.0	56.6	57.7	1.1
R284(K523)	Multi-Family	B	58.4	58.8	0.4	58.7	59.1	0.4
R285(K755)	Single-Family	B	55.1	56.1	1.0	56.0	57.1	1.1
R286(K549)	Multi-Family	B	61.0	61.5	0.5	61.3	61.9	0.6
R287(K645)	Single-Family	B	72.0	73.0	1.0	72.3	73.3	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R288(K715)	Church	C	63.2	64.2	1.0	63.8	64.9	1.1
R289(K1818)	Multi-Family	B	63.9	64.9	1.0	64.4	65.5	1.1
R290(K102)	Multi-Family	B	59.6	60.3	0.7	60.1	60.9	0.8
R291(K1785)	Single-Family	B	61.3	62.3	1.0	61.9	63.0	1.1
R292(K546)	Single-Family	B	60.7	61.0	0.3	60.9	61.4	0.5
R293(K699)	Single-Family	B	64.8	65.8	1.0	65.5	66.6	1.1
R294(K1805)	Multi-Family	B	62.6	63.6	1.0	63.2	64.3	1.1
R295(K791)	Single-Family	B	57.8	58.8	1.0	58.5	59.6	1.1
R296(K1837A)	Multi-Family	B	64.9	66.0	1.1	65.4	66.5	1.1
R297(K909)	Park/Playground/Picnic Area	C	58.5	59.5	1.0	59.2	60.3	1.1
R298(K784)	Single-Family	B	57.9	59.0	1.1	58.7	59.8	1.1
R299(K1792)	Single-Family	B	56.5	57.5	1.0	57.1	58.2	1.1
R300(K775)	Single-Family	B	49.6	50.6	1.0	50.6	51.6	1.0
R301(K782)	Single-Family	B	54.2	55.2	1.0	55.1	56.2	1.1
R302(K966)	Single-Family	B	46.0	47.0	1.0	46.3	47.4	1.1
R303(K687)	Single-Family	B	70.7	71.7	1.0	71.4	72.5	1.1
R304(K963)	Single-Family	B	57.3	58.3	1.0	58.1	59.1	1.0
R305(K1809)	Single-Family	B	61.6	62.7	1.1	62.2	63.3	1.1
R306(K1837)	Multi-Family	B	65.5	66.6	1.1	66.1	67.1	1.0
R307(K759)	Single-Family	B	50.9	51.9	1.0	52.0	53.0	1.0
R308(K682)	Single-Family	B	72.0	73.1	1.1	72.8	73.9	1.1
R309(K779)	Multi-Family	B	60.4	61.4	1.0	61.1	62.2	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R310(K1855 R-49)	Single-Family	B	68.3	69.3	1.0	68.8	69.8	1.0
R311(K692)	Single-Family	B	67.5	68.5	1.0	68.3	69.3	1.0
R312(K950)	Single-Family	B	57.6	58.6	1.0	58.4	59.4	1.0
R313(K1815)	Single-Family	B	61.2	62.3	1.1	61.8	62.9	1.1
R314(K678)	Single-Family	B	72.0	73.0	1.0	72.8	73.9	1.1
R315(K942)	Single-Family	B	58.0	59.0	1.0	58.8	59.9	1.1
R316(K935)	Single-Family	B	58.6	59.7	1.1	59.4	60.5	1.1
R317(K923)	Single-Family	B	58.6	59.6	1.0	59.3	60.4	1.1
R318(K926)	Single-Family	B	58.3	59.3	1.0	59.0	60.1	1.1
R319(K737)	Single-Family	B	63.1	64.2	1.1	64.0	65.0	1.0
R320(K756)	Single-Family	B	62.7	63.8	1.1	63.6	64.6	1.0
R321(K916)	Single-Family	B	58.9	59.9	1.0	59.6	60.7	1.1
R322(K1774)	Single-Family	B	59.1	60.2	1.1	59.7	60.8	1.1
R323(K733)	Multi-Family	B	60.2	61.2	1.0	61.2	62.3	1.1
R324(K745)	Single-Family	B	65.1	66.2	1.1	65.9	67.0	1.1
R325(K1855)	Single-Family	B	65.7	66.7	1.0	66.2	67.3	1.1
R326(K915)	Single-Family	B	59.9	60.9	1.0	60.6	61.7	1.1
R327(K1826)	Single-Family	B	59.2	60.3	1.1	59.7	60.8	1.1
R328(K674)	Single-Family	B	73.2	74.3	1.1	74.1	75.2	1.1
R329(K736)	Single-Family	B	68.5	69.5	1.0	69.1	70.2	1.1
R330(K1862)	Multi-Family	B	65.5	66.5	1.0	66.0	67.0	1.0
R331(K717)	Single-Family	B	66.8	67.8	1.0	67.5	68.5	1.0
R332(K910)	Single-Family	B	59.9	60.9	1.0	60.5	61.5	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

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R333(K1775)	Single-Family	B	52.2	53.3	1.1	52.8	53.9	1.1
R334(K1821)	Single-Family	B	52.3	53.3	1.0	53.0	54.0	1.0
R335(KV1880)	Vacant	B	69.0	70.1	1.1	69.5	70.6	1.1
R336(K1831)	Single-Family	B	59.4	60.5	1.1	60.0	61.1	1.1
R337(K587)	Single-Family	B	60.1	61.1	1.0	60.6	61.7	1.1
R338(K718)	Single-Family	B	68.5	69.5	1.0	69.3	70.3	1.0
R339(K583)	Single-Family	B	59.5	60.6	1.1	60.2	61.3	1.1
R340(K576)	Single-Family	B	60.6	61.6	1.0	61.3	62.4	1.1
R341(K568)	Single-Family	B	62.7	63.8	1.1	63.4	64.5	1.1
R342(K573)	Single-Family	B	60.8	61.9	1.1	61.5	62.6	1.1
R343(K785)	Multi-Family	B	66.5	67.5	1.0	67.2	68.3	1.1
R344(K1880)	Single-Family	B	64.8	65.8	1.0	65.3	66.3	1.0
R345(K857)	Single-Family	B	62.0	63.0	1.0	62.7	63.8	1.1
R346(K1840)	Multi-Family	B	59.6	60.6	1.0	60.2	61.3	1.1
R347(K1760)	Single-Family	B	66.2	67.3	1.1	66.7	67.8	1.1
R348(K1819)	Single-Family	B	51.5	52.5	1.0	52.1	53.2	1.1
R349(K714)	Multi-Family	B	71.2	72.2	1.0	72.0	73.1	1.1
R350(K1858)	Multi-Family	B	57.3	58.4	1.1	58.0	59.1	1.1
M-25(K707)	Single-Family	B	71.1	72.1	1.0	72.0	73.0	1.0
R351(K1886)	Single-Family	B	67.6	68.7	1.1	68.3	69.4	1.1
R352(K1869)	Multi-Family	B	51.4	52.4	1.0	52.1	53.2	1.1
R353(K1876)	Razed	B	55.8	56.8	1.0	56.4	57.5	1.1
R354(K1890)	Single-Family	B	66.9	68.0	1.1	67.6	68.7	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

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			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R355(K783)	Single-Family	B	67.5	68.6	1.1	68.3	69.4	1.1
R356(K1851)	Single-Family	B	55.0	56.1	1.1	55.5	56.6	1.1
R357(K1900)	Commercial	E	68.3	69.3	1.0	68.6	69.7	1.1
R358(K1845)	Single-Family	B	58.1	59.1	1.0	58.6	59.7	1.1
R359(K1881)	Multi-Family	B	61.1	62.2	1.1	61.6	62.7	1.1
R360(KV1908)	Vacant	B	65.3	66.4	1.1	65.8	66.9	1.1
R361(K773)	Single-Family	B	68.5	69.5	1.0	69.3	70.4	1.1
R362(K769)	Single-Family	B	68.9	69.9	1.0	69.7	70.8	1.1
R363(K766)	Single-Family	B	71.5	72.5	1.0	72.3	73.4	1.1
R364(K1889)	Single-Family	B	62.7	63.8	1.1	63.3	64.4	1.1
R365(K1908)	Single-Family	B	70.3	71.4	1.1	70.8	71.9	1.1
R366(K1893)	Multi-Family	B	62.4	63.4	1.0	62.9	64.0	1.1
R367(K1917)	Multi-Family	B	70.1	71.1	1.0	70.6	71.7	1.1
R368(K1884)	Single-Family	B	54.1	55.2	1.1	54.5	55.6	1.1
R369(K1898)	Multi-Family	B	60.0	61.0	1.0	60.5	61.6	1.1
R370(K1923)	Multi-Family	B	68.6	69.7	1.1	69.1	70.2	1.1
R371(KV1923)	Vacant	B	67.0	68.0	1.0	67.4	68.5	1.1
R372(K7)	Single-Family	B	60.2	61.3	1.1	60.8	61.9	1.1
R373(K1936)	Multi-Family	B	69.3	70.3	1.0	69.8	70.8	1.0
R374(K1907)	Multi-Family	B	56.2	57.3	1.1	56.6	57.7	1.1
R375(K1924)	Razed	B	53.1	54.2	1.1	53.6	54.7	1.1
R376(K1939)	Single-Family	B	69.0	70.1	1.1	69.5	70.6	1.1
R377(K1929)	Razed	B	54.3	55.4	1.1	54.8	55.9	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R378(K1945)	Multi-Family	B	67.0	68.0	1.0	67.5	68.5	1.0
R379(K1934)	Single-Family	B	62.5	63.5	1.0	62.9	64.0	1.1
R380(K1934 R-51)	Single-Family	B	65.5	66.6	1.1	66.1	67.2	1.1
R381(K696)	Single-Family	B	65.1	66.2	1.1	65.7	66.8	1.1
R382(K689)	Single-Family	B	62.6	63.6	1.0	63.1	64.2	1.1
R383(K691)	Single-Family	B	62.4	63.4	1.0	62.9	64.0	1.1
R384(K695)	Single-Family	B	63.1	64.1	1.0	63.6	64.7	1.1
M-26(K697)	Single-Family	B	71.0	72.0	1.0	71.4	72.4	1.0
R385(K694 R-52)	Single-Family	B	66.4	67.1	0.7	67.0	67.8	0.8
R386(K988)	Multi-Family	B	48.3	49.3	1.0	49.0	50.1	1.1
R387(K978)	Single-Family	B	48.3	49.3	1.0	49.0	50.1	1.1
R388(K997)	Multi-Family	B	50.0	51.0	1.0	50.8	51.9	1.1
R389(K987)	Single-Family	B	56.0	57.0	1.0	56.8	57.9	1.1
R390(K995)	Multi-Family	B	55.2	56.2	1.0	56.1	57.1	1.0
R391(K980)	Single-Family	B	57.1	58.1	1.0	58.0	59.0	1.0
R392(K1012)	Single-Family	B	54.7	55.7	1.0	55.4	56.5	1.1
R393(K811)	Single-Family	B	56.4	57.5	1.1	57.2	58.2	1.0
R394(K959)	Single-Family	B	61.5	62.5	1.0	62.3	63.3	1.0
R395(K971)	Single-Family	B	59.9	60.9	1.0	60.7	61.8	1.1
R396(KV811)	Vacant	B	65.8	66.8	1.0	66.5	67.5	1.0
R397(K802)	Multi-Family	B	62.0	63.0	1.0	62.6	63.7	1.1
R398(K804)	Single-Family	B	60.1	61.2	1.1	60.7	61.8	1.1
R399(K961)	Single-Family	B	63.9	64.9	1.0	64.7	65.7	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R400(K949)	Single-Family	B	66.8	67.9	1.1	67.6	68.7	1.1
R401(K798)	Multi-Family	B	62.0	63.0	1.0	62.6	63.7	1.1
R402(K796)	Multi-Family	B	62.2	63.3	1.1	62.9	64.0	1.1
R403(K931)	Single-Family	B	69.5	70.6	1.1	70.3	71.3	1.0
R404(K1019)	Multi-Family	B	61.2	62.3	1.1	61.9	63.0	1.1
R405(K1016)	Multi-Family	B	61.3	62.3	1.0	62.0	63.1	1.1
R406(K928)	Single-Family	B	70.6	71.6	1.0	71.3	72.4	1.1
R407(K1013)	Multi-Family	B	60.9	61.9	1.0	61.6	62.6	1.0
R408(K834)	Multi-Family	B	60.4	61.4	1.0	61.2	62.2	1.0
R409(K1010)	Multi-Family	B	62.1	63.1	1.0	62.8	63.8	1.0
R410(K1009)	Multi-Family	B	63.1	64.1	1.0	63.8	64.9	1.1
R411(K989)	Single-Family	B	66.3	67.3	1.0	67.0	68.1	1.1
R412(K1272)	Restaurant/Bar	E	59.4	60.3	0.9	60.0	60.9	0.9
R413(K833)	Multi-Family	B	61.2	62.2	1.0	62.0	63.0	1.0
R414(K1005)	Single-Family	B	68.7	69.7	1.0	69.4	70.4	1.0
R415(K829)	Single-Family	B	62.8	63.8	1.0	63.5	64.6	1.1
R416(K1032)	Single-Family	B	54.3	55.3	1.0	55.0	56.1	1.1
R417(K999)	Single-Family	B	72.2	73.2	1.0	72.9	74.0	1.1
R418(K847)	Single-Family	B	61.4	62.5	1.1	62.2	63.3	1.1
R419(K828)	Single-Family	B	63.3	64.3	1.0	64.1	65.1	1.0
R420(K1038)	Single-Family	B	54.0	55.0	1.0	54.7	55.8	1.1
R421(K581)	Multi-Family	B	70.2	71.2	1.0	70.6	71.7	1.1
R422(K582)	Single-Family	B	71.4	72.4	1.0	71.8	72.9	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R423(K584)	Single-Family	B	73.0	74.0	1.0	73.5	74.5	1.0
R424(K825)	Single-Family	B	63.8	64.9	1.1	64.6	65.7	1.1
R425(K575)	Single-Family	B	69.3	70.3	1.0	69.8	70.8	1.0
R426(K824)	Single-Family	B	64.8	65.9	1.1	65.6	66.7	1.1
R427(K821)	Single-Family	B	65.1	66.1	1.0	65.8	66.9	1.1
R428(K1048)	Single-Family	B	56.0	57.0	1.0	56.7	57.7	1.0
R429(K850)	Single-Family	B	64.8	65.8	1.0	65.6	66.7	1.1
R430(K574)	Single-Family	B	68.2	69.2	1.0	68.6	69.7	1.1
R431(K572)	Single-Family	B	67.8	68.8	1.0	68.3	69.3	1.0
R432(K1054)	Single-Family	B	58.9	59.9	1.0	59.6	60.7	1.1
R433(K1020)	Multi-Family	B	65.2	66.2	1.0	66.0	67.1	1.1
R434(K817)	Single-Family	B	66.4	67.4	1.0	67.2	68.3	1.1
R435(K864)	Single-Family	B	61.4	62.5	1.1	62.2	63.3	1.1
R436(K1026)	Single-Family	B	65.9	66.9	1.0	66.7	67.7	1.0
R437(K571)	Multi-Family	B	67.0	68.0	1.0	67.5	68.5	1.0
R438(K812)	Single-Family	B	65.9	66.9	1.0	66.7	67.7	1.0
R439(K954 R-53)	Razed	B	73.2	74.2	1.0	73.7	74.7	1.0
R440(K813)	Single-Family	B	66.6	67.7	1.1	67.5	68.5	1.0
R441(K1030)	Single-Family	B	65.8	66.9	1.1	66.7	67.7	1.0
R442(K569)	Single-Family	B	66.3	67.3	1.0	66.8	67.9	1.1
R443(K806)	Single-Family	B	70.2	71.2	1.0	71.0	72.1	1.1
R444(K814)	Single-Family	B	69.9	70.9	1.0	70.7	71.8	1.1
R445(K1035)	Multi-Family	B	65.8	66.8	1.0	66.6	67.7	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R446(K803)	Single-Family	B	70.5	71.5	1.0	71.3	72.4	1.1
R447(K938)	Razed	B	71.2	72.2	1.0	71.7	72.7	1.0
R448(K799)	Single-Family	B	70.9	71.9	1.0	71.7	72.8	1.1
R449(K872)	Single-Family	B	59.8	60.8	1.0	60.6	61.6	1.0
R450(K566)	Single-Family	B	66.3	67.3	1.0	66.9	67.9	1.0
R451(KV903)	Vacant	B	68.3	69.3	1.0	69.1	70.1	1.0
R452(K941)	Multi-Family	B	69.0	70.0	1.0	69.5	70.6	1.1
R453(K797)	Single-Family	B	72.2	73.2	1.0	73.1	74.1	1.0
R454(K932)	Single-Family	B	65.4	66.4	1.0	66.0	67.1	1.1
R455(K1017)	Single-Family	B	73.4	74.5	1.1	74.2	75.3	1.1
R456(K1007)	Single-Family	B	73.3	74.3	1.0	73.8	74.8	1.0
R457(K860)	Single-Family	B	65.9	66.9	1.0	66.5	67.5	1.0
R458(K875)	Undeveloped Land	B	57.7	58.7	1.0	58.5	59.5	1.0
R459(K1043)	Multi-Family	B	65.8	66.8	1.0	66.7	67.8	1.1
R460(K1532)	Single-Family	B	46.4	47.4	1.0	47.2	48.2	1.0
R461(K1006)	Single-Family	B	71.3	72.3	1.0	71.8	72.9	1.1
R462(K1000)	Single-Family	B	70.2	71.2	1.0	70.7	71.8	1.1
R463(K1004)	Single-Family	B	70.6	71.7	1.1	71.2	72.2	1.0
R464(K996)	Single-Family	B	69.4	70.4	1.0	69.9	71.0	1.1
R465(K1502)	Multi-Family	B	39.6	40.6	1.0	40.5	41.5	1.0
R466(K1050)	Multi-Family	B	66.0	67.0	1.0	66.9	67.9	1.0
R467(K929)	Single-Family	B	64.3	65.3	1.0	65.1	66.1	1.0
R468(K1545)	Multi-Family	B	48.0	49.0	1.0	48.9	49.9	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R469(KV91)	Vacant	B	56.3	57.3	1.0	56.9	58.0	1.1
R470(K859)	Single-Family	B	65.5	66.5	1.0	66.0	67.1	1.1
R471(K994)	Single-Family	B	68.9	69.9	1.0	69.5	70.5	1.0
R472(KV903)	Vacant	B	68.7	69.7	1.0	69.4	70.5	1.1
R473(K1506)	Multi-Family	B	47.2	48.2	1.0	48.1	49.1	1.0
R474(KV91)	Vacant	B	57.3	58.3	1.0	57.9	59.0	1.1
R475(K925)	Single-Family	B	63.3	64.3	1.0	64.1	65.1	1.0
M-36(K1573)	School	D	70.4	71.4	1.0	71.2	72.2	1.0
R476(K1520)	Multi-Family	B	47.5	48.5	1.0	48.4	49.4	1.0
R477(K1560)	Multi-Family	B	48.1	49.0	0.9	49.0	50.0	1.0
M-27(K1007)	Single-Family	B	73.9	74.9	1.0	74.3	75.4	1.1
R478(K856)	Single-Family	B	65.2	66.2	1.0	65.8	66.8	1.0
R480(K861)	Multi-Family	B	66.5	67.5	1.0	67.4	68.4	1.0
R481(K1509)	Multi-Family	B	53.1	54.1	1.0	53.9	54.9	1.0
R482(K792)	Single-Family	B	65.0	66.0	1.0	65.5	66.6	1.1
R483(K1179)	Single-Family	B	50.2	51.2	1.0	50.8	51.9	1.1
R484(K1981)	Razed	C	41.7	42.7	1.0	42.6	43.6	1.0
R485(KV1061)	Vacant	B	68.9	69.9	1.0	69.7	70.7	1.0
R486(K1191)	Multi-Family	B	46.5	47.5	1.0	47.4	48.4	1.0
R487(K1533)	Multi-Family	B	53.0	54.0	1.0	53.9	54.9	1.0
R488(K863)	Single-Family	B	67.0	68.0	1.0	67.8	68.9	1.1
R489(K924)	Single-Family	B	62.6	63.6	1.0	63.3	64.4	1.1
R490(K1171)	Single-Family	B	44.9	45.9	1.0	45.6	46.6	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R491(K1187)	Single-Family	B	34.5	35.5	1.0	35.2	36.3	1.1
R492(K1180)	Single-Family	B	44.1	45.1	1.0	45.0	46.0	1.0
R493(K1559)	Multi-Family	B	51.7	52.7	1.0	52.5	53.5	1.0
R494(K1568)	Multi-Family	B	52.3	53.3	1.0	53.3	54.3	1.0
R495(K1615)	Single-Family	B	73.9	74.9	1.0	74.5	75.5	1.0
R496(K2006)	Single-Family	B	64.0	64.9	0.9	64.2	65.2	1.0
M-38(K1609)	Single-Family	B	72.6	73.6	1.0	73.2	74.2	1.0
R497(K790)	Single-Family	B	64.4	65.4	1.0	64.9	66.0	1.1
R498(K869)	Multi-Family	B	67.0	68.0	1.0	67.9	68.9	1.0
R499(K1172)	Single-Family	B	43.7	44.7	1.0	44.5	45.5	1.0
R500(K1620)	Single-Family	B	73.0	74.0	1.0	73.6	74.6	1.0
R501(K2004)	Single-Family	B	65.6	66.6	1.0	66.0	67.0	1.0
R502(K2005)	Single-Family	B	65.2	66.2	1.0	65.5	66.5	1.0
R503(K1622)	Single-Family	B	72.8	73.8	1.0	73.3	74.3	1.0
R504(K1630)	Single-Family	B	71.9	72.9	1.0	72.4	73.4	1.0
R505(K1674)	Single-Family	B	66.6	67.6	1.0	66.9	68.0	1.1
M-31(K1979)	Multi-Family	B	68.6	69.6	1.0	68.7	69.7	1.0
R506(K927)	Single-Family	B	63.6	64.6	1.0	64.4	65.4	1.0
R507(K1564)	Multi-Family	B	61.6	62.5	0.9	62.2	63.2	1.0
R508(K1627)	Single-Family	B	72.2	73.2	1.0	72.7	73.7	1.0
R509(K1573)	School	C	68.3	69.3	1.0	69.0	70.0	1.0
R510(K1670 R-61)	Multi-Family	B	67.7	68.7	1.0	68.1	69.1	1.0
R511(K789)	Single-Family	B	64.1	65.0	0.9	64.6	65.6	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R512(K1642)	Single-Family	B	70.4	71.4	1.0	70.9	71.9	1.0
R513(K899)	Single-Family	B	60.2	61.2	1.0	61.1	62.2	1.1
R514(K1174)	Single-Family	B	46.3	47.3	1.0	47.1	48.1	1.0
R515(K1569)	Multi-Family	B	63.6	64.6	1.0	64.3	65.2	0.9
R516(K1638)	Single-Family	B	70.4	71.4	1.0	70.9	71.9	1.0
R517(K1652)	Single-Family	B	68.1	69.1	1.0	68.6	69.6	1.0
R518(K1665)	Single-Family	B	68.2	69.2	1.0	68.6	69.6	1.0
R519(K2012)	Multi-Family	B	57.1	58.0	0.9	57.0	58.0	1.0
R520(K2014)	Multi-Family	B	59.0	59.9	0.9	59.0	59.9	0.9
R521(KV1061)	Vacant	B	69.4	70.4	1.0	70.2	71.2	1.0
M-35(K1503)	Multi-Family	B	69.9	70.9	1.0	70.7	71.7	1.0
R522(K922)	Single-Family	B	62.5	63.5	1.0	63.3	64.4	1.1
R523(K1578)	Multi-Family	B	58.3	59.3	1.0	59.1	60.1	1.0
R524(K881)	Single-Family	B	63.4	64.4	1.0	64.2	65.2	1.0
R525(K1570)	Multi-Family	B	69.1	70.1	1.0	69.7	70.6	0.9
R526(K2009)	Multi-Family	B	56.8	57.7	0.9	56.8	57.8	1.0
R527(K2011)	Multi-Family	B	56.5	57.4	0.9	56.5	57.5	1.0
M-30(K1176)	Single-Family	B	65.6	66.6	1.0	66.0	67.0	1.0
R528(K903)	Single-Family	B	59.9	60.9	1.0	60.9	61.9	1.0
R529(K921)	Single-Family	B	62.1	63.1	1.0	62.9	64.0	1.1
R530(K1181)	Single-Family	B	51.7	52.7	1.0	52.6	53.5	0.9
R531(K1621)	Single-Family	B	68.4	69.4	1.0	68.9	69.9	1.0
R532(K2008)	Multi-Family	B	56.3	57.2	0.9	56.3	57.3	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
M-37(K1616)	Single-Family	B	67.2	68.3	1.1	67.6	68.6	1.0
R533(K2007)	Multi-Family	B	57.9	58.9	1.0	58.1	59.1	1.0
R534(K879)	Single-Family	B	68.7	69.7	1.0	69.5	70.5	1.0
R535(K1705)	Multi-Family	B	57.6	58.5	0.9	57.8	58.8	1.0
R536(K2024)	Multi-Family	B	60.7	61.5	0.8	61.0	61.7	0.7
R537(K85)	Single-Family	B	65.4	66.4	1.0	66.4	67.4	1.0
R538(K1602)	Single-Family	B	68.5	69.4	0.9	69.3	70.3	1.0
R539(K1611)	Single-Family	B	62.9	63.9	1.0	64.0	65.0	1.0
R540(K1624)	Single-Family	B	66.8	67.8	1.0	67.3	68.3	1.0
M-28(K879)	Single-Family	B	73.9	74.9	1.0	74.7	75.8	1.1
R541(K1629)	Single-Family	B	64.7	65.7	1.0	65.3	66.3	1.0
R542(K1632)	Single-Family	B	62.7	63.7	1.0	63.2	64.2	1.0
R543(K886)	Multi-Family	B	66.6	67.6	1.0	67.5	68.5	1.0
R544(K917)	Multi-Family	B	61.4	62.4	1.0	62.3	63.4	1.1
R545(K1608)	Single-Family	B	71.1	72.1	1.0	72.0	72.9	0.9
R546(K1613)	Single-Family	B	60.4	61.3	0.9	61.4	62.4	1.0
R547(K1637)	Single-Family	B	61.1	62.2	1.1	61.6	62.6	1.0
R548(K1699)	Multi-Family	B	57.7	58.7	1.0	58.0	59.0	1.0
R549(KV1077)	Vacant	B	69.7	70.7	1.0	70.5	71.5	1.0
R550(K1695)	Multi-Family	B	58.9	59.9	1.0	59.2	60.2	1.0
R551(K2019)	Single-Family	B	54.0	54.9	0.9	54.3	55.2	0.9
R552(K2023)	Single-Family	B	55.6	56.4	0.8	55.9	56.8	0.9
R553(K2031)	Multi-Family	B	58.9	59.6	0.7	59.2	60.0	0.8

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R554(K1677)	Single-Family	B	59.6	60.6	1.0	60.0	61.0	1.0
R555(K1687)	Multi-Family	B	59.3	60.3	1.0	59.7	60.7	1.0
R556(K2018)	Single-Family	B	52.5	53.5	1.0	52.8	53.8	1.0
R557(K2037)	Multi-Family	B	66.6	67.1	0.5	67.9	68.5	0.6
R558(K1626)	Single-Family	B	57.7	58.7	1.0	58.7	59.7	1.0
R559(K1648)	Single-Family	B	60.1	61.1	1.0	60.5	61.5	1.0
R560(K1668)	Single-Family	B	59.7	60.7	1.0	60.2	61.2	1.0
R561(K1672)	Single-Family	B	60.0	61.0	1.0	60.4	61.4	1.0
R562(K2013)	Single-Family	B	52.0	52.9	0.9	52.0	53.0	1.0
R563(K2015)	Single-Family	B	52.0	52.9	0.9	52.2	53.2	1.0
R564(K918)	Multi-Family	B	60.5	61.5	1.0	61.4	62.5	1.1
R565(K1713)	Single-Family	B	52.2	53.1	0.9	52.4	53.4	1.0
R566(K2038)	Single-Family	B	62.8	63.4	0.6	63.1	63.7	0.6
R567(K1552)	Single-Family	B	62.1	63.1	1.0	62.5	63.5	1.0
R568(K1561)	Single-Family	B	61.7	62.7	1.0	62.0	63.0	1.0
R569(K1712)	Single-Family	B	52.4	53.4	1.0	52.7	53.7	1.0
R570(K2036)	Multi-Family	B	58.8	59.6	0.8	59.3	60.2	0.9
R571(K1547 R-58)	Single-Family	B	62.4	63.4	1.0	62.8	63.7	0.9
R572(K1635)	Single-Family	B	55.8	56.8	1.0	56.2	57.2	1.0
R573(K1617)	Single-Family	B	67.0	68.0	1.0	67.9	68.8	0.9
R574(K891)	Single-Family	B	70.2	71.2	1.0	71.0	72.1	1.1
R575(K1540)	Single-Family	B	62.2	63.2	1.0	62.6	63.6	1.0
R576(K1597)	Multi-Family	B	36.0	37.0	1.0	36.8	37.8	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R577(K1623)	Single-Family	B	64.4	65.4	1.0	65.2	66.2	1.0
R578(K1634)	Single-Family	B	59.0	60.0	1.0	59.4	60.4	1.0
R579(K1710)	Single-Family	B	53.0	53.9	0.9	53.3	54.3	1.0
R580(K2034)	Multi-Family	B	53.9	54.8	0.9	54.5	55.4	0.9
M-33(K1581)	Single-Family	B	73.0	74.0	1.0	73.3	74.2	0.9
R581(K1708)	Single-Family	B	53.0	54.0	1.0	53.3	54.3	1.0
M-34(K1604)	Multi-Family	B	51.7	52.7	1.0	52.3	53.3	1.0
R582(K1061)	Single-Family	B	60.7	61.7	1.0	61.8	62.9	1.1
R583(K1628)	Single-Family	B	62.2	63.2	1.0	63.0	64.0	1.0
R584(K1641)	Single-Family	B	56.6	57.6	1.0	57.0	58.0	1.0
R585(K1706)	Single-Family	B	53.6	54.5	0.9	53.9	54.9	1.0
R586(K2030)	Multi-Family	B	52.1	53.1	1.0	52.6	53.5	0.9
R587(K1704)	Single-Family	B	54.3	55.3	1.0	54.7	55.7	1.0
R588(KV1089)	Vacant	B	70.2	71.2	1.0	71.0	72.0	1.0
R589(K1631)	Single-Family	B	60.8	61.8	1.0	61.6	62.6	1.0
R590(K1651)	Single-Family	B	56.6	57.6	1.0	57.1	58.1	1.0
R591(K1666)	Single-Family	B	56.2	57.2	1.0	56.6	57.6	1.0
R592(K1682)	Single-Family	B	56.6	57.6	1.0	57.0	58.0	1.0
R593(K1691)	Single-Family	B	55.6	56.6	1.0	56.0	57.0	1.0
R594(K1698)	Single-Family	B	54.4	55.3	0.9	54.7	55.7	1.0
R595(K1581)	Single-Family	B	71.6	72.6	1.0	72.0	72.9	0.9
R596(K1591)	Multi-Family	B	36.4	37.3	0.9	37.4	38.4	1.0
R597(K1636)	Single-Family	B	60.6	61.6	1.0	61.3	62.3	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R598(K1694)	Single-Family	B	54.6	55.6	1.0	55.0	56.0	1.0
R599(K2021)	Multi-Family	B	52.4	53.4	1.0	52.8	53.7	0.9
R600(K2027)	Multi-Family	B	52.2	53.1	0.9	52.5	53.5	1.0
R601(K1590)	Multi-Family	B	39.7	40.6	0.9	40.7	41.7	1.0
R602(K849)	Single-Family	B	72.3	73.3	1.0	72.9	73.9	1.0
R603(K904)	Single-Family	B	71.1	72.1	1.0	72.0	73.0	1.0
R604(K1643)	Single-Family	B	61.2	62.2	1.0	61.8	62.8	1.0
R605(K1718)	Multi-Family	B	52.5	53.4	0.9	52.8	53.8	1.0
R606(K1610)	Multi-Family	B	55.7	56.7	1.0	56.2	57.2	1.0
R607(K1717)	Multi-Family	B	52.6	53.6	1.0	53.0	53.9	0.9
R608(K819)	Single-Family	B	69.4	70.4	1.0	70.1	71.2	1.1
R609(K848)	Single-Family	B	70.9	71.9	1.0	71.5	72.5	1.0
R610(K1594)	Recreation	C	41.9	42.9	1.0	42.8	43.8	1.0
R611(K1612)	Multi-Family	B	50.8	51.8	1.0	51.6	52.6	1.0
R612(K1716)	Single-Family	B	53.0	54.0	1.0	53.4	54.3	0.9
R613(K1583)	Single-Family	B	59.2	60.2	1.0	59.5	60.5	1.0
R614(K1585)	Single-Family	B	58.8	59.8	1.0	59.2	60.1	0.9
R615(K1600)	Multi-Family	B	48.4	49.4	1.0	49.3	50.3	1.0
R616(K1601)	Multi-Family	B	42.7	43.7	1.0	43.6	44.6	1.0
R617(K841)	Single-Family	B	69.9	70.9	1.0	70.5	71.5	1.0
R618(K1558)	Single-Family	B	62.1	63.1	1.0	62.3	63.3	1.0
R619(K1567)	Single-Family	B	61.3	62.3	1.0	61.6	62.5	0.9
R620(K1596)	Multi-Family	B	49.2	50.2	1.0	50.1	51.1	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R621(K1572 R-59)	Single-Family	B	61.3	62.2	0.9	61.5	62.5	1.0
R622(K907)	Single-Family	B	71.4	72.4	1.0	72.3	73.3	1.0
R623(K1554)	Single-Family	B	62.2	63.2	1.0	62.4	63.4	1.0
R624(K1565)	Single-Family	B	61.7	62.7	1.0	61.9	62.9	1.0
R625(K1575)	Single-Family	B	60.9	61.9	1.0	61.2	62.2	1.0
R626(K1563)	Single-Family	B	61.8	62.8	1.0	62.0	63.0	1.0
R627(K1577)	Single-Family	B	61.0	62.0	1.0	61.3	62.2	0.9
R628(K1077)	Single-Family	B	65.0	66.0	1.0	66.1	67.1	1.0
R629(K1550)	Single-Family	B	62.2	63.2	1.0	62.4	63.4	1.0
R630(K1058)	Single-Family	B	71.9	72.9	1.0	72.8	73.9	1.1
R631(K1544)	Single-Family	B	62.1	63.1	1.0	62.3	63.3	1.0
R632(K1079)	Single-Family	B	66.8	67.8	1.0	67.8	68.9	1.1
R633(K843)	Single-Family	B	67.9	68.9	1.0	68.5	69.6	1.1
R634(K1538)	Single-Family	B	61.9	62.9	1.0	62.2	63.1	0.9
R635(K1062)	Single-Family	B	72.5	73.5	1.0	73.4	74.4	1.0
R636(K840)	Single-Family	B	67.3	68.3	1.0	68.0	69.1	1.1
R637(K1617 R-60)	Single-Family	B	66.0	66.9	0.9	66.7	67.6	0.9
R638(K1065)	Single-Family	B	73.2	74.2	1.0	74.1	75.2	1.1
R639(K1089)	Single-Family	B	70.4	71.4	1.0	71.3	72.4	1.1
R640(K1069)	Single-Family	B	73.7	74.7	1.0	74.6	75.7	1.1
R641(K1530)	Single-Family	B	61.5	62.5	1.0	61.8	62.8	1.0
R642(K1075 R-54)	Single-Family	B	74.4	75.4	1.0	75.3	76.3	1.0
R643(K1041)	Single-Family	B	71.9	72.9	1.0	72.5	73.6	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R644(K1036)	Single-Family	B	70.8	71.8	1.0	71.4	72.5	1.1
R645(K1033)	Multi-Family	B	65.7	66.7	1.0	66.4	67.5	1.1
R646(K1053)	Single-Family	B	64.6	65.6	1.0	65.4	66.4	1.0
R647(K1037)	Multi-Family	B	67.6	68.6	1.0	68.3	69.4	1.1
R648(K1522)	Single-Family	B	60.9	61.9	1.0	61.3	62.2	0.9
R649(K1027)	Multi-Family	B	64.8	65.8	1.0	65.6	66.6	1.0
R650(K1116)	Vacant	B	67.7	68.7	1.0	68.3	69.4	1.1
R651(K594)	Single-Family	B	66.9	67.9	1.0	67.6	68.6	1.0
R652(K1023)	Single-Family	B	60.6	61.6	1.0	61.4	62.4	1.0
R653(K884)	Single-Family	B	66.8	67.8	1.0	67.4	68.5	1.1
R654(K1039)	Single-Family	B	63.3	64.3	1.0	64.2	65.3	1.1
R655(K1121 R-56)	Single-Family	B	66.3	67.3	1.0	67.1	68.1	1.0
R656(K882)	Single-Family	B	59.6	60.6	1.0	60.2	61.2	1.0
R657(K1123)	Single-Family	B	65.7	66.7	1.0	66.5	67.5	1.0
R658(K883)	Single-Family	B	62.4	63.4	1.0	63.2	64.2	1.0
M-29(K1148)	Single-Family	B	65.0	66.0	1.0	65.8	66.8	1.0
R659(K876)	Single-Family	B	62.5	63.5	1.0	63.3	64.4	1.1
R660(K1167)	Church	D	69.0	70.0	1.0	70.0	71.0	1.0
R661(K1766)	Single-Family	B	59.6	60.6	1.0	60.1	61.1	1.0
R662(K1168)	Multi-Family	B	68.4	69.3	0.9	69.4	70.4	1.0
R663(K598)	Single-Family	B	61.4	62.4	1.0	62.3	63.3	1.0
M-32(K1983)	Multi-Family	B	59.0	60.0	1.0	59.7	60.7	1.0
R664(K1125)	Single-Family	B	64.6	65.6	1.0	65.5	66.5	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R665(K1989)	Single-Family	B	59.3	60.3	1.0	59.7	60.7	1.0
R666(K878)	Single-Family	B	62.0	63.0	1.0	62.8	63.9	1.1
R667(K1983)	Multi-Family	B	58.5	59.4	0.9	59.2	60.2	1.0
R668(K595)	Single-Family	B	63.0	64.0	1.0	63.6	64.6	1.0
R669(K877)	Single-Family	B	61.8	62.8	1.0	62.6	63.6	1.0
R670(K1129)	Single-Family	B	64.1	65.1	1.0	65.0	66.0	1.0
R671(K1183 R-57)	Multi-Family	B	61.6	62.6	1.0	62.5	63.5	1.0
R672(K600)	Single-Family	B	60.6	61.6	1.0	61.4	62.4	1.0
R673(K874)	Single-Family	B	61.6	62.6	1.0	62.4	63.4	1.0
R674(K1132)	Single-Family	B	63.7	64.7	1.0	64.7	65.7	1.0
R675(K873)	Single-Family	B	58.0	59.0	1.0	58.8	59.9	1.1
R676(K1117)	Single-Family	B	60.3	61.3	1.0	61.1	62.1	1.0
R677(K1150)	Single-Family	B	60.2	61.2	1.0	60.9	62.0	1.1
R678(K1136)	Single-Family	B	63.1	64.1	1.0	64.1	65.1	1.0
R679(K1152)	Single-Family	B	60.0	61.1	1.1	60.8	61.8	1.0
R680(K898)	Multi-Family	B	63.1	64.1	1.0	63.9	65.0	1.1
R681(K1139)	Single-Family	B	62.0	63.0	1.0	63.1	64.1	1.0
R682(K104)	Multi-Family	B	63.5	64.5	1.0	64.3	65.4	1.1
R683(K1120)	Single-Family	B	58.8	59.8	1.0	59.7	60.7	1.0
R684(K905)	Multi-Family	B	63.6	64.6	1.0	64.5	65.5	1.0
R685(K1153)	Single-Family	B	60.3	61.3	1.0	61.1	62.1	1.0
R686(K1142)	Single-Family	B	60.5	61.5	1.0	61.6	62.6	1.0
R687(K908)	Single-Family	B	63.8	64.8	1.0	64.6	65.7	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R688(K13)	Single-Family	B	59.7	60.7	1.0	60.5	61.5	1.0
R689(K1059)	Single-Family	B	63.2	64.2	1.0	64.0	65.1	1.1
R690(K1124)	Single-Family	B	56.5	57.5	1.0	57.5	58.5	1.0
R691(K1063)	Single-Family	B	63.1	64.1	1.0	63.9	64.9	1.0
R692(K1145)	Single-Family	B	59.4	60.4	1.0	60.6	61.6	1.0
R693(K1130)	Single-Family	B	55.6	56.6	1.0	56.6	57.6	1.0
R694(K1080)	Undeveloped Land	B	62.7	63.7	1.0	63.6	64.6	1.0
R695(K1119)	Single-Family	B	56.3	57.3	1.0	56.9	58.0	1.1
R696(K1085)	Undeveloped Land	B	62.8	63.8	1.0	63.7	64.8	1.1
R697(K1090)	Undeveloped Land	B	62.9	63.9	1.0	63.8	64.8	1.0
R698(K1135)	Single-Family	B	54.3	55.3	1.0	55.3	56.3	1.0
R699(K1095)	Multi-Family	B	62.8	63.8	1.0	63.7	64.7	1.0
R700(K1101 R-55)	Multi-Family	B	62.2	63.2	1.0	63.1	64.1	1.0
R701(K1138)	Single-Family	B	52.3	53.3	1.0	53.4	54.5	1.1
R702(K47)	Single-Family	B	61.0	62.0	1.0	62.2	63.2	1.0
R703(K1251)	Single-Family	B	60.5	61.5	1.0	61.7	62.8	1.1
R704(K46)	Single-Family	B	61.3	62.3	1.0	62.5	63.6	1.1
R705(K48)	Single-Family	B	61.2	62.2	1.0	62.4	63.5	1.1
R706(K1254)	Single-Family	B	60.9	61.9	1.0	62.1	63.1	1.0
R707(K44)	Single-Family	B	62.0	63.0	1.0	63.2	64.2	1.0
R708(K43)	Single-Family	B	61.8	62.8	1.0	63.0	64.0	1.0
R709(K1471)	Multi-Family	B	62.3	63.3	1.0	63.4	64.4	1.0
R710(K64)	Single-Family	B	61.3	62.3	1.0	62.3	63.4	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R711(K1474)	Single-Family	B	63.7	64.8	1.1	64.8	65.8	1.0
R712(K1304)	Single-Family	B	66.3	67.3	1.0	67.0	68.0	1.0
R713(K1267)	School	D	71.3	72.3	1.0	72.6	73.6	1.0
R714(K1493)	Multi-Family	B	68.4	69.4	1.0	69.5	70.5	1.0
R715(K1481)	Multi-Family	B	66.2	67.2	1.0	67.2	68.3	1.1
R716(K1302)	Single-Family	B	66.3	67.3	1.0	66.9	67.9	1.0
R717(K1266)	Office	E	71.9	72.9	1.0	73.1	74.2	1.1
R718(K1295)	Single-Family	B	64.6	65.6	1.0	65.2	66.2	1.0
R719(K1291)	Single-Family	B	61.3	62.3	1.0	61.9	62.9	1.0
R720(K1262)	Office	E	70.8	71.8	1.0	72.0	73.1	1.1
R721(K1381)	Restaurant/Bar	E	58.7	59.7	1.0	59.6	60.6	1.0
R722(K1404)	Office	E	58.4	59.4	1.0	59.3	60.3	1.0
R723(K1405)	Medical Facility	C	58.4	59.5	1.1	59.3	60.4	1.1
R724(K1415)	Single-Family	B	53.9	54.9	1.0	54.7	55.7	1.0
R725(K1264)	Single-Family	B	72.2	73.3	1.1	73.4	74.5	1.1
R726(K1487)	Single-Family	B	68.1	69.1	1.0	69.1	70.2	1.1
R727(K2068)	Office	E	70.6	71.6	1.0	71.8	72.8	1.0
R728(K1419)	Single-Family	B	58.3	59.3	1.0	59.2	60.3	1.1
R729(K1422)	Single-Family	B	58.1	59.1	1.0	59.0	60.1	1.1
R730(K1311)	Office	E	70.9	71.9	1.0	71.4	72.4	1.0
R731(K1429)	Single-Family	B	58.2	59.2	1.0	59.1	60.2	1.1
R732(K65)	Single-Family	B	58.8	59.8	1.0	59.7	60.8	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R734(K1201)	Multi-Family	B	72.0	73.0	1.0	73.1	74.1	1.0
R735(K1339)	Hotel	E	66.9	67.9	1.0	67.9	69.0	1.1
R736(K2067)	Office	E	73.9	74.9	1.0	75.1	76.2	1.1
M-43(K1349)	Hotel	E	76.8	77.8	1.0	77.8	78.8	1.0
R737(K1323)	Office	E	74.6	75.6	1.0	75.6	76.7	1.1
R738(K1412)	Single-Family	B	60.7	61.7	1.0	61.5	62.6	1.1
R739(K1424)	Single-Family	B	58.9	59.9	1.0	59.7	60.8	1.1
R740(K1454)	Single-Family	B	60.6	61.6	1.0	61.5	62.6	1.1
R741(K1307 R-62)	Office	E	68.7	69.7	1.0	69.0	70.0	1.0
R742(K1450)	Office	E	58.7	59.7	1.0	59.6	60.7	1.1
R743(K1479)	Single-Family	B	55.3	56.4	1.1	56.3	57.4	1.1
R744(K1497)	Single-Family	B	70.2	71.2	1.0	71.3	72.3	1.0
R745(K1476)	Single-Family	B	55.0	56.0	1.0	55.8	56.9	1.1
R746(K1458)	Single-Family	B	63.2	64.2	1.0	64.1	65.2	1.1
R747(K1482)	Single-Family	B	53.7	54.7	1.0	54.6	55.7	1.1
R748(K2091)	Single-Family	B	76.7	77.8	1.1	77.7	78.8	1.1
R749(K1767)	Single-Family	B	76.2	77.3	1.1	77.2	78.3	1.1
R750(K1435)	Single-Family	B	60.2	61.3	1.1	61.1	62.2	1.1
R751(K1427)	Single-Family	B	61.9	62.9	1.0	62.8	63.8	1.0
R752(K1438)	Single-Family	B	60.8	61.8	1.0	61.7	62.7	1.0
R753(K1472)	Restaurant/Bar	E	62.6	63.7	1.1	63.6	64.7	1.1
R754(K1478)	Single-Family	B	55.9	57.0	1.1	56.7	57.8	1.1
R755(K1488)	Single-Family	B	69.9	70.9	1.0	70.9	72.0	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R756(K2109B)	Single-Family	B	75.9	77.0	1.1	76.9	78.0	1.1
R757(K2105)	Single-Family	B	73.4	74.4	1.0	74.4	75.5	1.1
R758(K1448)	Single-Family	B	62.0	63.1	1.1	62.9	64.0	1.1
R760(K1433)	Single-Family	B	62.3	63.3	1.0	63.2	64.2	1.0
R761(K1483)	Single-Family	B	56.9	58.0	1.1	57.7	58.7	1.0
R762(K1455)	Single-Family	B	63.7	64.7	1.0	64.7	65.7	1.0
R763(K1485)	Single-Family	B	58.2	59.3	1.1	59.0	60.1	1.1
R764(KV2092)	Vacant	B	73.3	74.3	1.0	74.4	75.4	1.0
R765(K1459)	Single-Family	B	63.6	64.6	1.0	64.5	65.5	1.0
R766(K2085)	Single-Family	B	74.6	75.7	1.1	75.6	76.7	1.1
R767(K1491)	Single-Family	B	54.3	55.4	1.1	55.2	56.3	1.1
R768(K1437)	Single-Family	B	62.1	63.1	1.0	63.0	64.1	1.1
R769(K2119)	Single-Family	B	71.3	72.4	1.1	72.4	73.5	1.1
R770(K1489)	Single-Family	B	59.4	60.5	1.1	60.2	61.3	1.1
R771(K2101)	Single-Family	B	68.1	69.2	1.1	69.2	70.3	1.1
R772(K2109E)	Single-Family	B	72.3	73.3	1.0	73.4	74.4	1.0
R773(KV1469)	Vacant	B	63.0	64.1	1.1	64.0	65.0	1.0
R774(K1346)	Single-Family	B	70.8	71.8	1.0	71.4	72.3	0.9
R775(K1496)	Single-Family	B	55.4	56.5	1.1	56.2	57.4	1.2
R776(K2087)	Single-Family	B	71.7	72.7	1.0	72.7	73.7	1.0
R777(K2106)	Single-Family	B	69.7	70.7	1.0	70.9	71.9	1.0
M-41(K1318)	Single-Family	B	70.6	71.7	1.1	71.1	72.1	1.0
R778(K2104)	Single-Family	B	70.6	71.6	1.0	71.7	72.8	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R779(K1195)	Single-Family	B	69.5	70.5	1.0	70.6	71.6	1.0
R780(K1383)	Single-Family	B	71.6	72.6	1.0	72.1	73.1	1.0
R781(K1456)	Single-Family	B	63.0	64.1	1.1	64.0	65.0	1.0
R782(K1495)	Medical Facility	C	61.9	62.9	1.0	62.8	63.8	1.0
R783(K1722C)	Single-Family	B	69.7	70.8	1.1	70.9	71.9	1.0
R784(K1769)	Single-Family	B	68.8	69.9	1.1	69.9	70.9	1.0
R785(K2083)	Single-Family	B	76.1	77.2	1.1	77.1	78.1	1.0
M-44(K75)	Multi-Family	B	71.2	72.2	1.0	71.8	72.8	1.0
M-44a(K75)	Multi-Family	B	72.8	73.9	1.1	73.4	74.4	1.0
M-46(K1469)	Single-Family	B	65.5	66.5	1.0	66.5	67.5	1.0
R786(K1194)	Multi-Family	B	58.7	59.8	1.1	59.5	60.6	1.1
R787(K2122)	Single-Family	B	68.2	69.2	1.0	69.3	70.4	1.1
R788(K1722B)	Single-Family	B	69.0	70.1	1.1	70.2	71.2	1.0
M-40(K1315)	Single-Family	B	62.1	63.1	1.0	62.7	63.7	1.0
M-42(K1348)	Single-Family	B	64.3	65.3	1.0	65.0	65.9	0.9
R789(K1319)	Single-Family	B	64.3	65.3	1.0	64.9	65.9	1.0
R790(K1360)	Single-Family	B	71.2	72.2	1.0	71.9	72.9	1.0
R791(K1365)	Single-Family	B	69.5	70.6	1.1	70.1	71.1	1.0
R792(K1421)	Single-Family	B	74.5	75.5	1.0	75.3	76.3	1.0
R793(KV2025)	Vacant	B	62.2	63.2	1.0	62.7	63.7	1.0
R794(KV1318)	Vacant	B	66.4	67.4	1.0	67.2	68.2	1.0
R795(K74)	Multi-Family	B	69.3	70.3	1.0	69.9	70.8	0.9
R796(K1341)	Single-Family	B	71.1	72.1	1.0	71.7	72.7	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R797(K2124)	Single-Family	B	68.2	69.2	1.0	69.3	70.4	1.1
R798(K1326)	Single-Family	B	62.3	63.3	1.0	62.9	63.9	1.0
R799(K1391)	Single-Family	B	68.0	69.0	1.0	68.6	69.6	1.0
R800(K2086)	Single-Family	B	72.7	73.7	1.0	73.7	74.7	1.0
R801(K1205)	Single-Family	B	67.2	68.2	1.0	68.2	69.2	1.0
R802(K1331)	Single-Family	B	68.8	69.8	1.0	69.4	70.4	1.0
R803(K2017)	Single-Family	B	64.6	65.5	0.9	65.0	66.0	1.0
R804(K2025)	Single-Family	B	63.5	64.5	1.0	64.0	65.0	1.0
R805(K78)	Single-Family	B	70.1	71.1	1.0	70.7	71.7	1.0
R806(K1322)	Single-Family	B	64.2	65.2	1.0	64.7	65.7	1.0
R807(K1336)	Single-Family	B	69.1	70.1	1.0	69.7	70.7	1.0
R808(K2109)	Single-Family	B	63.9	64.9	1.0	65.1	66.1	1.0
R809(K71)	Multi-Family	B	66.1	67.1	1.0	66.7	67.7	1.0
R810(K2020)	Single-Family	B	63.3	64.1	0.8	63.9	64.7	0.8
R811(K2095)	Single-Family	B	67.1	68.1	1.0	68.1	69.1	1.0
R812(K1386)	Single-Family	B	63.5	64.5	1.0	64.0	65.0	1.0
R813(K2114)	Single-Family	B	65.9	66.9	1.0	67.0	68.1	1.1
R814(K2125)	Single-Family	B	65.7	66.8	1.1	66.9	67.9	1.0
M-48(K37)	Single-Family	B	60.3	61.4	1.1	61.3	62.4	1.1
R815(K73)	Multi-Family	B	63.9	65.0	1.1	64.4	65.4	1.0
R816(K1372)	Single-Family	B	61.3	62.3	1.0	61.9	62.9	1.0
R817(K1395)	Single-Family	B	67.8	68.8	1.0	68.4	69.4	1.0
R818(K2029)	Multi-Family	B	52.1	53.0	0.9	52.5	53.3	0.8

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R819(K2088)	Single-Family	B	72.7	73.8	1.1	73.7	74.7	1.0
R820(K2138)	Single-Family	B	66.2	67.2	1.0	67.4	68.4	1.0
R821(K1722A)	Single-Family	B	62.8	63.9	1.1	64.0	65.0	1.0
R822(K1204)	Single-Family	B	65.2	66.2	1.0	66.2	67.2	1.0
R823(K1722)	Single-Family	B	65.0	66.1	1.1	66.2	67.3	1.1
R824(K2099)	Single-Family	B	64.8	65.8	1.0	65.8	66.9	1.1
R825(K2127)	Single-Family	B	65.4	66.4	1.0	66.6	67.6	1.0
R826(K2144)	Single-Family	B	65.5	66.6	1.1	66.7	67.8	1.1
R827(K2109C)	Single-Family	B	65.0	66.1	1.1	66.2	67.3	1.1
R828(K1720)	Single-Family	B	65.2	66.3	1.1	66.4	67.5	1.1
R829(K2026)	Single-Family	B	63.6	64.2	0.6	64.5	65.1	0.6
R830(K68)	Multi-Family	B	65.9	66.9	1.0	66.6	67.6	1.0
R831(K1328)	Single-Family	B	63.8	64.9	1.1	64.4	65.4	1.0
M-45(K1484)	Church	D	72.7	73.7	1.0	73.5	74.5	1.0
R832(K1362)	Single-Family	B	59.5	60.5	1.0	60.2	61.1	0.9
R833(K1370)	Single-Family	B	60.7	61.7	1.0	61.3	62.3	1.0
R834(K1402)	Single-Family	B	66.4	67.4	1.0	67.0	68.0	1.0
R835(K1446)	Single-Family	B	68.3	69.3	1.0	69.0	70.0	1.0
R836(K67)	Multi-Family	B	65.6	66.6	1.0	66.3	67.3	1.0
R837(K2033)	Single-Family	B	52.5	53.3	0.8	52.9	53.8	0.9
R838(K2109F)	Single-Family	B	63.9	64.9	1.0	65.0	66.1	1.1
R839(K1334)	Single-Family	B	62.5	63.5	1.0	63.1	64.1	1.0
R840(K2109A)	Single-Family	B	60.8	61.8	1.0	61.9	63.0	1.1

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R841(K30)	Single-Family	B	62.3	63.4	1.1	63.5	64.6	1.1
R842(K1353)	Day Care	C	57.5	58.5	1.0	58.1	59.1	1.0
R843(K1406)	Single-Family	B	63.1	64.1	1.0	63.7	64.7	1.0
R844(K2032)	Single-Family	B	63.5	64.1	0.6	64.5	65.2	0.7
R845(K2103)	Single-Family	B	63.3	64.3	1.0	64.4	65.4	1.0
R846(K1396)	Single-Family	B	60.3	61.3	1.0	61.0	61.9	0.9
R847(K1403)	Single-Family	B	61.9	62.9	1.0	62.6	63.6	1.0
R848(K2035)	Multi-Family	B	51.5	52.3	0.8	51.9	52.8	0.9
R849(K1397)	Single-Family	B	58.8	59.9	1.1	59.5	60.5	1.0
R850(K1721)	Single-Family	B	63.3	64.4	1.1	64.5	65.5	1.0
R851(K2094)	Single-Family	B	72.2	73.3	1.1	73.2	74.2	1.0
R852(K2109D)	Single-Family	B	60.1	61.2	1.1	61.3	62.4	1.1
R853(K1217)	Hotel	E	60.6	61.7	1.1	61.6	62.6	1.0
R854(K1460)	Single-Family	B	63.0	64.0	1.0	63.7	64.6	0.9
R855(K1392)	Single-Family	B	57.9	58.9	1.0	58.6	59.6	1.0
R856(K1394)	Single-Family	B	58.4	59.4	1.0	59.1	60.1	1.0
R857(K1193)	Single-Family	B	69.5	70.5	1.0	70.3	71.3	1.0
R858(K1379)	Single-Family	B	57.0	58.0	1.0	57.6	58.6	1.0
R859(K1385)	Single-Family	B	56.3	57.3	1.0	56.9	57.8	0.9
R860(K2097)	Single-Family	B	71.8	72.9	1.1	72.8	73.8	1.0
R861(K1390)	Single-Family	B	55.6	56.6	1.0	56.3	57.3	1.0
R862(K1449)	Single-Family	B	64.1	65.1	1.0	64.8	65.8	1.0
M-39(K2037)	Multi-Family	B	66.4	67.0	0.6	67.8	68.4	0.6

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R863(K2043)	Single-Family	B	51.7	52.5	0.8	52.1	53.0	0.9
R864(K2117)	Single-Family	B	62.0	63.1	1.1	63.1	64.1	1.0
R865(K1212)	Commercial	E	69.0	70.1	1.1	70.1	71.2	1.1
R866(K2066)	Hotel	E	64.3	65.4	1.1	65.3	66.3	1.0
R867(K1196)	Single-Family	B	67.1	68.1	1.0	67.9	68.9	1.0
R868(KV1492)	Vacant	B	61.2	62.2	1.0	61.8	62.8	1.0
R869(K1492)	Multi-Family	B	62.2	63.2	1.0	63.0	64.0	1.0
R870(K2102)	Single-Family	B	70.8	71.9	1.1	71.8	72.8	1.0
R871(K2120)	Single-Family	B	61.1	62.1	1.0	62.1	63.1	1.0
R872(KV2147)	Vacant	B	60.7	61.7	1.0	61.8	62.9	1.1
R873(K2107)	Single-Family	B	70.5	71.6	1.1	71.4	72.5	1.1
R874(K1473)	Single-Family	B	51.9	52.9	1.0	52.6	53.6	1.0
R875(K1203)	Single-Family	B	65.0	66.0	1.0	65.8	66.8	1.0
R876(K2128)	Single-Family	B	60.7	61.7	1.0	61.7	62.7	1.0
R877(K40)	Single-Family	B	61.7	62.7	1.0	62.6	63.6	1.0
R878(K2141)	School	D	74.0	75.1	1.1	74.9	75.9	1.0
R879(K2121)	Single-Family	B	70.1	71.2	1.1	71.1	72.1	1.0
R880(K1202)	Single-Family	B	61.5	62.6	1.1	62.4	63.4	1.0
R881(K2130)	Single-Family	B	60.3	61.4	1.1	61.4	62.4	1.0
R882(K1211)	Single-Family	B	69.1	70.2	1.1	69.9	71.0	1.1
R883(K1209)	Single-Family	B	63.1	64.1	1.0	64.0	65.0	1.0
R884(K1213)	Single-Family	B	65.4	66.5	1.1	66.3	67.3	1.0
R885(K2126)	Single-Family	B	70.0	71.0	1.0	70.9	71.9	1.0

Table 5. Predicted Peak Hour 2035 Future No Build Noise Levels

Receptor Number	Land Use	NAC Category	AM			PM		
			2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))	2010 Existing L_{eq} (1-hr) dB(A)	2035 No Build L_{eq} (1-hr) dB(A)	Difference (dB(A))
R886(K1206)	Single-Family	B	61.7	62.8	1.1	62.6	63.6	1.0
R887(K2113)	Single-Family	B	59.9	61.0	1.1	61.0	62.0	1.0
R888(K1218)	Single-Family	B	63.7	64.8	1.1	64.6	65.6	1.0
R889(K36)	Single-Family	B	61.9	62.9	1.0	62.8	63.8	1.0
R890(K2131)	Single-Family	B	69.4	70.5	1.1	70.4	71.4	1.0
R891(K2140)	Single-Family	B	59.4	60.4	1.0	60.5	61.5	1.0
R892(K1216)	Single-Family	B	62.2	63.2	1.0	63.1	64.1	1.0
R893(K1220)	Single-Family	B	62.1	63.2	1.1	63.0	64.0	1.0
R894(K2111)	Single-Family	B	69.0	70.1	1.1	69.9	71.0	1.1
R895(K1219)	Single-Family	B	55.9	56.9	1.0	56.6	57.6	1.0
R896(K2142)	Single-Family	B	59.1	60.1	1.0	60.2	61.2	1.0
R897(K2139)	Single-Family	B	68.5	69.6	1.1	69.5	70.5	1.0
R898(K1224)	Single-Family	B	61.2	62.3	1.1	62.1	63.1	1.0
R899(K1223)	Single-Family	B	61.3	62.3	1.0	62.1	63.2	1.1
R900(K1222)	Single-Family	B	56.9	58.0	1.1	57.6	58.6	1.0
R901(K1753)	Cemetery	C	60.7	61.7	1.0	61.4	62.4	1.0
M-47(K2141)	School	C	60.0	61.0	1.0	60.9	61.9	1.0

Table 6. Summary of Impacts by FHWA Activity Category[1]

Alternative	NAC A		NAC B		NAC C		NAC D		NAC E		NAC G		Totals	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2010 Existing	0	0	326(436)	370(483)	29(376)	31(386)	6(303)	6(303)	9(6)	9(6)	0	0	370(1,121)	416(1,178)
2035 No Build	0	0	386(501)	429(554)	31(386)	33(399)	6(303)	6(303)	9(6)	10(6)	0	0	432(1,196)	478(1,262)
Alternative E	0	0	453(580)	491(631)	24(356)	25(356)	6(303)	6(303)	9(21)	15(26)	0	0	492(1,260)	537(1,316)
Alternative I	0	0	479(615)	512(659)	33(400)	34(400)	6(303)	6(303)	10(21)	13(23)	0	0	528(1,339)	565(1,385)

[1] Numbers not in parenthesis represent the total number of receivers with impacts for each FHWA Activity Category evaluated for each alternative scenario. Numbers shown in parenthesis represent the total impacted number of equivalent receptors for each FHWA Activity Category for each scenario evaluated. The last two columns on the extreme right provide a summary of the total corridor wide impacts.

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
M-17(K161)	Single-Family	61.5	61.8	62.8	1.3	1.0	61.7	62.0	63.4	1.7	1.4	No
R1(K177)	Single-Family	62.9	63.9	65.0	2.1	1.1	63.4	64.4	65.6	2.2	1.2	Yes
R2(K163)	Single-Family	62.0	62.7	64.4	2.4	1.7	62.2	62.9	65.0	2.8	2.1	No
R3(K166)	Single-Family	62.7	63.6	64.7	2.0	1.1	62.8	63.8	65.3	2.5	1.5	No
R4(K173)	Single-Family	62.9	63.9	65.6	2.7	1.7	63.1	64.0	66.2	3.1	2.2	Yes
R5(K165)	Single-Family	62.3	63.1	65.1	2.8	2.0	62.6	63.4	65.7	3.1	2.3	Yes
R6(K169)	Single-Family	62.7	63.6	64.7	2.0	1.1	62.8	63.8	65.3	2.5	1.5	No
R7(K183)	Single-Family	65.0	65.9	68.3	3.3	2.4	65.4	66.3	69.0	3.6	2.7	Yes
R8(K176)	Single-Family	63.1	64.0	66.1	3.0	2.1	63.2	64.2	66.8	3.6	2.6	Yes
R9(K185)	Single-Family	65.1	66.0	68.4	3.3	2.4	65.4	66.4	69.0	3.6	2.6	Yes
R10(K192)	Single-Family	64.0	64.9	67.2	3.2	2.3	64.3	65.3	67.8	3.5	2.5	Yes
R11(K188)	Single-Family	65.1	66.1	68.5	3.4	2.4	65.5	66.5	69.1	3.6	2.6	Yes
R12(K195)	Single-Family	65.1	66.1	68.5	3.4	2.4	65.5	66.5	69.1	3.6	2.6	Yes
R13(K184 R-40)	Single-Family	65.5	66.4	68.4	2.9	2.0	65.6	66.6	69.0	3.4	2.4	Yes
R14(K199)	Single-Family	65.5	66.4	68.8	3.3	2.4	65.8	66.8	69.4	3.6	2.6	Yes
R15(K198)	Single-Family	66.4	67.4	69.3	2.9	1.9	66.6	67.6	69.9	3.3	2.3	Yes
M-18(K190)	Single-Family	66.4	67.4	68.7	2.3	1.3	66.5	67.5	69.4	2.9	1.9	Yes
R16(K205)	Single-Family	67.0	68.0	70.7	3.7	2.7	67.4	68.4	71.4	4.0	3.0	Yes
R17(K207)	Single-Family	67.1	68.1	70.8	3.7	2.7	67.5	68.5	71.4	3.9	2.9	Yes
R18(K201)	Single-Family	67.0	68.0	70.0	3.0	2.0	67.2	68.2	70.6	3.4	2.4	Yes
R19(K210)	Single-Family	67.2	68.2	70.8	3.6	2.6	67.6	68.6	71.4	3.8	2.8	Yes
R20(K211 R-42)	Single-Family	67.3	68.3	70.9	3.6	2.6	67.7	68.7	71.5	3.8	2.8	Yes
R21(K175 R-37)	Hotel	66.1	67.0	69.5	3.4	2.5	66.3	67.3	70.2	3.9	2.9	No
R22(K213)	Single-Family	67.3	68.3	70.9	3.6	2.6	67.7	68.7	71.6	3.9	2.9	Yes
R23(K214)	Single-Family	67.3	68.3	70.9	3.6	2.6	67.8	68.8	71.6	3.8	2.8	Yes
R24(K215)	Single-Family	67.3	68.3	70.9	3.6	2.6	67.7	68.8	71.6	3.9	2.8	Yes
R25(K220)	Single-Family	66.1	67.1	70.2	4.1	3.1	66.7	67.7	70.9	4.2	3.2	Yes
R26(KV220)	Vacant	68.0	69.0	71.7	3.7	2.7	68.4	69.5	72.4	4.0	2.9	Yes
R27(K225)	Restaurant/Bar	63.6	64.5	70.2	6.6	5.7	64.4	65.4	71.1	6.7	5.7	Yes
R28(K234)	Multi-Family	66.2	67.2	69.9	3.7	2.7	66.6	67.6	70.6	4.0	3.0	Yes
R29(KV235)	Vacant	68.0	69.0	71.6	3.6	2.6	68.4	69.4	72.3	3.9	2.9	Yes
R30(K235)	Single-Family	63.6	64.6	67.5	3.9	2.9	63.9	64.9	68.2	4.3	3.3	Yes
R31(K237)	Single-Family	60.9	61.9	65.5	4.6	3.6	61.3	62.4	66.3	5.0	3.9	Yes
R32(K27)	Single-Family	63.9	64.9	68.9	5.0	4.0	64.3	65.4	69.5	5.2	4.1	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R33(K240)	Single-Family	64.4	65.3	68.4	4.0	3.1	64.9	65.9	69.2	4.3	3.3	Yes
R34(K248)	Single-Family	63.6	64.6	68.7	5.1	4.1	64.2	65.2	69.6	5.4	4.4	Yes
R35(K238A)	Multi-Family	69.3	70.3	72.9	3.6	2.6	69.8	70.9	73.5	3.7	2.6	Yes
R36(K252)	Single-Family	64.8	65.8	69.8	5.0	4.0	65.2	66.3	70.6	5.4	4.3	Yes
M-19(K25)	Multi-Family	69.9	71.0	74.6	4.7	3.6	70.5	71.6	75.4	4.9	3.8	Yes
R37(K238)	Multi-Family	69.7	70.8	74.3	4.6	3.5	70.3	71.4	75.1	4.8	3.7	Yes
R38(K257)	Single-Family	64.2	65.2	69.9	5.7	4.7	64.6	65.7	70.7	6.1	5.0	Yes
R39(K247)	Multi-Family	69.9	70.9	74.7	4.8	3.8	70.4	71.4	75.6	5.2	4.2	Yes
R40(K261)	Single-Family	64.1	65.1	69.8	5.7	4.7	64.5	65.6	70.6	6.1	5.0	Yes
R41(K265)	Single-Family	64.8	65.8	70.0	5.2	4.2	65.2	66.2	70.9	5.7	4.7	Yes
R42(K254)	Single-Family	67.6	68.6	74.9	7.3	6.3	68.0	69.1	75.8	7.8	6.7	Yes
R43(K269)	Single-Family	64.8	65.9	70.2	5.4	4.3	65.2	66.3	71.0	5.8	4.7	Yes
R44(K285)	Single-Family	62.5	63.6	66.4	3.9	2.8	62.9	64.0	67.1	4.2	3.1	Yes
R45(K256)	Single-Family	65.4	66.4	75.1	9.7	8.7	65.9	66.9	76.0	10.1	9.1	Yes
R46(KV256)	Vacant	70.1	71.2	74.7	4.6	3.5	70.6	71.7	75.6	5.0	3.9	Yes
R47(K275)	Single-Family	65.7	66.7	70.2	4.5	3.5	66.1	67.2	71.0	4.9	3.8	Yes
R48(K296)	Single-Family	64.8	65.9	68.4	3.6	2.5	65.2	66.3	69.2	4.0	2.9	Yes
R49(K266)	Single-Family	65.1	66.1	70.8	5.7	4.7	65.5	66.6	71.7	6.2	5.1	Yes
R50(KV266)	Vacant	71.0	72.0	74.8	3.8	2.8	71.4	72.5	75.8	4.4	3.3	Yes
R51(K276)	Single-Family	68.9	69.9	75.2	6.3	5.3	69.3	70.4	76.2	6.9	5.8	Yes
R52(K255)	Single-Family	71.5	72.6	N/A	N/A	N/A	72.4	73.5	N/A	N/A	N/A	N/A
R53(K287)	Single-Family	70.3	71.3	75.5	5.2	4.2	70.7	71.8	76.5	5.8	4.7	Yes
R54(K294)	Single-Family	70.2	71.2	75.7	5.5	4.5	70.6	71.7	76.7	6.1	5.0	Yes
R55(K112)	Single-Family	72.4	73.5	N/A	N/A	N/A	73.1	74.2	N/A	N/A	N/A	N/A
R56(K403)	Recreation	66.7	67.8	69.9	3.2	2.1	67.1	68.2	71.0	3.9	2.8	Yes
R57(K302)	Single-Family	69.7	70.7	75.6	5.9	4.9	70.1	71.2	76.6	6.5	5.4	Yes
R58(K267)	Single-Family	72.6	73.8	N/A	N/A	N/A	73.3	74.4	N/A	N/A	N/A	N/A
R59(K270)	Single-Family	72.8	73.9	N/A	N/A	N/A	73.5	74.6	N/A	N/A	N/A	N/A
R60(K307)	Single-Family	69.5	70.6	75.4	5.9	4.8	69.9	71.0	76.5	6.6	5.5	Yes
R61(K312)	Single-Family	69.8	70.9	75.2	5.4	4.3	70.2	71.3	76.3	6.1	5.0	Yes
R62(K280 R-45)	Single-Family	72.9	74.0	N/A	N/A	N/A	73.6	74.7	N/A	N/A	N/A	N/A
R63(KV312)	Vacant	71.2	72.2	74.9	3.7	2.7	71.7	72.8	75.9	4.2	3.1	Yes
R64(K10)	Single-Family	73.1	74.2	N/A	N/A	N/A	73.7	74.8	N/A	N/A	N/A	N/A
R65(KV304)	Vacant	73.1	74.1	N/A	N/A	N/A	73.6	74.7	N/A	N/A	N/A	N/A

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
M-21(K304)	Single-Family	73.1	74.1	N/A	N/A	N/A	73.7	74.8	N/A	N/A	N/A	N/A
R66(K111)	Razed	73.0	74.1	N/A	N/A	N/A	73.6	74.7	N/A	N/A	N/A	N/A
R67(KV111)	Vacant	73.3	74.3	N/A	N/A	N/A	73.8	74.9	N/A	N/A	N/A	N/A
R68(K179 R-38)	Hotel	71.0	72.0	71.9	0.9	-0.1	71.4	72.4	72.5	1.1	0.1	Yes
R69(K407)	Multi-Family	68.6	69.6	71.5	2.9	1.9	69.0	70.1	72.6	3.6	2.5	Yes
R70(K229)	Hotel	70.8	71.8	70.0	-0.8	-1.8	71.0	72.0	70.5	-0.5	-1.5	No
R71(K440)	Single-Family	67.6	68.6	71.0	3.4	2.4	68.1	69.2	71.9	3.8	2.7	Yes
R72(K18)	Single-Family	67.8	68.8	71.2	3.4	2.4	68.4	69.5	72.2	3.8	2.7	Yes
R73(K194)	Restaurant/Bar	62.5	63.3	63.1	0.6	-0.2	62.8	63.6	63.3	0.5	-0.3	No
R74(K456)	Single-Family	67.5	68.5	70.6	3.1	2.1	68.0	69.1	71.6	3.6	2.5	Yes
R75(K229 R-43)	Commercial	66.2	67.2	66.9	0.7	-0.3	66.2	67.3	67.1	0.9	-0.2	No
R76(K418)	Multi-Family	69.6	70.8	76.4	6.8	5.6	70.3	71.5	77.6	7.3	6.1	Yes
R77(KV418)	Vacant	72.5	73.5	75.6	3.1	2.1	73.2	74.3	76.7	3.5	2.4	Yes
R78(K470)	Single-Family	66.1	67.2	69.6	3.5	2.4	66.7	67.8	70.6	3.9	2.8	Yes
R79(K127)	Hotel	62.0	62.9	63.0	1.0	0.1	62.4	63.4	63.5	1.1	0.1	No
R80(KV460)	Vacant	71.9	72.9	75.2	3.3	2.3	72.5	73.6	76.3	3.8	2.7	Yes
R81(K485)	Single-Family	65.5	66.5	68.8	3.3	2.3	66.1	67.2	69.9	3.8	2.7	Yes
R82(KV460)	Vacant	71.4	72.4	75.0	3.6	2.6	72.0	73.1	76.1	4.1	3.0	Yes
R83(K513)	Single-Family	64.1	65.1	68.0	3.9	2.9	64.8	65.8	69.0	4.2	3.2	Yes
R84(K437)	Single-Family	74.6	75.6	N/A	N/A	N/A	75.3	76.4	N/A	N/A	N/A	N/A
R85(K494)	Single-Family	65.0	66.0	68.7	3.7	2.7	65.6	66.7	69.7	4.1	3.0	Yes
R86(K460)	Single-Family	65.1	66.4	74.7	9.6	8.3	66.3	67.6	75.9	9.6	8.3	Yes
R87(K467)	Single-Family	63.1	64.6	74.4	11.3	9.8	64.6	66.1	75.7	11.1	9.6	Yes
R88(K474)	Single-Family	60.9	62.6	74.3	13.4	11.7	62.5	64.1	75.5	13.0	11.4	Yes
R89(K446)	Multi-Family	74.8	75.8	N/A	N/A	N/A	75.6	76.7	N/A	N/A	N/A	N/A
R90(K532)	Single-Family	66.2	67.2	68.9	2.7	1.7	66.9	68.0	69.8	2.9	1.8	Yes
R91(K488)	Single-Family	60.3	62.1	73.9	13.6	11.8	62.4	64.2	75.1	12.7	10.9	Yes
M-20(K309)	Single-Family	68.3	69.3	69.2	0.9	-0.1	68.6	69.6	69.8	1.2	0.2	Yes
R92(K518)	Single-Family	67.4	68.6	71.3	3.9	2.7	68.3	69.5	72.5	4.2	3.0	Yes
R93(K455)	Single-Family	74.6	75.7	N/A	N/A	N/A	75.4	76.5	N/A	N/A	N/A	N/A
R94(K465)	Single-Family	74.1	75.1	N/A	N/A	N/A	74.8	75.9	N/A	N/A	N/A	N/A
R95(K314 R-46)	Single-Family	70.5	71.5	72.2	1.7	0.7	71.0	72.1	72.7	1.7	0.6	Yes
R96(K526)	Single-Family	62.9	64.3	67.0	4.1	2.7	64.2	65.6	68.4	4.2	2.8	Yes
R97(K115)	Recreation	66.1	67.1	63.0	-3.1	-4.1	66.5	67.6	62.7	-3.8	-4.9	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R97a(K115)	Recreation	71.0	72.0	73.2	2.2	1.2	71.5	72.6	73.6	2.1	1.0	Yes
R97b(K115)	Recreation	69.9	71.0	71.1	1.2	0.1	70.4	71.5	71.3	0.9	-0.2	Yes
R97c(K115)	Recreation	67.1	68.1	70.3	3.2	2.2	67.6	68.7	70.5	2.9	1.8	Yes
R97d(K115)	Recreation	66.7	67.7	67.7	1.0	0.0	67.0	68.1	67.5	0.5	-0.6	Yes
R97e(K115)	Recreation	65.5	66.5	67.5	2.0	1.0	65.9	66.9	67.3	1.4	0.4	Yes
R97f(K115)	Recreation	62.3	62.9	68.4	6.1	5.5	62.4	63.2	68.6	6.2	5.4	Yes
R97g(K115)	Recreation	70.9	71.7	71.2	0.3	-0.5	71.0	71.9	71.6	0.6	-0.3	Yes
R97h(K115)	Recreation	70.0	71.0	70.9	0.9	-0.1	70.2	71.3	71.3	1.1	0.0	Yes
R97i(K115)	Recreation	68.6	69.6	68.5	-0.1	-1.1	68.7	69.8	69.0	0.3	-0.8	Yes
R97j(K115)	Recreation	68.7	69.7	69.2	0.5	-0.5	69.0	70.0	69.8	0.8	-0.2	Yes
R97k(K115)	Recreation	65.4	66.4	68.6	3.2	2.2	65.8	66.8	69.0	3.2	2.2	Yes
R97l(K115)	Recreation	64.4	65.4	68.0	3.6	2.6	64.9	66.0	68.4	3.5	2.4	Yes
R97m(K115)	Recreation	66.8	67.8	68.5	1.7	0.7	67.1	68.1	68.6	1.5	0.5	Yes
R97n(K115)	Recreation	68.7	69.8	69.2	0.5	-0.6	69.3	70.4	68.9	-0.4	-1.5	Yes
R97o(K115)	Recreation	69.4	70.5	75.1	5.7	4.6	69.9	71.0	74.6	4.7	3.6	Yes
R97p(K115)	Recreation	67.5	68.6	71.2	3.7	2.6	68.0	69.1	71.5	3.5	2.4	Yes
R97q(K115)	Recreation	66.2	67.2	67.8	1.6	0.6	66.6	67.7	67.7	1.1	0.0	Yes
R97r(K115)	Recreation	66.3	67.3	67.4	1.1	0.1	66.8	67.9	67.2	0.4	-0.7	Yes
R97s(K115)	Recreation	68.0	69.0	71.4	3.4	2.4	68.6	69.7	71.4	2.8	1.7	Yes
R97t(K115)	Recreation	68.9	69.9	N/A	N/A	N/A	69.4	70.5	N/A	N/A	N/A	N/A
R97u(K115)	Recreation	69.7	70.8	N/A	N/A	N/A	70.1	71.2	N/A	N/A	N/A	N/A
R97v(K115)	Recreation	66.2	67.2	N/A	N/A	N/A	66.6	67.7	N/A	N/A	N/A	N/A
R97w(K115)	Recreation	67.4	68.4	N/A	N/A	N/A	67.7	68.7	N/A	N/A	N/A	N/A
R97x(K115)	Recreation	65.4	66.4	N/A	N/A	N/A	65.8	66.9	N/A	N/A	N/A	N/A
R97y(K115)	Recreation	74.4	75.0	N/A	N/A	N/A	74.3	75.0	N/A	N/A	N/A	N/A
R97z(K115)	Recreation	71.9	72.9	N/A	N/A	N/A	72.0	73.0	N/A	N/A	N/A	N/A
R97aa(K115)	Recreation	73.0	74.0	N/A	N/A	N/A	73.3	74.3	N/A	N/A	N/A	N/A
R139(K409 R-47)	Recreation	69.3	70.3	71.9	2.6	1.6	69.7	70.8	71.9	2.2	1.1	Yes
R98(K480)	Single-Family	73.7	74.8	N/A	N/A	N/A	74.5	75.6	N/A	N/A	N/A	N/A
M-22(K484)	Single-Family	73.6	74.7	N/A	N/A	N/A	74.4	75.5	N/A	N/A	N/A	N/A
R99(K473)	Single-Family	74.2	75.2	N/A	N/A	N/A	75.0	76.1	N/A	N/A	N/A	N/A
R100(K318)	Single-Family	70.0	71.0	72.0	2.0	1.0	70.5	71.6	72.5	2.0	0.9	Yes
R101(K492)	Single-Family	73.5	74.5	N/A	N/A	N/A	74.2	75.3	N/A	N/A	N/A	N/A
R102(K15)	Razed	72.0	73.0	75.8	3.8	2.8	72.8	73.9	77.0	4.2	3.1	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R103(K1771)	Single-Family	65.3	66.4	67.5	2.2	1.1	66.0	67.1	68.5	2.5	1.4	Yes
R104(K1832)	Single-Family	65.1	66.1	67.2	2.1	1.1	65.8	66.8	68.2	2.4	1.4	Yes
R105(K524)	Multi-Family	71.7	72.7	75.7	4.0	3.0	72.5	73.6	76.9	4.4	3.3	Yes
R106(KV492)	Vacant	73.4	74.4	N/A	N/A	N/A	74.1	75.2	N/A	N/A	N/A	N/A
R107(K541)	Single-Family	63.4	64.7	67.5	4.1	2.8	64.6	66.0	68.8	4.2	2.8	Yes
R108(K354)	Single-Family	69.5	70.5	71.8	2.3	1.3	70.0	71.1	72.2	2.2	1.1	Yes
R109(K349)	Single-Family	69.1	70.1	71.3	2.2	1.2	69.6	70.7	71.7	2.1	1.0	Yes
R110(K361)	Single-Family	68.8	69.9	70.3	1.5	0.4	69.3	70.4	70.6	1.3	0.2	Yes
R111(K527)	Single-Family	70.9	71.9	75.4	4.5	3.5	71.7	72.8	76.6	4.9	3.8	Yes
R112(K1841)	Single-Family	65.4	66.5	67.5	2.1	1.0	66.1	67.2	68.4	2.3	1.2	Yes
R113(K548)	Single-Family	65.2	66.4	69.3	4.1	2.9	66.4	67.7	70.6	4.2	2.9	Yes
R114(K1846)	Single-Family	65.5	66.6	67.7	2.2	1.1	66.2	67.3	68.6	2.4	1.3	Yes
R115(KV536)	Vacant	72.2	73.2	75.3	3.1	2.1	72.9	74.0	76.5	3.6	2.5	Yes
R116(K1816)	Single-Family	66.4	67.4	68.7	2.3	1.3	67.1	68.2	69.7	2.6	1.5	Yes
R117(KV1846)	Vacant	66.5	67.5	68.7	2.2	1.2	67.1	68.2	69.7	2.6	1.5	Yes
R118(K335)	Single-Family	67.0	68.0	69.2	2.2	1.2	67.5	68.6	69.6	2.1	1.0	Yes
R119(K322)	Single-Family	64.4	65.4	66.8	2.4	1.4	64.9	65.9	67.5	2.6	1.6	Yes
R120(KV1795)	Vacant	70.2	71.3	72.8	2.6	1.5	71.0	72.2	73.9	2.9	1.7	Yes
R121(K194 R-39)	Restaurant/Bar	61.2	62.1	62.8	1.6	0.7	61.7	62.6	63.2	1.5	0.6	No
R122(K365)	Single-Family	68.1	69.1	69.9	1.8	0.8	68.6	69.7	70.3	1.7	0.6	Yes
R123(K536)	Multi-Family	69.3	70.4	75.2	5.9	4.8	70.1	71.2	76.4	6.3	5.2	Yes
R124(K364)	Single-Family	66.4	67.5	67.9	1.5	0.4	66.9	68.0	68.3	1.4	0.3	Yes
R125(K1795)	Single-Family	65.1	66.5	68.1	3.0	1.6	66.4	67.8	69.4	3.0	1.6	Yes
R126(K370)	Multi-Family	68.1	69.2	69.9	1.8	0.7	68.6	69.7	70.3	1.7	0.6	Yes
R127(K1800)	Single-Family	66.3	67.5	70.1	3.8	2.6	67.4	68.6	71.4	4.0	2.8	Yes
R128(K1877)	Single-Family	65.9	66.9	68.0	2.1	1.1	66.6	67.6	69.0	2.4	1.4	Yes
R129(K340)	Single-Family	60.5	61.5	65.3	4.8	3.8	61.1	62.2	65.9	4.8	3.7	Yes
R130(K308)	Multi-Family	63.7	64.7	65.2	1.5	0.5	64.2	65.2	65.7	1.5	0.5	Yes
R131(K299)	Single-Family	64.1	65.1	65.9	1.8	0.8	64.6	65.6	66.3	1.7	0.7	Yes
R132(K545)	Single-Family	68.3	69.4	75.6	7.3	6.2	69.2	70.3	76.8	7.6	6.5	Yes
R133(K1811)	Single-Family	62.1	63.5	66.5	4.4	3.0	63.7	65.1	67.9	4.2	2.8	Yes
R134(K313)	Single-Family	63.2	64.2	64.7	1.5	0.5	63.7	64.8	65.2	1.5	0.4	No
R135(K346)	Single-Family	62.1	63.2	66.1	4.0	2.9	62.8	63.9	66.7	3.9	2.8	Yes
R136(K326)	Office	61.6	62.6	64.3	2.7	1.7	62.1	63.1	65.0	2.9	1.9	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R137(K194 R-41)	Restaurant/Bar	62.8	63.8	65.4	2.6	1.6	63.9	64.8	65.1	1.2	0.3	No
R138(K552)	Single-Family	69.0	70.0	76.1	7.1	6.1	69.9	70.9	77.3	7.4	6.4	Yes
R140(K352)	Single-Family	61.7	62.8	65.6	3.9	2.8	62.4	63.5	66.3	3.9	2.8	Yes
R141(K317)	Single-Family	62.6	63.6	64.0	1.4	0.4	63.0	64.1	64.6	1.6	0.5	No
R142(K368)	Single-Family	64.6	65.7	67.3	2.7	1.6	65.2	66.3	68.0	2.8	1.7	Yes
R143(K562)	Single-Family	69.1	70.1	76.1	7.0	6.0	69.9	71.0	77.2	7.3	6.2	Yes
R144(K1784)	Single-Family	69.3	70.4	76.3	7.0	5.9	70.2	71.3	77.5	7.3	6.2	Yes
R145(K229 R-44)	Commercial	63.6	64.5	64.7	1.1	0.2	63.4	64.3	64.8	1.4	0.5	No
R146(K1772)	Single-Family	62.0	63.4	65.6	3.6	2.2	63.6	65.0	67.0	3.4	2.0	Yes
R147(KV1801)	Vacant	70.5	71.5	74.2	3.7	2.7	71.3	72.4	75.3	4.0	2.9	Yes
R148(K360)	Single-Family	60.9	62.0	64.7	3.8	2.7	61.6	62.6	65.4	3.8	2.8	No
R149(K1790 R-48)	Single-Family	69.5	70.5	76.3	6.8	5.8	70.3	71.4	77.5	7.2	6.1	Yes
R150(K353)	Multi-Family	57.0	58.0	60.6	3.6	2.6	57.7	58.8	61.4	3.7	2.6	No
R151(K337)	Multi-Family	52.4	53.4	56.1	3.7	2.7	53.1	54.2	57.1	4.0	2.9	No
R152(K373)	Single-Family	65.5	66.5	68.6	3.1	2.1	66.1	67.2	69.3	3.2	2.1	Yes
R153(K379)	Single-Family	65.9	66.9	69.1	3.2	2.2	66.5	67.6	69.8	3.3	2.2	Yes
R154(K358)	Multi-Family	54.6	55.6	59.2	4.6	3.6	55.2	56.3	60.1	4.9	3.8	No
R155(K362)	Single-Family	57.7	58.7	61.3	3.6	2.6	58.3	59.4	62.2	3.9	2.8	No
R156(K344)	Single-Family	57.0	58.0	61.6	4.6	3.6	57.6	58.7	62.5	4.9	3.8	No
R157(K347)	Single-Family	57.8	58.8	62.0	4.2	3.2	58.4	59.5	62.5	4.1	3.0	No
R158(K367)	Single-Family	55.3	56.4	60.0	4.7	3.6	56.0	57.1	60.9	4.9	3.8	No
R159(K401)	Single-Family	63.4	64.5	66.0	2.6	1.5	64.1	65.2	66.6	2.5	1.4	Yes
R160(K382)	Single-Family	66.4	67.5	69.6	3.2	2.1	67.1	68.2	70.3	3.2	2.1	Yes
R161(K1777)	Single-Family	59.9	61.6	63.0	3.1	1.4	61.9	63.5	64.5	2.6	1.0	No
R162(K386)	Single-Family	67.0	68.1	70.1	3.1	2.0	67.7	68.8	70.7	3.0	1.9	Yes
R163(K1801)	Single-Family	68.2	69.2	75.4	7.2	6.2	69.1	70.2	76.2	7.1	6.0	Yes
R164(K332)	Studio	57.4	58.4	61.9	4.5	3.5	58.0	59.1	62.4	4.4	3.3	No
R165(K1885)	Single-Family	65.4	66.2	66.7	1.3	0.5	65.9	66.7	67.6	1.7	0.9	Yes
R166(K1828)	Single-Family	59.9	61.8	62.9	3.0	1.1	62.2	63.9	64.5	2.3	0.6	No
R167(K1883)	Single-Family	65.1	65.9	66.5	1.4	0.6	65.6	66.5	67.4	1.8	0.9	Yes
R168(K396)	Single-Family	67.4	68.4	69.6	2.2	1.2	67.9	69.0	70.2	2.3	1.2	Yes
R169(K388)	Single-Family	67.2	68.2	69.9	2.7	1.7	67.8	68.9	70.6	2.8	1.7	Yes
R170(K1812)	Single-Family	67.7	68.7	74.7	7.0	6.0	68.6	69.7	75.5	6.9	5.8	Yes
R171(K402)	Single-Family	63.2	64.2	65.7	2.5	1.5	63.8	64.9	66.4	2.6	1.5	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R172(K1839)	Single-Family	59.6	61.5	62.7	3.1	1.2	61.9	63.5	64.2	2.3	0.7	No
R173(K1882)	Single-Family	65.4	66.3	66.6	1.2	0.3	66.0	66.9	67.5	1.5	0.6	Yes
R174(K1765)	Single-Family	66.3	67.1	67.5	1.2	0.4	66.9	67.8	68.4	1.5	0.6	Yes
R175(K1915)	Single-Family	66.8	67.6	67.5	0.7	-0.1	67.3	68.1	68.4	1.1	0.3	Yes
R176(K1759)	Single-Family	64.5	65.2	66.3	1.8	1.1	64.9	65.7	67.0	2.1	1.3	Yes
R177(K1770)	Single-Family	67.6	68.6	74.2	6.6	5.6	68.5	69.6	75.0	6.5	5.4	Yes
R178(K371)	Single-Family	51.8	52.8	56.4	4.6	3.6	52.5	53.6	57.0	4.5	3.4	No
R179(K1879)	Single-Family	63.7	64.4	66.4	2.7	2.0	64.3	65.2	67.4	3.1	2.2	Yes
R180(K1909)	Single-Family	67.0	67.8	68.8	1.8	1.0	67.5	68.4	69.7	2.2	1.3	Yes
R181(K381)	Multi-Family	51.2	52.3	55.9	4.7	3.6	51.9	53.0	56.8	4.9	3.8	No
R182(K378)	Single-Family	49.5	50.5	54.4	4.9	3.9	50.1	51.2	55.1	5.0	3.9	No
R183(K384)	Single-Family	58.6	59.6	62.1	3.5	2.5	59.3	60.4	62.9	3.6	2.5	No
R184(K389)	Single-Family	58.4	59.4	62.1	3.7	2.7	59.1	60.2	63.0	3.9	2.8	No
R185(K1820)	Single-Family	66.6	67.6	73.6	7.0	6.0	67.4	68.4	74.4	7.0	6.0	Yes
R186(K369)	Single-Family	58.2	59.5	59.5	1.3	0.0	58.4	59.6	60.0	1.6	0.4	No
R187(K1755)	Razed	63.5	64.3	65.4	1.9	1.1	64.1	65.0	66.3	2.2	1.3	Yes
R188(K1903)	Single-Family	61.5	62.3	63.9	2.4	1.6	62.2	63.0	64.8	2.6	1.8	No
R189(K1873)	Single-Family	63.9	64.7	66.2	2.3	1.5	64.6	65.5	67.2	2.6	1.7	Yes
R190(K1834)	Single-Family	66.7	67.7	73.1	6.4	5.4	67.5	68.6	73.9	6.4	5.3	Yes
R191(K1871)	Single-Family	64.4	65.2	66.7	2.3	1.5	65.1	66.0	67.7	2.6	1.7	Yes
R192(K427)	Single-Family	63.8	64.9	67.0	3.2	2.1	64.5	65.6	67.6	3.1	2.0	Yes
R193(K387)	Multi-Family	59.0	60.3	60.3	1.3	0.0	59.2	60.4	60.7	1.5	0.3	No
R194(K1864)	Single-Family	64.1	65.0	66.7	2.6	1.7	65.0	66.0	67.8	2.8	1.8	Yes
R195(K1844)	Single-Family	66.7	67.7	72.3	5.6	4.6	67.4	68.5	73.2	5.8	4.7	Yes
R196(K400)	Multi-Family	61.1	62.2	64.4	3.3	2.2	61.6	62.8	65.2	3.6	2.4	No
R197(K380)	Multi-Family	56.4	57.7	58.3	1.9	0.6	56.7	57.9	58.9	2.2	1.0	No
R198(K1850)	Single-Family	67.0	68.0	72.1	5.1	4.1	67.7	68.8	73.0	5.3	4.2	Yes
R199(K397)	Razed	59.1	60.3	60.5	1.4	0.2	59.5	60.7	61.1	1.6	0.4	No
R200(K432)	Single-Family	64.6	65.7	67.5	2.9	1.8	65.2	66.3	68.2	3.0	1.9	Yes
R201(K383)	Multi-Family	56.1	57.4	57.9	1.8	0.5	56.4	57.6	58.4	2.0	0.8	No
R202(K413)	Multi-Family	62.1	63.3	63.5	1.4	0.2	62.7	63.8	64.2	1.5	0.4	No
R203(K1913)	Single-Family	56.3	57.2	58.5	2.2	1.3	57.0	57.9	59.5	2.5	1.6	No
R204(K1891)	Single-Family	65.1	66.0	67.9	2.8	1.9	65.9	67.0	68.9	3.0	1.9	Yes
R205(K1861)	Multi-Family	67.2	68.1	72.1	4.9	4.0	67.9	68.9	73.0	5.1	4.1	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R206(K445)	Multi-Family	63.9	64.9	67.1	3.2	2.2	64.4	65.5	67.7	3.3	2.2	Yes
R207(K420)	Multi-Family	62.0	63.2	63.6	1.6	0.4	62.5	63.6	64.2	1.7	0.6	No
R208(K1764)	Day Care	66.1	67.0	68.7	2.6	1.7	66.8	67.7	69.5	2.7	1.8	Yes
M-23(K506)	Recreation	68.1	69.1	N/A	N/A	N/A	68.5	69.6	N/A	N/A	N/A	N/A
R209(K1897)	Single-Family	62.2	63.2	65.4	3.2	2.2	63.1	64.2	66.5	3.4	2.3	Yes
R210(K425)	Single-Family	59.3	60.6	61.4	2.1	0.8	59.6	60.8	62.0	2.4	1.2	No
R211(K1761)	Single-Family	67.7	68.7	71.8	4.1	3.1	68.5	69.5	72.8	4.3	3.3	Yes
R212(K454)	Multi-Family	63.8	64.9	66.8	3.0	1.9	64.4	65.5	67.4	3.0	1.9	Yes
R213(K1905)	Single-Family	62.8	63.8	66.1	3.3	2.3	63.7	64.8	67.2	3.5	2.4	Yes
R214(K435)	Single-Family	58.9	60.2	60.6	1.7	0.4	59.2	60.4	61.1	1.9	0.7	No
R215(K1926)	Multi-Family	57.7	58.7	61.3	3.6	2.6	58.6	59.7	62.4	3.8	2.7	No
R216(K422)	Single-Family	57.8	59.0	60.3	2.5	1.3	58.4	59.5	61.1	2.7	1.6	No
R217(K1932)	Single-Family	56.4	57.4	59.6	3.2	2.2	57.2	58.3	60.7	3.5	2.4	No
R218(K461)	Single-Family	64.1	65.2	67.0	2.9	1.8	64.7	65.8	67.7	3.0	1.9	Yes
R219(K1910)	Single-Family	62.9	63.9	66.8	3.9	2.9	63.8	64.9	67.8	4.0	2.9	Yes
R220(K457)	Single-Family	62.1	63.3	63.9	1.8	0.6	62.6	63.7	64.6	2.0	0.9	No
R221(K1938)	Single-Family	59.5	60.6	62.6	3.1	2.0	60.3	61.4	63.7	3.4	2.3	No
R222(K439)	Multi-Family	56.2	57.4	58.3	2.1	0.9	56.8	57.9	59.0	2.2	1.1	No
R223(K444)	Single-Family	57.5	58.7	59.9	2.4	1.2	58.1	59.2	60.6	2.5	1.4	No
R224(K1919)	Multi-Family	64.4	65.5	67.8	3.4	2.3	65.3	66.4	69.0	3.7	2.6	Yes
R225(K412)	Single-Family	48.1	49.2	52.1	4.0	2.9	48.6	49.7	52.7	4.1	3.0	No
R226(K447)	Single-Family	57.9	59.1	60.4	2.5	1.3	58.4	59.6	61.1	2.7	1.5	No
R227(K1944)	Single-Family	59.3	60.3	62.5	3.2	2.2	60.1	61.2	63.6	3.5	2.4	No
R228(K419)	Single-Family	43.9	44.8	48.2	4.3	3.4	44.5	45.5	48.8	4.3	3.3	No
R229(K430)	Single-Family	50.5	51.6	52.7	2.2	1.1	51.0	52.2	53.3	2.3	1.1	No
R230(K1927)	Multi-Family	64.6	65.6	67.9	3.3	2.3	65.5	66.6	69.0	3.5	2.4	Yes
R231(K626)	Multi-Family	58.1	59.1	60.6	2.5	1.5	58.8	59.9	61.6	2.8	1.7	No
R232(K452)	Single-Family	55.7	56.8	58.7	3.0	1.9	56.2	57.4	59.3	3.1	1.9	No
R233(K466)	Multi-Family	62.9	64.1	64.7	1.8	0.6	63.6	64.7	65.4	1.8	0.7	No
R234(K477)	Razed	64.0	65.2	65.7	1.7	0.5	64.7	65.8	66.4	1.7	0.6	Yes
R235(K495)	Single-Family	64.9	66.1	66.8	1.9	0.7	65.6	66.7	67.5	1.9	0.8	Yes
R236(K1937)	Single-Family	64.0	65.1	67.6	3.6	2.5	65.0	66.1	68.7	3.7	2.6	Yes
R237(K620)	Single-Family	63.4	64.4	65.8	2.4	1.4	64.2	65.3	66.8	2.6	1.5	Yes
R238(K451)	Single-Family	49.5	50.5	54.1	4.6	3.6	50.2	51.2	54.7	4.5	3.5	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R239(K649)	Single-Family	50.3	51.3	52.4	2.1	1.1	50.5	51.6	53.6	3.1	2.0	No
R240(K1954)	Single-Family	61.3	62.3	65.5	4.2	3.2	62.3	63.4	66.5	4.2	3.1	Yes
R241(K478)	Single-Family	59.3	60.4	61.0	1.7	0.6	60.1	61.2	61.8	1.7	0.6	No
R242(K644)	Single-Family	50.3	51.3	52.3	2.0	1.0	50.3	51.5	53.4	3.1	1.9	No
R243(K1948)	Single-Family	63.4	64.4	67.9	4.5	3.5	64.4	65.5	68.8	4.4	3.3	Yes
R244(K458)	Single-Family	51.1	52.1	55.5	4.4	3.4	51.9	52.9	56.2	4.3	3.3	No
R245(K525)	Single-Family	65.3	66.4	67.4	2.1	1.0	66.0	67.1	68.1	2.1	1.0	Yes
R246(K1963)	Single-Family	60.6	61.7	64.7	4.1	3.0	61.6	62.7	65.7	4.1	3.0	Yes
R247(K643)	Single-Family	50.1	51.1	51.8	1.7	0.7	50.2	51.3	52.8	2.6	1.5	No
R248(K519)	Multi-Family	64.3	65.4	66.4	2.1	1.0	65.0	66.1	67.1	2.1	1.0	Yes
R249(K1947)	Restaurant/Bar	65.3	66.3	69.4	4.1	3.1	66.3	67.4	70.5	4.2	3.1	No
R250(K642)	Single-Family	52.8	53.7	54.6	1.8	0.9	53.2	54.3	55.7	2.5	1.4	No
R251(K1966)	Commercial	59.6	60.6	62.1	2.5	1.5	60.4	61.5	63.1	2.7	1.6	No
R252(K469)	Single-Family	54.1	55.1	57.3	3.2	2.2	54.7	55.8	58.2	3.5	2.4	No
R253(K499)	Single-Family	61.5	62.5	63.7	2.2	1.2	62.2	63.3	64.6	2.4	1.3	No
R254(K534)	Restaurant/Bar	65.4	66.5	67.6	2.2	1.1	66.0	67.1	68.3	2.3	1.2	No
R255(K510)	Multi-Family	62.0	63.1	63.8	1.8	0.7	62.8	63.9	64.6	1.8	0.7	No
R256(K641)	Single-Family	55.4	56.4	57.5	2.1	1.1	56.1	57.2	58.7	2.6	1.5	No
R257(K475)	Razed	52.3	53.2	55.7	3.4	2.5	52.9	54.0	56.5	3.6	2.5	No
R258(K614)	Single-Family	65.2	66.2	68.3	3.1	2.1	66.1	67.1	69.2	3.1	2.1	Yes
R259(K639)	Multi-Family	62.3	63.3	65.0	2.7	1.7	63.2	64.3	66.1	2.9	1.8	Yes
R260(K486)	Single-Family	54.7	55.7	57.3	2.6	1.6	55.4	56.4	58.1	2.7	1.7	No
R261(K491)	Single-Family	54.3	55.3	58.1	3.8	2.8	54.9	56.0	58.9	4.0	2.9	No
R262(K613)	Single-Family	65.8	66.8	69.2	3.4	2.4	66.7	67.8	70.1	3.4	2.3	Yes
R263(K498)	Single-Family	51.0	51.9	55.7	4.7	3.8	51.6	52.6	56.6	5.0	4.0	No
R264(K1781)	Office	68.3	69.4	70.7	2.4	1.3	68.9	69.9	71.3	2.4	1.4	Yes
R265(K503)	Single-Family	49.4	50.3	54.4	5.0	4.1	50.0	51.0	55.2	5.2	4.2	No
R266(K610)	Single-Family	66.1	67.2	69.6	3.5	2.4	67.0	68.1	70.5	3.5	2.4	Yes
R267(K608)	Single-Family	67.2	68.2	70.3	3.1	2.1	68.1	69.2	71.3	3.2	2.1	Yes
R268(K559)	Commercial	65.1	66.0	67.7	2.6	1.7	65.6	66.5	68.4	2.8	1.9	No
R269(K607)	Single-Family	68.2	69.2	71.0	2.8	1.8	69.1	70.2	72.0	2.9	1.8	Yes
R270(K606 R-50)	Razed	69.2	70.2	71.6	2.4	1.4	70.1	71.2	72.7	2.6	1.5	Yes
R271(K515)	Single-Family	55.3	56.3	59.3	4.0	3.0	56.3	57.3	60.1	3.8	2.8	No
R272(K722)	Single-Family	68.7	69.3	67.7	-1.0	-1.6	66.3	67.4	67.6	1.3	0.2	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R273(K729)	Multi-Family	67.5	68.4	67.3	-0.2	-1.1	65.9	67.0	67.5	1.6	0.5	Yes
R274(K1791)	Multi-Family	62.1	63.1	64.7	2.6	1.6	62.7	63.8	65.4	2.7	1.6	No
R275(K720)	Church	64.3	65.3	66.3	2.0	1.0	64.5	65.6	67.3	2.8	1.7	Yes
R276(K522)	Single-Family	58.0	58.7	60.7	2.7	2.0	58.5	59.3	61.3	2.8	2.0	No
R277(K680)	School	70.9	71.9	71.9	1.0	0.0	71.2	72.2	72.9	1.7	0.7	Yes
R278(K555)	Multi-Family	62.2	62.7	65.0	2.8	2.3	62.5	63.2	65.5	3.0	2.3	No
R279(K1796)	Single-Family	62.2	63.2	64.5	2.3	1.3	62.7	63.8	65.1	2.4	1.3	No
R280(K554)	Multi-Family	60.9	61.4	63.9	3.0	2.5	61.3	61.9	64.4	3.1	2.5	No
M-24(K655)	Single-Family	72.4	73.4	72.4	0.0	-1.0	72.8	73.9	73.3	0.5	-0.6	Yes
R281(K1802)	Single-Family	61.6	62.6	63.3	1.7	0.7	62.2	63.2	63.9	1.7	0.7	No
R282(K730)	Single-Family	56.6	57.7	60.2	3.6	2.5	57.5	58.6	61.0	3.5	2.4	No
R283(K735)	Single-Family	55.8	56.8	59.6	3.8	2.8	56.6	57.7	60.3	3.7	2.6	No
R284(K523)	Multi-Family	58.4	58.8	60.4	2.0	1.6	58.7	59.1	60.8	2.1	1.7	No
R285(K755)	Single-Family	55.1	56.1	59.1	4.0	3.0	56.0	57.1	59.9	3.9	2.8	No
R286(K549)	Multi-Family	61.0	61.5	63.7	2.7	2.2	61.3	61.9	64.2	2.9	2.3	No
R287(K645)	Single-Family	72.0	73.0	73.7	1.7	0.7	72.3	73.3	74.6	2.3	1.3	Yes
R288(K715)	Church	63.2	64.2	64.9	1.7	0.7	63.8	64.9	66.0	2.2	1.1	Yes
R289(K1818)	Multi-Family	63.9	64.9	66.0	2.1	1.1	64.4	65.5	66.7	2.3	1.2	Yes
R290(K102)	Multi-Family	59.6	60.3	62.5	2.9	2.2	60.1	60.9	63.2	3.1	2.3	No
R291(K1785)	Single-Family	61.3	62.3	62.2	0.9	-0.1	61.9	63.0	63.2	1.3	0.2	No
R292(K546)	Single-Family	60.7	61.0	63.4	2.7	2.4	60.9	61.4	63.8	2.9	2.4	No
R293(K699)	Single-Family	64.8	65.8	66.4	1.6	0.6	65.5	66.6	67.4	1.9	0.8	Yes
R294(K1805)	Multi-Family	62.6	63.6	63.8	1.2	0.2	63.2	64.3	64.7	1.5	0.4	No
R295(K791)	Single-Family	57.8	58.8	60.7	2.9	1.9	58.5	59.6	61.5	3.0	1.9	No
R296(K1837A)	Multi-Family	64.9	66.0	67.0	2.1	1.0	65.4	66.5	67.8	2.4	1.3	Yes
R297(K909)	Park/Playground/Picnic	58.5	59.5	61.5	3.0	2.0	59.2	60.3	62.3	3.1	2.0	No
R298(K784)	Single-Family	57.9	59.0	61.1	3.2	2.1	58.7	59.8	61.9	3.2	2.1	No
R299(K1792)	Single-Family	56.5	57.5	59.4	2.9	1.9	57.1	58.2	60.4	3.3	2.2	No
R300(K775)	Single-Family	49.6	50.6	53.4	3.8	2.8	50.6	51.6	54.3	3.7	2.7	No
R301(K782)	Single-Family	54.2	55.2	58.2	4.0	3.0	55.1	56.2	59.0	3.9	2.8	No
R302(K966)	Single-Family	46.0	47.0	48.7	2.7	1.7	46.3	47.4	49.6	3.3	2.2	No
R303(K687)	Single-Family	70.7	71.7	75.1	4.4	3.4	71.4	72.5	76.0	4.6	3.5	Yes
R304(K963)	Single-Family	57.3	58.3	60.9	3.6	2.6	58.1	59.1	61.7	3.6	2.6	No
R305(K1809)	Single-Family	61.6	62.7	63.1	1.5	0.4	62.2	63.3	64.1	1.9	0.8	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R306(K1837)	Multi-Family	65.5	66.6	67.6	2.1	1.0	66.1	67.1	68.4	2.3	1.3	Yes
R307(K759)	Single-Family	50.9	51.9	55.3	4.4	3.4	52.0	53.0	56.2	4.2	3.2	No
R308(K682)	Single-Family	72.0	73.1	75.2	3.2	2.1	72.8	73.9	76.2	3.4	2.3	Yes
R309(K779)	Multi-Family	60.4	61.4	63.3	2.9	1.9	61.1	62.2	64.1	3.0	1.9	No
R310(K1855 R-49)	Single-Family	68.3	69.3	70.5	2.2	1.2	68.8	69.8	71.1	2.3	1.3	Yes
R311(K692)	Single-Family	67.5	68.5	69.7	2.2	1.2	68.3	69.3	70.5	2.2	1.2	Yes
R312(K950)	Single-Family	57.6	58.6	61.3	3.7	2.7	58.4	59.4	62.1	3.7	2.7	No
R313(K1815)	Single-Family	61.2	62.3	63.5	2.3	1.2	61.8	62.9	64.4	2.6	1.5	No
R314(K678)	Single-Family	72.0	73.0	N/A	N/A	N/A	72.8	73.9	N/A	N/A	N/A	N/A
R315(K942)	Single-Family	58.0	59.0	61.2	3.2	2.2	58.8	59.9	62.0	3.2	2.1	No
R316(K935)	Single-Family	58.6	59.7	61.8	3.2	2.1	59.4	60.5	62.6	3.2	2.1	No
R317(K923)	Single-Family	58.6	59.6	61.0	2.4	1.4	59.3	60.4	61.8	2.5	1.4	No
R318(K926)	Single-Family	58.3	59.3	61.3	3.0	2.0	59.0	60.1	62.1	3.1	2.0	No
R319(K737)	Single-Family	63.1	64.2	66.4	3.3	2.2	64.0	65.0	67.2	3.2	2.2	Yes
R320(K756)	Single-Family	62.7	63.8	65.8	3.1	2.0	63.6	64.6	66.6	3.0	2.0	Yes
R321(K916)	Single-Family	58.9	59.9	60.5	1.6	0.6	59.6	60.7	61.4	1.8	0.7	No
R322(K1774)	Single-Family	59.1	60.2	62.6	3.5	2.4	59.7	60.8	63.5	3.8	2.7	No
R323(K733)	Multi-Family	60.2	61.2	66.8	6.6	5.6	61.2	62.3	67.7	6.5	5.4	Yes
R324(K745)	Single-Family	65.1	66.2	68.1	3.0	1.9	65.9	67.0	68.9	3.0	1.9	Yes
R325(K1855)	Single-Family	65.7	66.7	67.8	2.1	1.1	66.2	67.3	68.5	2.3	1.2	Yes
R326(K915)	Single-Family	59.9	60.9	61.5	1.6	0.6	60.6	61.7	62.4	1.8	0.7	No
R327(K1826)	Single-Family	59.2	60.3	61.5	2.3	1.2	59.7	60.8	62.3	2.6	1.5	No
R328(K674)	Single-Family	73.2	74.3	N/A	N/A	N/A	74.1	75.2	N/A	N/A	N/A	N/A
R329(K736)	Single-Family	68.5	69.5	68.8	0.3	-0.7	69.1	70.2	69.7	0.6	-0.5	Yes
R330(K1862)	Multi-Family	65.5	66.5	67.7	2.2	1.2	66.0	67.0	68.4	2.4	1.4	Yes
R331(K717)	Single-Family	66.8	67.8	69.3	2.5	1.5	67.5	68.5	70.3	2.8	1.8	Yes
R332(K910)	Single-Family	59.9	60.9	62.0	2.1	1.1	60.5	61.5	62.9	2.4	1.4	No
R333(K1775)	Single-Family	52.2	53.3	55.6	3.4	2.3	52.8	53.9	56.5	3.7	2.6	No
R334(K1821)	Single-Family	52.3	53.3	55.5	3.2	2.2	53.0	54.0	56.4	3.4	2.4	No
R335(KV1880)	Vacant	69.0	70.1	69.9	0.9	-0.2	69.5	70.6	70.7	1.2	0.1	Yes
R336(K1831)	Single-Family	59.4	60.5	60.8	1.4	0.3	60.0	61.1	61.7	1.7	0.6	No
R337(K587)	Single-Family	60.1	61.1	62.2	2.1	1.1	60.6	61.7	63.1	2.5	1.4	No
R338(K718)	Single-Family	68.5	69.5	71.4	2.9	1.9	69.3	70.3	72.4	3.1	2.1	Yes
R339(K583)	Single-Family	59.5	60.6	61.9	2.4	1.3	60.2	61.3	62.7	2.5	1.4	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R340(K576)	Single-Family	60.6	61.6	62.8	2.2	1.2	61.3	62.4	63.6	2.3	1.2	No
R341(K568)	Single-Family	62.7	63.8	64.8	2.1	1.0	63.4	64.5	65.7	2.3	1.2	Yes
R342(K573)	Single-Family	60.8	61.9	63.1	2.3	1.2	61.5	62.6	63.9	2.4	1.3	No
R343(K785)	Multi-Family	66.5	67.5	69.6	3.1	2.1	67.2	68.3	70.5	3.3	2.2	Yes
R344(K1880)	Single-Family	64.8	65.8	67.0	2.2	1.2	65.3	66.3	67.8	2.5	1.5	Yes
R345(K857)	Single-Family	62.0	63.0	64.1	2.1	1.1	62.7	63.8	65.0	2.3	1.2	No
R346(K1840)	Multi-Family	59.6	60.6	61.1	1.5	0.5	60.2	61.3	62.0	1.8	0.7	No
R347(K1760)	Single-Family	66.2	67.3	68.3	2.1	1.0	66.7	67.8	69.1	2.4	1.3	Yes
R348(K1819)	Single-Family	51.5	52.5	54.0	2.5	1.5	52.1	53.2	54.8	2.7	1.6	No
R349(K714)	Multi-Family	71.2	72.2	74.2	3.0	2.0	72.0	73.1	75.2	3.2	2.1	Yes
R350(K1858)	Multi-Family	57.3	58.4	60.1	2.8	1.7	58.0	59.1	61.0	3.0	1.9	No
M-25(K707)	Single-Family	71.1	72.1	N/A	N/A	N/A	72.0	73.0	N/A	N/A	N/A	N/A
R351(K1886)	Single-Family	67.6	68.7	69.2	1.6	0.5	68.3	69.4	70.0	1.7	0.6	Yes
R352(K1869)	Multi-Family	51.4	52.4	54.9	3.5	2.5	52.1	53.2	55.7	3.6	2.5	No
R353(K1876)	Razed	55.8	56.8	57.6	1.8	0.8	56.4	57.5	58.3	1.9	0.8	No
R354(K1890)	Single-Family	66.9	68.0	68.8	1.9	0.8	67.6	68.7	69.5	1.9	0.8	Yes
R355(K783)	Single-Family	67.5	68.6	71.9	4.4	3.3	68.3	69.4	72.9	4.6	3.5	Yes
R356(K1851)	Single-Family	55.0	56.1	57.4	2.4	1.3	55.5	56.6	58.3	2.8	1.7	No
R357(K1900)	Commercial	68.3	69.3	70.1	1.8	0.8	68.6	69.7	70.7	2.1	1.0	Yes
R358(K1845)	Single-Family	58.1	59.1	60.0	1.9	0.9	58.6	59.7	61.0	2.4	1.3	No
R359(K1881)	Multi-Family	61.1	62.2	61.8	0.7	-0.4	61.6	62.7	62.5	0.9	-0.2	No
R360(KV1908)	Vacant	65.3	66.4	67.2	1.9	0.8	65.8	66.9	67.9	2.1	1.0	Yes
R361(K773)	Single-Family	68.5	69.5	73.2	4.7	3.7	69.3	70.4	74.3	5.0	3.9	Yes
R362(K769)	Single-Family	68.9	69.9	74.3	5.4	4.4	69.7	70.8	75.5	5.8	4.7	Yes
R363(K766)	Single-Family	71.5	72.5	N/A	N/A	N/A	72.3	73.4	N/A	N/A	N/A	N/A
R364(K1889)	Single-Family	62.7	63.8	62.3	-0.4	-1.5	63.3	64.4	63.1	-0.2	-1.3	No
R365(K1908)	Single-Family	70.3	71.4	70.8	0.5	-0.6	70.8	71.9	71.5	0.7	-0.4	Yes
R366(K1893)	Multi-Family	62.4	63.4	62.4	0.0	-1.0	62.9	64.0	63.3	0.4	-0.7	No
R367(K1917)	Multi-Family	70.1	71.1	70.5	0.4	-0.6	70.6	71.7	71.2	0.6	-0.5	Yes
R368(K1884)	Single-Family	54.1	55.2	55.7	1.6	0.5	54.5	55.6	56.5	2.0	0.9	No
R369(K1898)	Multi-Family	60.0	61.0	60.5	0.5	-0.5	60.5	61.6	61.4	0.9	-0.2	No
R370(K1923)	Multi-Family	68.6	69.7	69.6	1.0	-0.1	69.1	70.2	70.3	1.2	0.1	Yes
R371(KV1923)	Vacant	67.0	68.0	67.4	0.4	-0.6	67.4	68.5	68.0	0.6	-0.5	Yes
R372(K7)	Single-Family	60.2	61.3	59.5	-0.7	-1.8	60.8	61.9	60.3	-0.5	-1.6	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R373(K1936)	Multi-Family	69.3	70.3	69.9	0.6	-0.4	69.8	70.8	70.6	0.8	-0.2	Yes
R374(K1907)	Multi-Family	56.2	57.3	59.3	3.1	2.0	56.6	57.7	59.9	3.3	2.2	No
R375(K1924)	Razed	53.1	54.2	55.9	2.8	1.7	53.6	54.7	56.5	2.9	1.8	No
R376(K1939)	Single-Family	69.0	70.1	69.1	0.1	-1.0	69.5	70.6	69.7	0.2	-0.9	Yes
R377(K1929)	Razed	54.3	55.4	56.4	2.1	1.0	54.8	55.9	57.0	2.2	1.1	No
R378(K1945)	Multi-Family	67.0	68.0	68.0	1.0	0.0	67.5	68.5	68.7	1.2	0.2	Yes
R379(K1934)	Single-Family	62.5	63.5	62.6	0.1	-0.9	62.9	64.0	63.3	0.4	-0.7	No
R380(K1934 R-51)	Single-Family	65.5	66.6	64.9	-0.6	-1.7	66.1	67.2	65.8	-0.3	-1.4	Yes
R381(K696)	Single-Family	65.1	66.2	66.5	1.4	0.3	65.7	66.8	67.2	1.5	0.4	Yes
R382(K689)	Single-Family	62.6	63.6	64.1	1.5	0.5	63.1	64.2	64.7	1.6	0.5	No
R383(K691)	Single-Family	62.4	63.4	63.9	1.5	0.5	62.9	64.0	64.5	1.6	0.5	No
R384(K695)	Single-Family	63.1	64.1	64.5	1.4	0.4	63.6	64.7	65.2	1.6	0.5	No
M-26(K697)	Single-Family	71.0	72.0	71.4	0.4	-0.6	71.4	72.4	72.0	0.6	-0.4	Yes
R385(K694 R-52)	Single-Family	66.4	67.1	68.2	1.8	1.1	67.0	67.8	68.8	1.8	1.0	Yes
R386(K988)	Multi-Family	48.3	49.3	51.4	3.1	2.1	49.0	50.1	52.3	3.3	2.2	No
R387(K978)	Single-Family	48.3	49.3	51.5	3.2	2.2	49.0	50.1	52.4	3.4	2.3	No
R388(K997)	Multi-Family	50.0	51.0	53.5	3.5	2.5	50.8	51.9	54.5	3.7	2.6	No
R389(K987)	Single-Family	56.0	57.0	58.9	2.9	1.9	56.8	57.9	59.9	3.1	2.0	No
R390(K995)	Multi-Family	55.2	56.2	58.2	3.0	2.0	56.1	57.1	59.1	3.0	2.0	No
R391(K980)	Single-Family	57.1	58.1	59.3	2.2	1.2	58.0	59.0	60.2	2.2	1.2	No
R392(K1012)	Single-Family	54.7	55.7	58.2	3.5	2.5	55.4	56.5	59.2	3.8	2.7	No
R393(K811)	Single-Family	56.4	57.5	60.5	4.1	3.0	57.2	58.2	61.4	4.2	3.2	No
R394(K959)	Single-Family	61.5	62.5	61.8	0.3	-0.7	62.3	63.3	62.7	0.4	-0.6	No
R395(K971)	Single-Family	59.9	60.9	61.1	1.2	0.2	60.7	61.8	61.9	1.2	0.1	No
R396(KV811)	Vacant	65.8	66.8	67.8	2.0	1.0	66.5	67.5	68.7	2.2	1.2	Yes
R397(K802)	Multi-Family	62.0	63.0	64.2	2.2	1.2	62.6	63.7	65.2	2.6	1.5	No
R398(K804)	Single-Family	60.1	61.2	62.7	2.6	1.5	60.7	61.8	63.7	3.0	1.9	No
R399(K961)	Single-Family	63.9	64.9	64.3	0.4	-0.6	64.7	65.7	65.2	0.5	-0.5	No
R400(K949)	Single-Family	66.8	67.9	67.6	0.8	-0.3	67.6	68.7	68.5	0.9	-0.2	Yes
R401(K798)	Multi-Family	62.0	63.0	64.3	2.3	1.3	62.6	63.7	65.3	2.7	1.6	No
R402(K796)	Multi-Family	62.2	63.3	64.5	2.3	1.2	62.9	64.0	65.5	2.6	1.5	No
R403(K931)	Single-Family	69.5	70.6	69.5	0.0	-1.1	70.3	71.3	70.5	0.2	-0.8	Yes
R404(K1019)	Multi-Family	61.2	62.3	63.9	2.7	1.6	61.9	63.0	64.9	3.0	1.9	No
R405(K1016)	Multi-Family	61.3	62.3	64.0	2.7	1.7	62.0	63.1	65.0	3.0	1.9	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R406(K928)	Single-Family	70.6	71.6	71.0	0.4	-0.6	71.3	72.4	72.0	0.7	-0.4	Yes
R407(K1013)	Multi-Family	60.9	61.9	63.6	2.7	1.7	61.6	62.6	64.6	3.0	2.0	No
R408(K834)	Multi-Family	60.4	61.4	63.5	3.1	2.1	61.2	62.2	64.5	3.3	2.3	No
R409(K1010)	Multi-Family	62.1	63.1	64.2	2.1	1.1	62.8	63.8	65.2	2.4	1.4	No
R410(K1009)	Multi-Family	63.1	64.1	65.4	2.3	1.3	63.8	64.9	66.3	2.5	1.4	Yes
R411(K989)	Single-Family	66.3	67.3	68.5	2.2	1.2	67.0	68.1	69.5	2.5	1.4	Yes
R412(K1272)	Restaurant/Bar	59.4	60.3	60.4	1.0	0.1	60.0	60.9	61.4	1.4	0.5	No
R413(K833)	Multi-Family	61.2	62.2	64.4	3.2	2.2	62.0	63.0	65.4	3.4	2.4	No
R414(K1005)	Single-Family	68.7	69.7	70.3	1.6	0.6	69.4	70.4	71.3	1.9	0.9	Yes
R415(K829)	Single-Family	62.8	63.8	65.8	3.0	2.0	63.5	64.6	66.8	3.3	2.2	Yes
R416(K1032)	Single-Family	54.3	55.3	57.6	3.3	2.3	55.0	56.1	58.6	3.6	2.5	No
R417(K999)	Single-Family	72.2	73.2	72.7	0.5	-0.5	72.9	74.0	73.7	0.8	-0.3	Yes
R418(K847)	Single-Family	61.4	62.5	64.7	3.3	2.2	62.2	63.3	65.7	3.5	2.4	Yes
R419(K828)	Single-Family	63.3	64.3	66.2	2.9	1.9	64.1	65.1	67.3	3.2	2.2	Yes
R420(K1038)	Single-Family	54.0	55.0	57.6	3.6	2.6	54.7	55.8	58.6	3.9	2.8	No
R421(K581)	Multi-Family	70.2	71.2	71.4	1.2	0.2	70.6	71.7	72.2	1.6	0.5	Yes
R422(K582)	Single-Family	71.4	72.4	72.5	1.1	0.1	71.8	72.9	73.3	1.5	0.4	Yes
R423(K584)	Single-Family	73.0	74.0	74.1	1.1	0.1	73.5	74.5	74.9	1.4	0.4	Yes
R424(K825)	Single-Family	63.8	64.9	66.7	2.9	1.8	64.6	65.7	67.7	3.1	2.0	Yes
R425(K575)	Single-Family	69.3	70.3	70.5	1.2	0.2	69.8	70.8	71.3	1.5	0.5	Yes
R426(K824)	Single-Family	64.8	65.9	67.6	2.8	1.7	65.6	66.7	68.6	3.0	1.9	Yes
R427(K821)	Single-Family	65.1	66.1	67.7	2.6	1.6	65.8	66.9	68.7	2.9	1.8	Yes
R428(K1048)	Single-Family	56.0	57.0	59.1	3.1	2.1	56.7	57.7	60.1	3.4	2.4	No
R429(K850)	Single-Family	64.8	65.8	67.7	2.9	1.9	65.6	66.7	68.7	3.1	2.0	Yes
R430(K574)	Single-Family	68.2	69.2	69.5	1.3	0.3	68.6	69.7	70.3	1.7	0.6	Yes
R431(K572)	Single-Family	67.8	68.8	69.1	1.3	0.3	68.3	69.3	70.0	1.7	0.7	Yes
R432(K1054)	Single-Family	58.9	59.9	61.8	2.9	1.9	59.6	60.7	62.8	3.2	2.1	No
R433(K1020)	Multi-Family	65.2	66.2	68.0	2.8	1.8	66.0	67.1	69.1	3.1	2.0	Yes
R434(K817)	Single-Family	66.4	67.4	68.7	2.3	1.3	67.2	68.3	69.7	2.5	1.4	Yes
R435(K864)	Single-Family	61.4	62.5	64.6	3.2	2.1	62.2	63.3	65.6	3.4	2.3	Yes
R436(K1026)	Single-Family	65.9	66.9	68.6	2.7	1.7	66.7	67.7	69.6	2.9	1.9	Yes
R437(K571)	Multi-Family	67.0	68.0	68.4	1.4	0.4	67.5	68.5	69.2	1.7	0.7	Yes
R438(K812)	Single-Family	65.9	66.9	68.2	2.3	1.3	66.7	67.7	69.2	2.5	1.5	Yes
R439(K954 R-53)	Razed	73.2	74.2	74.5	1.3	0.3	73.7	74.7	75.2	1.5	0.5	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R440(K813)	Single-Family	66.6	67.7	68.8	2.2	1.1	67.5	68.5	69.8	2.3	1.3	Yes
R441(K1030)	Single-Family	65.8	66.9	68.6	2.8	1.7	66.7	67.7	69.6	2.9	1.9	Yes
R442(K569)	Single-Family	66.3	67.3	67.8	1.5	0.5	66.8	67.9	68.6	1.8	0.7	Yes
R443(K806)	Single-Family	70.2	71.2	72.3	2.1	1.1	71.0	72.1	73.3	2.3	1.2	Yes
R444(K814)	Single-Family	69.9	70.9	72.0	2.1	1.1	70.7	71.8	73.0	2.3	1.2	Yes
R445(K1035)	Multi-Family	65.8	66.8	68.5	2.7	1.7	66.6	67.7	69.6	3.0	1.9	Yes
R446(K803)	Single-Family	70.5	71.5	72.6	2.1	1.1	71.3	72.4	73.6	2.3	1.2	Yes
R447(K938)	Razed	71.2	72.2	72.3	1.1	0.1	71.7	72.7	73.1	1.4	0.4	Yes
R448(K799)	Single-Family	70.9	71.9	72.7	1.8	0.8	71.7	72.8	73.7	2.0	0.9	Yes
R449(K872)	Single-Family	59.8	60.8	62.6	2.8	1.8	60.6	61.6	63.6	3.0	2.0	No
R450(K566)	Single-Family	66.3	67.3	67.9	1.6	0.6	66.9	67.9	68.7	1.8	0.8	Yes
R451(KV903)	Vacant	68.3	69.3	70.3	2.0	1.0	69.1	70.1	71.2	2.1	1.1	Yes
R452(K941)	Multi-Family	69.0	70.0	70.2	1.2	0.2	69.5	70.6	71.0	1.5	0.4	Yes
R453(K797)	Single-Family	72.2	73.2	72.5	0.3	-0.7	73.1	74.1	73.6	0.5	-0.5	Yes
R454(K932)	Single-Family	65.4	66.4	67.1	1.7	0.7	66.0	67.1	68.0	2.0	0.9	Yes
R455(K1017)	Single-Family	73.4	74.5	73.1	-0.3	-1.4	74.2	75.3	74.1	-0.1	-1.2	Yes
R456(K1007)	Single-Family	73.3	74.3	74.3	1.0	0.0	73.8	74.8	75.1	1.3	0.3	Yes
R457(K860)	Single-Family	65.9	66.9	67.6	1.7	0.7	66.5	67.5	68.4	1.9	0.9	Yes
R458(K875)	Undeveloped Land	57.7	58.7	61.0	3.3	2.3	58.5	59.5	62.1	3.6	2.6	No
R459(K1043)	Multi-Family	65.8	66.8	68.6	2.8	1.8	66.7	67.8	69.6	2.9	1.8	Yes
R460(K1532)	Single-Family	46.4	47.4	48.5	2.1	1.1	47.2	48.2	49.4	2.2	1.2	No
R461(K1006)	Single-Family	71.3	72.3	72.4	1.1	0.1	71.8	72.9	73.2	1.4	0.3	Yes
R462(K1000)	Single-Family	70.2	71.2	71.5	1.3	0.3	70.7	71.8	72.3	1.6	0.5	Yes
R463(K1004)	Single-Family	70.6	71.7	71.8	1.2	0.1	71.2	72.2	72.6	1.4	0.4	Yes
R464(K996)	Single-Family	69.4	70.4	70.9	1.5	0.5	69.9	71.0	71.7	1.8	0.7	Yes
R465(K1502)	Multi-Family	39.6	40.6	41.2	1.6	0.6	40.5	41.5	42.3	1.8	0.8	No
R466(K1050)	Multi-Family	66.0	67.0	68.7	2.7	1.7	66.9	67.9	69.7	2.8	1.8	Yes
R467(K929)	Single-Family	64.3	65.3	66.3	2.0	1.0	65.1	66.1	67.1	2.0	1.0	Yes
R468(K1545)	Multi-Family	48.0	49.0	49.6	1.6	0.6	48.9	49.9	50.7	1.8	0.8	No
R469(KV91)	Vacant	56.3	57.3	59.3	3.0	2.0	56.9	58.0	60.2	3.3	2.2	No
R470(K859)	Single-Family	65.5	66.5	67.1	1.6	0.6	66.0	67.1	67.9	1.9	0.8	Yes
R471(K994)	Single-Family	68.9	69.9	70.5	1.6	0.6	69.5	70.5	71.3	1.8	0.8	Yes
R472(KV903)	Vacant	68.7	69.7	70.8	2.1	1.1	69.4	70.5	71.7	2.3	1.2	Yes
R473(K1506)	Multi-Family	47.2	48.2	46.7	-0.5	-1.5	48.1	49.1	47.8	-0.3	-1.3	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R474(KV91)	Vacant	57.3	58.3	60.3	3.0	2.0	57.9	59.0	61.2	3.3	2.2	No
R475(K925)	Single-Family	63.3	64.3	65.3	2.0	1.0	64.1	65.1	66.1	2.0	1.0	Yes
M-36(K1573)	School	70.4	71.4	74.6	4.2	3.2	71.2	72.2	75.5	4.3	3.3	Yes
R476(K1520)	Multi-Family	47.5	48.5	49.5	2.0	1.0	48.4	49.4	50.4	2.0	1.0	No
R477(K1560)	Multi-Family	48.1	49.0	49.8	1.7	0.8	49.0	50.0	50.7	1.7	0.7	No
M-27(K1007)	Single-Family	73.9	74.9	74.9	1.0	0.0	74.3	75.4	75.7	1.4	0.3	Yes
R478(K856)	Single-Family	65.2	66.2	66.9	1.7	0.7	65.8	66.8	67.8	2.0	1.0	Yes
R480(K861)	Multi-Family	66.5	67.5	69.1	2.6	1.6	67.4	68.4	70.2	2.8	1.8	Yes
R481(K1509)	Multi-Family	53.1	54.1	54.0	0.9	-0.1	53.9	54.9	55.0	1.1	0.1	No
R482(K792)	Single-Family	65.0	66.0	66.7	1.7	0.7	65.5	66.6	67.6	2.1	1.0	Yes
R483(K1179)	Single-Family	50.2	51.2	52.1	1.9	0.9	50.8	51.9	53.1	2.3	1.2	No
R484(K1981)	Razed	41.7	42.7	42.7	1.0	0.0	42.6	43.6	43.6	1.0	0.0	No
R485(KV1061)	Vacant	68.9	69.9	71.1	2.2	1.2	69.7	70.7	72.0	2.3	1.3	Yes
R486(K1191)	Multi-Family	46.5	47.5	48.1	1.6	0.6	47.4	48.4	49.1	1.7	0.7	No
R487(K1533)	Multi-Family	53.0	54.0	51.4	-1.6	-2.6	53.9	54.9	52.8	-1.1	-2.1	No
R488(K863)	Single-Family	67.0	68.0	69.6	2.6	1.6	67.8	68.9	70.6	2.8	1.7	Yes
R489(K924)	Single-Family	62.6	63.6	64.7	2.1	1.1	63.3	64.4	65.6	2.3	1.2	Yes
R490(K1171)	Single-Family	44.9	45.9	46.0	1.1	0.1	45.6	46.6	46.9	1.3	0.3	No
R491(K1187)	Single-Family	34.5	35.5	36.4	1.9	0.9	35.2	36.3	37.5	2.3	1.2	No
R492(K1180)	Single-Family	44.1	45.1	45.9	1.8	0.8	45.0	46.0	46.7	1.7	0.7	No
R493(K1559)	Multi-Family	51.7	52.7	52.5	0.8	-0.2	52.5	53.5	53.4	0.9	-0.1	No
R494(K1568)	Multi-Family	52.3	53.3	53.2	0.9	-0.1	53.3	54.3	54.1	0.8	-0.2	No
R495(K1615)	Single-Family	73.9	74.9	75.7	1.8	0.8	74.5	75.5	76.3	1.8	0.8	Yes
R496(K2006)	Single-Family	62.8	63.8	64.8	2.0	1.0	63.1	64.1	65.5	2.4	1.4	No
M-38(K1609)	Single-Family	72.7	73.7	74.2	1.5	0.5	73.2	74.2	74.7	1.5	0.5	Yes
R497(K790)	Single-Family	64.4	65.4	66.1	1.7	0.7	64.9	66.0	67.0	2.1	1.0	Yes
R498(K869)	Multi-Family	67.0	68.0	69.7	2.7	1.7	67.9	68.9	70.7	2.8	1.8	Yes
R499(K1172)	Single-Family	43.7	44.7	45.7	2.0	1.0	44.5	45.5	46.5	2.0	1.0	No
R500(K1620)	Single-Family	73.0	74.0	75.2	2.2	1.2	73.6	74.6	75.8	2.2	1.2	Yes
R501(K2004)	Single-Family	65.3	66.3	67.9	2.6	1.6	65.7	66.7	68.7	3.0	2.0	Yes
R502(K2005)	Single-Family	64.6	65.6	67.3	2.7	1.7	64.9	65.9	68.1	3.2	2.2	Yes
R503(K1622)	Single-Family	72.8	73.8	75.0	2.2	1.2	73.3	74.3	75.6	2.3	1.3	Yes
R504(K1630)	Single-Family	71.9	72.9	74.1	2.2	1.2	72.4	73.4	74.7	2.3	1.3	Yes
R505(K1674)	Single-Family	66.8	67.8	69.5	2.7	1.7	67.1	68.2	70.3	3.2	2.1	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
M-31(K1979)	Multi-Family	68.6	69.6	69.4	0.8	-0.2	68.7	69.7	69.5	0.8	-0.2	Yes
R506(K927)	Single-Family	63.6	64.6	65.8	2.2	1.2	64.4	65.4	66.7	2.3	1.3	Yes
R507(K1564)	Multi-Family	61.6	62.5	61.3	-0.3	-1.2	62.2	63.2	62.2	0.0	-1.0	No
R508(K1627)	Single-Family	72.2	73.2	74.4	2.2	1.2	72.7	73.7	75.0	2.3	1.3	Yes
R509(K1573)	School	68.3	69.3	70.7	2.4	1.4	69.0	70.0	71.1	2.1	1.1	Yes
R510(K1670 R-61)	Multi-Family	67.9	68.9	70.8	2.9	1.9	68.3	69.3	71.5	3.2	2.2	Yes
R511(K789)	Single-Family	64.1	65.0	65.9	1.8	0.9	64.6	65.6	66.8	2.2	1.2	Yes
R512(K1642)	Single-Family	70.4	71.4	73.0	2.6	1.6	70.9	71.9	73.7	2.8	1.8	Yes
R513(K899)	Single-Family	60.2	61.2	63.4	3.2	2.2	61.1	62.2	64.4	3.3	2.2	No
R514(K1174)	Single-Family	46.3	47.3	47.8	1.5	0.5	47.1	48.1	48.6	1.5	0.5	No
R515(K1569)	Multi-Family	63.6	64.6	63.5	-0.1	-1.1	64.3	65.2	64.2	-0.1	-1.0	No
R516(K1638)	Single-Family	70.4	71.4	72.8	2.4	1.4	70.9	71.9	73.5	2.6	1.6	Yes
R517(K1652)	Single-Family	68.2	69.2	70.9	2.7	1.7	68.6	69.6	71.6	3.0	2.0	Yes
R518(K1665)	Single-Family	68.2	69.3	71.1	2.9	1.8	68.7	69.7	71.8	3.1	2.1	Yes
R519(K2012)	Multi-Family	56.2	57.1	57.0	0.8	-0.1	56.3	57.2	57.5	1.2	0.3	No
R520(K2014)	Multi-Family	58.4	59.2	58.9	0.5	-0.3	58.4	59.3	59.3	0.9	0.0	No
R521(KV1061)	Vacant	69.4	70.4	71.6	2.2	1.2	70.2	71.2	72.5	2.3	1.3	Yes
M-35(K1503)	Multi-Family	69.9	70.9	70.6	0.7	-0.3	70.7	71.7	71.3	0.6	-0.4	Yes
R522(K922)	Single-Family	62.5	63.5	64.9	2.4	1.4	63.3	64.4	65.9	2.6	1.5	Yes
R523(K1578)	Multi-Family	58.3	59.3	58.3	0.0	-1.0	59.1	60.1	59.2	0.1	-0.9	No
R524(K881)	Single-Family	63.4	64.4	66.1	2.7	1.7	64.2	65.2	67.0	2.8	1.8	Yes
R525(K1570)	Multi-Family	69.1	70.1	69.6	0.5	-0.5	69.7	70.6	70.2	0.5	-0.4	Yes
R526(K2009)	Multi-Family	55.7	56.6	56.5	0.8	-0.1	55.9	56.9	57.2	1.3	0.3	No
R527(K2011)	Multi-Family	55.6	56.5	56.7	1.1	0.2	55.7	56.7	57.4	1.7	0.7	No
M-30(K1176)	Single-Family	65.6	66.6	68.0	2.4	1.4	66.0	67.0	68.4	2.4	1.4	Yes
R528(K903)	Single-Family	59.9	60.9	63.3	3.4	2.4	60.9	61.9	64.3	3.4	2.4	No
R529(K921)	Single-Family	62.1	63.1	64.8	2.7	1.7	62.9	64.0	65.7	2.8	1.7	Yes
R530(K1181)	Single-Family	51.7	52.7	53.7	2.0	1.0	52.6	53.5	54.5	1.9	1.0	No
R531(K1621)	Single-Family	68.4	69.4	70.6	2.2	1.2	68.9	69.9	71.2	2.3	1.3	Yes
R532(K2008)	Multi-Family	55.6	56.6	56.2	0.6	-0.4	55.9	56.8	57.0	1.1	0.2	No
M-37(K1616)	Single-Family	67.2	68.3	69.1	1.9	0.8	67.6	68.6	69.8	2.2	1.2	Yes
R533(K2007)	Multi-Family	56.8	57.8	57.7	0.9	-0.1	57.0	58.0	58.5	1.5	0.5	No
R534(K879)	Single-Family	68.7	69.7	70.9	2.2	1.2	69.5	70.5	72.0	2.5	1.5	Yes
R535(K1705)	Multi-Family	56.6	57.6	58.6	2.0	1.0	56.9	57.9	59.4	2.5	1.5	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R536(K2024)	Multi-Family	60.7	61.4	61.2	0.5	-0.2	60.9	61.7	61.5	0.6	-0.2	No
R537(K85)	Single-Family	65.4	66.4	67.3	1.9	0.9	66.4	67.4	68.2	1.8	0.8	Yes
R538(K1602)	Single-Family	68.5	69.4	70.3	1.8	0.9	69.3	70.3	70.9	1.6	0.6	Yes
R539(K1611)	Single-Family	62.9	63.9	64.8	1.9	0.9	64.0	65.0	65.8	1.8	0.8	Yes
R540(K1624)	Single-Family	66.8	67.8	68.9	2.1	1.1	67.3	68.3	69.6	2.3	1.3	Yes
M-28(K879)	Single-Family	73.9	74.9	75.9	2.0	1.0	74.7	75.8	77.0	2.3	1.2	Yes
R541(K1629)	Single-Family	64.7	65.7	66.9	2.2	1.2	65.3	66.3	67.6	2.3	1.3	Yes
R542(K1632)	Single-Family	62.7	63.7	64.9	2.2	1.2	63.2	64.2	65.7	2.5	1.5	Yes
R543(K886)	Multi-Family	66.6	67.6	69.8	3.2	2.2	67.5	68.5	70.9	3.4	2.4	Yes
R544(K917)	Multi-Family	61.4	62.4	64.3	2.9	1.9	62.3	63.4	65.3	3.0	1.9	No
R545(K1608)	Single-Family	71.1	72.1	73.3	2.2	1.2	72.0	72.9	73.9	1.9	1.0	Yes
R546(K1613)	Single-Family	60.4	61.3	63.0	2.6	1.7	61.4	62.4	64.1	2.7	1.7	No
R547(K1637)	Single-Family	61.3	62.3	63.5	2.2	1.2	61.7	62.7	64.3	2.6	1.6	No
R548(K1699)	Multi-Family	57.3	58.3	59.5	2.2	1.2	57.7	58.6	60.4	2.7	1.8	No
R549(KV1077)	Vacant	69.7	70.7	71.9	2.2	1.2	70.5	71.5	72.9	2.4	1.4	Yes
R550(K1695)	Multi-Family	58.8	59.8	61.1	2.3	1.3	59.1	60.1	62.0	2.9	1.9	No
R551(K2019)	Single-Family	53.9	54.8	54.7	0.8	-0.1	54.3	55.2	55.3	1.0	0.1	No
R552(K2023)	Single-Family	55.7	56.6	56.3	0.6	-0.3	56.1	57.0	56.9	0.8	-0.1	No
R553(K2031)	Multi-Family	58.8	59.6	59.5	0.7	-0.1	59.2	60.0	59.9	0.7	-0.1	No
R554(K1677)	Single-Family	59.5	60.5	61.6	2.1	1.1	59.9	60.9	62.5	2.6	1.6	No
R555(K1687)	Multi-Family	59.3	60.3	61.4	2.1	1.1	59.7	60.7	62.2	2.5	1.5	No
R556(K2018)	Single-Family	52.1	53.0	53.4	1.3	0.4	52.4	53.4	54.1	1.7	0.7	No
R557(K2037)	Multi-Family	66.5	67.1	66.3	-0.2	-0.8	67.9	68.5	67.9	0.0	-0.6	Yes
R558(K1626)	Single-Family	57.7	58.7	61.2	3.5	2.5	58.7	59.7	62.2	3.5	2.5	No
R559(K1648)	Single-Family	60.1	61.1	62.6	2.5	1.5	60.5	61.5	63.4	2.9	1.9	No
R560(K1668)	Single-Family	59.7	60.7	62.3	2.6	1.6	60.1	61.1	63.1	3.0	2.0	No
R561(K1672)	Single-Family	60.0	61.0	62.2	2.2	1.2	60.3	61.3	63.0	2.7	1.7	No
R562(K2013)	Single-Family	51.6	52.5	52.4	0.8	-0.1	51.8	52.8	53.1	1.3	0.3	No
R563(K2015)	Single-Family	52.0	53.0	53.2	1.2	0.2	52.4	53.3	54.0	1.6	0.7	No
R564(K918)	Multi-Family	60.5	61.5	63.7	3.2	2.2	61.4	62.5	64.8	3.4	2.3	No
R565(K1713)	Single-Family	51.4	52.4	52.2	0.8	-0.2	51.7	52.7	52.9	1.2	0.2	No
R566(K2038)	Single-Family	62.8	63.4	59.6	-3.2	-3.8	63.1	63.7	60.4	-2.7	-3.3	No
R567(K1552)	Single-Family	62.1	63.1	64.5	2.4	1.4	62.5	63.5	65.4	2.9	1.9	No
R568(K1561)	Single-Family	61.7	62.7	64.9	3.2	2.2	62.0	63.0	65.8	3.8	2.8	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R569(K1712)	Single-Family	51.9	52.9	52.7	0.8	-0.2	52.2	53.2	53.4	1.2	0.2	No
R570(K2036)	Multi-Family	58.7	59.6	58.4	-0.3	-1.2	59.3	60.2	59.1	-0.2	-1.1	No
R571(K1547 R-58)	Single-Family	62.4	63.4	64.5	2.1	1.1	62.8	63.7	65.4	2.6	1.7	No
R572(K1635)	Single-Family	55.9	56.9	58.6	2.7	1.7	56.3	57.3	59.4	3.1	2.1	No
R573(K1617)	Single-Family	67.0	68.0	69.3	2.3	1.3	67.9	68.8	70.0	2.1	1.2	Yes
R574(K891)	Single-Family	70.2	71.2	72.8	2.6	1.6	71.0	72.1	73.8	2.8	1.7	Yes
R575(K1540)	Single-Family	62.2	63.2	64.0	1.8	0.8	62.6	63.6	64.8	2.2	1.2	No
R576(K1597)	Multi-Family	36.0	37.0	37.2	1.2	0.2	36.8	37.8	38.2	1.4	0.4	No
R577(K1623)	Single-Family	64.4	65.4	67.0	2.6	1.6	65.2	66.2	67.8	2.6	1.6	Yes
R578(K1634)	Single-Family	59.0	60.0	60.8	1.8	0.8	59.4	60.4	61.6	2.2	1.2	No
R579(K1710)	Single-Family	52.8	53.8	54.0	1.2	0.2	53.1	54.1	54.8	1.7	0.7	No
R580(K2034)	Multi-Family	53.8	54.7	54.9	1.1	0.2	54.4	55.3	55.7	1.3	0.4	No
M-33(K1581)	Single-Family	73.0	74.0	75.3	2.3	1.3	73.3	74.2	75.8	2.5	1.6	Yes
R581(K1708)	Single-Family	52.7	53.6	54.3	1.6	0.7	53.0	54.0	55.1	2.1	1.1	No
M-34(K1604)	Multi-Family	51.7	52.7	51.8	0.1	-0.9	52.3	53.3	52.5	0.2	-0.8	No
R582(K1061)	Single-Family	60.7	61.7	64.5	3.8	2.8	61.8	62.9	65.5	3.7	2.6	No
R583(K1628)	Single-Family	62.2	63.2	65.0	2.8	1.8	63.0	64.0	65.7	2.7	1.7	Yes
R584(K1641)	Single-Family	56.7	57.7	57.8	1.1	0.1	57.1	58.1	58.6	1.5	0.5	No
R585(K1706)	Single-Family	53.4	54.3	55.2	1.8	0.9	53.7	54.7	56.0	2.3	1.3	No
R586(K2030)	Multi-Family	51.7	52.6	53.1	1.4	0.5	52.2	53.1	53.8	1.6	0.7	No
R587(K1704)	Single-Family	54.3	55.3	56.5	2.2	1.2	54.7	55.7	57.3	2.6	1.6	No
R588(KV1089)	Vacant	70.2	71.2	72.6	2.4	1.4	71.0	72.0	73.6	2.6	1.6	Yes
R589(K1631)	Single-Family	60.8	61.8	63.6	2.8	1.8	61.6	62.6	64.3	2.7	1.7	No
R590(K1651)	Single-Family	56.7	57.7	58.5	1.8	0.8	57.1	58.1	59.4	2.3	1.3	No
R591(K1666)	Single-Family	56.3	57.3	58.2	1.9	0.9	56.7	57.7	59.1	2.4	1.4	No
R592(K1682)	Single-Family	56.6	57.6	58.6	2.0	1.0	57.0	58.0	59.5	2.5	1.5	No
R593(K1691)	Single-Family	55.7	56.7	58.0	2.3	1.3	56.1	57.1	58.9	2.8	1.8	No
R594(K1698)	Single-Family	54.3	55.3	56.6	2.3	1.3	54.7	55.7	57.5	2.8	1.8	No
R595(K1581)	Single-Family	71.6	72.6	74.6	3.0	2.0	72.0	72.9	75.1	3.1	2.2	Yes
R596(K1591)	Multi-Family	36.4	37.3	37.4	1.0	0.1	37.4	38.4	38.7	1.3	0.3	No
R597(K1636)	Single-Family	60.6	61.6	63.2	2.6	1.6	61.3	62.3	64.0	2.7	1.7	No
R598(K1694)	Single-Family	54.6	55.6	57.0	2.4	1.4	55.0	56.0	57.9	2.9	1.9	No
R599(K2021)	Multi-Family	52.5	53.4	53.6	1.1	0.2	52.9	53.9	54.3	1.4	0.4	No
R600(K2027)	Multi-Family	52.4	53.4	53.6	1.2	0.2	52.8	53.8	54.4	1.6	0.6	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R601(K1590)	Multi-Family	39.7	40.6	40.4	0.7	-0.2	40.7	41.7	41.6	0.9	-0.1	No
R602(K849)	Single-Family	72.3	73.3	73.7	1.4	0.4	72.9	73.9	74.5	1.6	0.6	Yes
R603(K904)	Single-Family	71.1	72.1	73.7	2.6	1.6	72.0	73.0	74.7	2.7	1.7	Yes
R604(K1643)	Single-Family	61.3	62.2	63.4	2.1	1.2	61.8	62.8	64.2	2.4	1.4	No
R605(K1718)	Multi-Family	52.7	53.7	53.7	1.0	0.0	53.1	54.1	54.4	1.3	0.3	No
R606(K1610)	Multi-Family	55.7	56.7	56.1	0.4	-0.6	56.2	57.2	56.7	0.5	-0.5	No
R607(K1717)	Multi-Family	52.6	53.6	53.8	1.2	0.2	53.1	54.0	54.5	1.4	0.5	No
R608(K819)	Single-Family	69.4	70.4	71.2	1.8	0.8	70.1	71.2	72.1	2.0	0.9	Yes
R609(K848)	Single-Family	70.9	71.9	72.3	1.4	0.4	71.5	72.5	73.1	1.6	0.6	Yes
R610(K1594)	Recreation	41.9	42.9	43.2	1.3	0.3	42.8	43.8	44.3	1.5	0.5	No
R611(K1612)	Multi-Family	50.8	51.8	52.8	2.0	1.0	51.6	52.6	53.5	1.9	0.9	No
R612(K1716)	Single-Family	53.3	54.3	54.2	0.9	-0.1	53.7	54.7	54.9	1.2	0.2	No
R613(K1583)	Single-Family	59.2	60.2	62.9	3.7	2.7	59.5	60.5	63.8	4.3	3.3	No
R614(K1585)	Single-Family	58.8	59.8	62.6	3.8	2.8	59.2	60.1	63.5	4.3	3.4	No
R615(K1600)	Multi-Family	48.4	49.4	49.3	0.9	-0.1	49.3	50.3	50.4	1.1	0.1	No
R616(K1601)	Multi-Family	42.7	43.7	43.7	1.0	0.0	43.6	44.6	44.8	1.2	0.2	No
R617(K841)	Single-Family	69.9	70.9	71.5	1.6	0.6	70.5	71.5	72.3	1.8	0.8	Yes
R618(K1558)	Single-Family	62.1	63.1	63.6	1.5	0.5	62.3	63.3	64.4	2.1	1.1	No
R619(K1567)	Single-Family	61.3	62.3	63.2	1.9	0.9	61.6	62.5	64.1	2.5	1.6	No
R620(K1596)	Multi-Family	49.2	50.2	50.6	1.4	0.4	50.1	51.1	51.7	1.6	0.6	No
R621(K1572 R-59)	Single-Family	61.3	62.2	63.6	2.3	1.4	61.5	62.5	64.4	2.9	1.9	No
R622(K907)	Single-Family	71.4	72.4	73.9	2.5	1.5	72.3	73.3	74.9	2.6	1.6	Yes
R623(K1554)	Single-Family	62.2	63.2	63.5	1.3	0.3	62.4	63.4	64.3	1.9	0.9	No
R624(K1565)	Single-Family	61.7	62.7	63.7	2.0	1.0	61.9	62.9	64.5	2.6	1.6	No
R625(K1575)	Single-Family	60.9	61.9	63.4	2.5	1.5	61.2	62.2	64.2	3.0	2.0	No
R626(K1563)	Single-Family	61.8	62.8	63.4	1.6	0.6	62.0	63.0	64.3	2.3	1.3	No
R627(K1577)	Single-Family	61.0	62.0	63.4	2.4	1.4	61.3	62.2	64.3	3.0	2.1	No
R628(K1077)	Single-Family	65.0	66.0	68.6	3.6	2.6	66.1	67.1	69.6	3.5	2.5	Yes
R629(K1550)	Single-Family	62.2	63.2	63.6	1.4	0.4	62.4	63.4	64.4	2.0	1.0	No
R630(K1058)	Single-Family	71.9	72.9	74.3	2.4	1.4	72.8	73.9	75.3	2.5	1.4	Yes
R631(K1544)	Single-Family	62.1	63.1	63.5	1.4	0.4	62.3	63.3	64.3	2.0	1.0	No
R632(K1079)	Single-Family	66.8	67.8	70.4	3.6	2.6	67.8	68.9	71.5	3.7	2.6	Yes
R633(K843)	Single-Family	67.9	68.9	69.5	1.6	0.6	68.5	69.6	70.4	1.9	0.8	Yes
R634(K1538)	Single-Family	61.9	62.9	63.2	1.3	0.3	62.2	63.1	64.0	1.8	0.9	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R635(K1062)	Single-Family	72.5	73.5	74.7	2.2	1.2	73.4	74.4	75.8	2.4	1.4	Yes
R636(K840)	Single-Family	67.3	68.3	69.2	1.9	0.9	68.0	69.1	70.0	2.0	0.9	Yes
R637(K1617 R-60)	Single-Family	66.0	66.9	67.7	1.7	0.8	66.7	67.7	68.4	1.7	0.7	Yes
R638(K1065)	Single-Family	73.2	74.2	75.3	2.1	1.1	74.1	75.2	76.3	2.2	1.1	Yes
R639(K1089)	Single-Family	70.4	71.4	73.5	3.1	2.1	71.3	72.4	74.6	3.3	2.2	Yes
R640(K1069)	Single-Family	73.7	74.7	75.7	2.0	1.0	74.6	75.7	76.8	2.2	1.1	Yes
R641(K1530)	Single-Family	61.5	62.5	62.9	1.4	0.4	61.8	62.8	63.7	1.9	0.9	No
R642(K1075 R-54)	Single-Family	74.4	75.4	76.4	2.0	1.0	75.3	76.3	77.5	2.2	1.2	Yes
R643(K1041)	Single-Family	71.9	72.9	73.5	1.6	0.6	72.5	73.6	74.3	1.8	0.7	Yes
R644(K1036)	Single-Family	70.8	71.8	72.4	1.6	0.6	71.4	72.5	73.2	1.8	0.7	Yes
R645(K1033)	Multi-Family	65.7	66.7	68.1	2.4	1.4	66.4	67.5	68.9	2.5	1.4	Yes
R646(K1053)	Single-Family	64.6	65.6	67.5	2.9	1.9	65.4	66.4	68.4	3.0	2.0	Yes
R647(K1037)	Multi-Family	67.6	68.6	69.7	2.1	1.1	68.3	69.4	70.6	2.3	1.2	Yes
R648(K1522)	Single-Family	60.9	61.9	62.0	1.1	0.1	61.3	62.2	62.8	1.5	0.6	No
R649(K1027)	Multi-Family	64.8	65.8	67.3	2.5	1.5	65.6	66.6	68.1	2.5	1.5	Yes
R650(K1116)	Vacant	67.7	68.7	68.2	0.5	-0.5	68.3	69.4	68.8	0.5	-0.6	Yes
R651(K594)	Single-Family	66.9	67.9	67.1	0.2	-0.8	67.6	68.6	67.9	0.3	-0.7	Yes
R652(K1023)	Single-Family	60.6	61.6	63.7	3.1	2.1	61.4	62.4	64.6	3.2	2.2	No
R653(K884)	Single-Family	66.8	67.8	69.9	3.1	2.1	67.4	68.5	71.0	3.6	2.5	Yes
R654(K1039)	Single-Family	63.3	64.3	66.0	2.7	1.7	64.2	65.3	67.1	2.9	1.8	Yes
R655(K1121 R-56)	Single-Family	66.3	67.3	67.0	0.7	-0.3	67.1	68.1	67.8	0.7	-0.3	Yes
R656(K882)	Single-Family	59.6	60.6	62.4	2.8	1.8	60.2	61.2	63.3	3.1	2.1	No
R657(K1123)	Single-Family	65.7	66.7	66.9	1.2	0.2	66.5	67.5	67.7	1.2	0.2	Yes
R658(K883)	Single-Family	62.4	63.4	65.6	3.2	2.2	63.2	64.2	66.6	3.4	2.4	Yes
M-29(K1148)	Single-Family	65.0	66.0	69.1	4.1	3.1	65.8	66.8	70.1	4.3	3.3	Yes
R659(K876)	Single-Family	62.5	63.5	65.5	3.0	2.0	63.3	64.4	66.5	3.2	2.1	Yes
R660(K1167)	Church	69.0	70.0	72.2	3.2	2.2	70.0	71.0	73.1	3.1	2.1	Yes
R661(K1766)	Single-Family	59.6	60.6	59.9	0.3	-0.7	60.1	61.1	60.8	0.7	-0.3	No
R662(K1168)	Multi-Family	68.4	69.3	71.8	3.4	2.5	69.4	70.4	72.7	3.3	2.3	Yes
R663(K598)	Single-Family	61.4	62.4	65.1	3.7	2.7	62.3	63.3	66.1	3.8	2.8	Yes
M-32(K1983)	Multi-Family	59.0	60.0	60.2	1.2	0.2	59.7	60.7	61.0	1.3	0.3	No
R664(K1125)	Single-Family	64.6	65.6	65.9	1.3	0.3	65.5	66.5	66.7	1.2	0.2	Yes
R665(K1989)	Single-Family	59.3	60.3	59.6	0.3	-0.7	59.7	60.7	60.4	0.7	-0.3	No
R666(K878)	Single-Family	62.0	63.0	65.2	3.2	2.2	62.8	63.9	66.2	3.4	2.3	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R667(K1983)	Multi-Family	58.5	59.4	59.8	1.3	0.4	59.2	60.2	60.6	1.4	0.4	No
R668(K595)	Single-Family	63.0	64.0	63.6	0.6	-0.4	63.6	64.6	64.4	0.8	-0.2	No
R669(K877)	Single-Family	61.8	62.8	65.0	3.2	2.2	62.6	63.6	66.1	3.5	2.5	Yes
R670(K1129)	Single-Family	64.1	65.1	65.7	1.6	0.6	65.0	66.0	66.5	1.5	0.5	Yes
R671(K1183 R-57)	Multi-Family	61.6	62.6	63.8	2.2	1.2	62.5	63.5	64.7	2.2	1.2	No
R672(K600)	Single-Family	60.6	61.6	64.0	3.4	2.4	61.4	62.4	64.9	3.5	2.5	No
R673(K874)	Single-Family	61.6	62.6	64.9	3.3	2.3	62.4	63.4	66.0	3.6	2.6	Yes
R674(K1132)	Single-Family	63.7	64.7	65.1	1.4	0.4	64.7	65.7	66.0	1.3	0.3	Yes
R675(K873)	Single-Family	58.0	59.0	61.7	3.7	2.7	58.8	59.9	62.7	3.9	2.8	No
R676(K1117)	Single-Family	60.3	61.3	61.3	1.0	0.0	61.1	62.1	62.1	1.0	0.0	No
R677(K1150)	Single-Family	60.2	61.2	63.5	3.3	2.3	60.9	62.0	64.4	3.5	2.4	No
R678(K1136)	Single-Family	63.1	64.1	64.6	1.5	0.5	64.1	65.1	65.5	1.4	0.4	No
R679(K1152)	Single-Family	60.0	61.1	62.9	2.9	1.8	60.8	61.8	63.8	3.0	2.0	No
R680(K898)	Multi-Family	63.1	64.1	66.4	3.3	2.3	63.9	65.0	67.5	3.6	2.5	Yes
R681(K1139)	Single-Family	62.0	63.0	63.9	1.9	0.9	63.1	64.1	64.9	1.8	0.8	No
R682(K104)	Multi-Family	63.5	64.5	66.9	3.4	2.4	64.3	65.4	68.0	3.7	2.6	Yes
R683(K1120)	Single-Family	58.8	59.8	59.1	0.3	-0.7	59.7	60.7	60.0	0.3	-0.7	No
R684(K905)	Multi-Family	63.6	64.6	67.3	3.7	2.7	64.5	65.5	68.3	3.8	2.8	Yes
R685(K1153)	Single-Family	60.3	61.3	62.6	2.3	1.3	61.1	62.1	63.4	2.3	1.3	No
R686(K1142)	Single-Family	60.5	61.5	62.6	2.1	1.1	61.6	62.6	63.5	1.9	0.9	No
R687(K908)	Single-Family	63.8	64.8	67.4	3.6	2.6	64.6	65.7	68.4	3.8	2.7	Yes
R688(K13)	Single-Family	59.7	60.7	60.8	1.1	0.1	60.5	61.5	61.6	1.1	0.1	No
R689(K1059)	Single-Family	63.2	64.2	66.9	3.7	2.7	64.0	65.1	67.9	3.9	2.8	Yes
R690(K1124)	Single-Family	56.5	57.5	57.1	0.6	-0.4	57.5	58.5	58.0	0.5	-0.5	No
R691(K1063)	Single-Family	63.1	64.1	66.6	3.5	2.5	63.9	64.9	67.6	3.7	2.7	Yes
R692(K1145)	Single-Family	59.4	60.4	60.9	1.5	0.5	60.6	61.6	61.8	1.2	0.2	No
R693(K1130)	Single-Family	55.6	56.6	56.1	0.5	-0.5	56.6	57.6	57.0	0.4	-0.6	No
R694(K1080)	Undeveloped Land	62.7	63.7	65.8	3.1	2.1	63.6	64.6	66.8	3.2	2.2	Yes
R695(K1119)	Single-Family	56.3	57.3	58.3	2.0	1.0	56.9	58.0	59.2	2.3	1.2	No
R696(K1085)	Undeveloped Land	62.8	63.8	66.1	3.3	2.3	63.7	64.8	67.1	3.4	2.3	Yes
R697(K1090)	Undeveloped Land	62.9	63.9	66.2	3.3	2.3	63.8	64.8	67.2	3.4	2.4	Yes
R698(K1135)	Single-Family	54.3	55.3	54.9	0.6	-0.4	55.3	56.3	55.9	0.6	-0.4	No
R699(K1095)	Multi-Family	62.8	63.8	66.0	3.2	2.2	63.7	64.7	67.0	3.3	2.3	Yes
R700(K1101 R-55)	Multi-Family	62.2	63.2	64.9	2.7	1.7	63.1	64.1	65.9	2.8	1.8	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R701(K1138)	Single-Family	52.3	53.3	53.5	1.2	0.2	53.4	54.5	54.4	1.0	-0.1	No
R702(K47)	Single-Family	61.0	62.0	62.9	1.9	0.9	62.2	63.2	64.0	1.8	0.8	No
R703(K1251)	Single-Family	60.5	61.5	62.4	1.9	0.9	61.7	62.8	63.5	1.8	0.7	No
R704(K46)	Single-Family	61.3	62.3	63.2	1.9	0.9	62.5	63.6	64.3	1.8	0.7	No
R705(K48)	Single-Family	61.2	62.2	63.0	1.8	0.8	62.4	63.5	64.2	1.8	0.7	No
R706(K1254)	Single-Family	60.9	61.9	62.7	1.8	0.8	62.1	63.1	63.9	1.8	0.8	No
R707(K44)	Single-Family	62.0	63.0	63.9	1.9	0.9	63.2	64.2	65.0	1.8	0.8	No
R708(K43)	Single-Family	61.8	62.8	63.5	1.7	0.7	63.0	64.0	64.6	1.6	0.6	No
R709(K1471)	Multi-Family	62.3	63.3	64.7	2.4	1.4	63.4	64.4	65.8	2.4	1.4	Yes
R710(K64)	Single-Family	61.3	62.3	63.3	2.0	1.0	62.3	63.4	64.4	2.1	1.0	No
R711(K1474)	Single-Family	63.7	64.8	65.7	2.0	0.9	64.8	65.8	66.7	1.9	0.9	Yes
R712(K1304)	Single-Family	66.3	67.3	68.1	1.8	0.8	67.0	68.0	68.9	1.9	0.9	Yes
R713(K1267)	School	71.3	72.3	73.3	2.0	1.0	72.6	73.6	74.5	1.9	0.9	Yes
R714(K1493)	Multi-Family	68.4	69.4	71.1	2.7	1.7	69.5	70.5	72.2	2.7	1.7	Yes
R715(K1481)	Multi-Family	66.2	67.2	68.2	2.0	1.0	67.2	68.3	69.3	2.1	1.0	Yes
R716(K1302)	Single-Family	66.3	67.3	68.0	1.7	0.7	66.9	67.9	68.9	2.0	1.0	Yes
R717(K1266)	Office	71.9	72.9	74.3	2.4	1.4	73.1	74.2	75.5	2.4	1.3	Yes
R718(K1295)	Single-Family	64.6	65.6	66.0	1.4	0.4	65.2	66.2	66.9	1.7	0.7	Yes
R719(K1291)	Single-Family	61.3	62.3	62.0	0.7	-0.3	61.9	62.9	62.9	1.0	0.0	No
R720(K1262)	Office	70.8	71.8	73.4	2.6	1.6	72.0	73.1	74.6	2.6	1.5	Yes
R721(K1381)	Restaurant/Bar	58.7	59.7	61.5	2.8	1.8	59.6	60.6	62.4	2.8	1.8	No
R722(K1404)	Office	58.4	59.4	62.1	3.7	2.7	59.3	60.3	63.0	3.7	2.7	No
R723(K1405)	Medical Facility	58.4	59.5	62.9	4.5	3.4	59.3	60.4	63.9	4.6	3.5	No
R724(K1415)	Single-Family	53.9	54.9	58.5	4.6	3.6	54.7	55.7	59.5	4.8	3.8	No
R725(K1264)	Single-Family	72.2	73.3	74.8	2.6	1.5	73.4	74.5	76.0	2.6	1.5	Yes
R726(K1487)	Single-Family	68.1	69.1	70.0	1.9	0.9	69.1	70.2	71.1	2.0	0.9	Yes
R727(K2068)	Office	70.6	71.6	73.3	2.7	1.7	71.8	72.8	74.5	2.7	1.7	Yes
R728(K1419)	Single-Family	58.3	59.3	61.3	3.0	2.0	59.2	60.3	62.3	3.1	2.0	No
R729(K1422)	Single-Family	58.1	59.1	61.8	3.7	2.7	59.0	60.1	62.7	3.7	2.6	No
R730(K1311)	Office	70.9	71.9	69.8	-1.1	-2.1	71.4	72.4	71.0	-0.4	-1.4	Yes
R731(K1429)	Single-Family	58.2	59.2	61.4	3.2	2.2	59.1	60.2	62.3	3.2	2.1	No
R732(K65)	Single-Family	58.8	59.8	63.1	4.3	3.3	59.7	60.8	64.0	4.3	3.2	No
R734(K1201)	Multi-Family	72.0	73.0	74.3	2.3	1.3	73.1	74.1	75.4	2.3	1.3	Yes
R735(K1339)	Hotel	66.9	67.9	69.8	2.9	1.9	67.9	69.0	70.8	2.9	1.8	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R736(K2067)	Office	73.9	74.9	75.3	1.4	0.4	75.1	76.2	76.5	1.4	0.3	Yes
M-43(K1349)	Hotel	76.8	77.8	78.3	1.5	0.5	77.8	78.8	79.3	1.5	0.5	Yes
R737(K1323)	Office	74.6	75.6	76.7	2.1	1.1	75.6	76.7	77.7	2.1	1.0	Yes
R738(K1412)	Single-Family	60.7	61.7	66.8	6.1	5.1	61.5	62.6	67.7	6.2	5.1	Yes
R739(K1424)	Single-Family	58.9	59.9	66.9	8.0	7.0	59.7	60.8	67.8	8.1	7.0	Yes
R740(K1454)	Single-Family	60.6	61.6	66.1	5.5	4.5	61.5	62.6	67.0	5.5	4.4	Yes
R741(K1307 R-62)	Office	68.7	69.7	N/A	N/A	N/A	69.0	70.0	N/A	N/A	N/A	N/A
R742(K1450)	Office	58.7	59.7	63.9	5.2	4.2	59.6	60.7	64.9	5.3	4.2	No
R743(K1479)	Single-Family	55.3	56.4	57.3	2.0	0.9	56.3	57.4	58.3	2.0	0.9	No
R744(K1497)	Single-Family	70.2	71.2	72.4	2.2	1.2	71.3	72.3	73.4	2.1	1.1	Yes
R745(K1476)	Single-Family	55.0	56.0	57.1	2.1	1.1	55.8	56.9	57.9	2.1	1.0	No
R746(K1458)	Single-Family	63.2	64.2	68.9	5.7	4.7	64.1	65.2	69.8	5.7	4.6	Yes
R747(K1482)	Single-Family	53.7	54.7	56.0	2.3	1.3	54.6	55.7	57.0	2.4	1.3	No
R748(K2091)	Single-Family	76.7	77.8	78.5	1.8	0.7	77.7	78.8	79.4	1.7	0.6	Yes
R749(K1767)	Single-Family	76.2	77.3	78.0	1.8	0.7	77.2	78.3	79.0	1.8	0.7	Yes
R750(K1435)	Single-Family	60.2	61.3	70.1	9.9	8.8	61.1	62.2	71.0	9.9	8.8	Yes
R751(K1427)	Single-Family	61.9	62.9	70.1	8.2	7.2	62.8	63.8	71.0	8.2	7.2	Yes
R752(K1438)	Single-Family	60.8	61.8	71.0	10.2	9.2	61.7	62.7	71.9	10.2	9.2	Yes
R753(K1472)	Restaurant/Bar	62.6	63.7	68.3	5.7	4.6	63.6	64.7	69.3	5.7	4.6	No
R754(K1478)	Single-Family	55.9	57.0	58.0	2.1	1.0	56.7	57.8	58.8	2.1	1.0	No
R755(K1488)	Single-Family	69.9	70.9	72.0	2.1	1.1	70.9	72.0	73.0	2.1	1.0	Yes
R756(K2109B)	Single-Family	75.9	77.0	77.7	1.8	0.7	76.9	78.0	78.7	1.8	0.7	Yes
R757(K2105)	Single-Family	73.4	74.4	75.2	1.8	0.8	74.4	75.5	76.2	1.8	0.7	Yes
R758(K1448)	Single-Family	62.0	63.1	72.0	10.0	8.9	62.9	64.0	72.9	10.0	8.9	Yes
R760(K1433)	Single-Family	62.3	63.3	70.6	8.3	7.3	63.2	64.2	71.5	8.3	7.3	Yes
R761(K1483)	Single-Family	56.9	58.0	58.7	1.8	0.7	57.7	58.7	59.5	1.8	0.8	No
R762(K1455)	Single-Family	63.7	64.7	73.7	10.0	9.0	64.7	65.7	74.6	9.9	8.9	Yes
R763(K1485)	Single-Family	58.2	59.3	59.9	1.7	0.6	59.0	60.1	60.8	1.8	0.7	No
R764(KV2092)	Vacant	73.3	74.3	75.0	1.7	0.7	74.4	75.4	76.1	1.7	0.7	Yes
R765(K1459)	Single-Family	63.6	64.6	75.0	11.4	10.4	64.5	65.5	76.0	11.5	10.5	Yes
R766(K2085)	Single-Family	74.6	75.7	76.4	1.8	0.7	75.6	76.7	77.4	1.8	0.7	Yes
R767(K1491)	Single-Family	54.3	55.4	56.8	2.5	1.4	55.2	56.3	57.8	2.6	1.5	No
R768(K1437)	Single-Family	62.1	63.1	72.8	10.7	9.7	63.0	64.1	73.9	10.9	9.8	Yes
R769(K2119)	Single-Family	71.3	72.4	73.5	2.2	1.1	72.4	73.5	74.5	2.1	1.0	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R770(K1489)	Single-Family	59.4	60.5	60.8	1.4	0.3	60.2	61.3	61.6	1.4	0.3	No
R771(K2101)	Single-Family	68.1	69.2	70.1	2.0	0.9	69.2	70.3	71.1	1.9	0.8	Yes
R772(K2109E)	Single-Family	72.3	73.3	74.4	2.1	1.1	73.4	74.4	75.5	2.1	1.1	Yes
R773(KV1469)	Vacant	63.0	64.1	75.1	12.1	11.0	64.0	65.0	76.1	12.1	11.1	Yes
R774(K1346)	Single-Family	70.8	71.8	71.2	0.4	-0.6	71.4	72.3	71.9	0.5	-0.4	Yes
R775(K1496)	Single-Family	55.4	56.5	57.9	2.5	1.4	56.2	57.4	58.9	2.7	1.5	No
R776(K2087)	Single-Family	71.7	72.7	73.4	1.7	0.7	72.7	73.7	74.5	1.8	0.8	Yes
R777(K2106)	Single-Family	69.7	70.7	71.8	2.1	1.1	70.9	71.9	72.9	2.0	1.0	Yes
M-41(K1318)	Single-Family	70.6	71.7	75.1	4.5	3.4	71.1	72.1	75.8	4.7	3.7	Yes
R778(K2104)	Single-Family	70.6	71.6	72.7	2.1	1.1	71.7	72.8	73.8	2.1	1.0	Yes
R779(K1195)	Single-Family	69.5	70.5	71.7	2.2	1.2	70.6	71.6	72.7	2.1	1.1	Yes
R780(K1383)	Single-Family	71.6	72.6	72.0	0.4	-0.6	72.1	73.1	72.7	0.6	-0.4	Yes
R781(K1456)	Single-Family	63.0	64.1	77.2	14.2	13.1	64.0	65.0	78.2	14.2	13.2	Yes
R782(K1495)	Medical Facility	61.9	62.9	63.7	1.8	0.8	62.8	63.8	64.6	1.8	0.8	No
R783(K1722C)	Single-Family	69.7	70.8	71.8	2.1	1.0	70.9	71.9	72.7	1.8	0.8	Yes
R784(K1769)	Single-Family	68.8	69.9	71.2	2.4	1.3	69.9	70.9	72.2	2.3	1.3	Yes
R785(K2083)	Single-Family	76.1	77.2	77.9	1.8	0.7	77.1	78.1	78.8	1.7	0.7	Yes
M-44(K75)	Multi-Family	71.2	72.2	72.8	1.6	0.6	71.8	72.8	73.5	1.7	0.7	Yes
M-44a(K75)	Multi-Family	72.8	73.9	73.0	0.2	-0.9	73.4	74.4	73.6	0.2	-0.8	Yes
M-46(K1469)	Single-Family	65.5	66.5	78.6	13.1	12.1	66.5	67.5	79.6	13.1	12.1	Yes
R786(K1194)	Multi-Family	58.7	59.8	61.1	2.4	1.3	59.5	60.6	62.0	2.5	1.4	No
R787(K2122)	Single-Family	68.2	69.2	70.7	2.5	1.5	69.3	70.4	71.8	2.5	1.4	Yes
R788(K1722B)	Single-Family	69.0	70.1	71.0	2.0	0.9	70.2	71.2	71.9	1.7	0.7	Yes
M-40(K1315)	Single-Family	62.1	63.1	62.2	0.1	-0.9	62.7	63.7	62.9	0.2	-0.8	No
M-42(K1348)	Single-Family	64.3	65.3	68.8	4.5	3.5	65.0	65.9	69.5	4.5	3.6	Yes
R789(K1319)	Single-Family	64.3	65.3	63.6	-0.7	-1.7	64.9	65.9	64.4	-0.5	-1.5	No
R790(K1360)	Single-Family	71.2	72.2	73.4	2.2	1.2	71.9	72.9	74.2	2.3	1.3	Yes
R791(K1365)	Single-Family	69.5	70.6	70.6	1.1	0.0	70.1	71.1	71.3	1.2	0.2	Yes
R792(K1421)	Single-Family	74.5	75.5	76.5	2.0	1.0	75.3	76.3	77.3	2.0	1.0	Yes
R793(KV2025)	Vacant	62.2	63.2	63.0	0.8	-0.2	62.7	63.7	63.9	1.2	0.2	No
R794(KV1318)	Vacant	66.4	67.4	70.5	4.1	3.1	67.2	68.2	71.3	4.1	3.1	Yes
R795(K74)	Multi-Family	69.3	70.3	68.8	-0.5	-1.5	69.9	70.8	69.5	-0.4	-1.3	Yes
R796(K1341)	Single-Family	71.1	72.1	74.1	3.0	2.0	71.7	72.7	74.9	3.2	2.2	Yes
R797(K2124)	Single-Family	68.2	69.2	70.7	2.5	1.5	69.3	70.4	71.8	2.5	1.4	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R798(K1326)	Single-Family	62.3	63.3	62.3	0.0	-1.0	62.9	63.9	63.1	0.2	-0.8	No
R799(K1391)	Single-Family	68.0	69.0	69.3	1.3	0.3	68.6	69.6	70.1	1.5	0.5	Yes
R800(K2086)	Single-Family	72.7	73.7	74.6	1.9	0.9	73.7	74.7	75.5	1.8	0.8	Yes
R801(K1205)	Single-Family	67.2	68.2	69.2	2.0	1.0	68.2	69.2	70.2	2.0	1.0	Yes
R802(K1331)	Single-Family	68.8	69.8	72.4	3.6	2.6	69.4	70.4	73.2	3.8	2.8	Yes
R803(K2017)	Single-Family	64.6	65.5	65.3	0.7	-0.2	65.0	66.0	66.0	1.0	0.0	Yes
R804(K2025)	Single-Family	63.5	64.5	64.1	0.6	-0.4	64.0	65.0	65.0	1.0	0.0	No
R805(K78)	Single-Family	70.1	71.1	73.1	3.0	2.0	70.7	71.7	73.9	3.2	2.2	Yes
R806(K1322)	Single-Family	64.2	65.2	63.4	-0.8	-1.8	64.7	65.7	64.2	-0.5	-1.5	No
R807(K1336)	Single-Family	69.1	70.1	72.4	3.3	2.3	69.7	70.7	73.2	3.5	2.5	Yes
R808(K2109)	Single-Family	63.9	64.9	66.4	2.5	1.5	65.1	66.1	67.6	2.5	1.5	Yes
R809(K71)	Multi-Family	66.1	67.1	66.5	0.4	-0.6	66.7	67.7	67.3	0.6	-0.4	Yes
R810(K2020)	Single-Family	63.3	64.1	64.0	0.7	-0.1	63.9	64.7	64.8	0.9	0.1	No
R811(K2095)	Single-Family	67.1	68.1	69.6	2.5	1.5	68.1	69.1	70.7	2.6	1.6	Yes
R812(K1386)	Single-Family	63.5	64.5	65.4	1.9	0.9	64.0	65.0	66.1	2.1	1.1	Yes
R813(K2114)	Single-Family	65.9	66.9	67.8	1.9	0.9	67.0	68.1	68.9	1.9	0.8	Yes
R814(K2125)	Single-Family	65.7	66.8	68.4	2.7	1.6	66.9	67.9	69.5	2.6	1.6	Yes
M-48(K37)	Single-Family	60.3	61.4	62.4	2.1	1.0	61.3	62.4	63.4	2.1	1.0	No
R815(K73)	Multi-Family	63.9	65.0	64.4	0.5	-0.6	64.4	65.4	65.1	0.7	-0.3	No
R816(K1372)	Single-Family	61.3	62.3	63.9	2.6	1.6	61.9	62.9	64.8	2.9	1.9	No
R817(K1395)	Single-Family	67.8	68.8	69.2	1.4	0.4	68.4	69.4	69.9	1.5	0.5	Yes
R818(K2029)	Multi-Family	52.1	53.0	53.2	1.1	0.2	52.5	53.3	54.0	1.5	0.7	No
R819(K2088)	Single-Family	72.7	73.8	74.5	1.8	0.7	73.7	74.7	75.4	1.7	0.7	Yes
R820(K2138)	Single-Family	66.2	67.2	68.3	2.1	1.1	67.4	68.4	69.3	1.9	0.9	Yes
R821(K1722A)	Single-Family	62.8	63.9	64.6	1.8	0.7	64.0	65.0	65.6	1.6	0.6	Yes
R822(K1204)	Single-Family	65.2	66.2	66.8	1.6	0.6	66.2	67.2	67.8	1.6	0.6	Yes
R823(K1722)	Single-Family	65.0	66.1	67.2	2.2	1.1	66.2	67.3	68.3	2.1	1.0	Yes
R824(K2099)	Single-Family	64.8	65.8	67.4	2.6	1.6	65.8	66.9	68.5	2.7	1.6	Yes
R825(K2127)	Single-Family	65.4	66.4	67.9	2.5	1.5	66.6	67.6	69.0	2.4	1.4	Yes
R826(K2144)	Single-Family	65.5	66.6	67.7	2.2	1.1	66.7	67.8	68.8	2.1	1.0	Yes
R827(K2109C)	Single-Family	65.0	66.1	67.5	2.5	1.4	66.2	67.3	68.7	2.5	1.4	Yes
R828(K1720)	Single-Family	65.2	66.3	67.4	2.2	1.1	66.4	67.5	68.5	2.1	1.0	Yes
R829(K2026)	Single-Family	63.6	64.2	64.1	0.5	-0.1	64.5	65.1	65.2	0.7	0.1	No
R830(K68)	Multi-Family	65.9	66.9	67.1	1.2	0.2	66.6	67.6	67.8	1.2	0.2	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R831(K1328)	Single-Family	63.8	64.9	63.5	-0.3	-1.4	64.4	65.4	64.3	-0.1	-1.1	No
M-45(K1484)	Church	72.7	73.7	75.2	2.5	1.5	73.5	74.5	75.9	2.4	1.4	Yes
R832(K1362)	Single-Family	59.5	60.5	60.8	1.3	0.3	60.2	61.1	61.7	1.5	0.6	No
R833(K1370)	Single-Family	60.7	61.7	62.8	2.1	1.1	61.3	62.3	63.7	2.4	1.4	No
R834(K1402)	Single-Family	66.4	67.4	67.5	1.1	0.1	67.0	68.0	68.2	1.2	0.2	Yes
R835(K1446)	Single-Family	68.3	69.3	70.4	2.1	1.1	69.0	70.0	71.2	2.2	1.2	Yes
R836(K67)	Multi-Family	65.6	66.6	66.7	1.1	0.1	66.3	67.3	67.5	1.2	0.2	Yes
R837(K2033)	Single-Family	52.5	53.3	53.5	1.0	0.2	52.9	53.8	54.3	1.4	0.5	No
R838(K2109F)	Single-Family	63.9	64.9	65.9	2.0	1.0	65.0	66.1	67.0	2.0	0.9	Yes
R839(K1334)	Single-Family	62.5	63.5	62.6	0.1	-0.9	63.1	64.1	63.5	0.4	-0.6	No
R840(K2109A)	Single-Family	60.8	61.8	62.9	2.1	1.1	61.9	63.0	64.0	2.1	1.0	No
R841(K30)	Single-Family	62.3	63.4	64.3	2.0	0.9	63.5	64.6	65.4	1.9	0.8	No
R842(K1353)	Day Care	57.5	58.5	60.4	2.9	1.9	58.1	59.1	61.2	3.1	2.1	No
R843(K1406)	Single-Family	63.1	64.1	64.2	1.1	0.1	63.7	64.7	65.0	1.3	0.3	No
R844(K2032)	Single-Family	63.5	64.1	63.9	0.4	-0.2	64.5	65.2	65.1	0.6	-0.1	No
R845(K2103)	Single-Family	63.3	64.3	65.8	2.5	1.5	64.4	65.4	66.8	2.4	1.4	Yes
R846(K1396)	Single-Family	60.3	61.3	62.1	1.8	0.8	61.0	61.9	63.0	2.0	1.1	No
R847(K1403)	Single-Family	61.9	62.9	63.3	1.4	0.4	62.6	63.6	64.2	1.6	0.6	No
R848(K2035)	Multi-Family	51.5	52.3	52.0	0.5	-0.3	51.9	52.8	52.9	1.0	0.1	No
R849(K1397)	Single-Family	58.8	59.9	60.8	2.0	0.9	59.5	60.5	61.7	2.2	1.2	No
R850(K1721)	Single-Family	63.3	64.4	64.9	1.6	0.5	64.5	65.5	66.1	1.6	0.6	Yes
R851(K2094)	Single-Family	72.2	73.3	74.1	1.9	0.8	73.2	74.2	74.9	1.7	0.7	Yes
R852(K2109D)	Single-Family	60.1	61.2	62.0	1.9	0.8	61.3	62.4	63.1	1.8	0.7	No
R853(K1217)	Hotel	60.6	61.7	62.5	1.9	0.8	61.6	62.6	63.4	1.8	0.8	No
R854(K1460)	Single-Family	63.0	64.0	64.0	1.0	0.0	63.7	64.6	64.8	1.1	0.2	No
R855(K1392)	Single-Family	57.9	58.9	60.6	2.7	1.7	58.6	59.6	61.4	2.8	1.8	No
R856(K1394)	Single-Family	58.4	59.4	60.0	1.6	0.6	59.1	60.1	60.8	1.7	0.7	No
R857(K1193)	Single-Family	69.5	70.5	72.1	2.6	1.6	70.3	71.3	72.9	2.6	1.6	Yes
R858(K1379)	Single-Family	57.0	58.0	59.2	2.2	1.2	57.6	58.6	60.0	2.4	1.4	No
R859(K1385)	Single-Family	56.3	57.3	58.6	2.3	1.3	56.9	57.8	59.4	2.5	1.6	No
R860(K2097)	Single-Family	71.8	72.9	73.7	1.9	0.8	72.8	73.8	74.6	1.8	0.8	Yes
R861(K1390)	Single-Family	55.6	56.6	57.5	1.9	0.9	56.3	57.3	58.4	2.1	1.1	No
R862(K1449)	Single-Family	64.1	65.1	64.6	0.5	-0.5	64.8	65.8	65.4	0.6	-0.4	No
M-39(K2037)	Multi-Family	66.4	67.0	66.1	-0.3	-0.9	67.8	68.4	67.8	0.0	-0.6	Yes

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R863(K2043)	Single-Family	51.7	52.5	52.0	0.3	-0.5	52.1	53.0	52.9	0.8	-0.1	No
R864(K2117)	Single-Family	62.0	63.1	64.4	2.4	1.3	63.1	64.1	65.4	2.3	1.3	No
R865(K1212)	Commercial	69.0	70.1	71.1	2.1	1.0	70.1	71.2	72.1	2.0	0.9	Yes
R866(K2066)	Hotel	64.3	65.4	67.0	2.7	1.6	65.3	66.3	67.9	2.6	1.6	No
R867(K1196)	Single-Family	67.1	68.1	69.8	2.7	1.7	67.9	68.9	70.5	2.6	1.6	Yes
R868(KV1492)	Vacant	61.2	62.2	62.3	1.1	0.1	61.8	62.8	63.1	1.3	0.3	No
R869(K1492)	Multi-Family	62.2	63.2	64.1	1.9	0.9	63.0	64.0	65.0	2.0	1.0	No
R870(K2102)	Single-Family	70.8	71.9	72.7	1.9	0.8	71.8	72.8	73.5	1.7	0.7	Yes
R871(K2120)	Single-Family	61.1	62.1	63.2	2.1	1.1	62.1	63.1	64.2	2.1	1.1	No
R872(KV2147)	Vacant	60.7	61.7	63.0	2.3	1.3	61.8	62.9	64.2	2.4	1.3	No
R873(K2107)	Single-Family	70.5	71.6	72.4	1.9	0.8	71.4	72.5	73.2	1.8	0.7	Yes
R874(K1473)	Single-Family	51.9	52.9	53.6	1.7	0.7	52.6	53.6	54.4	1.8	0.8	No
R875(K1203)	Single-Family	65.0	66.0	68.1	3.1	2.1	65.8	66.8	68.8	3.0	2.0	Yes
R876(K2128)	Single-Family	60.7	61.7	62.7	2.0	1.0	61.7	62.7	63.7	2.0	1.0	No
R877(K40)	Single-Family	61.7	62.7	63.9	2.2	1.2	62.6	63.6	64.8	2.2	1.2	No
R878(K2141)	School	74.0	75.1	75.9	1.9	0.8	74.9	75.9	76.7	1.8	0.8	Yes
R879(K2121)	Single-Family	70.1	71.2	72.1	2.0	0.9	71.1	72.1	73.0	1.9	0.9	Yes
R880(K1202)	Single-Family	61.5	62.6	64.4	2.9	1.8	62.4	63.4	65.2	2.8	1.8	No
R881(K2130)	Single-Family	60.3	61.4	62.2	1.9	0.8	61.4	62.4	63.2	1.8	0.8	No
R882(K1211)	Single-Family	69.1	70.2	71.1	2.0	0.9	69.9	71.0	71.8	1.9	0.8	Yes
R883(K1209)	Single-Family	63.1	64.1	66.7	3.6	2.6	64.0	65.0	67.3	3.3	2.3	Yes
R884(K1213)	Single-Family	65.4	66.5	69.3	3.9	2.8	66.3	67.3	70.0	3.7	2.7	Yes
R885(K2126)	Single-Family	70.0	71.0	71.8	1.8	0.8	70.9	71.9	72.7	1.8	0.8	Yes
R886(K1206)	Single-Family	61.7	62.8	64.6	2.9	1.8	62.6	63.6	65.4	2.8	1.8	No
R887(K2113)	Single-Family	59.9	61.0	61.9	2.0	0.9	61.0	62.0	63.0	2.0	1.0	No
R888(K1218)	Single-Family	63.7	64.8	67.6	3.9	2.8	64.6	65.6	68.3	3.7	2.7	Yes
R889(K36)	Single-Family	61.9	62.9	65.5	3.6	2.6	62.8	63.8	66.2	3.4	2.4	Yes
R890(K2131)	Single-Family	69.4	70.5	71.4	2.0	0.9	70.4	71.4	72.3	1.9	0.9	Yes
R891(K2140)	Single-Family	59.4	60.4	61.3	1.9	0.9	60.5	61.5	62.3	1.8	0.8	No
R892(K1216)	Single-Family	62.2	63.2	64.7	2.5	1.5	63.1	64.1	65.5	2.4	1.4	No
R893(K1220)	Single-Family	62.1	63.2	65.5	3.4	2.3	63.0	64.0	66.3	3.3	2.3	Yes
R894(K2111)	Single-Family	69.0	70.1	70.9	1.9	0.8	69.9	71.0	71.8	1.9	0.8	Yes
R895(K1219)	Single-Family	55.9	56.9	58.6	2.7	1.7	56.6	57.6	59.3	2.7	1.7	No
R896(K2142)	Single-Family	59.1	60.1	60.9	1.8	0.8	60.2	61.2	61.9	1.7	0.7	No

Table 7. Alternative E Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approach/ Exceed NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R897(K2139)	Single-Family	68.5	69.6	70.5	2.0	0.9	69.5	70.5	71.3	1.8	0.8	Yes
R898(K1224)	Single-Family	61.2	62.3	64.7	3.5	2.4	62.1	63.1	65.4	3.3	2.3	No
R899(K1223)	Single-Family	61.3	62.3	64.4	3.1	2.1	62.1	63.2	65.2	3.1	2.0	No
R900(K1222)	Single-Family	56.9	58.0	59.6	2.7	1.6	57.6	58.6	60.3	2.7	1.7	No
R901(K1753)	Cemetery	60.7	61.7	63.1	2.4	1.4	61.4	62.4	63.8	2.4	1.4	No
M-47(K2141)	School	60.0	61.0	61.8	1.8	0.8	60.9	61.9	62.6	1.7	0.7	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
M-17(K161)	Single-Family	61.5	61.8	61.8	0.3	0.0	61.7	62.0	62.1	0.4	0.1	No
R1(K177)	Single-Family	62.9	63.9	64.6	1.7	0.7	63.4	64.4	65.2	1.8	0.8	No
R2(K163)	Single-Family	62.0	62.7	63.7	1.7	1.0	62.2	62.9	64.1	1.9	1.2	No
R3(K166)	Single-Family	62.7	63.6	64.4	1.7	0.8	62.8	63.8	64.7	1.9	0.9	No
R4(K173)	Single-Family	62.9	63.9	65.0	2.1	1.1	63.1	64.0	65.5	2.4	1.5	No
R5(K165)	Single-Family	62.3	63.1	64.3	2.0	1.2	62.6	63.4	64.7	2.1	1.3	No
R6(K169)	Single-Family	62.7	63.6	64.5	1.8	0.9	62.8	63.8	64.8	2.0	1.0	No
R7(K183)	Single-Family	65.0	65.9	67.5	2.5	1.6	65.4	66.3	67.9	2.5	1.6	Yes
R8(K176)	Single-Family	63.1	64.0	65.5	2.4	1.5	63.2	64.2	65.9	2.7	1.7	Yes
R9(K185)	Single-Family	65.1	66.0	67.5	2.4	1.5	65.4	66.4	67.9	2.5	1.5	Yes
R10(K192)	Single-Family	64.0	64.9	66.3	2.3	1.4	64.3	65.3	66.7	2.4	1.4	Yes
R11(K188)	Single-Family	65.1	66.1	67.7	2.6	1.6	65.5	66.5	68.0	2.5	1.5	Yes
R12(K195)	Single-Family	65.1	66.1	67.7	2.6	1.6	65.5	66.5	68.0	2.5	1.5	Yes
R13(K184 R-40)	Single-Family	65.5	66.4	67.6	2.1	1.2	65.6	66.6	68.0	2.4	1.4	Yes
R14(K199)	Single-Family	65.5	66.4	67.9	2.4	1.5	65.8	66.8	68.3	2.5	1.5	Yes
R15(K198)	Single-Family	66.4	67.4	68.3	1.9	0.9	66.6	67.6	68.8	2.2	1.2	Yes
M-18(K190)	Single-Family	66.4	67.4	68.2	1.8	0.8	66.5	67.5	68.5	2.0	1.0	Yes
R16(K205)	Single-Family	67.0	68.0	69.6	2.6	1.6	67.4	68.4	70.0	2.6	1.6	Yes
R17(K207)	Single-Family	67.1	68.1	69.7	2.6	1.6	67.5	68.5	70.1	2.6	1.6	Yes
R18(K201)	Single-Family	67.0	68.0	69.0	2.0	1.0	67.2	68.2	69.5	2.3	1.3	Yes
R19(K210)	Single-Family	67.2	68.2	69.7	2.5	1.5	67.6	68.6	70.1	2.5	1.5	Yes
R20(K211 R-42)	Single-Family	67.3	68.3	69.8	2.5	1.5	67.7	68.7	70.2	2.5	1.5	Yes
R21(K175 R-37)	Hotel	66.1	67.0	69.0	2.9	2.0	66.3	67.3	69.4	3.1	2.1	No
R22(K213)	Single-Family	67.3	68.3	69.8	2.5	1.5	67.7	68.7	70.2	2.5	1.5	Yes
R23(K214)	Single-Family	67.3	68.3	69.8	2.5	1.5	67.8	68.8	70.2	2.4	1.4	Yes
R24(K215)	Single-Family	67.3	68.3	69.8	2.5	1.5	67.7	68.8	70.2	2.5	1.4	Yes
R25(K220)	Single-Family	66.1	67.1	69.2	3.1	2.1	66.7	67.7	69.6	2.9	1.9	Yes
R26(KV220)	Vacant	68.0	69.0	70.3	2.3	1.3	68.4	69.5	70.7	2.3	1.2	Yes
R27(K225)	Restaurant/Bar	63.6	64.5	68.4	4.8	3.9	64.4	65.4	68.9	4.5	3.5	No
R28(K234)	Multi-Family	66.2	67.2	68.6	2.4	1.4	66.6	67.6	69.0	2.4	1.4	Yes
R29(KV235)	Vacant	68.0	69.0	70.1	2.1	1.1	68.4	69.4	70.6	2.2	1.2	Yes
R30(K235)	Single-Family	63.6	64.6	66.2	2.6	1.6	63.9	64.9	66.6	2.7	1.7	Yes
R31(K237)	Single-Family	60.9	61.9	64.0	3.1	2.1	61.3	62.4	64.5	3.2	2.1	No
R32(K27)	Single-Family	63.9	64.9	66.8	2.9	1.9	64.3	65.4	67.2	2.9	1.8	Yes
R33(K240)	Single-Family	64.4	65.3	67.4	3.0	2.1	64.9	65.9	67.8	2.9	1.9	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R34(K248)	Single-Family	63.6	64.6	66.8	3.2	2.2	64.2	65.2	67.1	2.9	1.9	Yes
R35(K238A)	Multi-Family	69.3	70.3	71.7	2.4	1.4	69.8	70.9	72.2	2.4	1.3	Yes
R36(K252)	Single-Family	64.8	65.8	67.3	2.5	1.5	65.2	66.3	67.7	2.5	1.4	Yes
M-19(K25)	Multi-Family	69.9	71.0	72.4	2.5	1.4	70.5	71.6	72.9	2.4	1.3	Yes
R37(K238)	Multi-Family	69.7	70.8	72.3	2.6	1.5	70.3	71.4	72.8	2.5	1.4	Yes
R38(K257)	Single-Family	64.2	65.2	66.9	2.7	1.7	64.6	65.7	67.4	2.8	1.7	Yes
R39(K247)	Multi-Family	69.9	70.9	72.1	2.2	1.2	70.4	71.4	72.6	2.2	1.2	Yes
R40(K261)	Single-Family	64.1	65.1	66.7	2.6	1.6	64.5	65.6	67.1	2.6	1.5	Yes
R41(K265)	Single-Family	64.8	65.8	66.9	2.1	1.1	65.2	66.2	67.3	2.1	1.1	Yes
R42(K254)	Single-Family	67.6	68.6	69.9	2.3	1.3	68.0	69.1	70.4	2.4	1.3	Yes
R43(K269)	Single-Family	64.8	65.9	67.2	2.4	1.3	65.2	66.3	67.5	2.3	1.2	Yes
R44(K285)	Single-Family	62.5	63.6	64.6	2.1	1.0	62.9	64.0	65.0	2.1	1.0	No
R45(K256)	Single-Family	65.4	66.4	67.5	2.1	1.1	65.9	66.9	68.0	2.1	1.1	Yes
R46(KV256)	Vacant	70.1	71.2	72.1	2.0	0.9	70.6	71.7	72.6	2.0	0.9	Yes
R47(K275)	Single-Family	65.7	66.7	67.6	1.9	0.9	66.1	67.2	68.1	2.0	0.9	Yes
R48(K296)	Single-Family	64.8	65.9	67.0	2.2	1.1	65.2	66.3	67.4	2.2	1.1	Yes
R49(K266)	Single-Family	65.1	66.1	66.8	1.7	0.7	65.5	66.6	67.1	1.6	0.5	Yes
R50(KV266)	Vacant	71.0	72.0	72.6	1.6	0.6	71.4	72.5	73.1	1.7	0.6	Yes
R51(K276)	Single-Family	68.9	69.9	70.7	1.8	0.8	69.3	70.4	71.2	1.9	0.8	Yes
R52(K255)	Single-Family	71.5	72.6	74.4	2.9	1.8	72.4	73.5	75.0	2.6	1.5	Yes
R53(K287)	Single-Family	70.3	71.3	71.9	1.6	0.6	70.7	71.8	72.3	1.6	0.5	Yes
R54(K294)	Single-Family	70.2	71.2	71.7	1.5	0.5	70.6	71.7	72.2	1.6	0.5	Yes
R55(K112)	Single-Family	72.4	73.5	74.7	2.3	1.2	73.1	74.2	75.3	2.2	1.1	Yes
R56(K403)	Recreation	66.7	67.8	68.2	1.5	0.4	67.1	68.2	68.7	1.6	0.5	Yes
R57(K302)	Single-Family	69.7	70.7	71.5	1.8	0.8	70.1	71.2	72.0	1.9	0.8	Yes
R58(K267)	Single-Family	72.6	73.8	74.8	2.2	1.0	73.3	74.4	75.4	2.1	1.0	Yes
R59(K270)	Single-Family	72.8	73.9	74.8	2.0	0.9	73.5	74.6	75.3	1.8	0.7	Yes
R60(K307)	Single-Family	69.5	70.6	71.2	1.7	0.6	69.9	71.0	71.7	1.8	0.7	Yes
R61(K312)	Single-Family	69.8	70.9	71.3	1.5	0.4	70.2	71.3	71.8	1.6	0.5	Yes
R62(K280 R-45)	Single-Family	72.9	74.0	74.7	1.8	0.7	73.6	74.7	75.2	1.6	0.5	Yes
R63(KV312)	Vacant	71.2	72.2	72.7	1.5	0.5	71.7	72.8	73.2	1.5	0.4	Yes
R64(K10)	Single-Family	73.1	74.2	74.6	1.5	0.4	73.7	74.8	75.0	1.3	0.2	Yes
R65(KV304)	Vacant	73.1	74.1	74.7	1.6	0.6	73.6	74.7	75.2	1.6	0.5	Yes
M-21(K304)	Single-Family	73.1	74.1	74.4	1.3	0.3	73.7	74.8	74.9	1.2	0.1	Yes
R66(K111)	Razed	73.0	74.1	74.3	1.3	0.2	73.6	74.7	74.8	1.2	0.1	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R67(KV111)	Vacant	73.3	74.3	74.8	1.5	0.5	73.8	74.9	75.4	1.6	0.5	Yes
R68(K179 R-38)	Hotel	71.0	72.0	72.6	1.6	0.6	71.4	72.4	72.8	1.4	0.4	Yes
R69(K407)	Multi-Family	68.6	69.6	70.0	1.4	0.4	69.0	70.1	70.6	1.6	0.5	Yes
R70(K229)	Hotel	70.8	71.8	71.9	1.1	0.1	71.0	72.0	72.2	1.2	0.2	Yes
R71(K440)	Single-Family	67.6	68.6	69.6	2.0	1.0	68.1	69.2	70.3	2.2	1.1	Yes
R72(K18)	Single-Family	67.8	68.8	69.9	2.1	1.1	68.4	69.5	70.6	2.2	1.1	Yes
R73(K194)	Restaurant/Bar	62.5	63.3	63.1	0.6	-0.2	62.8	63.6	63.4	0.6	-0.2	No
R74(K456)	Single-Family	67.5	68.5	69.5	2.0	1.0	68.0	69.1	70.3	2.3	1.2	Yes
R75(K229 R-43)	Commercial	66.2	67.2	68.1	1.9	0.9	66.2	67.3	68.3	2.1	1.0	No
R76(K418)	Multi-Family	69.6	70.8	71.5	1.9	0.7	70.3	71.5	72.0	1.7	0.5	Yes
R77(KV418)	Vacant	72.5	73.5	74.3	1.8	0.8	73.2	74.3	75.2	2.0	0.9	Yes
R78(K470)	Single-Family	66.1	67.2	68.5	2.4	1.3	66.7	67.8	69.2	2.5	1.4	Yes
R79(K127)	Hotel	62.0	62.9	62.9	0.9	0.0	62.4	63.4	63.2	0.8	-0.2	No
R80(KV460)	Vacant	71.9	72.9	73.7	1.8	0.8	72.5	73.6	74.5	2.0	0.9	Yes
R81(K485)	Single-Family	65.5	66.5	67.9	2.4	1.4	66.1	67.2	68.7	2.6	1.5	Yes
R82(KV460)	Vacant	71.4	72.4	73.3	1.9	0.9	72.0	73.1	74.1	2.1	1.0	Yes
R83(K513)	Single-Family	64.1	65.1	66.2	2.1	1.1	64.8	65.8	67.1	2.3	1.3	Yes
R84(K437)	Single-Family	74.6	75.6	77.1	2.5	1.5	75.3	76.4	78.1	2.8	1.7	Yes
R85(K494)	Single-Family	65.0	66.0	67.4	2.4	1.4	65.6	66.7	68.2	2.6	1.5	Yes
R86(K460)	Single-Family	65.1	66.4	68.6	3.5	2.2	66.3	67.6	69.6	3.3	2.0	Yes
R87(K467)	Single-Family	63.1	64.6	66.9	3.8	2.3	64.6	66.1	67.9	3.3	1.8	Yes
R88(K474)	Single-Family	60.9	62.6	63.3	2.4	0.7	62.5	64.1	64.3	1.8	0.2	No
R89(K446)	Multi-Family	74.8	75.8	77.6	2.8	1.8	75.6	76.7	78.6	3.0	1.9	Yes
R90(K532)	Single-Family	66.2	67.2	68.4	2.2	1.2	66.9	68.0	69.4	2.5	1.4	Yes
R91(K488)	Single-Family	60.3	62.1	63.9	3.6	1.8	62.4	64.2	65.0	2.6	0.8	No
M-20(K309)	Single-Family	68.3	69.3	70.1	1.8	0.8	68.6	69.6	70.5	1.9	0.9	Yes
R92(K518)	Single-Family	67.4	68.6	70.0	2.6	1.4	68.3	69.5	71.0	2.7	1.5	Yes
R93(K455)	Single-Family	74.6	75.7	77.5	2.9	1.8	75.4	76.5	78.5	3.1	2.0	Yes
R94(K465)	Single-Family	74.1	75.1	76.8	2.7	1.7	74.8	75.9	77.9	3.1	2.0	Yes
R95(K314 R-46)	Single-Family	70.5	71.5	73.4	2.9	1.9	71.0	72.1	73.7	2.7	1.6	Yes
R96(K526)	Single-Family	62.9	64.3	66.7	3.8	2.4	64.2	65.6	67.8	3.6	2.2	Yes
R97(K115)	Recreation	66.1	67.1	72.1	6.0	5.0	66.5	67.6	72.5	6.0	4.9	Yes
R97a(K115)	Recreation	71.0	72.0	73.9	2.9	1.9	71.5	72.6	74.6	3.1	2.0	Yes
R97b(K115)	Recreation	69.9	71.0	72.5	2.6	1.5	70.4	71.5	73.2	2.8	1.7	Yes
R97c(K115)	Recreation	67.1	68.1	71.4	4.3	3.3	67.6	68.7	71.8	4.2	3.1	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R97d(K115)	Recreation	66.7	67.7	71.2	4.5	3.5	67.0	68.1	71.6	4.6	3.5	Yes
R97e(K115)	Recreation	65.5	66.5	71.3	5.8	4.8	65.9	66.9	71.7	5.8	4.8	Yes
R97f(K115)	Recreation	62.3	62.9	72.1	9.8	9.2	62.4	63.2	72.4	10.0	9.2	Yes
R97g(K115)	Recreation	70.9	71.7	73.1	2.2	1.4	71.0	71.9	73.3	2.3	1.4	Yes
R97h(K115)	Recreation	70.0	71.0	72.6	2.6	1.6	70.2	71.3	72.8	2.6	1.5	Yes
R97i(K115)	Recreation	68.6	69.6	69.7	1.1	0.1	68.7	69.8	70.1	1.4	0.3	Yes
R97j(K115)	Recreation	68.7	69.7	70.2	1.5	0.5	69.0	70.0	70.8	1.8	0.8	Yes
R97k(K115)	Recreation	65.4	66.4	69.7	4.3	3.3	65.8	66.8	70.1	4.3	3.3	Yes
R97l(K115)	Recreation	64.4	65.4	68.9	4.5	3.5	64.9	66.0	69.4	4.5	3.4	Yes
R97m(K115)	Recreation	66.8	67.8	71.0	4.2	3.2	67.1	68.1	71.4	4.3	3.3	Yes
R97n(K115)	Recreation	68.7	69.8	72.7	4.0	2.9	69.3	70.4	73.0	3.7	2.6	Yes
R97o(K115)	Recreation	69.4	70.5	72.9	3.5	2.4	69.9	71.0	73.4	3.5	2.4	Yes
R97p(K115)	Recreation	67.5	68.6	71.1	3.6	2.5	68.0	69.1	71.6	3.6	2.5	Yes
R97q(K115)	Recreation	66.2	67.2	70.8	4.6	3.6	66.6	67.7	71.3	4.7	3.6	Yes
R97r(K115)	Recreation	66.3	67.3	70.9	4.6	3.6	66.8	67.9	71.5	4.7	3.6	Yes
R97s(K115)	Recreation	68.0	69.0	72.1	4.1	3.1	68.6	69.7	72.6	4.0	2.9	Yes
R97t(K115)	Recreation	68.9	69.9	72.4	3.5	2.5	69.4	70.5	72.9	3.5	2.4	Yes
R97u(K115)	Recreation	69.7	70.8	72.6	2.9	1.8	70.1	71.2	73.0	2.9	1.8	Yes
R97v(K115)	Recreation	66.2	67.2	71.4	5.2	4.2	66.6	67.7	71.8	5.2	4.1	Yes
R97w(K115)	Recreation	67.4	68.4	71.6	4.2	3.2	67.7	68.7	72.0	4.3	3.3	Yes
R97x(K115)	Recreation	65.4	66.4	71.9	6.5	5.5	65.8	66.9	72.4	6.6	5.5	Yes
R97y(K115)	Recreation	74.4	75.0	73.5	-0.9	-1.5	74.3	75.0	73.9	-0.4	-1.1	Yes
R97z(K115)	Recreation	71.9	72.9	73.8	1.9	0.9	72.0	73.0	74.2	2.2	1.2	Yes
R97aa(K115)	Recreation	73.0	74.0	73.8	0.8	-0.2	73.3	74.3	74.2	0.9	-0.1	Yes
R139(K409 R-47)	Recreation	69.3	70.3	72.5	3.2	2.2	69.7	70.8	73.0	3.3	2.2	Yes
R98(K480)	Single-Family	73.7	74.8	76.4	2.7	1.6	74.5	75.6	77.5	3.0	1.9	Yes
M-22(K484)	Single-Family	73.6	74.7	76.3	2.7	1.6	74.4	75.5	77.3	2.9	1.8	Yes
R99(K473)	Single-Family	74.2	75.2	77.0	2.8	1.8	75.0	76.1	78.0	3.0	1.9	Yes
R100(K318)	Single-Family	70.0	71.0	73.0	3.0	2.0	70.5	71.6	73.4	2.9	1.8	Yes
R101(K492)	Single-Family	73.5	74.5	76.1	2.6	1.6	74.2	75.3	77.1	2.9	1.8	Yes
R102(K15)	Razed	72.0	73.0	75.0	3.0	2.0	72.8	73.9	76.1	3.3	2.2	Yes
R103(K1771)	Single-Family	65.3	66.4	67.5	2.2	1.1	66.0	67.1	68.4	2.4	1.3	Yes
R104(K1832)	Single-Family	65.1	66.1	67.3	2.2	1.2	65.8	66.8	68.2	2.4	1.4	Yes
R105(K524)	Multi-Family	71.7	72.7	75.0	3.3	2.3	72.5	73.6	76.1	3.6	2.5	Yes
R106(KV492)	Vacant	73.4	74.4	75.9	2.5	1.5	74.1	75.2	77.0	2.9	1.8	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R107(K541)	Single-Family	63.4	64.7	66.7	3.3	2.0	64.6	66.0	67.7	3.1	1.7	Yes
R108(K354)	Single-Family	69.5	70.5	72.3	2.8	1.8	70.0	71.1	73.0	3.0	1.9	Yes
R109(K349)	Single-Family	69.1	70.1	72.3	3.2	2.2	69.6	70.7	72.7	3.1	2.0	Yes
R110(K361)	Single-Family	68.8	69.9	71.9	3.1	2.0	69.3	70.4	72.6	3.3	2.2	Yes
R111(K527)	Single-Family	70.9	71.9	74.9	4.0	3.0	71.7	72.8	76.0	4.3	3.2	Yes
R112(K1841)	Single-Family	65.4	66.5	67.5	2.1	1.0	66.1	67.2	68.4	2.3	1.2	Yes
R113(K548)	Single-Family	65.2	66.4	69.3	4.1	2.9	66.4	67.7	70.5	4.1	2.8	Yes
R114(K1846)	Single-Family	65.5	66.6	67.7	2.2	1.1	66.2	67.3	68.7	2.5	1.4	Yes
R115(KV536)	Vacant	72.2	73.2	74.8	2.6	1.6	72.9	74.0	75.8	2.9	1.8	Yes
R116(K1816)	Single-Family	66.4	67.4	68.8	2.4	1.4	67.1	68.2	69.8	2.7	1.6	Yes
R117(KV1846)	Vacant	66.5	67.5	68.7	2.2	1.2	67.1	68.2	69.6	2.5	1.4	Yes
R118(K335)	Single-Family	67.0	68.0	69.7	2.7	1.7	67.5	68.6	70.1	2.6	1.5	Yes
R119(K322)	Single-Family	64.4	65.4	67.4	3.0	2.0	64.9	65.9	67.9	3.0	2.0	Yes
R120(KV1795)	Vacant	70.2	71.3	72.7	2.5	1.4	71.0	72.2	73.7	2.7	1.5	Yes
R121(K194 R-39)	Restaurant/Bar	61.2	62.1	62.9	1.7	0.8	61.7	62.6	63.1	1.4	0.5	No
R122(K365)	Single-Family	68.1	69.1	71.4	3.3	2.3	68.6	69.7	72.1	3.5	2.4	Yes
R123(K536)	Multi-Family	69.3	70.4	74.9	5.6	4.5	70.1	71.2	75.9	5.8	4.7	Yes
R124(K364)	Single-Family	66.4	67.5	70.0	3.6	2.5	66.9	68.0	70.9	4.0	2.9	Yes
R125(K1795)	Single-Family	65.1	66.5	68.0	2.9	1.5	66.4	67.8	69.2	2.8	1.4	Yes
R126(K370)	Multi-Family	68.1	69.2	71.4	3.3	2.2	68.6	69.7	72.1	3.5	2.4	Yes
R127(K1800)	Single-Family	66.3	67.5	70.0	3.7	2.5	67.4	68.6	71.2	3.8	2.6	Yes
R128(K1877)	Single-Family	65.9	66.9	68.1	2.2	1.2	66.6	67.6	69.1	2.5	1.5	Yes
R129(K340)	Single-Family	60.5	61.5	65.7	5.2	4.2	61.1	62.2	66.1	5.0	3.9	Yes
R130(K308)	Multi-Family	63.7	64.7	65.8	2.1	1.1	64.2	65.2	66.2	2.0	1.0	Yes
R131(K299)	Single-Family	64.1	65.1	66.1	2.0	1.0	64.6	65.6	66.6	2.0	1.0	Yes
R132(K545)	Single-Family	68.3	69.4	75.2	6.9	5.8	69.2	70.3	76.3	7.1	6.0	Yes
R133(K1811)	Single-Family	62.1	63.5	66.6	4.5	3.1	63.7	65.1	67.8	4.1	2.7	Yes
R134(K313)	Single-Family	63.2	64.2	65.1	1.9	0.9	63.7	64.8	65.5	1.8	0.7	No
R135(K346)	Single-Family	62.1	63.2	66.1	4.0	2.9	62.8	63.9	66.6	3.8	2.7	Yes
R136(K326)	Office	61.6	62.6	64.6	3.0	2.0	62.1	63.1	65.0	2.9	1.9	No
R137(K194 R-41)	Restaurant/Bar	62.8	63.8	66.2	3.4	2.4	63.9	64.8	65.7	1.8	0.9	No
R138(K552)	Single-Family	69.0	70.0	75.5	6.5	5.5	69.9	70.9	76.6	6.7	5.7	Yes
R140(K352)	Single-Family	61.7	62.8	65.4	3.7	2.6	62.4	63.5	65.9	3.5	2.4	Yes
R141(K317)	Single-Family	62.6	63.6	64.6	2.0	1.0	63.0	64.1	65.1	2.1	1.0	No
R142(K368)	Single-Family	64.6	65.7	68.0	3.4	2.3	65.2	66.3	68.6	3.4	2.3	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R143(K562)	Single-Family	69.1	70.1	75.6	6.5	5.5	69.9	71.0	76.7	6.8	5.7	Yes
R144(K1784)	Single-Family	69.3	70.4	75.7	6.4	5.3	70.2	71.3	76.8	6.6	5.5	Yes
R145(K229 R-44)	Commercial	63.6	64.5	64.4	0.8	-0.1	63.4	64.3	64.1	0.7	-0.2	No
R146(K1772)	Single-Family	62.0	63.4	66.0	4.0	2.6	63.6	65.0	67.2	3.6	2.2	Yes
R147(KV1801)	Vacant	70.5	71.5	74.0	3.5	2.5	71.3	72.4	75.1	3.8	2.7	Yes
R148(K360)	Single-Family	60.9	62.0	64.8	3.9	2.8	61.6	62.6	65.3	3.7	2.7	No
R149(K1790 R-48)	Single-Family	69.5	70.5	75.8	6.3	5.3	70.3	71.4	76.9	6.6	5.5	Yes
R150(K353)	Multi-Family	57.0	58.0	61.1	4.1	3.1	57.7	58.8	61.6	3.9	2.8	No
R151(K337)	Multi-Family	52.4	53.4	56.0	3.6	2.6	53.1	54.2	56.9	3.8	2.7	No
R152(K373)	Single-Family	65.5	66.5	69.4	3.9	2.9	66.1	67.2	70.0	3.9	2.8	Yes
R153(K379)	Single-Family	65.9	66.9	69.8	3.9	2.9	66.5	67.6	70.5	4.0	2.9	Yes
R154(K358)	Multi-Family	54.6	55.6	58.7	4.1	3.1	55.2	56.3	59.4	4.2	3.1	No
R155(K362)	Single-Family	57.7	58.7	60.9	3.2	2.2	58.3	59.4	61.5	3.2	2.1	No
R156(K344)	Single-Family	57.0	58.0	61.9	4.9	3.9	57.6	58.7	62.3	4.7	3.6	No
R157(K347)	Single-Family	57.8	58.8	62.0	4.2	3.2	58.4	59.5	62.6	4.2	3.1	No
R158(K367)	Single-Family	55.3	56.4	59.3	4.0	2.9	56.0	57.1	60.1	4.1	3.0	No
R159(K401)	Single-Family	63.4	64.5	67.5	4.1	3.0	64.1	65.2	68.2	4.1	3.0	Yes
R160(K382)	Single-Family	66.4	67.5	70.3	3.9	2.8	67.1	68.2	71.0	3.9	2.8	Yes
R161(K1777)	Single-Family	59.9	61.6	63.2	3.3	1.6	61.9	63.5	64.4	2.5	0.9	No
R162(K386)	Single-Family	67.0	68.1	70.6	3.6	2.5	67.7	68.8	71.4	3.7	2.6	Yes
R163(K1801)	Single-Family	68.2	69.2	75.3	7.1	6.1	69.1	70.2	76.4	7.3	6.2	Yes
R164(K332)	Studio	57.4	58.4	61.8	4.4	3.4	58.0	59.1	62.2	4.2	3.1	No
R165(K1885)	Single-Family	65.4	66.2	66.8	1.4	0.6	65.9	66.7	67.7	1.8	1.0	Yes
R166(K1828)	Single-Family	59.9	61.8	63.3	3.4	1.5	62.2	63.9	64.4	2.2	0.5	No
R167(K1883)	Single-Family	65.1	65.9	66.6	1.5	0.7	65.6	66.5	67.5	1.9	1.0	Yes
R168(K396)	Single-Family	67.4	68.4	70.5	3.1	2.1	67.9	69.0	71.3	3.4	2.3	Yes
R169(K388)	Single-Family	67.2	68.2	70.6	3.4	2.4	67.8	68.9	71.4	3.6	2.5	Yes
R170(K1812)	Single-Family	67.7	68.7	74.6	6.9	5.9	68.6	69.7	75.6	7.0	5.9	Yes
R171(K402)	Single-Family	63.2	64.2	67.6	4.4	3.4	63.8	64.9	68.4	4.6	3.5	Yes
R172(K1839)	Single-Family	59.6	61.5	63.1	3.5	1.6	61.9	63.5	64.2	2.3	0.7	No
R173(K1882)	Single-Family	65.4	66.3	66.7	1.3	0.4	66.0	66.9	67.6	1.6	0.7	Yes
R174(K1765)	Single-Family	66.3	67.1	67.7	1.4	0.6	66.9	67.8	68.6	1.7	0.8	Yes
R175(K1915)	Single-Family	66.8	67.6	68.3	1.5	0.7	67.3	68.1	69.1	1.8	1.0	Yes
R176(K1759)	Single-Family	64.5	65.2	66.1	1.6	0.9	64.9	65.7	66.9	2.0	1.2	Yes
R177(K1770)	Single-Family	67.6	68.6	74.0	6.4	5.4	68.5	69.6	75.1	6.6	5.5	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R178(K371)	Single-Family	51.8	52.8	55.6	3.8	2.8	52.5	53.6	56.1	3.6	2.5	No
R179(K1879)	Single-Family	63.7	64.4	67.1	3.4	2.7	64.3	65.2	68.0	3.7	2.8	Yes
R180(K1909)	Single-Family	67.0	67.8	68.8	1.8	1.0	67.5	68.4	69.8	2.3	1.4	Yes
R181(K381)	Multi-Family	51.2	52.3	55.6	4.4	3.3	51.9	53.0	55.9	4.0	2.9	No
R182(K378)	Single-Family	49.5	50.5	53.1	3.6	2.6	50.1	51.2	53.5	3.4	2.3	No
R183(K384)	Single-Family	58.6	59.6	62.5	3.9	2.9	59.3	60.4	63.3	4.0	2.9	No
R184(K389)	Single-Family	58.4	59.4	62.3	3.9	2.9	59.1	60.2	63.1	4.0	2.9	No
R185(K1820)	Single-Family	66.6	67.6	73.1	6.5	5.5	67.4	68.4	74.2	6.8	5.8	Yes
R186(K369)	Single-Family	58.2	59.5	58.9	0.7	-0.6	58.4	59.6	59.2	0.8	-0.4	No
R187(K1755)	Razed	63.5	64.3	65.6	2.1	1.3	64.1	65.0	66.5	2.4	1.5	Yes
R188(K1903)	Single-Family	61.5	62.3	63.4	1.9	1.1	62.2	63.0	64.2	2.0	1.2	No
R189(K1873)	Single-Family	63.9	64.7	66.3	2.4	1.6	64.6	65.5	67.2	2.6	1.7	Yes
R190(K1834)	Single-Family	66.7	67.7	72.5	5.8	4.8	67.5	68.6	73.6	6.1	5.0	Yes
R191(K1871)	Single-Family	64.4	65.2	66.6	2.2	1.4	65.1	66.0	67.5	2.4	1.5	Yes
R192(K427)	Single-Family	63.8	64.9	68.5	4.7	3.6	64.5	65.6	69.3	4.8	3.7	Yes
R193(K387)	Multi-Family	59.0	60.3	59.8	0.8	-0.5	59.2	60.4	60.1	0.9	-0.3	No
R194(K1864)	Single-Family	64.1	65.0	66.6	2.5	1.6	65.0	66.0	67.6	2.6	1.6	Yes
R195(K1844)	Single-Family	66.7	67.7	71.1	4.4	3.4	67.4	68.5	72.3	4.9	3.8	Yes
R196(K400)	Multi-Family	61.1	62.2	65.5	4.4	3.3	61.6	62.8	66.3	4.7	3.5	Yes
R197(K380)	Multi-Family	56.4	57.7	57.6	1.2	-0.1	56.7	57.9	58.0	1.3	0.1	No
R198(K1850)	Single-Family	67.0	68.0	71.1	4.1	3.1	67.7	68.8	72.3	4.6	3.5	Yes
R199(K397)	Razed	59.1	60.3	61.1	2.0	0.8	59.5	60.7	61.8	2.3	1.1	No
R200(K432)	Single-Family	64.6	65.7	69.0	4.4	3.3	65.2	66.3	69.8	4.6	3.5	Yes
R201(K383)	Multi-Family	56.1	57.4	57.4	1.3	0.0	56.4	57.6	57.8	1.4	0.2	No
R202(K413)	Multi-Family	62.1	63.3	64.7	2.6	1.4	62.7	63.8	65.5	2.8	1.7	No
R203(K1913)	Single-Family	56.3	57.2	58.4	2.1	1.2	57.0	57.9	59.3	2.3	1.4	No
R204(K1891)	Single-Family	65.1	66.0	67.7	2.6	1.7	65.9	67.0	68.7	2.8	1.7	Yes
R205(K1861)	Multi-Family	67.2	68.1	71.0	3.8	2.9	67.9	68.9	72.2	4.3	3.3	Yes
R206(K445)	Multi-Family	63.9	64.9	68.4	4.5	3.5	64.4	65.5	69.1	4.7	3.6	Yes
R207(K420)	Multi-Family	62.0	63.2	64.0	2.0	0.8	62.5	63.6	64.7	2.2	1.1	No
R208(K1764)	Day Care	66.1	67.0	68.6	2.5	1.6	66.8	67.7	69.6	2.8	1.9	Yes
M-23(K506)	Recreation	68.1	69.1	63.6	-4.5	-5.5	68.5	69.6	63.8	-4.7	-5.8	No
R209(K1897)	Single-Family	62.2	63.2	65.5	3.3	2.3	63.1	64.2	66.6	3.5	2.4	Yes
R210(K425)	Single-Family	59.3	60.6	60.9	1.6	0.3	59.6	60.8	61.2	1.6	0.4	No
R211(K1761)	Single-Family	67.7	68.7	71.6	3.9	2.9	68.5	69.5	72.7	4.2	3.2	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R212(K454)	Multi-Family	63.8	64.9	68.2	4.4	3.3	64.4	65.5	68.9	4.5	3.4	Yes
R213(K1905)	Single-Family	62.8	63.8	66.3	3.5	2.5	63.7	64.8	67.4	3.7	2.6	Yes
R214(K435)	Single-Family	58.9	60.2	60.4	1.5	0.2	59.2	60.4	60.8	1.6	0.4	No
R215(K1926)	Multi-Family	57.7	58.7	61.6	3.9	2.9	58.6	59.7	62.6	4.0	2.9	No
R216(K422)	Single-Family	57.8	59.0	59.8	2.0	0.8	58.4	59.5	60.3	1.9	0.8	No
R217(K1932)	Single-Family	56.4	57.4	59.0	2.6	1.6	57.2	58.3	60.1	2.9	1.8	No
R218(K461)	Single-Family	64.1	65.2	68.4	4.3	3.2	64.7	65.8	69.1	4.4	3.3	Yes
R219(K1910)	Single-Family	62.9	63.9	66.7	3.8	2.8	63.8	64.9	67.8	4.0	2.9	Yes
R220(K457)	Single-Family	62.1	63.3	64.5	2.4	1.2	62.6	63.7	65.2	2.6	1.5	No
R221(K1938)	Single-Family	59.5	60.6	63.0	3.5	2.4	60.3	61.4	64.1	3.8	2.7	No
R222(K439)	Multi-Family	56.2	57.4	59.1	2.9	1.7	56.8	57.9	60.0	3.2	2.1	No
R223(K444)	Single-Family	57.5	58.7	60.8	3.3	2.1	58.1	59.2	61.7	3.6	2.5	No
R224(K1919)	Multi-Family	64.4	65.5	68.0	3.6	2.5	65.3	66.4	69.1	3.8	2.7	Yes
R225(K412)	Single-Family	48.1	49.2	51.0	2.9	1.8	48.6	49.7	51.5	2.9	1.8	No
R226(K447)	Single-Family	57.9	59.1	61.1	3.2	2.0	58.4	59.6	61.9	3.5	2.3	No
R227(K1944)	Single-Family	59.3	60.3	62.9	3.6	2.6	60.1	61.2	64.0	3.9	2.8	No
R228(K419)	Single-Family	43.9	44.8	47.9	4.0	3.1	44.5	45.5	48.6	4.1	3.1	No
R229(K430)	Single-Family	50.5	51.6	53.3	2.8	1.7	51.0	52.2	54.0	3.0	1.8	No
R230(K1927)	Multi-Family	64.6	65.6	68.1	3.5	2.5	65.5	66.6	69.2	3.7	2.6	Yes
R231(K626)	Multi-Family	58.1	59.1	60.5	2.4	1.4	58.8	59.9	61.5	2.7	1.6	No
R232(K452)	Single-Family	55.7	56.8	58.7	3.0	1.9	56.2	57.4	59.4	3.2	2.0	No
R233(K466)	Multi-Family	62.9	64.1	65.6	2.7	1.5	63.6	64.7	66.5	2.9	1.8	Yes
R234(K477)	Razed	64.0	65.2	66.7	2.7	1.5	64.7	65.8	67.6	2.9	1.8	Yes
R235(K495)	Single-Family	64.9	66.1	67.7	2.8	1.6	65.6	66.7	68.5	2.9	1.8	Yes
R236(K1937)	Single-Family	64.0	65.1	68.0	4.0	2.9	65.0	66.1	69.1	4.1	3.0	Yes
R237(K620)	Single-Family	63.4	64.4	65.8	2.4	1.4	64.2	65.3	66.8	2.6	1.5	Yes
R238(K451)	Single-Family	49.5	50.5	53.0	3.5	2.5	50.2	51.2	53.7	3.5	2.5	No
R239(K649)	Single-Family	50.3	51.3	52.1	1.8	0.8	50.5	51.6	53.0	2.5	1.4	No
R240(K1954)	Single-Family	61.3	62.3	65.4	4.1	3.1	62.3	63.4	66.5	4.2	3.1	Yes
R241(K478)	Single-Family	59.3	60.4	63.0	3.7	2.6	60.1	61.2	64.1	4.0	2.9	No
R242(K644)	Single-Family	50.3	51.3	52.0	1.7	0.7	50.3	51.5	52.9	2.6	1.4	No
R243(K1948)	Single-Family	63.4	64.4	68.0	4.6	3.6	64.4	65.5	69.1	4.7	3.6	Yes
R244(K458)	Single-Family	51.1	52.1	55.4	4.3	3.3	51.9	52.9	56.2	4.3	3.3	No
R245(K525)	Single-Family	65.3	66.4	68.4	3.1	2.0	66.0	67.1	69.3	3.3	2.2	Yes
R246(K1963)	Single-Family	60.6	61.7	64.6	4.0	2.9	61.6	62.7	65.7	4.1	3.0	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R247(K643)	Single-Family	50.1	51.1	51.9	1.8	0.8	50.2	51.3	52.8	2.6	1.5	No
R248(K519)	Multi-Family	64.3	65.4	67.5	3.2	2.1	65.0	66.1	68.5	3.5	2.4	Yes
R249(K1947)	Restaurant/Bar	65.3	66.3	69.3	4.0	3.0	66.3	67.4	70.4	4.1	3.0	No
R250(K642)	Single-Family	52.8	53.7	54.3	1.5	0.6	53.2	54.3	55.4	2.2	1.1	No
R251(K1966)	Commercial	59.6	60.6	61.8	2.2	1.2	60.4	61.5	62.8	2.4	1.3	No
R252(K469)	Single-Family	54.1	55.1	57.9	3.8	2.8	54.7	55.8	58.8	4.1	3.0	No
R253(K499)	Single-Family	61.5	62.5	65.4	3.9	2.9	62.2	63.3	66.5	4.3	3.2	Yes
R254(K534)	Restaurant/Bar	65.4	66.5	68.7	3.3	2.2	66.0	67.1	69.6	3.6	2.5	No
R255(K510)	Multi-Family	62.0	63.1	65.5	3.5	2.4	62.8	63.9	66.5	3.7	2.6	Yes
R256(K641)	Single-Family	55.4	56.4	57.2	1.8	0.8	56.1	57.2	58.3	2.2	1.1	No
R257(K475)	Razed	52.3	53.2	55.9	3.6	2.7	52.9	54.0	56.8	3.9	2.8	No
R258(K614)	Single-Family	65.2	66.2	68.4	3.2	2.2	66.1	67.1	69.5	3.4	2.4	Yes
R259(K639)	Multi-Family	62.3	63.3	65.0	2.7	1.7	63.2	64.3	66.1	2.9	1.8	Yes
R260(K486)	Single-Family	54.7	55.7	58.2	3.5	2.5	55.4	56.4	59.2	3.8	2.8	No
R261(K491)	Single-Family	54.3	55.3	58.1	3.8	2.8	54.9	56.0	58.9	4.0	2.9	No
R262(K613)	Single-Family	65.8	66.8	69.1	3.3	2.3	66.7	67.8	70.2	3.5	2.4	Yes
R263(K498)	Single-Family	51.0	51.9	54.5	3.5	2.6	51.6	52.6	55.1	3.5	2.5	No
R264(K1781)	Office	68.3	69.4	71.0	2.7	1.6	68.9	69.9	71.6	2.7	1.7	Yes
R265(K503)	Single-Family	49.4	50.3	53.0	3.6	2.7	50.0	51.0	53.6	3.6	2.6	No
R266(K610)	Single-Family	66.1	67.2	69.4	3.3	2.2	67.0	68.1	70.5	3.5	2.4	Yes
R267(K608)	Single-Family	67.2	68.2	70.2	3.0	2.0	68.1	69.2	71.3	3.2	2.1	Yes
R268(K559)	Commercial	65.1	66.0	68.0	2.9	2.0	65.6	66.5	68.9	3.3	2.4	No
R269(K607)	Single-Family	68.2	69.2	71.0	2.8	1.8	69.1	70.2	72.1	3.0	1.9	Yes
R270(K606 R-50)	Razed	69.2	70.2	71.6	2.4	1.4	70.1	71.2	72.7	2.6	1.5	Yes
R271(K515)	Single-Family	55.3	56.3	59.6	4.3	3.3	56.3	57.3	60.5	4.2	3.2	No
R272(K722)	Single-Family	68.7	69.3	69.3	0.6	0.0	66.3	67.4	68.4	2.1	1.0	Yes
R273(K729)	Multi-Family	67.5	68.4	68.3	0.8	-0.1	65.9	67.0	68.0	2.1	1.0	Yes
R274(K1791)	Multi-Family	62.1	63.1	64.4	2.3	1.3	62.7	63.8	65.1	2.4	1.3	No
R275(K720)	Church	64.3	65.3	66.4	2.1	1.1	64.5	65.6	67.3	2.8	1.7	Yes
R276(K522)	Single-Family	58.0	58.7	61.2	3.2	2.5	58.5	59.3	62.0	3.5	2.7	No
R277(K680)	School	70.9	71.9	72.5	1.6	0.6	71.2	72.2	73.5	2.3	1.3	Yes
R278(K555)	Multi-Family	62.2	62.7	64.7	2.5	2.0	62.5	63.2	65.3	2.8	2.1	No
R279(K1796)	Single-Family	62.2	63.2	64.2	2.0	1.0	62.7	63.8	64.8	2.1	1.0	No
R280(K554)	Multi-Family	60.9	61.4	63.9	3.0	2.5	61.3	61.9	64.5	3.2	2.6	No
M-24(K655)	Single-Family	72.4	73.4	73.3	0.9	-0.1	72.8	73.9	74.1	1.3	0.2	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R281(K1802)	Single-Family	61.6	62.6	63.4	1.8	0.8	62.2	63.2	64.0	1.8	0.8	No
R282(K730)	Single-Family	56.6	57.7	59.0	2.4	1.3	57.5	58.6	60.1	2.6	1.5	No
R283(K735)	Single-Family	55.8	56.8	58.3	2.5	1.5	56.6	57.7	59.4	2.8	1.7	No
R284(K523)	Multi-Family	58.4	58.8	61.1	2.7	2.3	58.7	59.1	61.5	2.8	2.4	No
R285(K755)	Single-Family	55.1	56.1	58.1	3.0	2.0	56.0	57.1	59.2	3.2	2.1	No
R286(K549)	Multi-Family	61.0	61.5	63.7	2.7	2.2	61.3	61.9	64.3	3.0	2.4	No
R287(K645)	Single-Family	72.0	73.0	73.5	1.5	0.5	72.3	73.3	74.3	2.0	1.0	Yes
R288(K715)	Church	63.2	64.2	64.8	1.6	0.6	63.8	64.9	65.8	2.0	0.9	Yes
R289(K1818)	Multi-Family	63.9	64.9	66.1	2.2	1.2	64.4	65.5	66.8	2.4	1.3	Yes
R290(K102)	Multi-Family	59.6	60.3	62.7	3.1	2.4	60.1	60.9	63.5	3.4	2.6	No
R291(K1785)	Single-Family	61.3	62.3	63.7	2.4	1.4	61.9	63.0	64.6	2.7	1.6	No
R292(K546)	Single-Family	60.7	61.0	63.3	2.6	2.3	60.9	61.4	63.8	2.9	2.4	No
R293(K699)	Single-Family	64.8	65.8	66.3	1.5	0.5	65.5	66.6	67.3	1.8	0.7	Yes
R294(K1805)	Multi-Family	62.6	63.6	64.6	2.0	1.0	63.2	64.3	65.4	2.2	1.1	No
R295(K791)	Single-Family	57.8	58.8	60.0	2.2	1.2	58.5	59.6	61.0	2.5	1.4	No
R296(K1837A)	Multi-Family	64.9	66.0	67.2	2.3	1.2	65.4	66.5	67.9	2.5	1.4	Yes
R297(K909)	Park/Playground/Picnic	58.5	59.5	60.6	2.1	1.1	59.2	60.3	61.6	2.4	1.3	No
R298(K784)	Single-Family	57.9	59.0	60.0	2.1	1.0	58.7	59.8	60.9	2.2	1.1	No
R299(K1792)	Single-Family	56.5	57.5	60.0	3.5	2.5	57.1	58.2	60.9	3.8	2.7	No
R300(K775)	Single-Family	49.6	50.6	53.2	3.6	2.6	50.6	51.6	54.2	3.6	2.6	No
R301(K782)	Single-Family	54.2	55.2	57.2	3.0	2.0	55.1	56.2	58.2	3.1	2.0	No
R302(K966)	Single-Family	46.0	47.0	48.8	2.8	1.8	46.3	47.4	49.6	3.3	2.2	No
R303(K687)	Single-Family	70.7	71.7	72.9	2.2	1.2	71.4	72.5	73.9	2.5	1.4	Yes
R304(K963)	Single-Family	57.3	58.3	59.3	2.0	1.0	58.1	59.1	60.4	2.3	1.3	No
R305(K1809)	Single-Family	61.6	62.7	64.0	2.4	1.3	62.2	63.3	64.8	2.6	1.5	No
R306(K1837)	Multi-Family	65.5	66.6	67.8	2.3	1.2	66.1	67.1	68.5	2.4	1.4	Yes
R307(K759)	Single-Family	50.9	51.9	54.8	3.9	2.9	52.0	53.0	55.8	3.8	2.8	No
R308(K682)	Single-Family	72.0	73.1	74.2	2.2	1.1	72.8	73.9	75.1	2.3	1.2	Yes
R309(K779)	Multi-Family	60.4	61.4	62.2	1.8	0.8	61.1	62.2	63.2	2.1	1.0	No
R310(K1855 R-49)	Single-Family	68.3	69.3	70.5	2.2	1.2	68.8	69.8	71.1	2.3	1.3	Yes
R311(K692)	Single-Family	67.5	68.5	69.2	1.7	0.7	68.3	69.3	70.2	1.9	0.9	Yes
R312(K950)	Single-Family	57.6	58.6	59.7	2.1	1.1	58.4	59.4	60.8	2.4	1.4	No
R313(K1815)	Single-Family	61.2	62.3	64.0	2.8	1.7	61.8	62.9	64.8	3.0	1.9	No
R314(K678)	Single-Family	72.0	73.0	74.1	2.1	1.1	72.8	73.9	75.2	2.4	1.3	Yes
R315(K942)	Single-Family	58.0	59.0	60.0	2.0	1.0	58.8	59.9	61.0	2.2	1.1	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R316(K935)	Single-Family	58.6	59.7	60.4	1.8	0.7	59.4	60.5	61.5	2.1	1.0	No
R317(K923)	Single-Family	58.6	59.6	60.1	1.5	0.5	59.3	60.4	61.2	1.9	0.8	No
R318(K926)	Single-Family	58.3	59.3	59.9	1.6	0.6	59.0	60.1	61.0	2.0	0.9	No
R319(K737)	Single-Family	63.1	64.2	65.4	2.3	1.2	64.0	65.0	66.4	2.4	1.4	Yes
R320(K756)	Single-Family	62.7	63.8	64.7	2.0	0.9	63.6	64.6	65.7	2.1	1.1	Yes
R321(K916)	Single-Family	58.9	59.9	59.6	0.7	-0.3	59.6	60.7	60.7	1.1	0.0	No
R322(K1774)	Single-Family	59.1	60.2	63.0	3.9	2.8	59.7	60.8	63.9	4.2	3.1	No
R323(K733)	Multi-Family	60.2	61.2	64.6	4.4	3.4	61.2	62.3	65.7	4.5	3.4	Yes
R324(K745)	Single-Family	65.1	66.2	66.9	1.8	0.7	65.9	67.0	68.0	2.1	1.0	Yes
R325(K1855)	Single-Family	65.7	66.7	67.9	2.2	1.2	66.2	67.3	68.6	2.4	1.3	Yes
R326(K915)	Single-Family	59.9	60.9	60.4	0.5	-0.5	60.6	61.7	61.4	0.8	-0.3	No
R327(K1826)	Single-Family	59.2	60.3	61.8	2.6	1.5	59.7	60.8	62.6	2.9	1.8	No
R328(K674)	Single-Family	73.2	74.3	75.2	2.0	0.9	74.1	75.2	76.4	2.3	1.2	Yes
R329(K736)	Single-Family	68.5	69.5	69.5	1.0	0.0	69.1	70.2	70.4	1.3	0.2	Yes
R330(K1862)	Multi-Family	65.5	66.5	67.8	2.3	1.3	66.0	67.0	68.4	2.4	1.4	Yes
R331(K717)	Single-Family	66.8	67.8	68.6	1.8	0.8	67.5	68.5	69.5	2.0	1.0	Yes
R332(K910)	Single-Family	59.9	60.9	60.8	0.9	-0.1	60.5	61.5	61.8	1.3	0.3	No
R333(K1775)	Single-Family	52.2	53.3	56.0	3.8	2.7	52.8	53.9	56.9	4.1	3.0	No
R334(K1821)	Single-Family	52.3	53.3	55.5	3.2	2.2	53.0	54.0	56.4	3.4	2.4	No
R335(KV1880)	Vacant	69.0	70.1	71.0	2.0	0.9	69.5	70.6	71.6	2.1	1.0	Yes
R336(K1831)	Single-Family	59.4	60.5	61.6	2.2	1.1	60.0	61.1	62.4	2.4	1.3	No
R337(K587)	Single-Family	60.1	61.1	61.2	1.1	0.1	60.6	61.7	62.2	1.6	0.5	No
R338(K718)	Single-Family	68.5	69.5	70.2	1.7	0.7	69.3	70.3	71.2	1.9	0.9	Yes
R339(K583)	Single-Family	59.5	60.6	61.1	1.6	0.5	60.2	61.3	62.0	1.8	0.7	No
R340(K576)	Single-Family	60.6	61.6	62.3	1.7	0.7	61.3	62.4	63.2	1.9	0.8	No
R341(K568)	Single-Family	62.7	63.8	64.3	1.6	0.5	63.4	64.5	65.2	1.8	0.7	No
R342(K573)	Single-Family	60.8	61.9	62.5	1.7	0.6	61.5	62.6	63.5	2.0	0.9	No
R343(K785)	Multi-Family	66.5	67.5	68.1	1.6	0.6	67.2	68.3	69.1	1.9	0.8	Yes
R344(K1880)	Single-Family	64.8	65.8	67.2	2.4	1.4	65.3	66.3	67.9	2.6	1.6	Yes
R345(K857)	Single-Family	62.0	63.0	63.5	1.5	0.5	62.7	63.8	64.5	1.8	0.7	No
R346(K1840)	Multi-Family	59.6	60.6	61.9	2.3	1.3	60.2	61.3	62.7	2.5	1.4	No
R347(K1760)	Single-Family	66.2	67.3	69.1	2.9	1.8	66.7	67.8	69.7	3.0	1.9	Yes
R348(K1819)	Single-Family	51.5	52.5	54.7	3.2	2.2	52.1	53.2	55.5	3.4	2.3	No
R349(K714)	Multi-Family	71.2	72.2	72.9	1.7	0.7	72.0	73.1	74.0	2.0	0.9	Yes
R350(K1858)	Multi-Family	57.3	58.4	60.6	3.3	2.2	58.0	59.1	61.4	3.4	2.3	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
M-25(K707)	Single-Family	71.1	72.1	72.6	1.5	0.5	72.0	73.0	73.8	1.8	0.8	Yes
R351(K1886)	Single-Family	67.6	68.7	70.1	2.5	1.4	68.3	69.4	70.8	2.5	1.4	Yes
R352(K1869)	Multi-Family	51.4	52.4	54.6	3.2	2.2	52.1	53.2	55.4	3.3	2.2	No
R353(K1876)	Razed	55.8	56.8	57.9	2.1	1.1	56.4	57.5	58.7	2.3	1.2	No
R354(K1890)	Single-Family	66.9	68.0	69.5	2.6	1.5	67.6	68.7	70.2	2.6	1.5	Yes
R355(K783)	Single-Family	67.5	68.6	69.1	1.6	0.5	68.3	69.4	70.2	1.9	0.8	Yes
R356(K1851)	Single-Family	55.0	56.1	57.7	2.7	1.6	55.5	56.6	58.5	3.0	1.9	No
R357(K1900)	Commercial	68.3	69.3	70.4	2.1	1.1	68.6	69.7	70.9	2.3	1.2	Yes
R358(K1845)	Single-Family	58.1	59.1	60.4	2.3	1.3	58.6	59.7	61.3	2.7	1.6	No
R359(K1881)	Multi-Family	61.1	62.2	63.1	2.0	0.9	61.6	62.7	63.7	2.1	1.0	No
R360(KV1908)	Vacant	65.3	66.4	67.9	2.6	1.5	65.8	66.9	68.4	2.6	1.5	Yes
R361(K773)	Single-Family	68.5	69.5	69.9	1.4	0.4	69.3	70.4	71.0	1.7	0.6	Yes
R362(K769)	Single-Family	68.9	69.9	70.0	1.1	0.1	69.7	70.8	71.1	1.4	0.3	Yes
R363(K766)	Single-Family	71.5	72.5	72.9	1.4	0.4	72.3	73.4	74.1	1.8	0.7	Yes
R364(K1889)	Single-Family	62.7	63.8	63.8	1.1	0.0	63.3	64.4	64.5	1.2	0.1	No
R365(K1908)	Single-Family	70.3	71.4	71.9	1.6	0.5	70.8	71.9	72.6	1.8	0.7	Yes
R366(K1893)	Multi-Family	62.4	63.4	63.6	1.2	0.2	62.9	64.0	64.3	1.4	0.3	No
R367(K1917)	Multi-Family	70.1	71.1	71.8	1.7	0.7	70.6	71.7	72.4	1.8	0.7	Yes
R368(K1884)	Single-Family	54.1	55.2	56.6	2.5	1.4	54.5	55.6	57.3	2.8	1.7	No
R369(K1898)	Multi-Family	60.0	61.0	61.7	1.7	0.7	60.5	61.6	62.5	2.0	0.9	No
R370(K1923)	Multi-Family	68.6	69.7	70.6	2.0	0.9	69.1	70.2	71.1	2.0	0.9	Yes
R371(KV1923)	Vacant	67.0	68.0	68.4	1.4	0.4	67.4	68.5	69.0	1.6	0.5	Yes
R372(K7)	Single-Family	60.2	61.3	61.1	0.9	-0.2	60.8	61.9	61.8	1.0	-0.1	No
R373(K1936)	Multi-Family	69.3	70.3	71.0	1.7	0.7	69.8	70.8	71.6	1.8	0.8	Yes
R374(K1907)	Multi-Family	56.2	57.3	59.1	2.9	1.8	56.6	57.7	59.9	3.3	2.2	No
R375(K1924)	Razed	53.1	54.2	56.0	2.9	1.8	53.6	54.7	56.7	3.1	2.0	No
R376(K1939)	Single-Family	69.0	70.1	70.4	1.4	0.3	69.5	70.6	71.1	1.6	0.5	Yes
R377(K1929)	Razed	54.3	55.4	56.9	2.6	1.5	54.8	55.9	57.7	2.9	1.8	No
R378(K1945)	Multi-Family	67.0	68.0	68.9	1.9	0.9	67.5	68.5	69.5	2.0	1.0	Yes
R379(K1934)	Single-Family	62.5	63.5	63.7	1.2	0.2	62.9	64.0	64.5	1.6	0.5	No
R380(K1934 R-51)	Single-Family	65.5	66.6	66.8	1.3	0.2	66.1	67.2	67.8	1.7	0.6	Yes
R381(K696)	Single-Family	65.1	66.2	66.7	1.6	0.5	65.7	66.8	67.5	1.8	0.7	Yes
R382(K689)	Single-Family	62.6	63.6	64.1	1.5	0.5	63.1	64.2	64.9	1.8	0.7	No
R383(K691)	Single-Family	62.4	63.4	63.9	1.5	0.5	62.9	64.0	64.7	1.8	0.7	No
R384(K695)	Single-Family	63.1	64.1	64.7	1.6	0.6	63.6	64.7	65.5	1.9	0.8	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
M-26(K697)	Single-Family	71.0	72.0	72.6	1.6	0.6	71.4	72.4	73.2	1.8	0.8	Yes
R385(K694 R-52)	Single-Family	66.4	67.1	68.1	1.7	1.0	67.0	67.8	68.8	1.8	1.0	Yes
R386(K988)	Multi-Family	48.3	49.3	50.5	2.2	1.2	49.0	50.1	51.4	2.4	1.3	No
R387(K978)	Single-Family	48.3	49.3	50.8	2.5	1.5	49.0	50.1	51.7	2.7	1.6	No
R388(K997)	Multi-Family	50.0	51.0	52.7	2.7	1.7	50.8	51.9	53.6	2.8	1.7	No
R389(K987)	Single-Family	56.0	57.0	58.4	2.4	1.4	56.8	57.9	59.4	2.6	1.5	No
R390(K995)	Multi-Family	55.2	56.2	57.6	2.4	1.4	56.1	57.1	58.6	2.5	1.5	No
R391(K980)	Single-Family	57.1	58.1	59.4	2.3	1.3	58.0	59.0	60.3	2.3	1.3	No
R392(K1012)	Single-Family	54.7	55.7	57.1	2.4	1.4	55.4	56.5	58.1	2.7	1.6	No
R393(K811)	Single-Family	56.4	57.5	59.8	3.4	2.3	57.2	58.2	60.7	3.5	2.5	No
R394(K959)	Single-Family	61.5	62.5	63.0	1.5	0.5	62.3	63.3	64.0	1.7	0.7	No
R395(K971)	Single-Family	59.9	60.9	61.9	2.0	1.0	60.7	61.8	62.8	2.1	1.0	No
R396(KV811)	Vacant	65.8	66.8	67.7	1.9	0.9	66.5	67.5	68.6	2.1	1.1	Yes
R397(K802)	Multi-Family	62.0	63.0	64.0	2.0	1.0	62.6	63.7	65.0	2.4	1.3	No
R398(K804)	Single-Family	60.1	61.2	62.2	2.1	1.0	60.7	61.8	63.2	2.5	1.4	No
R399(K961)	Single-Family	63.9	64.9	65.5	1.6	0.6	64.7	65.7	66.5	1.8	0.8	Yes
R400(K949)	Single-Family	66.8	67.9	68.5	1.7	0.6	67.6	68.7	69.5	1.9	0.8	Yes
R401(K798)	Multi-Family	62.0	63.0	64.1	2.1	1.1	62.6	63.7	65.1	2.5	1.4	No
R402(K796)	Multi-Family	62.2	63.3	64.2	2.0	0.9	62.9	64.0	65.2	2.3	1.2	No
R403(K931)	Single-Family	69.5	70.6	70.6	1.1	0.0	70.3	71.3	71.5	1.2	0.2	Yes
R404(K1019)	Multi-Family	61.2	62.3	63.3	2.1	1.0	61.9	63.0	64.3	2.4	1.3	No
R405(K1016)	Multi-Family	61.3	62.3	63.3	2.0	1.0	62.0	63.1	64.2	2.2	1.1	No
R406(K928)	Single-Family	70.6	71.6	71.8	1.2	0.2	71.3	72.4	72.7	1.4	0.3	Yes
R407(K1013)	Multi-Family	60.9	61.9	62.8	1.9	0.9	61.6	62.6	63.8	2.2	1.2	No
R408(K834)	Multi-Family	60.4	61.4	63.4	3.0	2.0	61.2	62.2	64.6	3.4	2.4	No
R409(K1010)	Multi-Family	62.1	63.1	63.8	1.7	0.7	62.8	63.8	64.7	1.9	0.9	No
R410(K1009)	Multi-Family	63.1	64.1	64.9	1.8	0.8	63.8	64.9	65.9	2.1	1.0	Yes
R411(K989)	Single-Family	66.3	67.3	68.2	1.9	0.9	67.0	68.1	69.1	2.1	1.0	Yes
R412(K1272)	Restaurant/Bar	59.4	60.3	60.8	1.4	0.5	60.0	60.9	61.7	1.7	0.8	No
R413(K833)	Multi-Family	61.2	62.2	64.2	3.0	2.0	62.0	63.0	65.4	3.4	2.4	No
R414(K1005)	Single-Family	68.7	69.7	70.4	1.7	0.7	69.4	70.4	71.3	1.9	0.9	Yes
R415(K829)	Single-Family	62.8	63.8	65.9	3.1	2.1	63.5	64.6	67.1	3.6	2.5	Yes
R416(K1032)	Single-Family	54.3	55.3	57.2	2.9	1.9	55.0	56.1	58.2	3.2	2.1	No
R417(K999)	Single-Family	72.2	73.2	73.7	1.5	0.5	72.9	74.0	74.6	1.7	0.6	Yes
R418(K847)	Single-Family	61.4	62.5	64.1	2.7	1.6	62.2	63.3	65.3	3.1	2.0	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R419(K828)	Single-Family	63.3	64.3	66.4	3.1	2.1	64.1	65.1	67.6	3.5	2.5	Yes
R420(K1038)	Single-Family	54.0	55.0	57.2	3.2	2.2	54.7	55.8	58.2	3.5	2.4	No
R421(K581)	Multi-Family	70.2	71.2	71.9	1.7	0.7	70.6	71.7	72.6	2.0	0.9	Yes
R422(K582)	Single-Family	71.4	72.4	72.9	1.5	0.5	71.8	72.9	73.6	1.8	0.7	Yes
R423(K584)	Single-Family	73.0	74.0	74.7	1.7	0.7	73.5	74.5	75.4	1.9	0.9	Yes
R424(K825)	Single-Family	63.8	64.9	66.7	2.9	1.8	64.6	65.7	68.0	3.4	2.3	Yes
R425(K575)	Single-Family	69.3	70.3	71.0	1.7	0.7	69.8	70.8	71.7	1.9	0.9	Yes
R426(K824)	Single-Family	64.8	65.9	67.4	2.6	1.5	65.6	66.7	68.6	3.0	1.9	Yes
R427(K821)	Single-Family	65.1	66.1	67.5	2.4	1.4	65.8	66.9	68.7	2.9	1.8	Yes
R428(K1048)	Single-Family	56.0	57.0	58.6	2.6	1.6	56.7	57.7	59.6	2.9	1.9	No
R429(K850)	Single-Family	64.8	65.8	67.7	2.9	1.9	65.6	66.7	68.9	3.3	2.2	Yes
R430(K574)	Single-Family	68.2	69.2	69.9	1.7	0.7	68.6	69.7	70.6	2.0	0.9	Yes
R431(K572)	Single-Family	67.8	68.8	69.5	1.7	0.7	68.3	69.3	70.3	2.0	1.0	Yes
R432(K1054)	Single-Family	58.9	59.9	60.4	1.5	0.5	59.6	60.7	61.5	1.9	0.8	No
R433(K1020)	Multi-Family	65.2	66.2	68.2	3.0	2.0	66.0	67.1	69.4	3.4	2.3	Yes
R434(K817)	Single-Family	66.4	67.4	68.4	2.0	1.0	67.2	68.3	69.6	2.4	1.3	Yes
R435(K864)	Single-Family	61.4	62.5	63.6	2.2	1.1	62.2	63.3	64.7	2.5	1.4	No
R436(K1026)	Single-Family	65.9	66.9	68.8	2.9	1.9	66.7	67.7	70.0	3.3	2.3	Yes
R437(K571)	Multi-Family	67.0	68.0	68.8	1.8	0.8	67.5	68.5	69.6	2.1	1.1	Yes
R438(K812)	Single-Family	65.9	66.9	68.0	2.1	1.1	66.7	67.7	69.2	2.5	1.5	Yes
R439(K954 R-53)	Razed	73.2	74.2	74.8	1.6	0.6	73.7	74.7	75.6	1.9	0.9	Yes
R440(K813)	Single-Family	66.6	67.7	68.5	1.9	0.8	67.5	68.5	69.7	2.2	1.2	Yes
R441(K1030)	Single-Family	65.8	66.9	68.9	3.1	2.0	66.7	67.7	70.1	3.4	2.4	Yes
R442(K569)	Single-Family	66.3	67.3	68.2	1.9	0.9	66.8	67.9	69.0	2.2	1.1	Yes
R443(K806)	Single-Family	70.2	71.2	71.8	1.6	0.6	71.0	72.1	72.9	1.9	0.8	Yes
R444(K814)	Single-Family	69.9	70.9	71.4	1.5	0.5	70.7	71.8	72.6	1.9	0.8	Yes
R445(K1035)	Multi-Family	65.8	66.8	68.9	3.1	2.1	66.6	67.7	70.1	3.5	2.4	Yes
R446(K803)	Single-Family	70.5	71.5	72.1	1.6	0.6	71.3	72.4	73.3	2.0	0.9	Yes
R447(K938)	Razed	71.2	72.2	72.6	1.4	0.4	71.7	72.7	73.4	1.7	0.7	Yes
R448(K799)	Single-Family	70.9	71.9	72.5	1.6	0.6	71.7	72.8	73.7	2.0	0.9	Yes
R449(K872)	Single-Family	59.8	60.8	61.7	1.9	0.9	60.6	61.6	62.7	2.1	1.1	No
R450(K566)	Single-Family	66.3	67.3	68.2	1.9	0.9	66.9	67.9	69.0	2.1	1.1	Yes
R451(KV903)	Vacant	68.3	69.3	70.1	1.8	0.8	69.1	70.1	71.1	2.0	1.0	Yes
R452(K941)	Multi-Family	69.0	70.0	70.4	1.4	0.4	69.5	70.6	71.2	1.7	0.6	Yes
R453(K797)	Single-Family	72.2	73.2	73.9	1.7	0.7	73.1	74.1	75.0	1.9	0.9	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R454(K932)	Single-Family	65.4	66.4	67.2	1.8	0.8	66.0	67.1	68.1	2.1	1.0	Yes
R455(K1017)	Single-Family	73.4	74.5	74.6	1.2	0.1	74.2	75.3	75.7	1.5	0.4	Yes
R456(K1007)	Single-Family	73.3	74.3	74.7	1.4	0.4	73.8	74.8	75.5	1.7	0.7	Yes
R457(K860)	Single-Family	65.9	66.9	67.8	1.9	0.9	66.5	67.5	68.6	2.1	1.1	Yes
R458(K875)	Undeveloped Land	57.7	58.7	61.4	3.7	2.7	58.5	59.5	62.5	4.0	3.0	No
R459(K1043)	Multi-Family	65.8	66.8	69.0	3.2	2.2	66.7	67.8	70.2	3.5	2.4	Yes
R460(K1532)	Single-Family	46.4	47.4	48.2	1.8	0.8	47.2	48.2	49.1	1.9	0.9	No
R461(K1006)	Single-Family	71.3	72.3	72.7	1.4	0.4	71.8	72.9	73.5	1.7	0.6	Yes
R462(K1000)	Single-Family	70.2	71.2	71.7	1.5	0.5	70.7	71.8	72.5	1.8	0.7	Yes
R463(K1004)	Single-Family	70.6	71.7	72.1	1.5	0.4	71.2	72.2	72.9	1.7	0.7	Yes
R464(K996)	Single-Family	69.4	70.4	70.9	1.5	0.5	69.9	71.0	71.7	1.8	0.7	Yes
R465(K1502)	Multi-Family	39.6	40.6	41.2	1.6	0.6	40.5	41.5	42.2	1.7	0.7	No
R466(K1050)	Multi-Family	66.0	67.0	69.1	3.1	2.1	66.9	67.9	70.3	3.4	2.4	Yes
R467(K929)	Single-Family	64.3	65.3	66.2	1.9	0.9	65.1	66.1	67.1	2.0	1.0	Yes
R468(K1545)	Multi-Family	48.0	49.0	49.2	1.2	0.2	48.9	49.9	50.3	1.4	0.4	No
R469(KV91)	Vacant	56.3	57.3	58.9	2.6	1.6	56.9	58.0	59.9	3.0	1.9	No
R470(K859)	Single-Family	65.5	66.5	67.2	1.7	0.7	66.0	67.1	68.1	2.1	1.0	Yes
R471(K994)	Single-Family	68.9	69.9	70.5	1.6	0.6	69.5	70.5	71.3	1.8	0.8	Yes
R472(KV903)	Vacant	68.7	69.7	70.6	1.9	0.9	69.4	70.5	71.6	2.2	1.1	Yes
R473(K1506)	Multi-Family	47.2	48.2	46.7	-0.5	-1.5	48.1	49.1	47.8	-0.3	-1.3	No
R474(KV91)	Vacant	57.3	58.3	60.1	2.8	1.8	57.9	59.0	61.0	3.1	2.0	No
R475(K925)	Single-Family	63.3	64.3	65.3	2.0	1.0	64.1	65.1	66.2	2.1	1.1	Yes
M-36(K1573)	School	70.4	71.4	74.6	4.2	3.2	71.2	72.2	75.5	4.3	3.3	Yes
R476(K1520)	Multi-Family	47.5	48.5	49.4	1.9	0.9	48.4	49.4	50.4	2.0	1.0	No
R477(K1560)	Multi-Family	48.1	49.0	49.6	1.5	0.6	49.0	50.0	50.5	1.5	0.5	No
M-27(K1007)	Single-Family	73.9	74.9	75.3	1.4	0.4	74.3	75.4	76.1	1.8	0.7	Yes
R478(K856)	Single-Family	65.2	66.2	67.0	1.8	0.8	65.8	66.8	67.8	2.0	1.0	Yes
R480(K861)	Multi-Family	66.5	67.5	69.5	3.0	2.0	67.4	68.4	70.7	3.3	2.3	Yes
R481(K1509)	Multi-Family	53.1	54.1	53.9	0.8	-0.2	53.9	54.9	54.9	1.0	0.0	No
R482(K792)	Single-Family	65.0	66.0	66.7	1.7	0.7	65.5	66.6	67.6	2.1	1.0	Yes
R483(K1179)	Single-Family	50.2	51.2	52.1	1.9	0.9	50.8	51.9	53.0	2.2	1.1	No
R484(K1981)	Razed	41.7	42.7	42.7	1.0	0.0	42.6	43.6	43.6	1.0	0.0	No
R485(KV1061)	Vacant	68.9	69.9	70.8	1.9	0.9	69.7	70.7	71.8	2.1	1.1	Yes
R486(K1191)	Multi-Family	46.5	47.5	48.1	1.6	0.6	47.4	48.4	49.0	1.6	0.6	No
R487(K1533)	Multi-Family	53.0	54.0	51.3	-1.7	-2.7	53.9	54.9	52.7	-1.2	-2.2	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R488(K863)	Single-Family	67.0	68.0	69.7	2.7	1.7	67.8	68.9	70.9	3.1	2.0	Yes
R489(K924)	Single-Family	62.6	63.6	64.7	2.1	1.1	63.3	64.4	65.6	2.3	1.2	Yes
R490(K1171)	Single-Family	44.9	45.9	46.3	1.4	0.4	45.6	46.6	47.2	1.6	0.6	No
R491(K1187)	Single-Family	34.5	35.5	36.8	2.3	1.3	35.2	36.3	37.8	2.6	1.5	No
R492(K1180)	Single-Family	44.1	45.1	45.8	1.7	0.7	45.0	46.0	46.7	1.7	0.7	No
R493(K1559)	Multi-Family	51.7	52.7	52.4	0.7	-0.3	52.5	53.5	53.3	0.8	-0.2	No
R494(K1568)	Multi-Family	52.3	53.3	53.2	0.9	-0.1	53.3	54.3	54.1	0.8	-0.2	No
R495(K1615)	Single-Family	73.9	74.9	75.8	1.9	0.9	74.5	75.5	76.3	1.8	0.8	Yes
R496(K2006)	Single-Family	62.8	63.8	65.0	2.2	1.2	63.1	64.1	65.7	2.6	1.6	Yes
M-38(K1609)	Single-Family	72.7	73.7	74.2	1.5	0.5	73.2	74.2	74.7	1.5	0.5	Yes
R497(K790)	Single-Family	64.4	65.4	66.1	1.7	0.7	64.9	66.0	67.0	2.1	1.0	Yes
R498(K869)	Multi-Family	67.0	68.0	69.7	2.7	1.7	67.9	68.9	70.9	3.0	2.0	Yes
R499(K1172)	Single-Family	43.7	44.7	45.6	1.9	0.9	44.5	45.5	46.4	1.9	0.9	No
R500(K1620)	Single-Family	73.0	74.0	75.2	2.2	1.2	73.6	74.6	75.8	2.2	1.2	Yes
R501(K2004)	Single-Family	65.3	66.3	68.0	2.7	1.7	65.7	66.7	68.8	3.1	2.1	Yes
R502(K2005)	Single-Family	64.6	65.6	67.4	2.8	1.8	64.9	65.9	68.2	3.3	2.3	Yes
R503(K1622)	Single-Family	72.8	73.8	75.1	2.3	1.3	73.3	74.3	75.7	2.4	1.4	Yes
R504(K1630)	Single-Family	71.9	72.9	74.1	2.2	1.2	72.4	73.4	74.8	2.4	1.4	Yes
R505(K1674)	Single-Family	66.8	67.8	69.6	2.8	1.8	67.1	68.2	70.4	3.3	2.2	Yes
M-31(K1979)	Multi-Family	68.6	69.6	69.4	0.8	-0.2	68.7	69.7	69.5	0.8	-0.2	Yes
R506(K927)	Single-Family	63.6	64.6	65.5	1.9	0.9	64.4	65.4	66.5	2.1	1.1	Yes
R507(K1564)	Multi-Family	61.6	62.5	61.3	-0.3	-1.2	62.2	63.2	62.1	-0.1	-1.1	No
R508(K1627)	Single-Family	72.2	73.2	74.4	2.2	1.2	72.7	73.7	75.1	2.4	1.4	Yes
R509(K1573)	School	68.3	69.3	70.7	2.4	1.4	69.0	70.0	71.1	2.1	1.1	Yes
R510(K1670 R-61)	Multi-Family	67.9	68.9	70.8	2.9	1.9	68.3	69.3	71.6	3.3	2.3	Yes
R511(K789)	Single-Family	64.1	65.0	65.8	1.7	0.8	64.6	65.6	66.8	2.2	1.2	Yes
R512(K1642)	Single-Family	70.4	71.4	73.1	2.7	1.7	70.9	71.9	73.8	2.9	1.9	Yes
R513(K899)	Single-Family	60.2	61.2	63.2	3.0	2.0	61.1	62.2	64.3	3.2	2.1	No
R514(K1174)	Single-Family	46.3	47.3	47.9	1.6	0.6	47.1	48.1	48.7	1.6	0.6	No
R515(K1569)	Multi-Family	63.6	64.6	63.4	-0.2	-1.2	64.3	65.2	64.1	-0.2	-1.1	No
R516(K1638)	Single-Family	70.4	71.4	72.9	2.5	1.5	70.9	71.9	73.6	2.7	1.7	Yes
R517(K1652)	Single-Family	68.2	69.2	71.0	2.8	1.8	68.6	69.6	71.7	3.1	2.1	Yes
R518(K1665)	Single-Family	68.2	69.3	71.1	2.9	1.8	68.7	69.7	71.9	3.2	2.2	Yes
R519(K2012)	Multi-Family	56.2	57.1	57.4	1.2	0.3	56.3	57.2	57.9	1.6	0.7	No
R520(K2014)	Multi-Family	58.4	59.2	59.2	0.8	0.0	58.4	59.3	59.6	1.2	0.3	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R521(KV1061)	Vacant	69.4	70.4	71.3	1.9	0.9	70.2	71.2	72.3	2.1	1.1	Yes
M-35(K1503)	Multi-Family	69.9	70.9	70.6	0.7	-0.3	70.7	71.7	71.3	0.6	-0.4	Yes
R522(K922)	Single-Family	62.5	63.5	64.6	2.1	1.1	63.3	64.4	65.6	2.3	1.2	Yes
R523(K1578)	Multi-Family	58.3	59.3	58.2	-0.1	-1.1	59.1	60.1	59.2	0.1	-0.9	No
R524(K881)	Single-Family	63.4	64.4	65.4	2.0	1.0	64.2	65.2	66.5	2.3	1.3	Yes
R525(K1570)	Multi-Family	69.1	70.1	69.6	0.5	-0.5	69.7	70.6	70.2	0.5	-0.4	Yes
R526(K2009)	Multi-Family	55.7	56.6	57.0	1.3	0.4	55.9	56.9	57.7	1.8	0.8	No
R527(K2011)	Multi-Family	55.6	56.5	57.2	1.6	0.7	55.7	56.7	57.8	2.1	1.1	No
M-30(K1176)	Single-Family	65.6	66.6	68.1	2.5	1.5	66.0	67.0	68.4	2.4	1.4	Yes
R528(K903)	Single-Family	59.9	60.9	63.7	3.8	2.8	60.9	61.9	64.9	4.0	3.0	No
R529(K921)	Single-Family	62.1	63.1	64.4	2.3	1.3	62.9	64.0	65.4	2.5	1.4	No
R530(K1181)	Single-Family	51.7	52.7	53.6	1.9	0.9	52.6	53.5	54.4	1.8	0.9	No
R531(K1621)	Single-Family	68.4	69.4	70.6	2.2	1.2	68.9	69.9	71.2	2.3	1.3	Yes
R532(K2008)	Multi-Family	55.6	56.6	56.9	1.3	0.3	55.9	56.8	57.7	1.8	0.9	No
M-37(K1616)	Single-Family	67.2	68.3	69.2	2.0	0.9	67.6	68.6	69.8	2.2	1.2	Yes
R533(K2007)	Multi-Family	56.8	57.8	58.2	1.4	0.4	57.0	58.0	59.0	2.0	1.0	No
R534(K879)	Single-Family	68.7	69.7	70.4	1.7	0.7	69.5	70.5	71.6	2.1	1.1	Yes
R535(K1705)	Multi-Family	56.6	57.6	58.9	2.3	1.3	56.9	57.9	59.7	2.8	1.8	No
R536(K2024)	Multi-Family	60.7	61.4	61.3	0.6	-0.1	60.9	61.7	61.7	0.8	0.0	No
R537(K85)	Single-Family	65.4	66.4	67.3	1.9	0.9	66.4	67.4	68.2	1.8	0.8	Yes
R538(K1602)	Single-Family	68.5	69.4	70.3	1.8	0.9	69.3	70.3	71.0	1.7	0.7	Yes
R539(K1611)	Single-Family	62.9	63.9	64.8	1.9	0.9	64.0	65.0	65.8	1.8	0.8	Yes
R540(K1624)	Single-Family	66.8	67.8	69.0	2.2	1.2	67.3	68.3	69.7	2.4	1.4	Yes
M-28(K879)	Single-Family	73.9	74.9	75.3	1.4	0.4	74.7	75.8	76.5	1.8	0.7	Yes
R541(K1629)	Single-Family	64.7	65.7	67.0	2.3	1.3	65.3	66.3	67.8	2.5	1.5	Yes
R542(K1632)	Single-Family	62.7	63.7	65.1	2.4	1.4	63.2	64.2	65.8	2.6	1.6	Yes
R543(K886)	Multi-Family	66.6	67.6	69.7	3.1	2.1	67.5	68.5	70.9	3.4	2.4	Yes
R544(K917)	Multi-Family	61.4	62.4	63.9	2.5	1.5	62.3	63.4	64.9	2.6	1.5	No
R545(K1608)	Single-Family	71.1	72.1	73.3	2.2	1.2	72.0	72.9	73.9	1.9	1.0	Yes
R546(K1613)	Single-Family	60.4	61.3	63.1	2.7	1.8	61.4	62.4	64.1	2.7	1.7	No
R547(K1637)	Single-Family	61.3	62.3	63.7	2.4	1.4	61.7	62.7	64.5	2.8	1.8	No
R548(K1699)	Multi-Family	57.3	58.3	59.8	2.5	1.5	57.7	58.6	60.7	3.0	2.1	No
R549(KV1077)	Vacant	69.7	70.7	71.8	2.1	1.1	70.5	71.5	72.8	2.3	1.3	Yes
R550(K1695)	Multi-Family	58.8	59.8	61.3	2.5	1.5	59.1	60.1	62.2	3.1	2.1	No
R551(K2019)	Single-Family	53.9	54.8	54.8	0.9	0.0	54.3	55.2	55.4	1.1	0.2	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R552(K2023)	Single-Family	55.7	56.6	56.5	0.8	-0.1	56.1	57.0	57.2	1.1	0.2	No
R553(K2031)	Multi-Family	58.8	59.6	59.6	0.8	0.0	59.2	60.0	60.0	0.8	0.0	No
R554(K1677)	Single-Family	59.5	60.5	61.8	2.3	1.3	59.9	60.9	62.7	2.8	1.8	No
R555(K1687)	Multi-Family	59.3	60.3	61.5	2.2	1.2	59.7	60.7	62.4	2.7	1.7	No
R556(K2018)	Single-Family	52.1	53.0	53.7	1.6	0.7	52.4	53.4	54.4	2.0	1.0	No
R557(K2037)	Multi-Family	66.5	67.1	66.3	-0.2	-0.8	67.9	68.5	68.0	0.1	-0.5	Yes
R558(K1626)	Single-Family	57.7	58.7	61.2	3.5	2.5	58.7	59.7	62.2	3.5	2.5	No
R559(K1648)	Single-Family	60.1	61.1	62.7	2.6	1.6	60.5	61.5	63.6	3.1	2.1	No
R560(K1668)	Single-Family	59.7	60.7	62.4	2.7	1.7	60.1	61.1	63.2	3.1	2.1	No
R561(K1672)	Single-Family	60.0	61.0	62.3	2.3	1.3	60.3	61.3	63.2	2.9	1.9	No
R562(K2013)	Single-Family	51.6	52.5	52.9	1.3	0.4	51.8	52.8	53.6	1.8	0.8	No
R563(K2015)	Single-Family	52.0	53.0	53.7	1.7	0.7	52.4	53.3	54.5	2.1	1.2	No
R564(K918)	Multi-Family	60.5	61.5	63.2	2.7	1.7	61.4	62.5	64.3	2.9	1.8	No
R565(K1713)	Single-Family	51.4	52.4	52.6	1.2	0.2	51.7	52.7	53.3	1.6	0.6	No
R566(K2038)	Single-Family	62.8	63.4	59.5	-3.3	-3.9	63.1	63.7	60.4	-2.7	-3.3	No
R567(K1552)	Single-Family	62.1	63.1	64.5	2.4	1.4	62.5	63.5	65.3	2.8	1.8	No
R568(K1561)	Single-Family	61.7	62.7	64.8	3.1	2.1	62.0	63.0	65.7	3.7	2.7	Yes
R569(K1712)	Single-Family	51.9	52.9	53.1	1.2	0.2	52.2	53.2	53.8	1.6	0.6	No
R570(K2036)	Multi-Family	58.7	59.6	58.3	-0.4	-1.3	59.3	60.2	59.1	-0.2	-1.1	No
R571(K1547 R-58)	Single-Family	62.4	63.4	64.5	2.1	1.1	62.8	63.7	65.3	2.5	1.6	No
R572(K1635)	Single-Family	55.9	56.9	58.7	2.8	1.8	56.3	57.3	59.5	3.2	2.2	No
R573(K1617)	Single-Family	67.0	68.0	69.3	2.3	1.3	67.9	68.8	70.0	2.1	1.2	Yes
R574(K891)	Single-Family	70.2	71.2	72.3	2.1	1.1	71.0	72.1	73.5	2.5	1.4	Yes
R575(K1540)	Single-Family	62.2	63.2	63.9	1.7	0.7	62.6	63.6	64.7	2.1	1.1	No
R576(K1597)	Multi-Family	36.0	37.0	37.3	1.3	0.3	36.8	37.8	38.2	1.4	0.4	No
R577(K1623)	Single-Family	64.4	65.4	67.0	2.6	1.6	65.2	66.2	67.8	2.6	1.6	Yes
R578(K1634)	Single-Family	59.0	60.0	60.9	1.9	0.9	59.4	60.4	61.7	2.3	1.3	No
R579(K1710)	Single-Family	52.8	53.8	54.4	1.6	0.6	53.1	54.1	55.1	2.0	1.0	No
R580(K2034)	Multi-Family	53.8	54.7	54.9	1.1	0.2	54.4	55.3	55.7	1.3	0.4	No
M-33(K1581)	Single-Family	73.0	74.0	75.3	2.3	1.3	73.3	74.2	75.8	2.5	1.6	Yes
R581(K1708)	Single-Family	52.7	53.6	54.6	1.9	1.0	53.0	54.0	55.4	2.4	1.4	No
M-34(K1604)	Multi-Family	51.7	52.7	51.7	0.0	-1.0	52.3	53.3	52.5	0.2	-0.8	No
R582(K1061)	Single-Family	60.7	61.7	64.3	3.6	2.6	61.8	62.9	65.5	3.7	2.6	No
R583(K1628)	Single-Family	62.2	63.2	65.0	2.8	1.8	63.0	64.0	65.7	2.7	1.7	Yes
R584(K1641)	Single-Family	56.7	57.7	58.4	1.7	0.7	57.1	58.1	59.2	2.1	1.1	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R585(K1706)	Single-Family	53.4	54.3	55.5	2.1	1.2	53.7	54.7	56.3	2.6	1.6	No
R586(K2030)	Multi-Family	51.7	52.6	53.2	1.5	0.6	52.2	53.1	53.9	1.7	0.8	No
R587(K1704)	Single-Family	54.3	55.3	56.8	2.5	1.5	54.7	55.7	57.7	3.0	2.0	No
R588(KV1089)	Vacant	70.2	71.2	72.4	2.2	1.2	71.0	72.0	73.4	2.4	1.4	Yes
R589(K1631)	Single-Family	60.8	61.8	63.6	2.8	1.8	61.6	62.6	64.3	2.7	1.7	No
R590(K1651)	Single-Family	56.7	57.7	59.0	2.3	1.3	57.1	58.1	59.8	2.7	1.7	No
R591(K1666)	Single-Family	56.3	57.3	58.6	2.3	1.3	56.7	57.7	59.4	2.7	1.7	No
R592(K1682)	Single-Family	56.6	57.6	58.7	2.1	1.1	57.0	58.0	59.6	2.6	1.6	No
R593(K1691)	Single-Family	55.7	56.7	58.2	2.5	1.5	56.1	57.1	59.1	3.0	2.0	No
R594(K1698)	Single-Family	54.3	55.3	56.8	2.5	1.5	54.7	55.7	57.7	3.0	2.0	No
R595(K1581)	Single-Family	71.6	72.6	74.6	3.0	2.0	72.0	72.9	75.1	3.1	2.2	Yes
R596(K1591)	Multi-Family	36.4	37.3	37.3	0.9	0.0	37.4	38.4	38.6	1.2	0.2	No
R597(K1636)	Single-Family	60.6	61.6	63.2	2.6	1.6	61.3	62.3	64.0	2.7	1.7	No
R598(K1694)	Single-Family	54.6	55.6	57.3	2.7	1.7	55.0	56.0	58.1	3.1	2.1	No
R599(K2021)	Multi-Family	52.5	53.4	53.9	1.4	0.5	52.9	53.9	54.7	1.8	0.8	No
R600(K2027)	Multi-Family	52.4	53.4	53.9	1.5	0.5	52.8	53.8	54.6	1.8	0.8	No
R601(K1590)	Multi-Family	39.7	40.6	40.3	0.6	-0.3	40.7	41.7	41.5	0.8	-0.2	No
R602(K849)	Single-Family	72.3	73.3	73.1	0.8	-0.2	72.9	73.9	74.0	1.1	0.1	Yes
R603(K904)	Single-Family	71.1	72.1	73.2	2.1	1.1	72.0	73.0	74.5	2.5	1.5	Yes
R604(K1643)	Single-Family	61.3	62.2	63.5	2.2	1.3	61.8	62.8	64.2	2.4	1.4	No
R605(K1718)	Multi-Family	52.7	53.7	54.0	1.3	0.3	53.1	54.1	54.8	1.7	0.7	No
R606(K1610)	Multi-Family	55.7	56.7	56.0	0.3	-0.7	56.2	57.2	56.7	0.5	-0.5	No
R607(K1717)	Multi-Family	52.6	53.6	54.0	1.4	0.4	53.1	54.0	54.7	1.6	0.7	No
R608(K819)	Single-Family	69.4	70.4	70.5	1.1	0.1	70.1	71.2	71.5	1.4	0.3	Yes
R609(K848)	Single-Family	70.9	71.9	71.8	0.9	-0.1	71.5	72.5	72.7	1.2	0.2	Yes
R610(K1594)	Recreation	41.9	42.9	43.2	1.3	0.3	42.8	43.8	44.3	1.5	0.5	No
R611(K1612)	Multi-Family	50.8	51.8	52.8	2.0	1.0	51.6	52.6	53.5	1.9	0.9	No
R612(K1716)	Single-Family	53.3	54.3	54.5	1.2	0.2	53.7	54.7	55.3	1.6	0.6	No
R613(K1583)	Single-Family	59.2	60.2	62.9	3.7	2.7	59.5	60.5	63.8	4.3	3.3	No
R614(K1585)	Single-Family	58.8	59.8	62.5	3.7	2.7	59.2	60.1	63.4	4.2	3.3	No
R615(K1600)	Multi-Family	48.4	49.4	49.3	0.9	-0.1	49.3	50.3	50.4	1.1	0.1	No
R616(K1601)	Multi-Family	42.7	43.7	43.7	1.0	0.0	43.6	44.6	44.8	1.2	0.2	No
R617(K841)	Single-Family	69.9	70.9	70.9	1.0	0.0	70.5	71.5	71.8	1.3	0.3	Yes
R618(K1558)	Single-Family	62.1	63.1	63.5	1.4	0.4	62.3	63.3	64.4	2.1	1.1	No
R619(K1567)	Single-Family	61.3	62.3	63.2	1.9	0.9	61.6	62.5	64.0	2.4	1.5	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R620(K1596)	Multi-Family	49.2	50.2	50.5	1.3	0.3	50.1	51.1	51.6	1.5	0.5	No
R621(K1572 R-59)	Single-Family	61.3	62.2	63.5	2.2	1.3	61.5	62.5	64.3	2.8	1.8	No
R622(K907)	Single-Family	71.4	72.4	73.5	2.1	1.1	72.3	73.3	74.8	2.5	1.5	Yes
R623(K1554)	Single-Family	62.2	63.2	63.5	1.3	0.3	62.4	63.4	64.3	1.9	0.9	No
R624(K1565)	Single-Family	61.7	62.7	63.6	1.9	0.9	61.9	62.9	64.4	2.5	1.5	No
R625(K1575)	Single-Family	60.9	61.9	63.4	2.5	1.5	61.2	62.2	64.2	3.0	2.0	No
R626(K1563)	Single-Family	61.8	62.8	63.4	1.6	0.6	62.0	63.0	64.2	2.2	1.2	No
R627(K1577)	Single-Family	61.0	62.0	63.4	2.4	1.4	61.3	62.2	64.2	2.9	2.0	No
R628(K1077)	Single-Family	65.0	66.0	68.3	3.3	2.3	66.1	67.1	69.5	3.4	2.4	Yes
R629(K1550)	Single-Family	62.2	63.2	63.5	1.3	0.3	62.4	63.4	64.3	1.9	0.9	No
R630(K1058)	Single-Family	71.9	72.9	74.0	2.1	1.1	72.8	73.9	75.2	2.4	1.3	Yes
R631(K1544)	Single-Family	62.1	63.1	63.5	1.4	0.4	62.3	63.3	64.3	2.0	1.0	No
R632(K1079)	Single-Family	66.8	67.8	70.1	3.3	2.3	67.8	68.9	71.3	3.5	2.4	Yes
R633(K843)	Single-Family	67.9	68.9	69.0	1.1	0.1	68.5	69.6	69.9	1.4	0.3	Yes
R634(K1538)	Single-Family	61.9	62.9	63.2	1.3	0.3	62.2	63.1	64.0	1.8	0.9	No
R635(K1062)	Single-Family	72.5	73.5	74.4	1.9	0.9	73.4	74.4	75.6	2.2	1.2	Yes
R636(K840)	Single-Family	67.3	68.3	68.6	1.3	0.3	68.0	69.1	69.5	1.5	0.4	Yes
R637(K1617 R-60)	Single-Family	66.0	66.9	67.7	1.7	0.8	66.7	67.7	68.4	1.7	0.7	Yes
R638(K1065)	Single-Family	73.2	74.2	75.0	1.8	0.8	74.1	75.2	76.2	2.1	1.0	Yes
R639(K1089)	Single-Family	70.4	71.4	73.1	2.7	1.7	71.3	72.4	74.4	3.1	2.0	Yes
R640(K1069)	Single-Family	73.7	74.7	75.4	1.7	0.7	74.6	75.7	76.6	2.0	0.9	Yes
R641(K1530)	Single-Family	61.5	62.5	62.8	1.3	0.3	61.8	62.8	63.6	1.8	0.8	No
R642(K1075 R-54)	Single-Family	74.4	75.4	76.1	1.7	0.7	75.3	76.3	77.3	2.0	1.0	Yes
R643(K1041)	Single-Family	71.9	72.9	73.1	1.2	0.2	72.5	73.6	74.0	1.5	0.4	Yes
R644(K1036)	Single-Family	70.8	71.8	71.8	1.0	0.0	71.4	72.5	72.7	1.3	0.2	Yes
R645(K1033)	Multi-Family	65.7	66.7	67.0	1.3	0.3	66.4	67.5	68.0	1.6	0.5	Yes
R646(K1053)	Single-Family	64.6	65.6	66.9	2.3	1.3	65.4	66.4	67.9	2.5	1.5	Yes
R647(K1037)	Multi-Family	67.6	68.6	68.7	1.1	0.1	68.3	69.4	69.7	1.4	0.3	Yes
R648(K1522)	Single-Family	60.9	61.9	62.0	1.1	0.1	61.3	62.2	62.8	1.5	0.6	No
R649(K1027)	Multi-Family	64.8	65.8	66.4	1.6	0.6	65.6	66.6	67.4	1.8	0.8	Yes
R650(K1116)	Vacant	67.7	68.7	70.2	2.5	1.5	68.3	69.4	70.9	2.6	1.5	Yes
R651(K594)	Single-Family	66.9	67.9	69.4	2.5	1.5	67.6	68.6	70.2	2.6	1.6	Yes
R652(K1023)	Single-Family	60.6	61.6	62.8	2.2	1.2	61.4	62.4	63.8	2.4	1.4	No
R653(K884)	Single-Family	66.8	67.8	70.8	4.0	3.0	67.4	68.5	71.8	4.4	3.3	Yes
R654(K1039)	Single-Family	63.3	64.3	66.0	2.7	1.7	64.2	65.3	67.1	2.9	1.8	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R655(K1121 R-56)	Single-Family	66.3	67.3	68.6	2.3	1.3	67.1	68.1	69.4	2.3	1.3	Yes
R656(K882)	Single-Family	59.6	60.6	63.3	3.7	2.7	60.2	61.2	64.1	3.9	2.9	No
R657(K1123)	Single-Family	65.7	66.7	68.3	2.6	1.6	66.5	67.5	69.1	2.6	1.6	Yes
R658(K883)	Single-Family	62.4	63.4	65.9	3.5	2.5	63.2	64.2	66.8	3.6	2.6	Yes
M-29(K1148)	Single-Family	65.0	66.0	69.3	4.3	3.3	65.8	66.8	70.3	4.5	3.5	Yes
R659(K876)	Single-Family	62.5	63.5	65.9	3.4	2.4	63.3	64.4	66.8	3.5	2.4	Yes
R660(K1167)	Church	69.0	70.0	72.2	3.2	2.2	70.0	71.0	73.1	3.1	2.1	Yes
R661(K1766)	Single-Family	59.6	60.6	59.8	0.2	-0.8	60.1	61.1	60.6	0.5	-0.5	No
R662(K1168)	Multi-Family	68.4	69.3	71.8	3.4	2.5	69.4	70.4	72.8	3.4	2.4	Yes
R663(K598)	Single-Family	61.4	62.4	65.8	4.4	3.4	62.3	63.3	66.8	4.5	3.5	Yes
M-32(K1983)	Multi-Family	59.0	60.0	60.1	1.1	0.1	59.7	60.7	60.9	1.2	0.2	No
R664(K1125)	Single-Family	64.6	65.6	67.1	2.5	1.5	65.5	66.5	68.0	2.5	1.5	Yes
R665(K1989)	Single-Family	59.3	60.3	59.5	0.2	-0.8	59.7	60.7	60.3	0.6	-0.4	No
R666(K878)	Single-Family	62.0	63.0	65.5	3.5	2.5	62.8	63.9	66.4	3.6	2.5	Yes
R667(K1983)	Multi-Family	58.5	59.4	59.8	1.3	0.4	59.2	60.2	60.6	1.4	0.4	No
R668(K595)	Single-Family	63.0	64.0	64.9	1.9	0.9	63.6	64.6	65.8	2.2	1.2	Yes
R669(K877)	Single-Family	61.8	62.8	65.3	3.5	2.5	62.6	63.6	66.3	3.7	2.7	Yes
R670(K1129)	Single-Family	64.1	65.1	66.8	2.7	1.7	65.0	66.0	67.6	2.6	1.6	Yes
R671(K1183 R-57)	Multi-Family	61.6	62.6	63.8	2.2	1.2	62.5	63.5	64.7	2.2	1.2	No
R672(K600)	Single-Family	60.6	61.6	64.2	3.6	2.6	61.4	62.4	65.1	3.7	2.7	No
R673(K874)	Single-Family	61.6	62.6	65.2	3.6	2.6	62.4	63.4	66.2	3.8	2.8	Yes
R674(K1132)	Single-Family	63.7	64.7	67.4	3.7	2.7	64.7	65.7	68.3	3.6	2.6	Yes
R675(K873)	Single-Family	58.0	59.0	62.2	4.2	3.2	58.8	59.9	63.2	4.4	3.3	No
R676(K1117)	Single-Family	60.3	61.3	62.6	2.3	1.3	61.1	62.1	63.4	2.3	1.3	No
R677(K1150)	Single-Family	60.2	61.2	63.8	3.6	2.6	60.9	62.0	64.7	3.8	2.7	No
R678(K1136)	Single-Family	63.1	64.1	66.9	3.8	2.8	64.1	65.1	67.8	3.7	2.7	Yes
R679(K1152)	Single-Family	60.0	61.1	63.4	3.4	2.3	60.8	61.8	64.4	3.6	2.6	No
R680(K898)	Multi-Family	63.1	64.1	66.9	3.8	2.8	63.9	65.0	68.0	4.1	3.0	Yes
R681(K1139)	Single-Family	62.0	63.0	65.9	3.9	2.9	63.1	64.1	66.8	3.7	2.7	Yes
R682(K104)	Multi-Family	63.5	64.5	67.4	3.9	2.9	64.3	65.4	68.4	4.1	3.0	Yes
R683(K1120)	Single-Family	58.8	59.8	60.7	1.9	0.9	59.7	60.7	61.5	1.8	0.8	No
R684(K905)	Multi-Family	63.6	64.6	67.4	3.8	2.8	64.5	65.5	68.5	4.0	3.0	Yes
R685(K1153)	Single-Family	60.3	61.3	63.4	3.1	2.1	61.1	62.1	64.3	3.2	2.2	No
R686(K1142)	Single-Family	60.5	61.5	64.5	4.0	3.0	61.6	62.6	65.3	3.7	2.7	No
R687(K908)	Single-Family	63.8	64.8	67.6	3.8	2.8	64.6	65.7	68.6	4.0	2.9	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R688(K13)	Single-Family	59.7	60.7	62.0	2.3	1.3	60.5	61.5	62.9	2.4	1.4	No
R689(K1059)	Single-Family	63.2	64.2	67.2	4.0	3.0	64.0	65.1	68.3	4.3	3.2	Yes
R690(K1124)	Single-Family	56.5	57.5	58.5	2.0	1.0	57.5	58.5	59.3	1.8	0.8	No
R691(K1063)	Single-Family	63.1	64.1	67.2	4.1	3.1	63.9	64.9	68.2	4.3	3.3	Yes
R692(K1145)	Single-Family	59.4	60.4	62.8	3.4	2.4	60.6	61.6	63.6	3.0	2.0	No
R693(K1130)	Single-Family	55.6	56.6	57.4	1.8	0.8	56.6	57.6	58.2	1.6	0.6	No
R694(K1080)	Undeveloped Land	62.7	63.7	66.6	3.9	2.9	63.6	64.6	67.6	4.0	3.0	Yes
R695(K1119)	Single-Family	56.3	57.3	58.2	1.9	0.9	56.9	58.0	59.1	2.2	1.1	No
R696(K1085)	Undeveloped Land	62.8	63.8	66.9	4.1	3.1	63.7	64.8	67.9	4.2	3.1	Yes
R697(K1090)	Undeveloped Land	62.9	63.9	66.9	4.0	3.0	63.8	64.8	68.0	4.2	3.2	Yes
R698(K1135)	Single-Family	54.3	55.3	56.0	1.7	0.7	55.3	56.3	56.9	1.6	0.6	No
R699(K1095)	Multi-Family	62.8	63.8	66.7	3.9	2.9	63.7	64.7	67.7	4.0	3.0	Yes
R700(K1101 R-55)	Multi-Family	62.2	63.2	65.1	2.9	1.9	63.1	64.1	66.1	3.0	2.0	Yes
R701(K1138)	Single-Family	52.3	53.3	54.4	2.1	1.1	53.4	54.5	55.2	1.8	0.7	No
R702(K47)	Single-Family	61.0	62.0	62.9	1.9	0.9	62.2	63.2	64.0	1.8	0.8	No
R703(K1251)	Single-Family	60.5	61.5	62.4	1.9	0.9	61.7	62.8	63.5	1.8	0.7	No
R704(K46)	Single-Family	61.3	62.3	63.2	1.9	0.9	62.5	63.6	64.3	1.8	0.7	No
R705(K48)	Single-Family	61.2	62.2	63.0	1.8	0.8	62.4	63.5	64.2	1.8	0.7	No
R706(K1254)	Single-Family	60.9	61.9	62.7	1.8	0.8	62.1	63.1	63.9	1.8	0.8	No
R707(K44)	Single-Family	62.0	63.0	63.9	1.9	0.9	63.2	64.2	65.0	1.8	0.8	No
R708(K43)	Single-Family	61.8	62.8	63.5	1.7	0.7	63.0	64.0	64.6	1.6	0.6	No
R709(K1471)	Multi-Family	62.3	63.3	64.7	2.4	1.4	63.4	64.4	65.8	2.4	1.4	Yes
R710(K64)	Single-Family	61.3	62.3	63.3	2.0	1.0	62.3	63.4	64.4	2.1	1.0	No
R711(K1474)	Single-Family	63.7	64.8	65.7	2.0	0.9	64.8	65.8	66.7	1.9	0.9	Yes
R712(K1304)	Single-Family	66.3	67.3	68.1	1.8	0.8	67.0	68.0	68.9	1.9	0.9	Yes
R713(K1267)	School	71.3	72.3	73.3	2.0	1.0	72.6	73.6	74.5	1.9	0.9	Yes
R714(K1493)	Multi-Family	68.4	69.4	71.1	2.7	1.7	69.5	70.5	72.2	2.7	1.7	Yes
R715(K1481)	Multi-Family	66.2	67.2	68.2	2.0	1.0	67.2	68.3	69.3	2.1	1.0	Yes
R716(K1302)	Single-Family	66.3	67.3	68.0	1.7	0.7	66.9	67.9	68.9	2.0	1.0	Yes
R717(K1266)	Office	71.9	72.9	74.3	2.4	1.4	73.1	74.2	75.5	2.4	1.3	Yes
R718(K1295)	Single-Family	64.6	65.6	66.0	1.4	0.4	65.2	66.2	66.9	1.7	0.7	Yes
R719(K1291)	Single-Family	61.3	62.3	62.0	0.7	-0.3	61.9	62.9	62.9	1.0	0.0	No
R720(K1262)	Office	70.8	71.8	73.4	2.6	1.6	72.0	73.1	74.6	2.6	1.5	Yes
R721(K1381)	Restaurant/Bar	58.7	59.7	61.5	2.8	1.8	59.6	60.6	62.4	2.8	1.8	No
R722(K1404)	Office	58.4	59.4	62.1	3.7	2.7	59.3	60.3	63.0	3.7	2.7	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R723(K1405)	Medical Facility	58.4	59.5	62.9	4.5	3.4	59.3	60.4	63.9	4.6	3.5	No
R724(K1415)	Single-Family	53.9	54.9	58.5	4.6	3.6	54.7	55.7	59.5	4.8	3.8	No
R725(K1264)	Single-Family	72.2	73.3	74.8	2.6	1.5	73.4	74.5	76.0	2.6	1.5	Yes
R726(K1487)	Single-Family	68.1	69.1	70.0	1.9	0.9	69.1	70.2	71.1	2.0	0.9	Yes
R727(K2068)	Office	70.6	71.6	73.3	2.7	1.7	71.8	72.8	74.5	2.7	1.7	Yes
R728(K1419)	Single-Family	58.3	59.3	61.3	3.0	2.0	59.2	60.3	62.3	3.1	2.0	No
R729(K1422)	Single-Family	58.1	59.1	61.8	3.7	2.7	59.0	60.1	62.7	3.7	2.6	No
R730(K1311)	Office	70.9	71.9	69.8	-1.1	-2.1	71.4	72.4	71.0	-0.4	-1.4	Yes
R731(K1429)	Single-Family	58.2	59.2	61.4	3.2	2.2	59.1	60.2	62.3	3.2	2.1	No
R732(K65)	Single-Family	58.8	59.8	63.1	4.3	3.3	59.7	60.8	64.0	4.3	3.2	No
R734(K1201)	Multi-Family	72.0	73.0	74.3	2.3	1.3	73.1	74.1	75.4	2.3	1.3	Yes
R735(K1339)	Hotel	66.9	67.9	69.8	2.9	1.9	67.9	69.0	70.8	2.9	1.8	Yes
R736(K2067)	Office	73.9	74.9	75.3	1.4	0.4	75.1	76.2	76.5	1.4	0.3	Yes
M-43(K1349)	Hotel	76.8	77.8	78.3	1.5	0.5	77.8	78.8	79.3	1.5	0.5	Yes
R737(K1323)	Office	74.6	75.6	76.7	2.1	1.1	75.6	76.7	77.7	2.1	1.0	Yes
R738(K1412)	Single-Family	60.7	61.7	66.8	6.1	5.1	61.5	62.6	67.7	6.2	5.1	Yes
R739(K1424)	Single-Family	58.9	59.9	66.9	8.0	7.0	59.7	60.8	67.8	8.1	7.0	Yes
R740(K1454)	Single-Family	60.6	61.6	66.1	5.5	4.5	61.5	62.6	67.0	5.5	4.4	Yes
R741(K1307 R-62)	Office	68.7	69.7	65.3	-3.4	-4.4	69.0	70.0	66.4	-2.6	-3.6	No
R742(K1450)	Office	58.7	59.7	63.9	5.2	4.2	59.6	60.7	64.9	5.3	4.2	No
R743(K1479)	Single-Family	55.3	56.4	57.3	2.0	0.9	56.3	57.4	58.3	2.0	0.9	No
R744(K1497)	Single-Family	70.2	71.2	72.4	2.2	1.2	71.3	72.3	73.4	2.1	1.1	Yes
R745(K1476)	Single-Family	55.0	56.0	57.1	2.1	1.1	55.8	56.9	57.9	2.1	1.0	No
R746(K1458)	Single-Family	63.2	64.2	68.9	5.7	4.7	64.1	65.2	69.8	5.7	4.6	Yes
R747(K1482)	Single-Family	53.7	54.7	56.0	2.3	1.3	54.6	55.7	57.0	2.4	1.3	No
R748(K2091)	Single-Family	76.7	77.8	78.5	1.8	0.7	77.7	78.8	79.4	1.7	0.6	Yes
R749(K1767)	Single-Family	76.2	77.3	78.0	1.8	0.7	77.2	78.3	79.0	1.8	0.7	Yes
R750(K1435)	Single-Family	60.2	61.3	70.1	9.9	8.8	61.1	62.2	71.0	9.9	8.8	Yes
R751(K1427)	Single-Family	61.9	62.9	70.1	8.2	7.2	62.8	63.8	71.0	8.2	7.2	Yes
R752(K1438)	Single-Family	60.8	61.8	71.0	10.2	9.2	61.7	62.7	71.9	10.2	9.2	Yes
R753(K1472)	Restaurant/Bar	62.6	63.7	68.3	5.7	4.6	63.6	64.7	69.3	5.7	4.6	No
R754(K1478)	Single-Family	55.9	57.0	58.0	2.1	1.0	56.7	57.8	58.8	2.1	1.0	No
R755(K1488)	Single-Family	69.9	70.9	72.0	2.1	1.1	70.9	72.0	73.0	2.1	1.0	Yes
R756(K2109B)	Single-Family	75.9	77.0	77.7	1.8	0.7	76.9	78.0	78.7	1.8	0.7	Yes
R757(K2105)	Single-Family	73.4	74.4	75.2	1.8	0.8	74.4	75.5	76.2	1.8	0.7	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R758(K1448)	Single-Family	62.0	63.1	72.0	10.0	8.9	62.9	64.0	72.9	10.0	8.9	Yes
R760(K1433)	Single-Family	62.3	63.3	70.6	8.3	7.3	63.2	64.2	71.5	8.3	7.3	Yes
R761(K1483)	Single-Family	56.9	58.0	58.7	1.8	0.7	57.7	58.7	59.5	1.8	0.8	No
R762(K1455)	Single-Family	63.7	64.7	73.7	10.0	9.0	64.7	65.7	74.6	9.9	8.9	Yes
R763(K1485)	Single-Family	58.2	59.3	59.9	1.7	0.6	59.0	60.1	60.8	1.8	0.7	No
R764(KV2092)	Vacant	73.3	74.3	75.0	1.7	0.7	74.4	75.4	76.1	1.7	0.7	Yes
R765(K1459)	Single-Family	63.6	64.6	75.0	11.4	10.4	64.5	65.5	76.0	11.5	10.5	Yes
R766(K2085)	Single-Family	74.6	75.7	76.4	1.8	0.7	75.6	76.7	77.4	1.8	0.7	Yes
R767(K1491)	Single-Family	54.3	55.4	56.8	2.5	1.4	55.2	56.3	57.8	2.6	1.5	No
R768(K1437)	Single-Family	62.1	63.1	72.8	10.7	9.7	63.0	64.1	73.9	10.9	9.8	Yes
R769(K2119)	Single-Family	71.3	72.4	73.5	2.2	1.1	72.4	73.5	74.5	2.1	1.0	Yes
R770(K1489)	Single-Family	59.4	60.5	60.8	1.4	0.3	60.2	61.3	61.6	1.4	0.3	No
R771(K2101)	Single-Family	68.1	69.2	70.1	2.0	0.9	69.2	70.3	71.1	1.9	0.8	Yes
R772(K2109E)	Single-Family	72.3	73.3	74.4	2.1	1.1	73.4	74.4	75.5	2.1	1.1	Yes
R773(KV1469)	Vacant	63.0	64.1	75.1	12.1	11.0	64.0	65.0	76.1	12.1	11.1	Yes
R774(K1346)	Single-Family	70.8	71.8	71.2	0.4	-0.6	71.4	72.3	71.9	0.5	-0.4	Yes
R775(K1496)	Single-Family	55.4	56.5	57.9	2.5	1.4	56.2	57.4	58.9	2.7	1.5	No
R776(K2087)	Single-Family	71.7	72.7	73.4	1.7	0.7	72.7	73.7	74.5	1.8	0.8	Yes
R777(K2106)	Single-Family	69.7	70.7	71.8	2.1	1.1	70.9	71.9	72.9	2.0	1.0	Yes
M-41(K1318)	Single-Family	70.6	71.7	75.1	4.5	3.4	71.1	72.1	75.8	4.7	3.7	Yes
R778(K2104)	Single-Family	70.6	71.6	72.7	2.1	1.1	71.7	72.8	73.8	2.1	1.0	Yes
R779(K1195)	Single-Family	69.5	70.5	71.7	2.2	1.2	70.6	71.6	72.7	2.1	1.1	Yes
R780(K1383)	Single-Family	71.6	72.6	72.0	0.4	-0.6	72.1	73.1	72.7	0.6	-0.4	Yes
R781(K1456)	Single-Family	63.0	64.1	77.2	14.2	13.1	64.0	65.0	78.2	14.2	13.2	Yes
R782(K1495)	Medical Facility	61.9	62.9	63.7	1.8	0.8	62.8	63.8	64.6	1.8	0.8	No
R783(K1722C)	Single-Family	69.7	70.8	71.8	2.1	1.0	70.9	71.9	72.7	1.8	0.8	Yes
R784(K1769)	Single-Family	68.8	69.9	71.2	2.4	1.3	69.9	70.9	72.2	2.3	1.3	Yes
R785(K2083)	Single-Family	76.1	77.2	77.9	1.8	0.7	77.1	78.1	78.8	1.7	0.7	Yes
M-44(K75)	Multi-Family	71.2	72.2	72.8	1.6	0.6	71.8	72.8	73.5	1.7	0.7	Yes
M-44a(K75)	Multi-Family	72.8	73.9	73.0	0.2	-0.9	73.4	74.4	73.6	0.2	-0.8	Yes
M-46(K1469)	Single-Family	65.5	66.5	78.6	13.1	12.1	66.5	67.5	79.6	13.1	12.1	Yes
R786(K1194)	Multi-Family	58.7	59.8	61.1	2.4	1.3	59.5	60.6	62.0	2.5	1.4	No
R787(K2122)	Single-Family	68.2	69.2	70.7	2.5	1.5	69.3	70.4	71.8	2.5	1.4	Yes
R788(K1722B)	Single-Family	69.0	70.1	71.0	2.0	0.9	70.2	71.2	71.9	1.7	0.7	Yes
M-40(K1315)	Single-Family	62.1	63.1	62.2	0.1	-0.9	62.7	63.7	62.9	0.2	-0.8	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
M-42(K1348)	Single-Family	64.3	65.3	68.8	4.5	3.5	65.0	65.9	69.5	4.5	3.6	Yes
R789(K1319)	Single-Family	64.3	65.3	63.6	-0.7	-1.7	64.9	65.9	64.4	-0.5	-1.5	No
R790(K1360)	Single-Family	71.2	72.2	73.4	2.2	1.2	71.9	72.9	74.2	2.3	1.3	Yes
R791(K1365)	Single-Family	69.5	70.6	70.6	1.1	0.0	70.1	71.1	71.3	1.2	0.2	Yes
R792(K1421)	Single-Family	74.5	75.5	76.5	2.0	1.0	75.3	76.3	77.3	2.0	1.0	Yes
R793(KV2025)	Vacant	62.2	63.2	63.0	0.8	-0.2	62.7	63.7	63.9	1.2	0.2	No
R794(KV1318)	Vacant	66.4	67.4	70.5	4.1	3.1	67.2	68.2	71.3	4.1	3.1	Yes
R795(K74)	Multi-Family	69.3	70.3	68.8	-0.5	-1.5	69.9	70.8	69.5	-0.4	-1.3	Yes
R796(K1341)	Single-Family	71.1	72.1	74.1	3.0	2.0	71.7	72.7	74.9	3.2	2.2	Yes
R797(K2124)	Single-Family	68.2	69.2	70.7	2.5	1.5	69.3	70.4	71.8	2.5	1.4	Yes
R798(K1326)	Single-Family	62.3	63.3	62.3	0.0	-1.0	62.9	63.9	63.1	0.2	-0.8	No
R799(K1391)	Single-Family	68.0	69.0	69.3	1.3	0.3	68.6	69.6	70.1	1.5	0.5	Yes
R800(K2086)	Single-Family	72.7	73.7	74.6	1.9	0.9	73.7	74.7	75.5	1.8	0.8	Yes
R801(K1205)	Single-Family	67.2	68.2	69.2	2.0	1.0	68.2	69.2	70.2	2.0	1.0	Yes
R802(K1331)	Single-Family	68.8	69.8	72.4	3.6	2.6	69.4	70.4	73.2	3.8	2.8	Yes
R803(K2017)	Single-Family	64.6	65.5	65.3	0.7	-0.2	65.0	66.0	66.0	1.0	0.0	Yes
R804(K2025)	Single-Family	63.5	64.5	64.1	0.6	-0.4	64.0	65.0	65.0	1.0	0.0	No
R805(K78)	Single-Family	70.1	71.1	73.1	3.0	2.0	70.7	71.7	73.9	3.2	2.2	Yes
R806(K1322)	Single-Family	64.2	65.2	63.4	-0.8	-1.8	64.7	65.7	64.2	-0.5	-1.5	No
R807(K1336)	Single-Family	69.1	70.1	72.4	3.3	2.3	69.7	70.7	73.2	3.5	2.5	Yes
R808(K2109)	Single-Family	63.9	64.9	66.4	2.5	1.5	65.1	66.1	67.6	2.5	1.5	Yes
R809(K71)	Multi-Family	66.1	67.1	66.5	0.4	-0.6	66.7	67.7	67.3	0.6	-0.4	Yes
R810(K2020)	Single-Family	63.3	64.1	64.0	0.7	-0.1	63.9	64.7	64.8	0.9	0.1	No
R811(K2095)	Single-Family	67.1	68.1	69.6	2.5	1.5	68.1	69.1	70.7	2.6	1.6	Yes
R812(K1386)	Single-Family	63.5	64.5	65.4	1.9	0.9	64.0	65.0	66.1	2.1	1.1	Yes
R813(K2114)	Single-Family	65.9	66.9	67.8	1.9	0.9	67.0	68.1	68.9	1.9	0.8	Yes
R814(K2125)	Single-Family	65.7	66.8	68.4	2.7	1.6	66.9	67.9	69.5	2.6	1.6	Yes
M-48(K37)	Single-Family	60.3	61.4	62.4	2.1	1.0	61.3	62.4	63.4	2.1	1.0	No
R815(K73)	Multi-Family	63.9	65.0	64.4	0.5	-0.6	64.4	65.4	65.1	0.7	-0.3	No
R816(K1372)	Single-Family	61.3	62.3	63.9	2.6	1.6	61.9	62.9	64.8	2.9	1.9	No
R817(K1395)	Single-Family	67.8	68.8	69.2	1.4	0.4	68.4	69.4	69.9	1.5	0.5	Yes
R818(K2029)	Multi-Family	52.1	53.0	53.2	1.1	0.2	52.5	53.3	54.0	1.5	0.7	No
R819(K2088)	Single-Family	72.7	73.8	74.5	1.8	0.7	73.7	74.7	75.4	1.7	0.7	Yes
R820(K2138)	Single-Family	66.2	67.2	68.3	2.1	1.1	67.4	68.4	69.3	1.9	0.9	Yes
R821(K1722A)	Single-Family	62.8	63.9	64.6	1.8	0.7	64.0	65.0	65.6	1.6	0.6	Yes

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R822(K1204)	Single-Family	65.2	66.2	66.8	1.6	0.6	66.2	67.2	67.8	1.6	0.6	Yes
R823(K1722)	Single-Family	65.0	66.1	67.2	2.2	1.1	66.2	67.3	68.3	2.1	1.0	Yes
R824(K2099)	Single-Family	64.8	65.8	67.4	2.6	1.6	65.8	66.9	68.5	2.7	1.6	Yes
R825(K2127)	Single-Family	65.4	66.4	67.9	2.5	1.5	66.6	67.6	69.0	2.4	1.4	Yes
R826(K2144)	Single-Family	65.5	66.6	67.7	2.2	1.1	66.7	67.8	68.8	2.1	1.0	Yes
R827(K2109C)	Single-Family	65.0	66.1	67.5	2.5	1.4	66.2	67.3	68.7	2.5	1.4	Yes
R828(K1720)	Single-Family	65.2	66.3	67.4	2.2	1.1	66.4	67.5	68.5	2.1	1.0	Yes
R829(K2026)	Single-Family	63.6	64.2	64.1	0.5	-0.1	64.5	65.1	65.2	0.7	0.1	No
R830(K68)	Multi-Family	65.9	66.9	67.1	1.2	0.2	66.6	67.6	67.8	1.2	0.2	Yes
R831(K1328)	Single-Family	63.8	64.9	63.5	-0.3	-1.4	64.4	65.4	64.3	-0.1	-1.1	No
M-45(K1484)	Church	72.7	73.7	75.2	2.5	1.5	73.5	74.5	75.9	2.4	1.4	Yes
R832(K1362)	Single-Family	59.5	60.5	60.8	1.3	0.3	60.2	61.1	61.7	1.5	0.6	No
R833(K1370)	Single-Family	60.7	61.7	62.8	2.1	1.1	61.3	62.3	63.7	2.4	1.4	No
R834(K1402)	Single-Family	66.4	67.4	67.5	1.1	0.1	67.0	68.0	68.2	1.2	0.2	Yes
R835(K1446)	Single-Family	68.3	69.3	70.4	2.1	1.1	69.0	70.0	71.2	2.2	1.2	Yes
R836(K67)	Multi-Family	65.6	66.6	66.7	1.1	0.1	66.3	67.3	67.5	1.2	0.2	Yes
R837(K2033)	Single-Family	52.5	53.3	53.5	1.0	0.2	52.9	53.8	54.3	1.4	0.5	No
R838(K2109F)	Single-Family	63.9	64.9	65.9	2.0	1.0	65.0	66.1	67.0	2.0	0.9	Yes
R839(K1334)	Single-Family	62.5	63.5	62.6	0.1	-0.9	63.1	64.1	63.5	0.4	-0.6	No
R840(K2109A)	Single-Family	60.8	61.8	62.9	2.1	1.1	61.9	63.0	64.0	2.1	1.0	No
R841(K30)	Single-Family	62.3	63.4	64.3	2.0	0.9	63.5	64.6	65.4	1.9	0.8	No
R842(K1353)	Day Care	57.5	58.5	60.4	2.9	1.9	58.1	59.1	61.2	3.1	2.1	No
R843(K1406)	Single-Family	63.1	64.1	64.2	1.1	0.1	63.7	64.7	65.0	1.3	0.3	No
R844(K2032)	Single-Family	63.5	64.1	63.9	0.4	-0.2	64.5	65.2	65.1	0.6	-0.1	No
R845(K2103)	Single-Family	63.3	64.3	65.8	2.5	1.5	64.4	65.4	66.8	2.4	1.4	Yes
R846(K1396)	Single-Family	60.3	61.3	62.1	1.8	0.8	61.0	61.9	63.0	2.0	1.1	No
R847(K1403)	Single-Family	61.9	62.9	63.3	1.4	0.4	62.6	63.6	64.2	1.6	0.6	No
R848(K2035)	Multi-Family	51.5	52.3	52.0	0.5	-0.3	51.9	52.8	52.9	1.0	0.1	No
R849(K1397)	Single-Family	58.8	59.9	60.8	2.0	0.9	59.5	60.5	61.7	2.2	1.2	No
R850(K1721)	Single-Family	63.3	64.4	64.9	1.6	0.5	64.5	65.5	66.1	1.6	0.6	Yes
R851(K2094)	Single-Family	72.2	73.3	74.1	1.9	0.8	73.2	74.2	74.9	1.7	0.7	Yes
R852(K2109D)	Single-Family	60.1	61.2	62.0	1.9	0.8	61.3	62.4	63.1	1.8	0.7	No
R853(K1217)	Hotel	60.6	61.7	62.5	1.9	0.8	61.6	62.6	63.4	1.8	0.8	No
R854(K1460)	Single-Family	63.0	64.0	64.0	1.0	0.0	63.7	64.6	64.8	1.1	0.2	No
R855(K1392)	Single-Family	57.9	58.9	60.6	2.7	1.7	58.6	59.6	61.4	2.8	1.8	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R856(K1394)	Single-Family	58.4	59.4	60.0	1.6	0.6	59.1	60.1	60.8	1.7	0.7	No
R857(K1193)	Single-Family	69.5	70.5	72.1	2.6	1.6	70.3	71.3	72.9	2.6	1.6	Yes
R858(K1379)	Single-Family	57.0	58.0	59.2	2.2	1.2	57.6	58.6	60.0	2.4	1.4	No
R859(K1385)	Single-Family	56.3	57.3	58.6	2.3	1.3	56.9	57.8	59.4	2.5	1.6	No
R860(K2097)	Single-Family	71.8	72.9	73.7	1.9	0.8	72.8	73.8	74.6	1.8	0.8	Yes
R861(K1390)	Single-Family	55.6	56.6	57.5	1.9	0.9	56.3	57.3	58.4	2.1	1.1	No
R862(K1449)	Single-Family	64.1	65.1	64.6	0.5	-0.5	64.8	65.8	65.4	0.6	-0.4	No
M-39(K2037)	Multi-Family	66.4	67.0	66.1	-0.3	-0.9	67.8	68.4	67.8	0.0	-0.6	Yes
R863(K2043)	Single-Family	51.7	52.5	52.0	0.3	-0.5	52.1	53.0	52.9	0.8	-0.1	No
R864(K2117)	Single-Family	62.0	63.1	64.4	2.4	1.3	63.1	64.1	65.4	2.3	1.3	No
R865(K1212)	Commercial	69.0	70.1	71.1	2.1	1.0	70.1	71.2	72.1	2.0	0.9	Yes
R866(K2066)	Hotel	64.3	65.4	67.0	2.7	1.6	65.3	66.3	67.9	2.6	1.6	No
R867(K1196)	Single-Family	67.1	68.1	69.8	2.7	1.7	67.9	68.9	70.5	2.6	1.6	Yes
R868(KV1492)	Vacant	61.2	62.2	62.3	1.1	0.1	61.8	62.8	63.1	1.3	0.3	No
R869(K1492)	Multi-Family	62.2	63.2	64.1	1.9	0.9	63.0	64.0	65.0	2.0	1.0	No
R870(K2102)	Single-Family	70.8	71.9	72.7	1.9	0.8	71.8	72.8	73.5	1.7	0.7	Yes
R871(K2120)	Single-Family	61.1	62.1	63.2	2.1	1.1	62.1	63.1	64.2	2.1	1.1	No
R872(KV2147)	Vacant	60.7	61.7	63.0	2.3	1.3	61.8	62.9	64.2	2.4	1.3	No
R873(K2107)	Single-Family	70.5	71.6	72.4	1.9	0.8	71.4	72.5	73.2	1.8	0.7	Yes
R874(K1473)	Single-Family	51.9	52.9	53.6	1.7	0.7	52.6	53.6	54.4	1.8	0.8	No
R875(K1203)	Single-Family	65.0	66.0	68.1	3.1	2.1	65.8	66.8	68.8	3.0	2.0	Yes
R876(K2128)	Single-Family	60.7	61.7	62.7	2.0	1.0	61.7	62.7	63.7	2.0	1.0	No
R877(K40)	Single-Family	61.7	62.7	63.9	2.2	1.2	62.6	63.6	64.8	2.2	1.2	No
R878(K2141)	School	74.0	75.1	75.9	1.9	0.8	74.9	75.9	76.7	1.8	0.8	Yes
R879(K2121)	Single-Family	70.1	71.2	72.1	2.0	0.9	71.1	72.1	73.0	1.9	0.9	Yes
R880(K1202)	Single-Family	61.5	62.6	64.4	2.9	1.8	62.4	63.4	65.2	2.8	1.8	No
R881(K2130)	Single-Family	60.3	61.4	62.2	1.9	0.8	61.4	62.4	63.2	1.8	0.8	No
R882(K1211)	Single-Family	69.1	70.2	71.1	2.0	0.9	69.9	71.0	71.8	1.9	0.8	Yes
R883(K1209)	Single-Family	63.1	64.1	66.7	3.6	2.6	64.0	65.0	67.3	3.3	2.3	Yes
R884(K1213)	Single-Family	65.4	66.5	69.3	3.9	2.8	66.3	67.3	70.0	3.7	2.7	Yes
R885(K2126)	Single-Family	70.0	71.0	71.8	1.8	0.8	70.9	71.9	72.7	1.8	0.8	Yes
R888(K1218)	Single-Family	63.7	64.8	67.6	3.9	2.8	64.6	65.6	68.3	3.7	2.7	Yes
R889(K36)	Single-Family	61.9	62.9	65.5	3.6	2.6	62.8	63.8	66.2	3.4	2.4	Yes
R890(K2131)	Single-Family	69.4	70.5	71.4	2.0	0.9	70.4	71.4	72.3	1.9	0.9	Yes
R891(K2140)	Single-Family	59.4	60.4	61.3	1.9	0.9	60.5	61.5	62.3	1.8	0.8	No

Table 8. Alternative I Noise Levels

Receptor Number	Land Use	AM Peak Hour					PM Peak Hour					Approaches/ Exceeds NAC (Yes/No)
		2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	2010 Existing L_{eq} (1-Hr) dB(A)	2035 No Build L_{eq} (1-Hr) dB(A)	2035 Build L_{eq} (1-Hr) dB(A)	Build Minus Existing (dB(A))	Build Minus No Build (dB(A))	
R892(K1216)	Single-Family	62.2	63.2	64.7	2.5	1.5	63.1	64.1	65.5	2.4	1.4	No
R893(K1220)	Single-Family	62.1	63.2	65.5	3.4	2.3	63.0	64.0	66.3	3.3	2.3	Yes
R894(K2111)	Single-Family	69.0	70.1	70.9	1.9	0.8	69.9	71.0	71.8	1.9	0.8	Yes
R895(K1219)	Single-Family	55.9	56.9	58.6	2.7	1.7	56.6	57.6	59.3	2.7	1.7	No
R896(K2142)	Single-Family	59.1	60.1	60.9	1.8	0.8	60.2	61.2	61.9	1.7	0.7	No
R897(K2139)	Single-Family	68.5	69.6	70.5	2.0	0.9	69.5	70.5	71.3	1.8	0.8	Yes
R898(K1224)	Single-Family	61.2	62.3	64.7	3.5	2.4	62.1	63.1	65.4	3.3	2.3	No
R899(K1223)	Single-Family	61.3	62.3	64.4	3.1	2.1	62.1	63.2	65.2	3.1	2.0	No
R900(K1222)	Single-Family	56.9	58.0	59.6	2.7	1.6	57.6	58.6	60.3	2.7	1.7	No
R901(K1753)	Cemetery	60.7	61.7	63.1	2.4	1.4	61.4	62.4	63.8	2.4	1.4	No
M-47(K2141)	School	60.0	61.0	61.8	1.8	0.8	60.9	61.9	62.6	1.7	0.7	No

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6.0 NOISE ABATEMENT

The Kentucky Transportation Cabinet (KYTC) requires that noise abatement measures be considered where traffic related noise impacts are predicted. Federal funds may be used for noise abatement measures when:

- traffic noise impacts have been identified, and
- abatement measures have been determined to be feasible and reasonable pursuant to Section 772.13(d) and KYTC policy.

In conformance with these requirements, abatement measures were evaluated in terms of their effectiveness to substantially reduce predicted design year noise levels at locations where impacts occur. Potential abatement measures include:

- Traffic management measures.
- Alteration of roadway horizontal or vertical alignments.
- Acquisition of real property or land to serve as a buffer zone to preempt development that would be adversely impacted from traffic noise.
- Noise insulation of Activity Category D land use facilities listed in Table 1.
- Construction of noise barriers including acquisition of property rights, either within or outside the highway right-of-way (ROW).

Traffic management measures involve restrictions on the speed and type of vehicles permitted to use a particular roadway. Traffic management measures such as placing restrictions on heavy truck movements and lowering operating speeds are not compatible with the purpose of interstate roadways. Alteration of horizontal and vertical alignments beyond what is presently proposed for the Build Alternatives is constrained by existing terrain, location of the existing transportation facilities and land uses, underlying geology, and other considerations. Due to the densely developed urban environment of the study area, acquisition of land to serve as a noise buffer zone is not a practical option. Therefore, the only remaining potential effective abatement measures are noise barriers.

6.1 KYTC Noise Barrier Feasibility and Reasonableness Factors

Noise barriers reduce noise by blocking the path of sound between the source of the noise and the receiver. To be effective, a noise barrier should be located adjacent to either the source or the receiver. The noise wall must also be long, continuous and break the line-of-sight from the highway to the receiver.

When determining the acoustic feasibility of a proposed abatement measure, KYTC policy requires that abatement measures provide a substantial noise reduction (>5 dB(A)) for a reasonable percentage of impacted receptors to warrant consideration. The objective of the proposed abatement is to achieve the noise reduction design goal (7 dB(A) for a minimum of 40 percent of benefited receptors). However, a proposed barrier will not be considered acoustically feasible if it does not provide a minimum 5 dB(A) reduction for more than 50 percent of the impacted receptors.

Engineering or constructability issues may render an abatement measure infeasible. In determining if site characteristics are suitable for noise barrier construction, KYTC considers

numerous factors including safety, maintenance, drainage, and access. Engineering judgment may dictate that a barrier is not feasible if:

- A substantial noise reduction (≥ 5 dB(A)) for more than 50 percent of the impacted receptors is not achievable, and
- The barrier would pose overriding safety (visibility issues) or maintenance (drainage and right of way access) problems as determined by the American Association of State Highway and Transportation Officials (AASHTO) *Green Book, Roadside Design Guide or Manual of Uniform Traffic Control Devices* (MUTCD).

The determination of reasonableness of a proposed abatement measure is based upon three primary factors: cost effectiveness; the noise reduction design goal and the desires of the benefited receptors. The noise barrier determination of reasonableness is defined as follows:

To be cost effective, KYTC policy has established $35,000 as a reasonable maximum threshold for the Cost per Benefited Receptor (CBR). The CBR is defined as follows:

CBR = (Cost of Noise Barrier ($)/Number of Benefited Receptors)

Where:

1. Cost of noise barrier is the total anticipated cost of the noise barrier including design, ROW, utilities, and construction. For this analysis, an average cost of $30 per square foot of barrier wall is assumed.

2. The number of benefited receptors is the total number of receptors receiving a noise reduction of at least 5 dB(A).

Once a proposed noise barrier satisfies the physical feasibility and reasonableness requirements described above, the solicitation of views of the affected property owners (benefited receptors) is the final step in determining if a proposed noise barrier will be constructed. The final decision on the installation of any abatement measure is determined in coordination with residents and owners of the impacted properties during the public involvement process. When the majority of benefited receptors and property owners, are opposed to construction of a noise barrier, KYTC will give great deference to these opinions in making a final determination regarding the reasonableness of the measure. Similarly, where the majority of the benefited receptors and property owners are in support of noise barrier construction, and the proposal satisfies all other criteria for consideration outlined in the policy, KYTC will incorporate the abatement measures into the project.

6.2 Noise Barrier Analysis Findings

A noise barrier analysis was completed utilizing the Federal Highway Administration (FHWA) Traffic Noise Model Version 2.5 (TNM) for adjacent residential communities and other noise sensitive areas where noise impacts are predicted to occur and a lowered noise level would be of benefit. Eleven potential noise wall locations were identified and evaluated for feasibility and reasonableness. Summaries of those findings are contained in Table 9 for Alternative E and Table 10 for Alternative I. Illustrations depicting the location of each proposed noise barrier are shown on Exhibits 4 through 21. Noise reduction levels achieved and the number of benefiting

equivalent residences at each receiver modeling location behind each proposed noise wall are contained in Appendix D for Alternative E and Appendix E for Alternative I.

The abatement analysis indicates that three out of the eleven proposed noise walls satisfy KYTC feasibility and reasonableness requirements under both Build Alternatives. The noise barrier locations associated with Alternative E are labeled B1 through B11 in Table 9 and are illustrated in Exhibits 4 through 12. Similarly, the noise barrier locations associated with Alternative I are labeled B12 through B22 (B22A plus B22B) in Table 10 and are depicted in Exhibits 13 through 21.

The recommended noise barriers for both Build Alternatives provide abatement to three residential areas. These are illustrated on Exhibits 8, 9 and 11 for Alternative E and Exhibits 17, 18, and 20 for Alternative I. The optimized barrier heights at each proposed location under both alternatives are the same. The recommended noise barriers for Alternatives E and I vary slightly in the number of equivalent benefiting receptors, barrier length, unit cost per benefiting receptor, total cost, and maximum acoustical effectiveness. All recommended noise barriers achieve a 5 dB(A) or greater noise reduction for at least 50 percent of the impacted receptors. In addition, each recommended barrier satisfied the 7 dB(A) minimum noise reduction goal at 40 percent or more of the benefiting receptors.

Noise abatement was evaluated for Goebel Park as illustrated in Exhibit 12 for Alternative E and Exhibit 21 for Alternative I. Under Alternative E a noise barrier was considered between KY 8th Street and the KY 5th Street ramp (Exhibit 12). A noise barrier is not proposed along the southern extent of the park boundary (south of the outdoor pool area) where the I-71/I-75 widening would occur because major features of the walking trail, parking lot and nearly all of the basketball court area would be taken and therefore eliminating these features as potential benefiting receptors. Furthermore, most of the southern land areas of Goebel Park remaining after roadway improvements are completed would slope upward rendering any potential noise barrier acoustically ineffective.

Noise barrier acoustic effectiveness for Goebel Park would be limited to the portions of the park closest to the considered sound barrier. The total park area is assumed to be comprised of a total of 60 equivalent benefiting receptors. These general park usage equivalent benefiting receptors are in addition to the other benefiting receptors behind the proposed noise wall which includes the pool. As depicted in Exhibit 12, the proposed sound barrier under Alternative E does not cover the entire length of the park fronting the highway because the southern extent of the improvements results in little usable remaining park usage to consider abatement. For example the basketball courts are largely taken by the widening under Alternative E. Approximately 30 percent of the park area immediately adjacent to the barrier (after the roadway widening is completed) could potentially receive noise reductions of 5 dB(A) or greater.

The noise abatement analysis assumed a conservative approach with all 60 equivalent benefiting receptors located in this narrow band of Goebel Park as potential benefiting receptors. The analysis findings indicate that the proposed noise barrier would be 20 feet tall and would provide 5 dB(A) or greater noise reduction to 47 equivalent benefiting receptors comprised of 15 equivalent benefiting receptors associated the pool area and 32 Goebel Park general usage receptors. However, however the 47 equivalent benefiting receptors represent approximately 43 percent of total number of impacted receptors which achieve a 5 dB(A) or greater noise reduction. The KYTC policy states a minimum of 50 percent of the impacted receptors behind a proposed sound barrier must achieve a noise reduction of 5 dB(A) or

greater. Increasing the barrier height beyond 20 feet would not change the outcome. Therefore under the Alternative E build design the proposed barrier would be considered not acoustically feasible under the KYTC noise abatement policy requirements.

The noise barrier cost and acoustic effectiveness evaluation for this area also considered potential noise impacts and abatement benefits for large community festivals such as Oktoberfest and Maifest. According to the city of Covington, these events draw large crowds to the park and surrounding area, estimated to be 125,000 over three day periods for each event. The majority of the usage of the park during these periods occurs in the area of the bell tower and shelter house, located near Philadelphia Street on the northern end of the park. Though the barrier is effective in achieving a significant reduction in noise levels within 100-200 feet of its location, the primary use of the facility during these special events would not occur within these areas of effectiveness. The predicted noise readings in the vicinity of the bell tower and shelter house area are not appreciably altered with the construction of the barrier. Since the barrier would not achieve a noise reduction sufficient to benefit the users during the special events, these were not further considered in evaluation of the reasonableness of the barrier.

Under Alternative I a noise barrier is proposed between Pike Street and the KY 5th Street ramp (Exhibit 21). Under the Alternative I build design several proposed mainline roadway segments are increasing in elevation as they pass Goebel Park on their approach to the Brent Spence Bridge crossing. To further complicate the situation most of the useable areas of the park and the adjacent residential area are also increasing in elevation the further away you get from the I-71/I75 mainlines. As a result for the most of the mainline roadways fronting Goebel Park, the to break the line of sight between the traffic noise and the adjacent sensitive areas would require noise barriers in excess of 40 feet to provide any noticeable noise reduction, The resulting sound barriers would far exceed the $35,000 cost per benefiting equivalent receptor limit. However, noise barriers were considered in attempt to determine if instead of a single fixed height sound barrier, a wall composed of 2 heights could achieve noise reduction within the minimum feasibility and reasonableness limits of the KYTC policy requirements. As illustrated in Exhibit 21, sound barrier B22 along its southern extent would extend 26 feet in height as indicated by barrier segment B22A and extends 30 feet in height in the northern portion of its extent as represented by barrier segment B22B. In general, 30 feet is generally considered the maximum constructible height for sound barriers using standard engineering design guidelines. The noise barrier cost and acoustic effectiveness evaluation for this area was based on a maximum of 60 equivalent benefiting receptors using the park on an average daily basis. Approximately 30 percent of the park area immediately adjacent to the barrier (after the roadway widening is completed) could potentially receive noise reductions of 5 dB(A) or greater.

The noise abatement analysis assumed a conservative approach with all 60 equivalent benefiting receptors located in this narrow band of Goebel Park as potential benefiting receptors. The analysis findings indicate that the proposed noise barrier would provide 5 dB(A) or greater noise reduction to only 12 equivalent benefiting receptors comprised entirely of general park usage receptors. The existing outdoor pool area would not receive benefit from the barrier. The 12 equivalent benefiting receptors represent less than 10 percent of total number of impacted receptors which is far below the 50 percent minimum requirement, Furthermore, the unit cost per benefiting receptor was estimated at over $143,000 which far exceeds the $35,000 limit. Therefore under the KYTC traffic noise abatement policy requirements, the proposed sound barrier would not be acoustically feasible and cost effective.

Total construction cost of all recommended noise barriers satisfying KYTC feasibility and reasonableness criteria for Alternative E was determined to be $5,980,380 providing abatement to 373 equivalent benefiting receptors and $5,973,780 for Alternative I providing abatement to 365 equivalent benefiting receptors.

6.3 Parallel Barrier Consideration

The *FHWA Highway Noise Barrier Design Handbook* defines parallel barriers as two barriers which face each other on opposite sides of a roadway. Sound reflected between reflective parallel barriers may cause degradations in each barrier's performance due to multiple reflections that diffract over the individual barriers. To categorize parallel noise barriers and the insertion-loss degradation values, a width-to-height ratio is used. The separation distance width-to-barrier-height ratio (w/h) is the ratio of the total distance between parallel barriers and the average height of the two barriers. Significant insertion loss degradation of greater than 3 dB(A) will occur when width-to-height ratios are less than 10:1. Within the study area there are no parallel barrier configurations with width-to-height ratios of less than 10:1 which would warrant further TNM modeling to quantify sound barrier performance degradation and require adjustments to the recommended sound barrier configurations shown in this report.

6.4 Noise Abatement Likelihood Statement

Based on the results of the noise barrier analysis, a total of 373 equivalent residences are identified as benefited under Alternative E and 365 under Alternative I in accordance with KYTC feasibility and reasonableness criteria. The analysis indicates that noise abatement is warranted, at three out of the 11 evaluated sound barrier locations depicted in Exhibits 4 through 21. A refinement of the noise analysis will occur during the final highway design phase of the project. If during final design it has been determined that conditions have changed such that noise abatement is no longer feasible and reasonable, the abatement measures may not be implemented. The final decision on the installation of any abatement measure will be determined in coordination with local officials and residents living in the impacted properties during the public involvement process.

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Table 9. Summary of Noise Abatement Analysis Findings for Alternative E

Barrier #	Percentage of Benefited Receptors which Receive 7 dB(A) or Greater Noise Reduction (%)	Percentage of Impacted Receptors which Receive 5 dB(A) or Greater Noise Reduction (%)	Barrier Description					Number Of Benefited Properties	Estimated Cost Per Benefiting Receptor (CBR) ($)	Noise Barrier Effectiveness			KYTC Noise Abatement Criteria Satisfied (Yes/No)
			Length (feet)	Beginning Point and Highway Direction	Ending Point and Highway Direction	Noise Barrier Height (feet)	Estimated [1] Cost ($)			Design Goal Achieved[2]	Acoustic Feasibility Achieved [3] (Yes/No)	Cost Effective Achieved [4] (Yes/No)	
B1	76.0	38.5	1,129	SB 560+86	SB 550+33	22	745,140	25	$29,806	Yes	No	Yes	No
B2	33.3	11.5	593	SB 549+71	SB 543+78	24	426,960	3	$142,320	No	No	No	No
B3	85.7	14.6	491	SB 542+92	SB 537+83	24	353,520	7	$50,503	Yes	No	No	No
B4	23.1	20.0	1,257	SB 537+16	SB 523+82	24	905,040	13	$69,618	No	No	No	No
B5	29.3	100.0	1,041	SB 413+81	SB 403+29	24	749,520	41	$18,281	No	Yes	Yes	No
B6	68.8	94.1	1,453	SB 384+82	SB 370+60	24	1,046,160	16	$65,385	Yes	Yes	No	No
B7	53.7	95.1	4,487	NB 347+62	NB 391+74	20	2,692,200	203	$13,262	Yes	Yes	Yes	**Yes**
B8	46.1	92.5	2,617	NB 405+57	NB 431+88	20	1,570,200	102	$15,394	Yes	Yes	Yes	**Yes**
B9	71.4	58.3	1,990	NB 446+15	NB 465+63	24	1,432,800	21	$68,229	Yes	Yes	No	No
B10	60.3	58.8	2,603	NB 511+30	NB 536+37	22	1,717,980	68	$25,264	Yes	Yes	Yes	**Yes**
B11	84.1	42.9	1,473	NB 557+17	NB 572+05	20	883,800	47	$18,804	Yes	No	Yes	No
			Total Cost of Recommended Noise Barriers =				**5,980,380**	**373**					

Notes:
[1] Estimated cost of the barriers is based on the surface area cost of $30 per square foot of barrier wall as recommended by KYTC.
[2] A design goal of 7 dB(A) noise reduction for a minimum of 40 percent of all benefiting receptors is required
[3] Acoustic effectiveness of a barrier was judged by providing a noise reduction of 5 dB(A) or greater at 50 percent or more of the impacted receptors.
[4] Cost effectiveness was based on KYTC unit cost of $35,000 per benefiting receptor (CBR).

Table 10. Summary of Noise Abatement Analysis for Alternative I

Barrier #	Percentage of Benefited Receptors which Receive 7 dB(A) or Greater Noise Reduction (%)	Percentage of Impacted Receptors which Receive 5 dB(A) or Greater Noise Reduction (%)	Barrier Description					Number Of Benefited Properties	Estimated Cost Per Benefiting Receptor (CBR) ($)	Noise Barrier Effectiveness			KYTC Noise Abatement Criteria Satisfied (Yes/No)
			Length (feet)	Beginning Point and Highway Direction	Ending Point and Highway Direction	Noise Barrier Height (feet)	Estimated [1] Cost ($)			Design Goal Achieved[2]	Acoustic Feasibility Achieved [3] (Yes/No)	Cost Effective Achieved [4] (Yes/No)	
B12	76.0	38.5	1,151	SB 561+63	SB 550+32	24	828,720	25	$33,149	Yes	No	Yes	No
B13	70.0	15.9	606	SB 549+82	SB 543+92	24	436,320	10	$43,632	Yes	No	No	No
B14	45.5	22.0	504	SB 542+96	SB 537+84	24	362,880	11	$32,989	Yes	No	Yes	No
B15	0.0	13.8	1,407	SB 537+33	SB 522+55	24	1,013,040	8	$126,630	No	No	No	No
B16	29.3	100.0	1,041	SB 413+81	SB 403+29	24	749,520	41	$18,281	No	Yes	Yes	No
B17	68.8	94.1	1,453	SB 384+82	SB 370+60	24	1,046,160	16	$65,385	Yes	Yes	No	No
B18	52.0	94.9	4,487	NB 347+62	NB 391+74	20	2,692,200	198	$13,597	Yes	Yes	Yes	**Yes**
B19	46.1	92.5	2,617	NB 405+57	NB 431+88	20	1,570,200	102	$15,394	Yes	Yes	Yes	**Yes**
B20	71.4	58.3	1,990	NB 446+15	NB 465+63	24	1,432,800	21	$68,229	Yes	Yes	No	No
B21	43.1	63.8	2,593	NB 511+29	NB 536+30	22	1,711,380	65	$26,329	Yes	Yes	Yes	**Yes**
B22A	NA[6]	NA[6]	582	NB 550 +76	NB 557 +34	26	453,960	4	NA[6]	NA[6]	NA[6]	NA[6]	NA[6]
B22B	NA[6]	NA[6]	1,410	NB 557 +34	NB 571+35	30	1,269,000	8	NA[6]	NA[6]	NA[6]	NA[6]	NA[6]
B22(A+B)	50.0	9.6	1,992	NB 550 +76	NB 571+35	26-30	1,722,960	12	$143,580	Yes	No	No	No
			Total Cost of Recommended Noise Barriers =				**5,973,780**	**365**					

Notes:
[1] Estimated cost of the barriers is based on the surface area cost of $30 per square foot of barrier wall as recommended by KYTC.
[2] A design goal of 7 dB(A) noise reduction for a minimum of 40 percent of all benefiting receptors is required
[3] Acoustic effectiveness of a barrier was judged by providing a noise reduction of 5 dB(A) or greater at 50 percent or more of the impacted receptors.
[4] Cost effectiveness was based on KYTC unit cost of $35,000 per benefiting receptor (CBR).
[5] Not Applicable (NA). Noise barrier feasibility and reasonableness for Barrier B22 was determined for the combined length of B22A plus B22B. The two barrier segments act as a system to provide abatement to portions of Goebel Park
.

7.0 HIGHWAY CONSTRUCTION-RELATED NOISE

Generally, annoyance effects can be expected during construction at sites within 250 feet of the activity. Actual distances at which noise impacts would occur depend on a number of factors including the type and number of construction equipment in site and their duration of usage.

7.1 Noise Effects during Construction

Noise from construction activities will add to the average noise level during the construction phase. Construction activities are temporary in nature and all activities are expected to occur during normal daytime waking hours; however, noise from construction could result in annoyance or disruption of sleep if nighttime operations should occur. In any case, construction operations should adhere to any local construction noise ordinances. Noise may also be generated by increases in heavy truck traffic to and from the project area.

Construction activities within the I-71/I-75 Corridor would have short-term noise effects on receptors in the immediate vicinity of the area. Effects on community noise levels during construction would result from equipment and delivery vehicles traveling to and from the area. The level of effect would depend on the noise characteristics of the equipment and activities involved, such as, the duration of the activity, the construction schedule, and the distance from receptors. Resultant noise levels at a given receptor location would depend on the type and number of pieces of construction equipment being operated and the distance from the construction site. Noise levels from construction activities can vary widely, depending on the phase of construction, which include land clearing and excavation, construction of new roadways and retaining walls. Noise generated from construction activity would be highest typically during the first year when excavation and heavy daily truck traffic would occur.

Typical noise levels from construction equipment, which may be employed during the construction period, are presented in Table 11. Noise levels measured at 50 feet from the construction equipment range from 81 dB(A) for generators to 101 dB(A) for pile drivers. The total hourly average sound energy [L_{eq} (1-hr) dB(A)] at a distance of 50 feet from the construction site boundary is in the order of 80 to 85 dB(A). Noise levels at receptors located at known distances from the construction site boundary can be conservatively estimated by assuming a 6 dB(A) drop-off per doubling of distance from each type of construction equipment and by combining the noise contributions from all of the construction equipment at the receptor site.

7.2 Construction Noise Abatement Measures

Although increases in the noise levels due to the construction of the project are temporary, measures should be taken to minimize impacts noise. Recommended standard measures include the following:

- informing the public when work is going to be performed,
- limit the number and duration of idling equipment on site,
- install mufflers on equipment and maintain all construction equipment in good repair,
- reduce noise from all stationary equipment by utilizing suitable enclosures,
- minimize the use of back-up alarms,
- schedule and space truck loading and unloading operations to minimize noise impacts,

- limit operation of heavy equipment and other noisy procedures to daylight hours whenever possible, and
- locate equipment and vehicle staging areas as far from noise sensitive areas as possible.

Table 11. Typical Roadway Construction Equipment Noise Levels

Equipment	Typical Noise Level (dB(A) at 50 feet from Source)*
Air Compressor	81
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane Derrick	88
Crane Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pile Driver (Impact)	101
Pile Driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Rail Saw	90
Rock Drill	98
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Truck	88

Source: Environmental Protection Agency (EPA) Report: *Construction Noise Technology Initiative (*Report 1789, September 1980).

8.0 CONCLUSIONS AND RECOMMENDATIONS

A noise barrier analysis was completed utilizing the Federal Highway Administration (FHWA) Traffic Noise Model Version 2.5 (TNM) for adjacent residential communities and other noise sensitive areas where noise impacts are predicted to occur and where a lowered noise level would be beneficial. The TNM modeling analysis for the two Build Alternatives yielded similar future (2035) predicted noise level with slightly more impacts under the PM peak hour when compared to the AM peak hour impacts. For Alternative E, there are 553 land use activities that would experience noise levels at or above the noise abatement criteria (NAC) impact thresholds established by the Federal Highway Administration (FHWA). These consist of 507 Activity Category B, 26 Category C, six Category D use and 14 Category E uses. For Alternative I, there are 565 land use activities that would experience noise levels at or above the NAC. These include 511 Category B, 34 Category C, six Category D, and 14 Category E uses.

A noise abatement analysis was completed for impacted areas where the construction of noise walls was determined to be feasible based upon Kentucky Transportation Cabinet (KYTC) noise guidance. The noise abatement evaluation considered sound barriers at 11 locations. Summaries of those findings are contained in Table 9 for Alternative E and Table 10 for Alternative I. Illustrations depicting the location of each proposed noise barrier are shown on Exhibits 4 through 21.

The abatement analysis findings indicate that three proposed noise barriers would satisfy the KYTC noise abatement feasibility and reasonableness requirements. The three recommended noise barriers under the Build Alternatives provide abatement for three residential communities. The three recommended noise barriers consist of a total of 9,707 linear feet of barrier wall, ranging in height from 20 to 22 feet for Alternative E and a total of 9,697 linear feet of barrier wall ranging in height from 20 to 22 feet under Alternative I. The recommended noise barriers are located between the following major intersections:

- I-71/75 northbound between Beechwood Road and Dixie Highway (Exhibits 8 and 17),
- I-71/75 northbound between Dixie Highway and Kyles Lane (see Exhibits 9 and 18), and
- I-71/75 northbound between Kyles Lane and West 12th Street (see Exhibits 11 and 20).

The recommended barriers under Alternative E would provide acoustic effectiveness for 373 equivalent noise receptors at a cost of approximately $5.9 million. Under Alternative I, the recommended barriers would provide acoustic effectiveness for 365 noise receptors at a cost of approximately $5.9 million dollars. The final decision on the installation of any abatement measure will be determined in coordination with local officials and residents of the impacted properties during the public involvement process.

9.0 REFERENCES

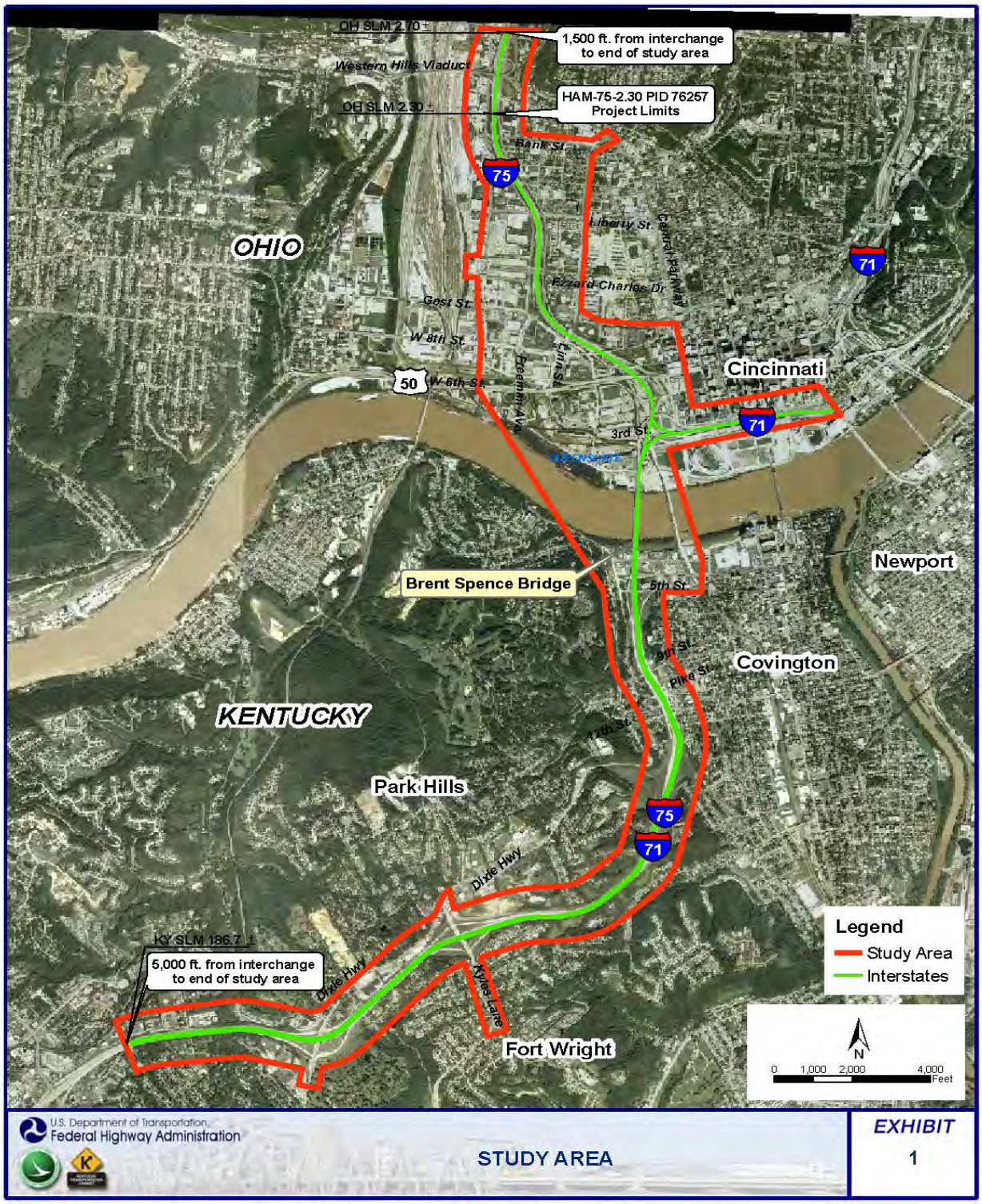
Brent Spence Bridge Noise Screening Report (PID No 75119, HAM-71/75-0.00/0.22, KYTC Project Item No. 5-17), February 2009.

Highway Traffic Noise Analysis and Abatement, Federal Highway Administration, 23 CFR 772. June 1995.

Measurement of Highway Noise Related Noise, Federal Highway Administration (Report No. FHWA-DP-45-1R) August 1996.

Noise Analysis and Abatement Policy, Kentucky Transportation Cabinet, July 13, 2011.

Exhibits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OHIO
Liberty St.
Central Parkway
71
Ezzard Charles Dr.
Gest St.
W 8th St.
50
W 6th St.
Freeman Ave.
Cincinnati
3rd St.
Brent Spence Bridge
Newport
5th St.
9th St.
Pike St.
Covington
KENTUCKY
12th St.
Park Hills
75
71
Dixie Hwy
KY SLM 186.7 ±
5,000 ft. from interchange to end of study area
Dixie Hwy
Kyles Lane
Fort Wright
Legend
Study Area
Interstates
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Feet
U.S. Department of Transportation
Federal Highway Administration
STUDY AREA
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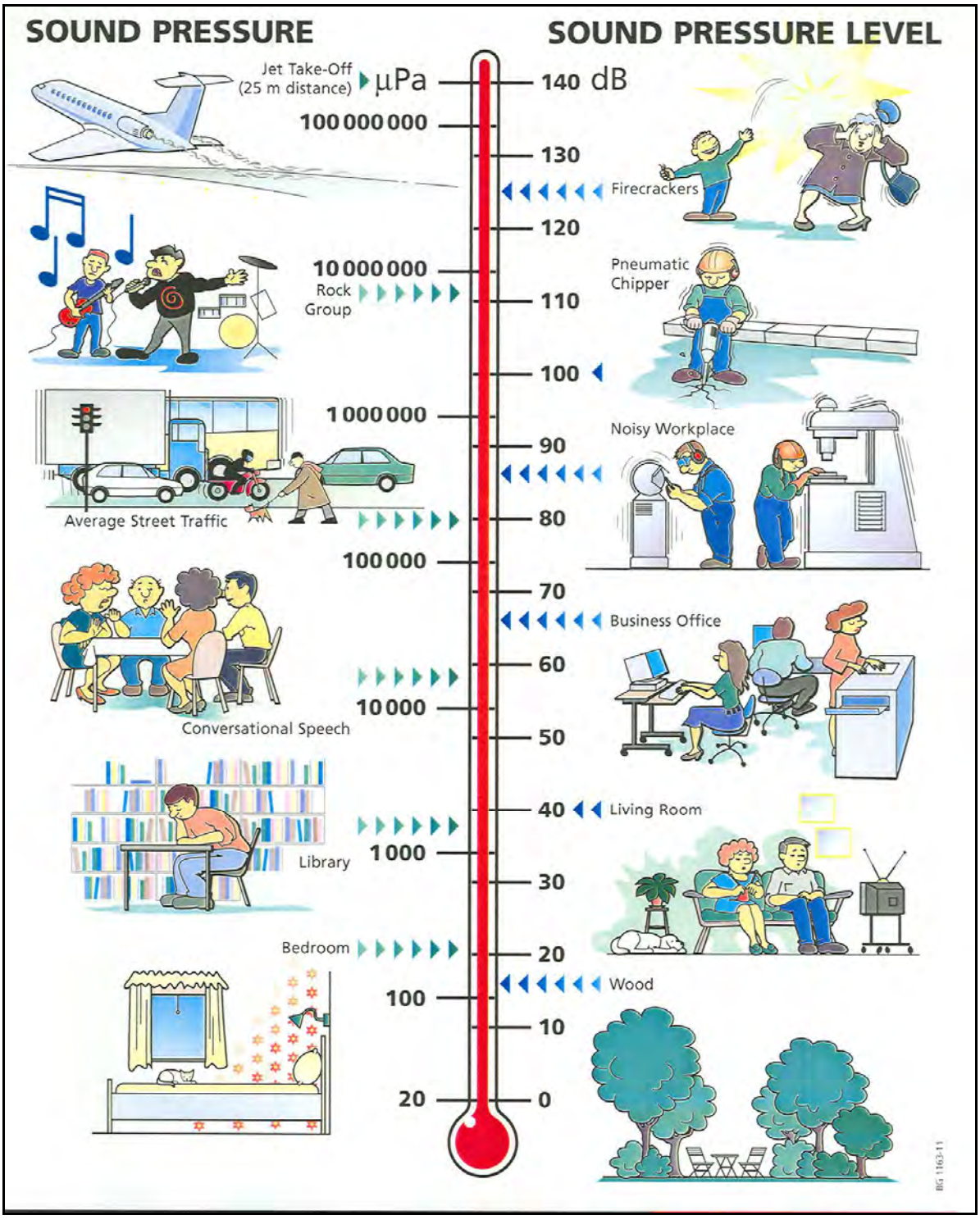
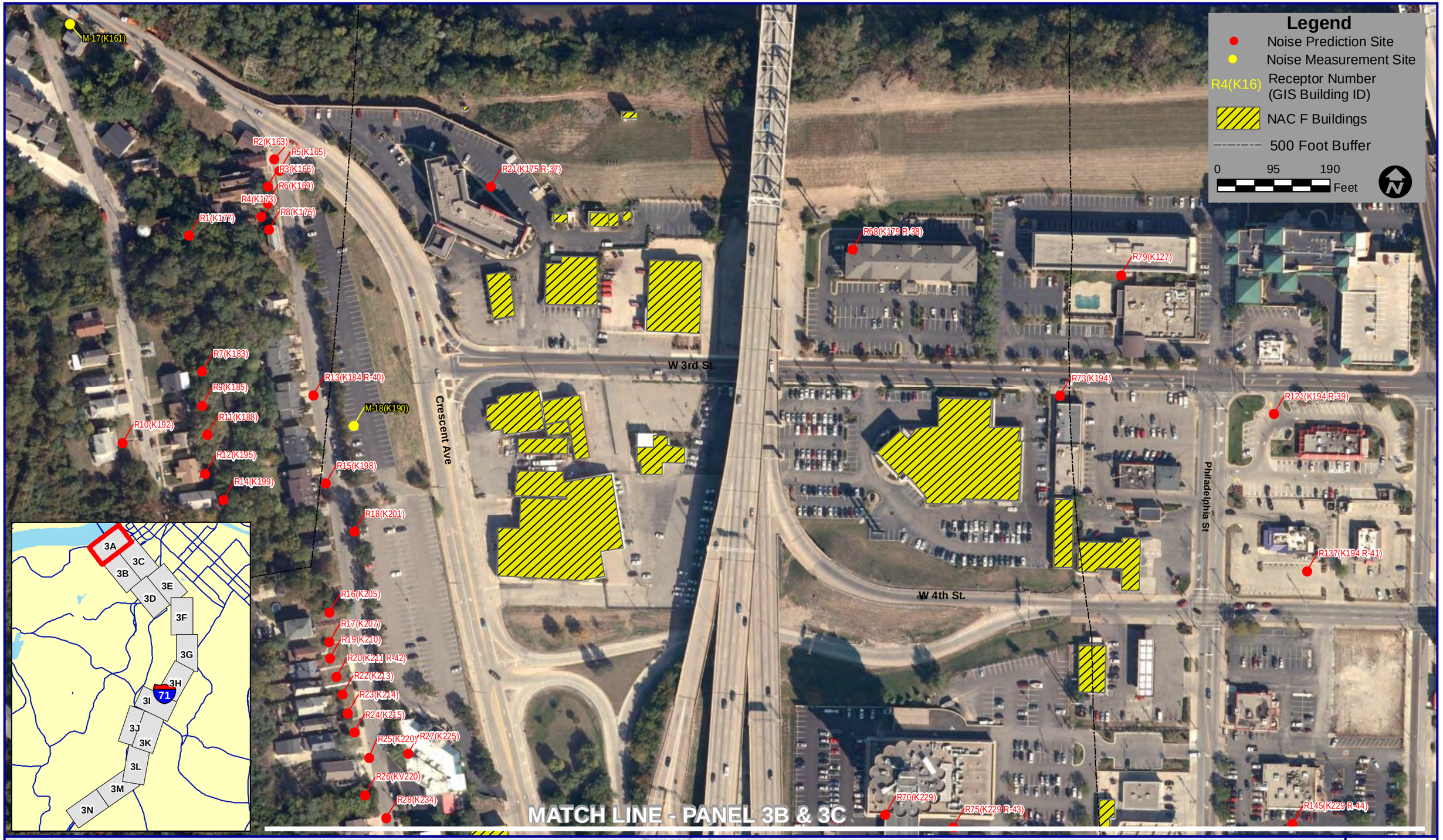


Source: Brüel and Kjær. Environmental Noise, Sound and Vibration Measurements, 2000

EXHIBIT 2: SOUND PRESSURE LEVELS



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Noise Measurement and Prediction Sites

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EXHIBIT
3B

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MATCH LINE - PANEL 3B

MATCH LINE - PANEL 3D

MATCH LINE - PANEL 3A

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Willow Run Rd
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Philadelphia St
Perry St
Dalton St
Philadelphia St
Short Pershing Ave
Fay St
W 9th St
Emma St
W 8th St
Lockwood St
W 8th St
W 7th St
Bakewell St
W 6th St
W 6th St

Legend

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- NAC F Buildings
- 500 Foot Buffer

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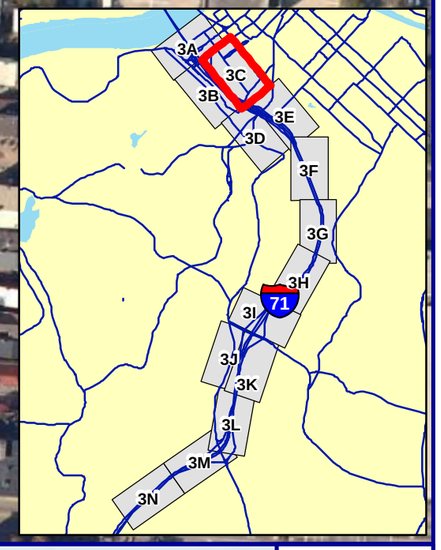

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MATCH LINE - PANEL 3F

MATCH LINE - PANEL 3D

MATCH LINE - PANEL 3C

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- NAC F Buildings
- 500 Foot Buffer

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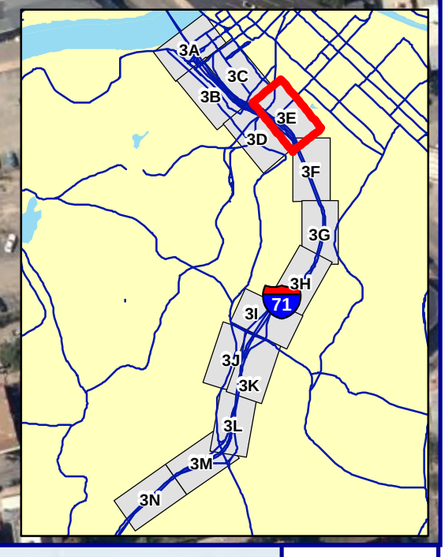

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Noise Measurement and Prediction Sites

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MATCH LINE - PANEL 3G

MATCH LINE - PANEL 3E

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Monroe St
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Legend

- Noise Prediction Site
- Noise Measurement Site
- R4(K16) Receptor Number (GIS Building ID)
- NAC F Buildings
- 500 Foot Buffer

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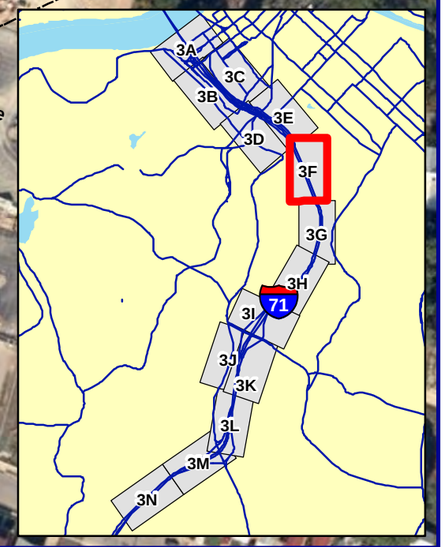

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Noise Measurement and Prediction Sites

EXHIBIT
3F

Prepared by:
PARSONS BRINCKERHOFF

MATCH LINE - PANEL 3H

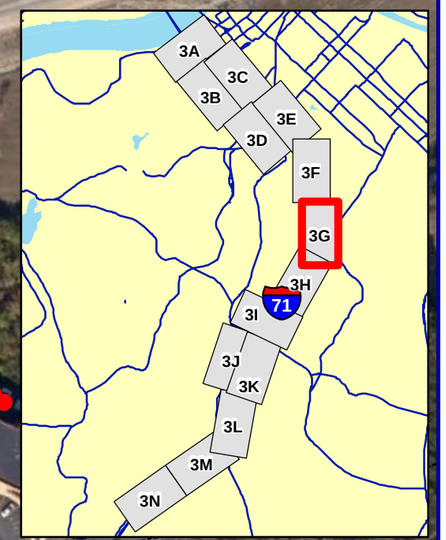
MATCH LINE - PANEL 3F

R465(K1502)
R476(K1520)
R473(K1506)
M-35(K1503)
R487(K1538)
R481(K1509)
Elberta Cir
Elberta Cir
Far Hills Dr
Silver Ridge Ln
R491(K1187)
R486(K1194)
R484(K1981)
Far Hills Dr
M-31(K1979)
M-33(K1581)
R595(K1581)
R614(K1585)
R613(K1583)
R568(K1561)
R567(K1552)
R571(K1547 R-58)
R575(K1540)
R626(K1563)
R618(K1558)
R623(K1554)
R629(K1550)
R627(K1577)
R625(K1575)
R624(K1565)
R631(K1544)
R634(K1538)
R641(K1530)
R621(K1572 R-59)
R619(K1567)
Highland Ave
R667(K1983)
M-32(K1983)
R661(K1766)
R665(K1989)

Legend

- Noise Prediction Site
- Noise Measurement Site
- R4(K16) Receptor Number (GIS Building ID)
- NAC F Buildings
- 500 Foot Buffer

0 95 190 Feet



U.S. Department of Transportation
Federal Highway Administration

Noise Measurement and Prediction Sites

EXHIBIT
3G

Prepared by:
PARSONS BRINCKERHOFF

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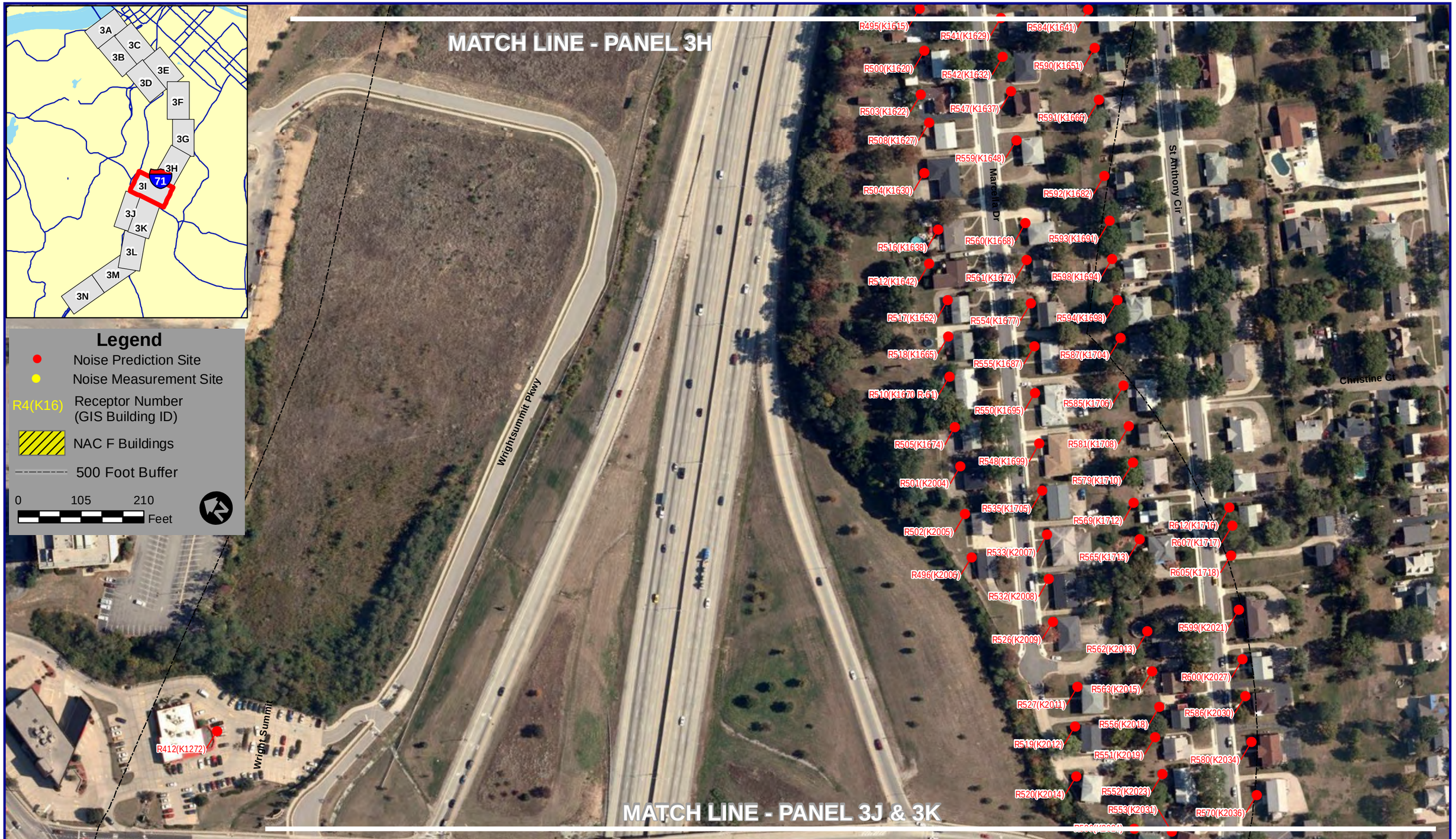
Federal Highway Administration

Noise Measurement and Prediction Sites

EXHIBIT
3H

Prepared by:
PARSONS BRINCKERHOFF



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Federal Highway Administration

Noise Measurement and Prediction Sites

EXHIBIT
3I

Prepared by:
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Federal Highway Administration

Noise Measurement and Prediction Sites

EXHIBIT
3J

Prepared by:
PARSONS BRINCKERHOFF

MATCH LINE - PANEL 3L

MATCH LINE - PANEL 3J

MATCH LINE - PANEL 3I

Kyles Ln

Rivard Rd

Rivard Dr

Pieck Dr

Highview Dr

Kennedy Rd

Rosa Ct

Rosa Ave

Lake St

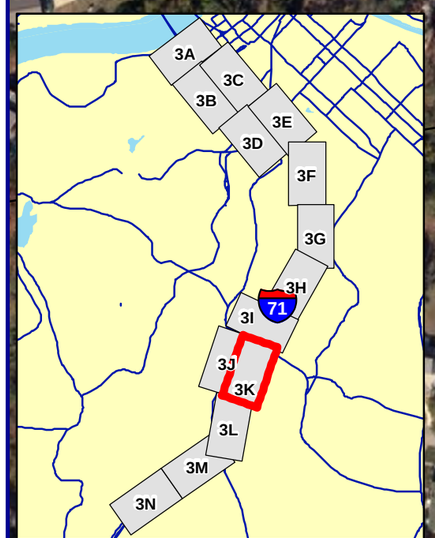
Augusta Ave

R735(K1339)
R733(K1332)
R737(K1323)
R730(K1311)
R741(K1307 R-62)
M-43(K1349)
R774(K1345)
M-41(K1318)
R794(KV1318)
M-42(K1348)
R805(K78)
R802(K1331)
R796(K1341)
R807(K1336)
R790(K1360)
R780(K1383)
M-44(K75)
R795(K74)
R791(K1365)
R799(K1391)
R815(K73)
R809(K71)
R817(K1395)
R830(K68)
R834(K1402)
R812(K1386)
R816(K1372)
R833(K1370)
R832(K1362)
R842(K1353)
R798(K1326)
R836(K67)
R843(K1406)
R847(K1403)
R849(K1397)
R856(K1394)
R861(K1390)
R858(K1379)
R846(K1396)
R855(K1392)
R859(K1385)
R789(K1319)
M-40(K1315)
R806(K1322)
R793(KV2025)
R831(K1328)
R803(K2017)
R839(K1334)
R804(K2025)
R810(K2020)
R818(K2029)
R837(K2033)
R829(K2026)
R848(K2035)
R844(K2032)
R536(K2024)
R553(K2031)
R863(K2043)
M-39(K2037)
R570(K2036)
R566(K2038)

Legend

- Noise Prediction Site
- Noise Measurement Site
- R4(K16) Receptor Number (GIS Building ID)
- NAC F Buildings
- 500 Foot Buffer

0 95 190 Feet



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Noise Measurement and Prediction Sites

EXHIBIT
3K

Prepared by:
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Federal Highway Administration

Noise Measurement and Prediction Sites

EXHIBIT
3L

Prepared by:
PARSONS BRINCKERHOFF

MATCH LINE - PANEL 3N

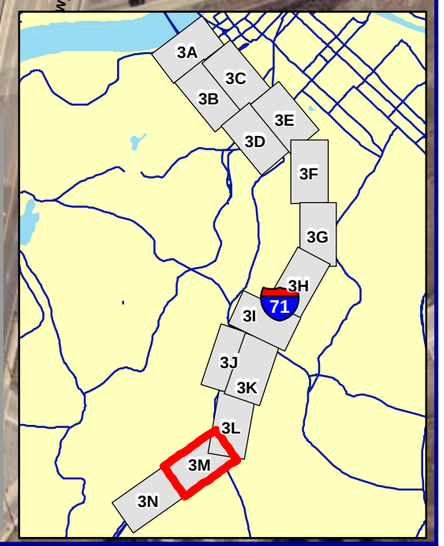
MATCH LINE - PANEL 3L

R710(K64)
R711(K1474)
R715(K1481)
R726(K1487)
R744(K1497)
R755(K1488)
R734(K1201)
R779(K1195)
R801(K1205)
M-48(K37)
R822(K1204)
W Maple Ave
R745(K1476)
R754(K1478)
R743(K1479)
R747(K1482)
R761(K1483)
R770(K1489)
R782(K1495)
R775(K1496)
R767(K1491)
R786(K1194)
R763(K1485)
R865(K1212)
Maple Ave
R853(K1217)
R866(K2066)
Dixie Hwy
R785(K2083)
R800(K2086)
R819(K2088)
R784(K1769)
R851(K2094)
R811(K2095)
R860(K2097)
R824(K2099)
R878(K2141)
R870(K2102)
R845(K2103)
R873(K2107)
R864(K2117)
R879(K2121)
R871(K2120)
R885(K2126)
R876(K2128)
R890(K2131)
R881(K2130)
R894(K2111)
R887(K2113)
R897(K2139)
R891(K2140)
R896(K2142)
Ashton Rd
M-47(K2141)
TIGERS

Legend

- Noise Prediction Site
- Noise Measurement Site
- R4(K16) Receptor Number (GIS Building ID)
- NAC F Buildings
- 500 Foot Buffer

0 130 260 Feet



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Noise Measurement and Prediction Sites

EXHIBIT
3M

Prepared by:
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Noise Measurement and Prediction Sites

EXHIBIT
3N

Prepared by:
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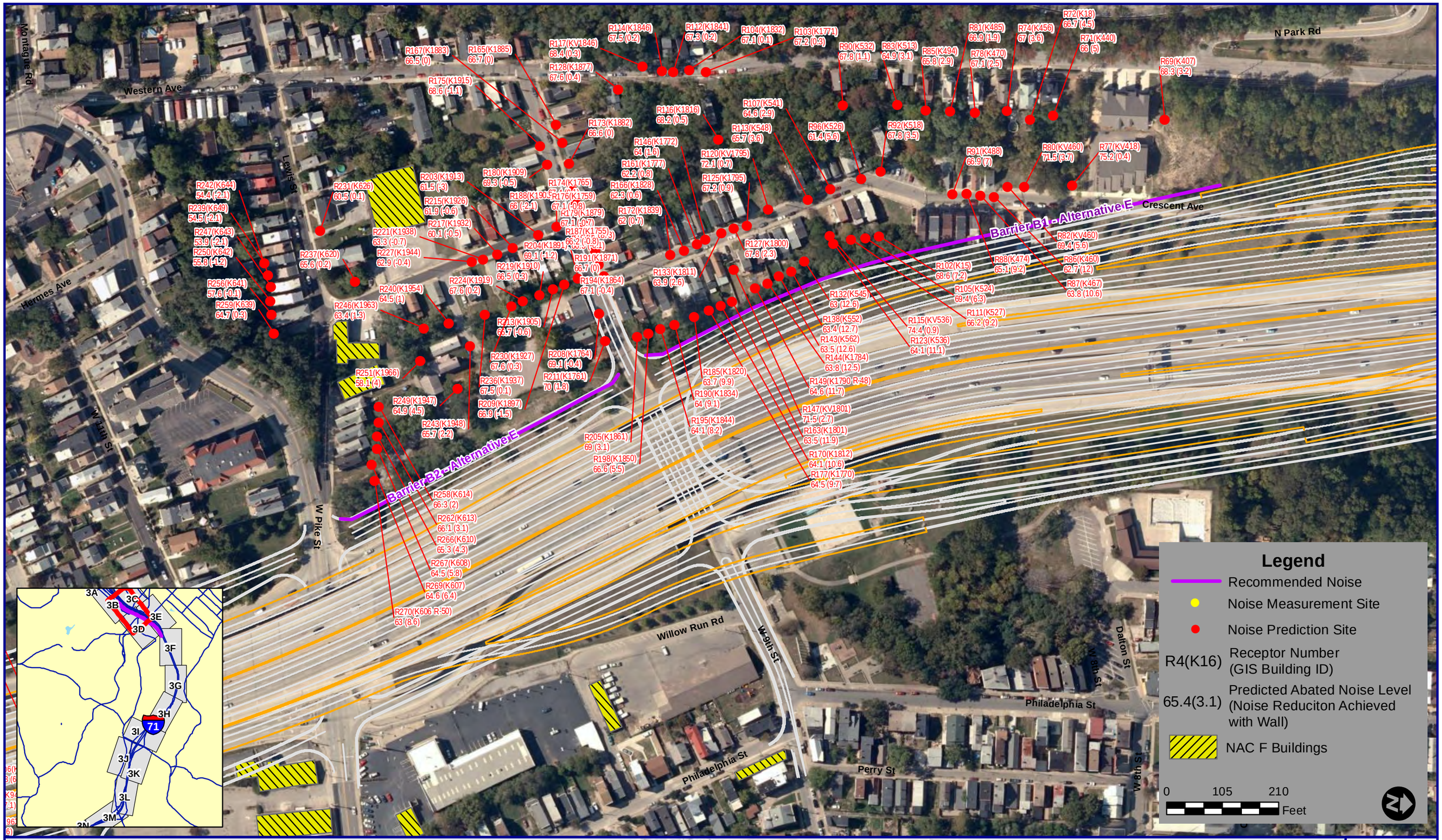
Goebel Park 24 Hour Noise Measurement Sites

EXHIBIT
3O

Prepared by:
PARSONS BRINCKERHOFF



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Alternative E Barrier B1 (22 feet) and Barrier B2 (24 feet)

EXHIBIT
4

Prepared by:
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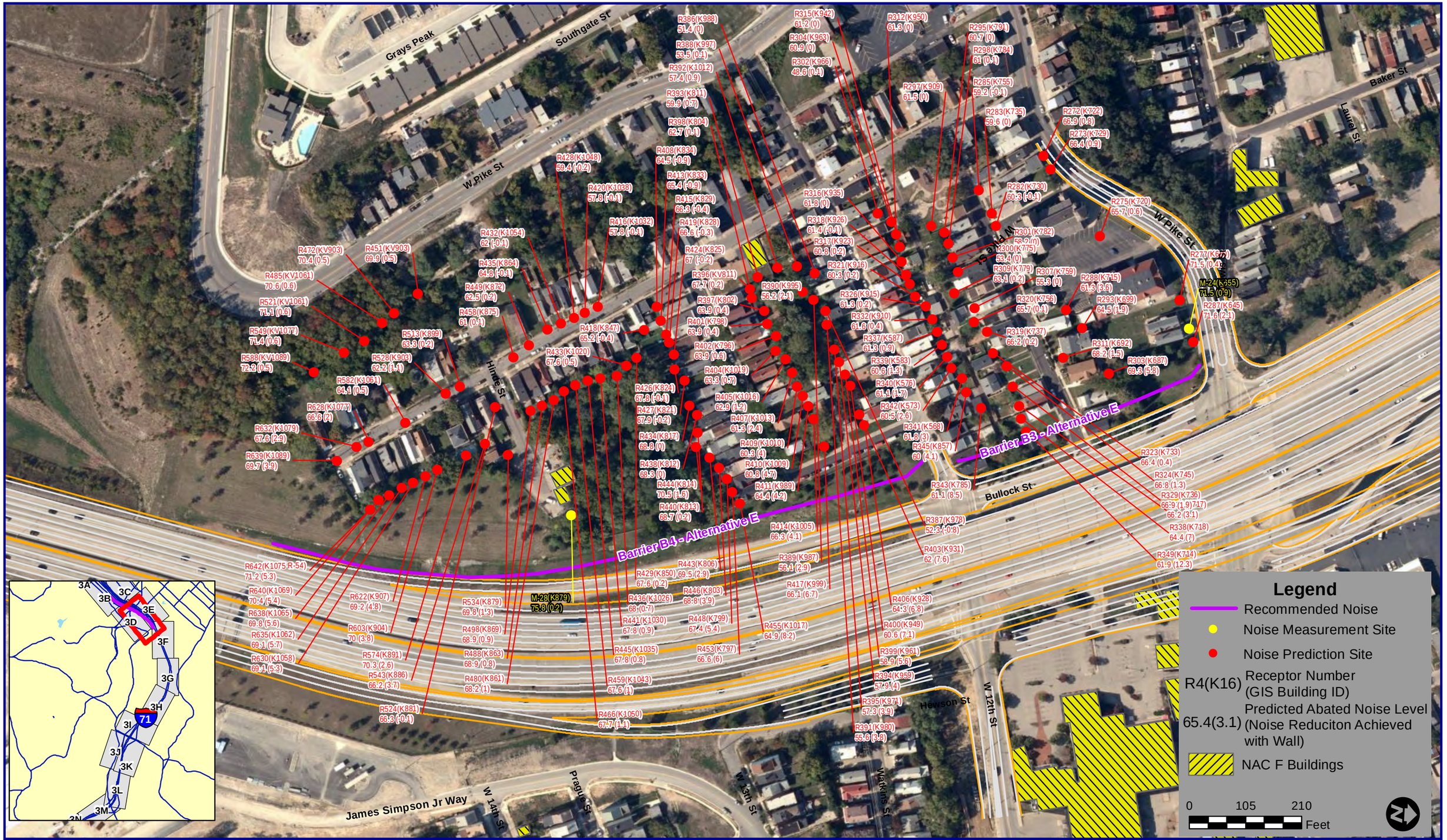

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Alternative E Barrier B3 (24 feet) and Barrier B4 (24 feet)

EXHIBIT
5

Prepared by:
PARSONS BRINCKERHOFF

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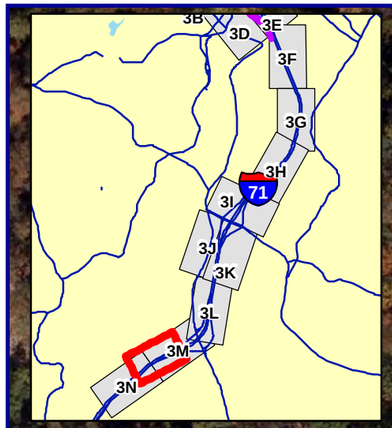
Federal Highway Administration

Alternative E Barrier B5 (24 feet)

EXHIBIT
6

Prepared by:
PARSONS BRINCKERHOFF



R710(K64)
59.7 (3.6)

R709(K1471)
63.2 (1.5)

R711(K1474)
61.5 (4.2)

R715(K1481)
60.6 (7.6)

R726(K1487)
61.5 (8.5)

R744(K1497)
64.3 (8.1)

R755(K1488)
64.2 (7.8)

R779(K1195)
63.9 (7.8)

R801(K1205)
63.7 (5.5)

R822(K1204)
63.2 (3.6)

M-48(K37)
61 (1.4)

R714(K1493)
65.8 (5.3)

R734(K1201)
65.9 (8.4)

W Maple Ave

Barrier B6 - Alternative E

Ashton Rd

Legend

- Recommended Noise
- Noise Measurement Site
- Noise Prediction Site
- R4(K16) — Receptor Number (GIS Building ID)
- 65.4(3.1) — Predicted Abated Noise Level (Noise Reduciton Achieved with Wall)
- NAC F Buildings

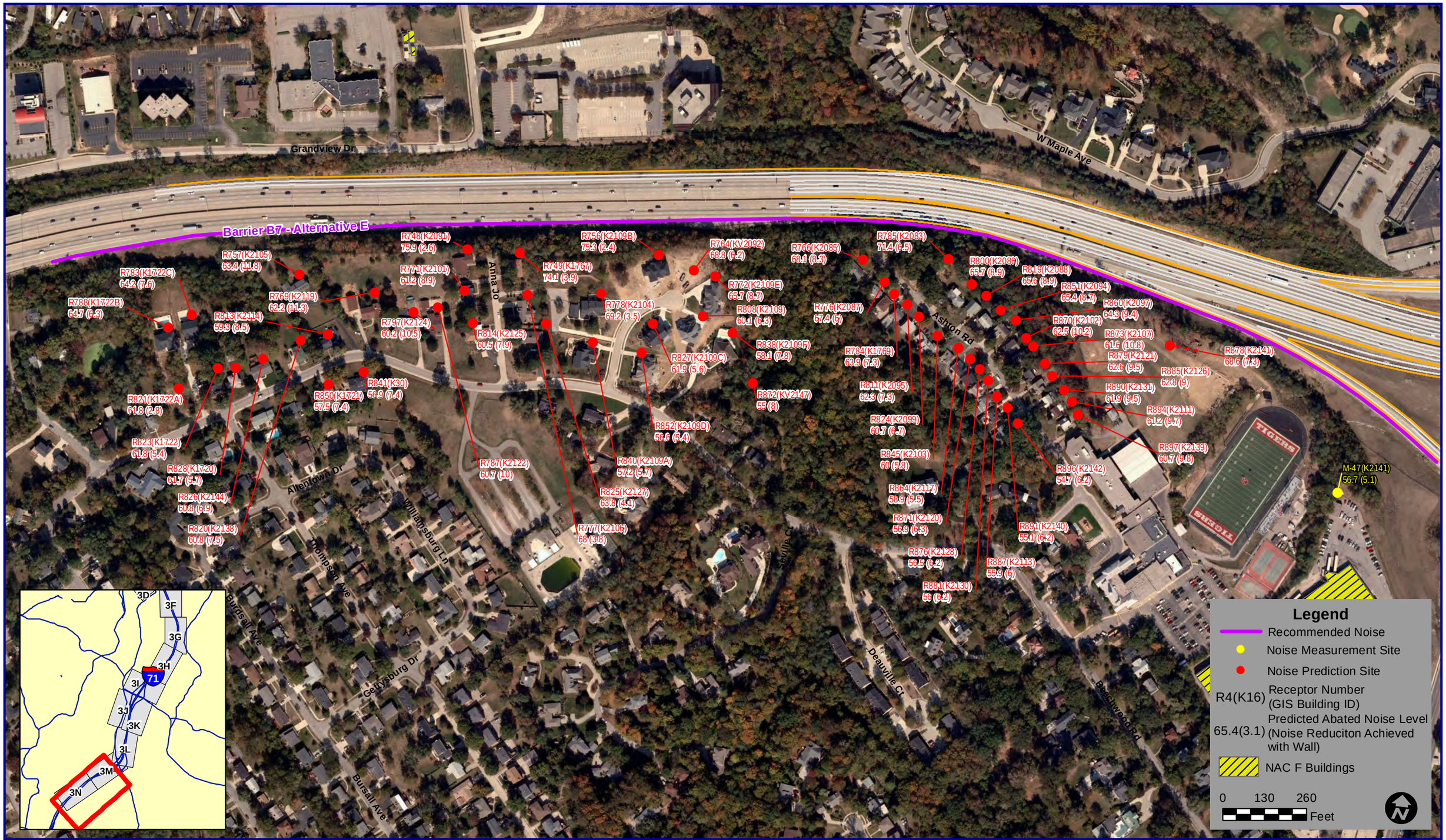
0 60 120
Feet

U.S. Department of Transportation
Federal Highway Administration

Alternative E Barrier B6 (24 feet)

EXHIBIT
7

Prepared by:
PARSONS BRINCKERHOFF



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Federal Highway Administration

Alternative E Barrier B7 (20 feet)

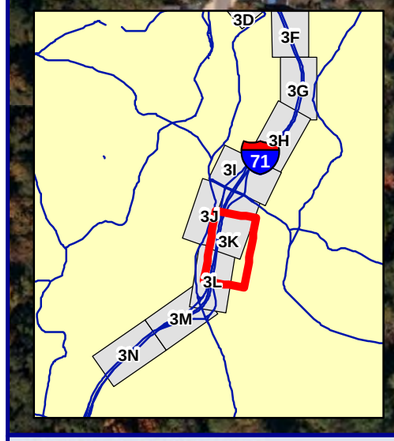
EXHIBIT
8

Prepared by:
PARSONS BRINCKERHOFF

Barrier B8 - Alternative E

M-45(K1484) 66.4 (8.8)
M-44a(K75) 61.8 (11.2)
M-44(K75) 63.2 (9.6)
R795(K74) 60.7 (8.1)
R792(K1421) 71.2 (5.3)
R815(K73) 57.3 (7.1)
R809(K71) 59.5 (7)
R830(K68) 59.2 (7.9)
R836(K59) 59.6 (7.1)
R835(K1446) 62.6 (7.8)
R857(K1193) 61.3 (10.8)
R867(K1196) 60.1 (9.7)
R875(K1203) 59.6 (8.5)
R883(K1209) 58.7 (8)
R882(K1211) 60.9 (10.2)
R884(K1213) 58.8 (10.5)
R888(K1218) 57.8 (9.8)
R893(K1220) 57 (8.5)
R892(K1216) 58.4 (6.3)
R898(K1224) 59 (5.7)
R899(K1223) 59.2 (5.2)
R895(K1219) 53.9 (4.7)
R900(K1222) 55.6 (4)
R889(K36) 58.7 (7.8)
R886(K1206) 58.4 (6.2)
R880(K1202) 59.2 (5.2)
R877(K40) 60.5 (3.4)
R869(K1492) 60.9 (3.2)
R868(KV1492) 57.4 (4.9)
R854(K1460) 58.4 (5.6)
R862(K1449) 58.4 (6.2)
R874(K1473) 49.9 (3.7)
R780(K1383) 62 (10)
R799(K1391) 60 (9.3)
R817(K1395) 60 (9.2)
R834(K1402) 58.7 (8.9)
R843(K1406) 56.9 (7.3)
R847(K1403) 56 (7.3)
R791(K1365) 61.2 (9.4)
R812(K1386) 57.4 (8)
R846(K1396) 55.2 (6.9)
R849(K1397) 54.6 (6.2)
R856(K1394) 54.4 (6.6)
R855(K1392) 54.4 (6.2)
R854(K1390) 53.5 (4)
R858(K1379) 54.5 (4.7)
R859(K1385) 54.1 (4.5)
R790(K1360) 62.5 (10.9)
R816(K1372) 56.6 (7.3)
R833(K1370) 56.2 (6.6)
R832(K1362) 55.8 (5)
R842(K1353) 55.3 (5.1)
R774(K1346) 60.9 (10.3)
M-42(K1348) 55.6 (13.2)
R796(K1341) 62.8 (11.3)
R805(K78) 62.8 (10.3)
R807(K1336) 63.5 (8.9)
R802(K1331) 66.4 (7)
M-41(K1318) 74.9 (0.2)
R794(KV1318) 65 (5.5)

Pieck Dr
Rivard Rd
Kennedy Rd
Highview Dr
E Orchard Rd
Augusta Ave
Edna Ln
Barbara Cir
Rosa Ct
Leslie



Legend

- Recommended Noise
- Noise Measurement Site
- Noise Prediction Site
- R4(K16) Receptor Number (GIS Building ID)
- 65.4(3.1) Predicted Abated Noise Level (Noise Reduciton Achieved with Wall)
- NAC F Buildings

0 80 160 Feet

U.S. Department of Transportation
Federal Highway Administration

Alternative E Barrier B8 (20 feet)

EXHIBIT **9**

Prepared by:
PARSONS BRINCKERHOFF

Wrightsummit Pkwy

Kyles Ln

Barrier B9 - Alternative E

M-38(K1609)
63.4 (10.8)

M:37(K1616)
65 (4.2)

R495 (K1615)
67.4 (6.4)

R503 (K1622)
63.4 (11.7)

R516 (K1638)
60.4 (12.5)

R504 (K1630)
61.4 (12.7)

R517 (K1652)
59.5 (11.5)

R512 (K1642)
60.7 (12.0)

R510 (K1670 R-64)
60 (10.8)

R518 (K1665)
59.7 (11.4)

R505 (K1674)
59.8 (9.8)

R501 (K2004)
59.2 (9.8)

R502 (K2005)
59.4 (9)

R496 (K2006)
59 (9)

R508 (K1627)
62.4 (12)

R500 (K1620)
65.5 (9.7)

R540 (K1624)
64.9 (4.1)

R541 (K1629)
63.1 (3.9)

R539 (K1611)
64.1 (1.7)

R538 (K1626)
59.8 (1.4)

R537 (K85)
66.8 (1.5)

R536 (K1602)
65.2 (1.1)

R546 (K1613)
62.1 (1)

R545 (K1608)
72.6 (0.7)

R560 (K1668)
55.2 (7.2)

R559 (K1648)
57.5 (5.2)

R547 (K1637)
57.7 (6)

R542 (K1632)
59.4 (5.7)

R550 (K1695)
56.8 (4.5)

R561 (K1672)
56.6 (5.7)

R554 (K1677)
56.5 (5.3)

R555 (K1687)
56.9 (4.6)

R548 (K1699)
56.5 (3.8)

R591 (K1666)
55 (3.6)

R572 (K1635)
56.7 (2)

R578 (K1634)
56.4 (4.5)

R584 (K1641)
56.4 (2)

R590 (K1651)
55.7 (3.3)

R526 (K2009)
56.2 (0.8)

R532 (K2008)
55.8 (1.1)

R533 (K2007)
56.1 (1.1)

R535 (K1705)
55.9 (3)

R592 (K1682)
54.2 (4.6)

R593 (K1691)
55.1 (3.1)

R604 (K1643)
62.5 (1)

R597 (K1636)
62.6 (1.4)

R583 (K1628)
65 (1)

R577 (K1623)
66.5 (1.5)

R573 (K1617)
68.4 (1.8)

R589 (K1631)
63.7 (2.1)

R561 (K1708)
53.9 (1.3)

R585 (K1706)
53.6 (1.9)

R594 (K1698)
54.3 (2.5)

R598 (K1694)
54.9 (2.4)

R587 (K1704)
54.2 (2.6)

R565 (K1713)
52.1 (1.5)

R562 (K2013)
53.1 (1.2)

R569 (K1712)
52.1 (1)

R579 (K1710)
53.3 (1.4)

R598 (K2021)
55 (1.1)

R605 (K1718)
54.6 (0.6)

R607 (K1717)
54.3 (0.3)

R612 (K1716)
54.9 (0.4)

Marcella Dr

Kennedy Rd

St Anthony Cir

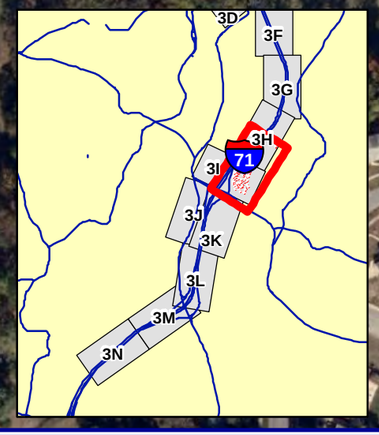
Christine Ct

Basswood Cir

Bluegrass Ave

E Henry Clay Ave

Henry Clay Ct



Legend

- Recommended Noise
- Noise Measurement Site
- Noise Prediction Site
- R4(K16) — Receptor Number (GIS Building ID)
- 65.4(3.1) — Predicted Abated Noise Level (Noise Reduciton Achieved with Wall)
- NAC F Buildings

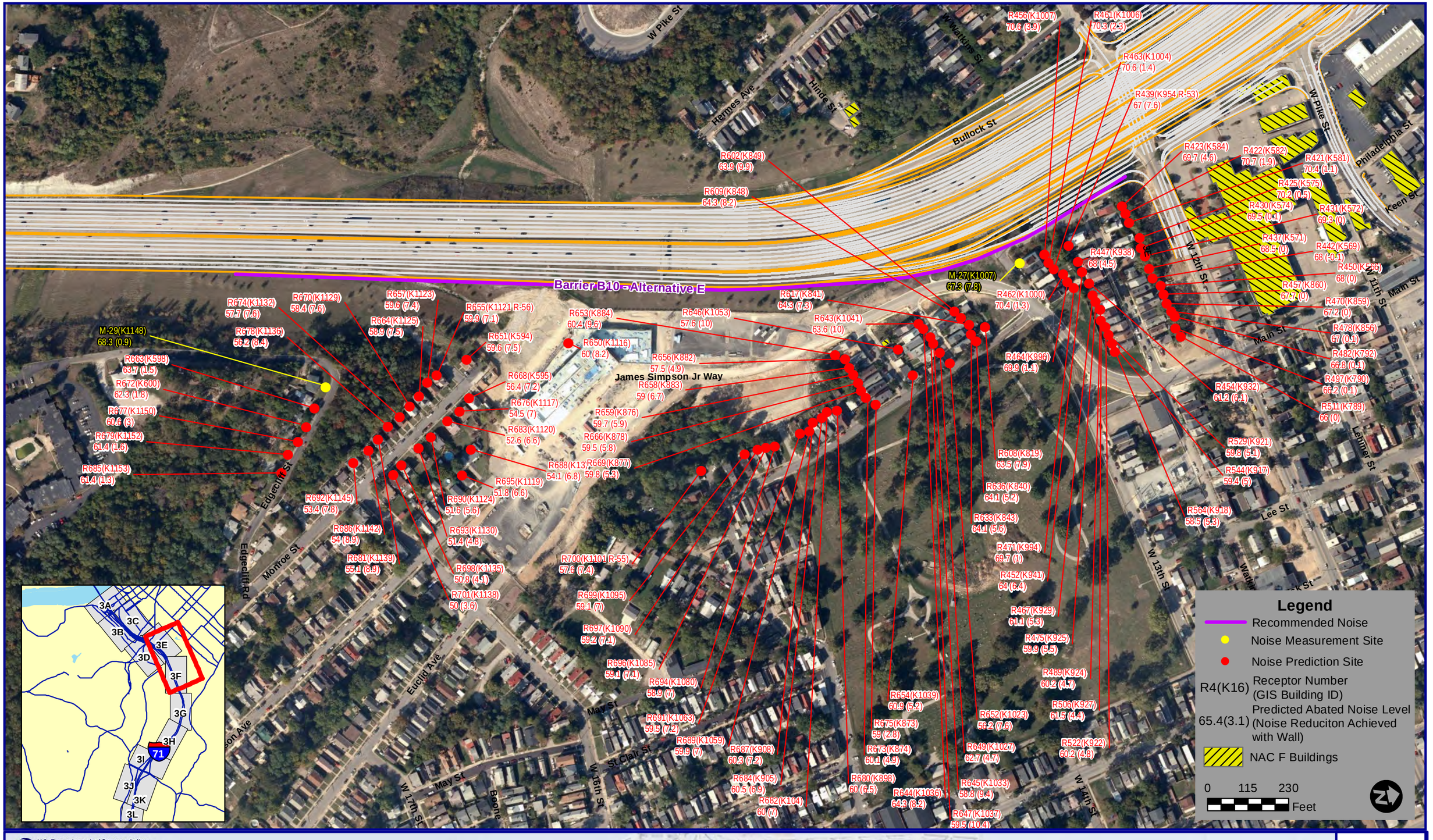
0 75 150 Feet

U.S. Department of Transportation
Federal Highway Administration

Alternative E Barrier B9 (24 feet)

EXHIBIT
10

Prepared by:
PARSONS BRINCKERHOFF



U.S. Department of Transportation
Federal Highway Administration

Alternative E Barrier B10 (22 feet)

EXHIBIT
11

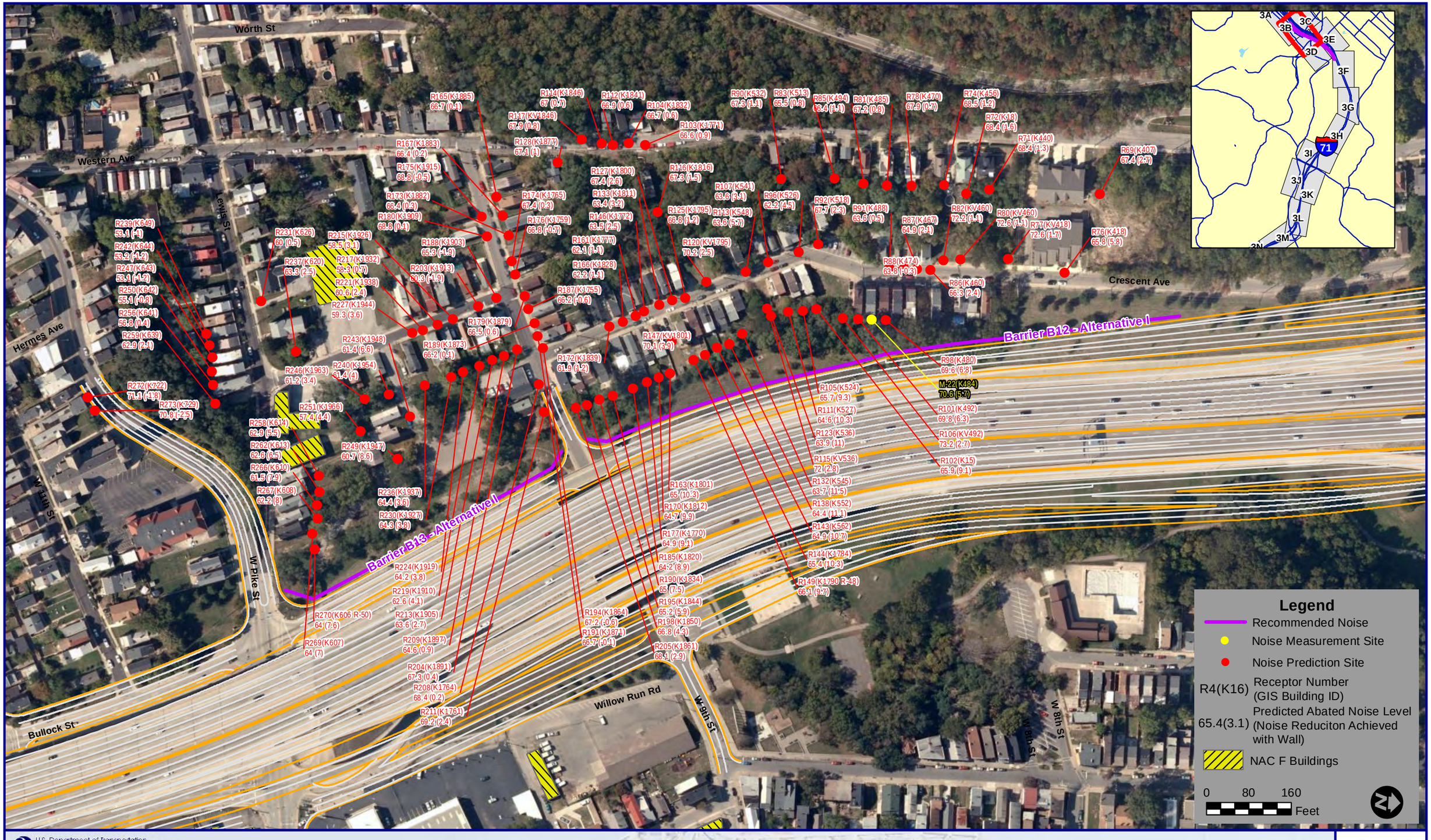
Prepared by:
PARSONS BRINCKERHOFF

U.S. Department of Transportation
Federal Highway Administration

Alternative E Barrier B11 (20 feet)

EXHIBIT
12

Prepared by:
PARSONS BRINCKERHOFF

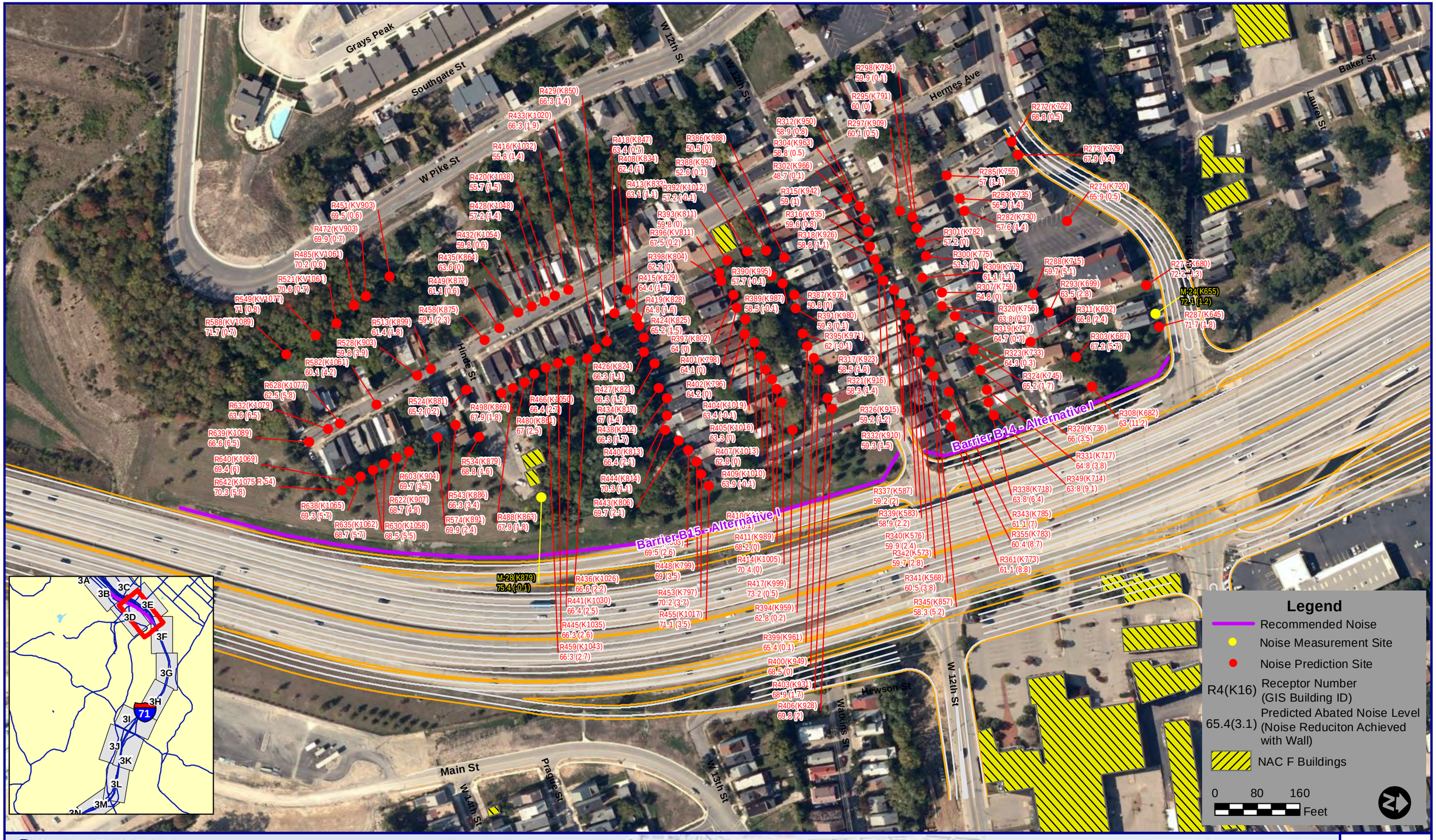


U.S. Department of Transportation
Federal Highway Administration

Alternative I Barrier B12 (24 feet) and Barrier B13 (24 feet)

EXHIBIT
13

Prepared by:
PARSONS BRINCKERHOFF



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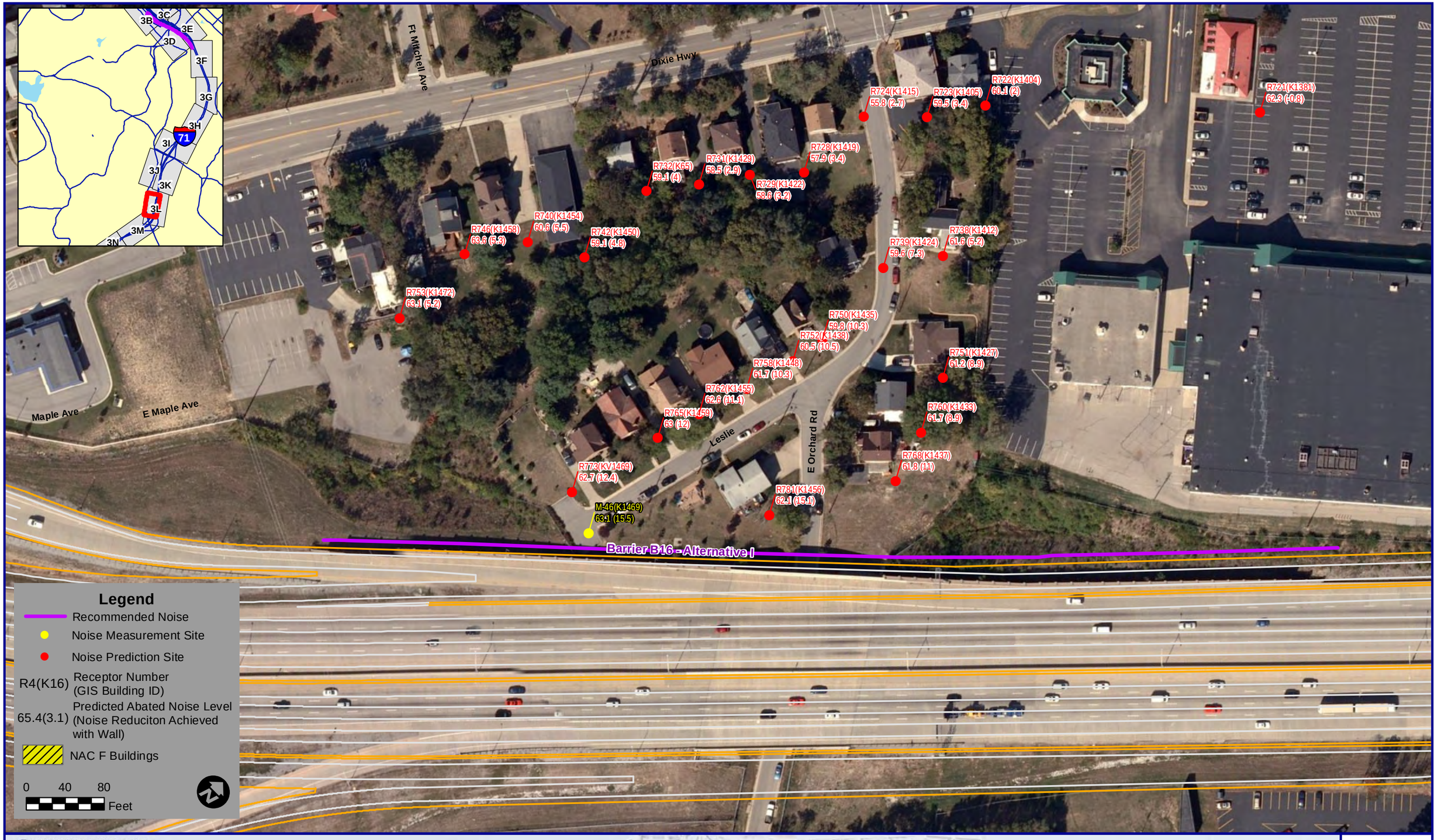
Federal Highway Administration

Alternative I Barrier B14 (24 feet) and Barrier B15 (24 feet)

EXHIBIT
14

Prepared by:
PARSONS BRINCKERHOFF



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Federal Highway Administration

Alternative I Barrier B16 (24 feet)

EXHIBIT
15

Prepared by:
PARSONS BRINCKERHOFF

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Federal Highway Administration

Alternative I Barrier B17 (24 feet)

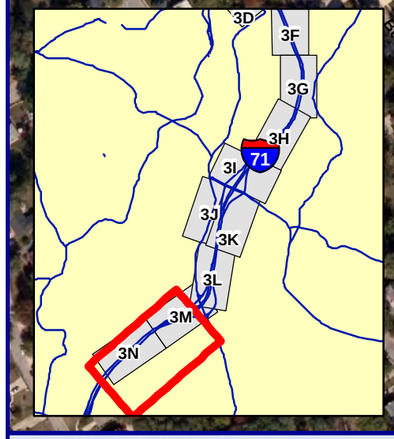
EXHIBIT
16

Prepared by:
PARSONS BRINCKERHOFF

Barrier B18 - Alternative I

R757(K2105) 63.4 (11.8)
R769(K2119) 62.2 (11.3)
R748(K2091) 75.9 (2.6)
R749(K1767) 74.1 (3.9)
R756(K2109B) 75.9 (2.4)
R764(KV2092) 68.8 (6.2)
R766(K2085) 68.1 (8.3)
R785(K2083) 71.4 (6.5)
R800(K2086) 65.7 (8.9)
R819(K2088) 65.6 (8.9)
R851(K2094) 65.4 (8.7)
R860(K2097) 64.3 (9.4)
R771(K2101) 61.2 (8.9)
R777(K2106) 68 (3.8)
R778(K2104) 69.2 (3.5)
R772(K2109E) 65.7 (8.7)
R776(K2087) 67.4 (6)
R783(K1722C) 64.2 (7.6)
R820(K2138) 60.8 (7.5)
R808(K2109) 60.1 (6.3)
R784(K1769) 63.9 (7.3)
R870(K2102) 62.5 (10.2)
R788(K1722B) 64.7 (6.3)
R797(K2124) 60.2 (10.5)
R814(K2125) 60.5 (7.9)
R827(K2109C) 61.9 (5.6)
R811(K2095) 62.3 (7.3)
R838(K2109F) 58.1 (7.8)
R873(K2107) 61.6 (10.8)
R878(K2141) 68.6 (7.3)
R787(K2122) 60.7 (10)
R852(K2109D) 56.6 (5.4)
R824(K2099) 60.7 (6.7)
R879(K2121) 62.6 (9.5)
R821(K1722A) 61.8 (2.8)
R841(K30) 56.9 (7.4)
R825(K2127) 63.8 (4.1)
R840(K2109A) 57.2 (5.7)
R872(KV2147) 55 (8)
R845(K2103) 60 (5.8)
R885(K2126) 62.8 (9)
R823(K1722) 61.8 (5.4)
R850(K1721) 57.5 (7.4)
R813(K2114) 59.3 (8.5)
R864(K2117) 58.9 (5.5)
R896(K2142) 54.7 (6.2)
R890(K2131) 61.9 (9.5)
R828(K1720) 61.7 (5.7)
R826(K2144) 60.8 (6.9)
R871(K2120) 56.9 (6.3)
R894(K2111) 61.2 (9.7)
R876(K2128) 56.5 (6.2)
R897(K2139) 60.7 (9.8)
R881(K2130) 56 (6.2)
R887(K2113) 55.9 (6)
R891(K2140) 55.1 (6.2)
M-47(K2141) 56.7 (5.1)

Grandview Dr
W Maple Ave
Anna Jo
Ashton Dr
Allentown Dr
Williamsburg Ln
Thomson Ave
Bursall Ave
Gettysburg Dr
Seville Ct
Deauville Ct
Page Rd
Beechwood Rd
TIGERS



Legend

- Recommended Noise
- Noise Measurement Site
- Noise Prediction Site
- R4(K16) Receptor Number (GIS Building ID)
- 65.4(3.1) Predicted Abated Noise Level (Noise Reduciton Achieved with Wall)
- NAC F Buildings

0 130 260 Feet

U.S. Department of Transportation
Federal Highway Administration

Alternative I Barrier B18 (20 feet)

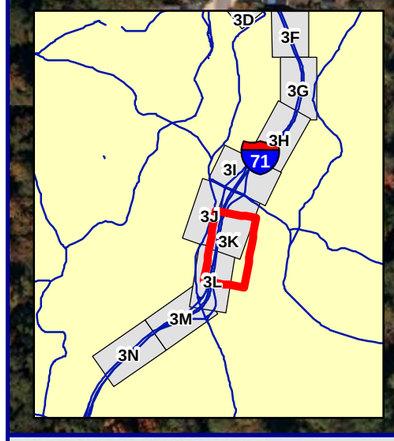
EXHIBIT
17

Prepared by:
PARSONS BRINCKERHOFF

Barrier B19 - Alternative I

M-45(K1484) 66.4 (8.8)
M-44a(K75) 61.8 (11.2)
M-44(K75) 63.2 (9.6)
R795(K74) 60.7 (8.1)
R792(K1421) 71.2 (5.3)
R815(K73) 57.3 (7.1)
R809(K71) 59.5 (7)
R830(K68) 59.2 (7.9)
R836(K69) 59.6 (7.1)
R835(K1446) 62.6 (7.8)
R857(K1193) 61.3 (10.8)
R867(K1196) 60.1 (9.7)
R875(K1203) 59.6 (8.5)
R883(K1209) 58.7 (8)
R882(K1211) 60.9 (10.2)
R884(K1213) 58.8 (10.5)
R888(K1218) 57.8 (9.8)
R893(K1220) 57 (8.5)
R892(K1216) 58.4 (6.3)
R898(K1224) 59 (5.7)
R899(K1223) 59.2 (5.2)
R895(K1219) 53.9 (4.7)
R900(K1222) 55.6 (4)
R889(K36) 58.7 (7.8)
R886(K1206) 58.4 (6.2)
R880(K1202) 59.2 (5.2)
R877(K40) 60.5 (3.4)
R869(K1492) 60.9 (3.2)
R868(KV1492) 57.4 (4.9)
R854(K1460) 58.4 (5.6)
R862(K1449) 58.4 (6.2)
R874(K1473) 49.9 (3.7)
R780(K1383) 62 (10)
R799(K1391) 60 (9.3)
R817(K1395) 60 (9.2)
R834(K1402) 58.7 (8.9)
R843(K1406) 56.9 (7.3)
R847(K1403) 56 (7.3)
R846(K1396) 55.2 (6.9)
R812(K1386) 57.4 (8)
R791(K1365) 61.2 (9.4)
R849(K1397) 54.6 (6.2)
R856(K1394) 54.4 (6.6)
R855(K1392) 54.4 (6.2)
R774(K1346) 60.9 (10.3)
M-42(K1348) 55.6 (13.2)
R790(K1360) 62.5 (10.9)
R816(K1372) 56.6 (7.3)
R833(K1370) 56.2 (6.6)
R832(K1362) 55.8 (5)
R859(K1385) 54.1 (4.5)
R1(K1390) 53.5 (4)
R858(K1379) 54.5 (4.7)
R796(K1341) 62.8 (11.3)
R805(K78) 62.8 (10.3)
R807(K1336) 63.5 (8.9)
R802(K1331) 66.4 (7)
M-41(K1318) 74.9 (0.2)
R794(KV1318) 65 (5.5)
R842(K1353) 55.3 (5.1)

Pieck Dr
Rivard Rd
Kennedy Rd
Highview Dr
E Orchard Rd
Augusta Ave
Edna Ln
Barbara Cir
Rosa Ct
Leslie



Legend

- Recommended Noise
- Noise Measurement Site
- Noise Prediction Site
- R4(K16) — Receptor Number (GIS Building ID)
- 65.4(3.1) — Predicted Abated Noise Level (Noise Reduciton Achieved with Wall)
- NAC F Buildings

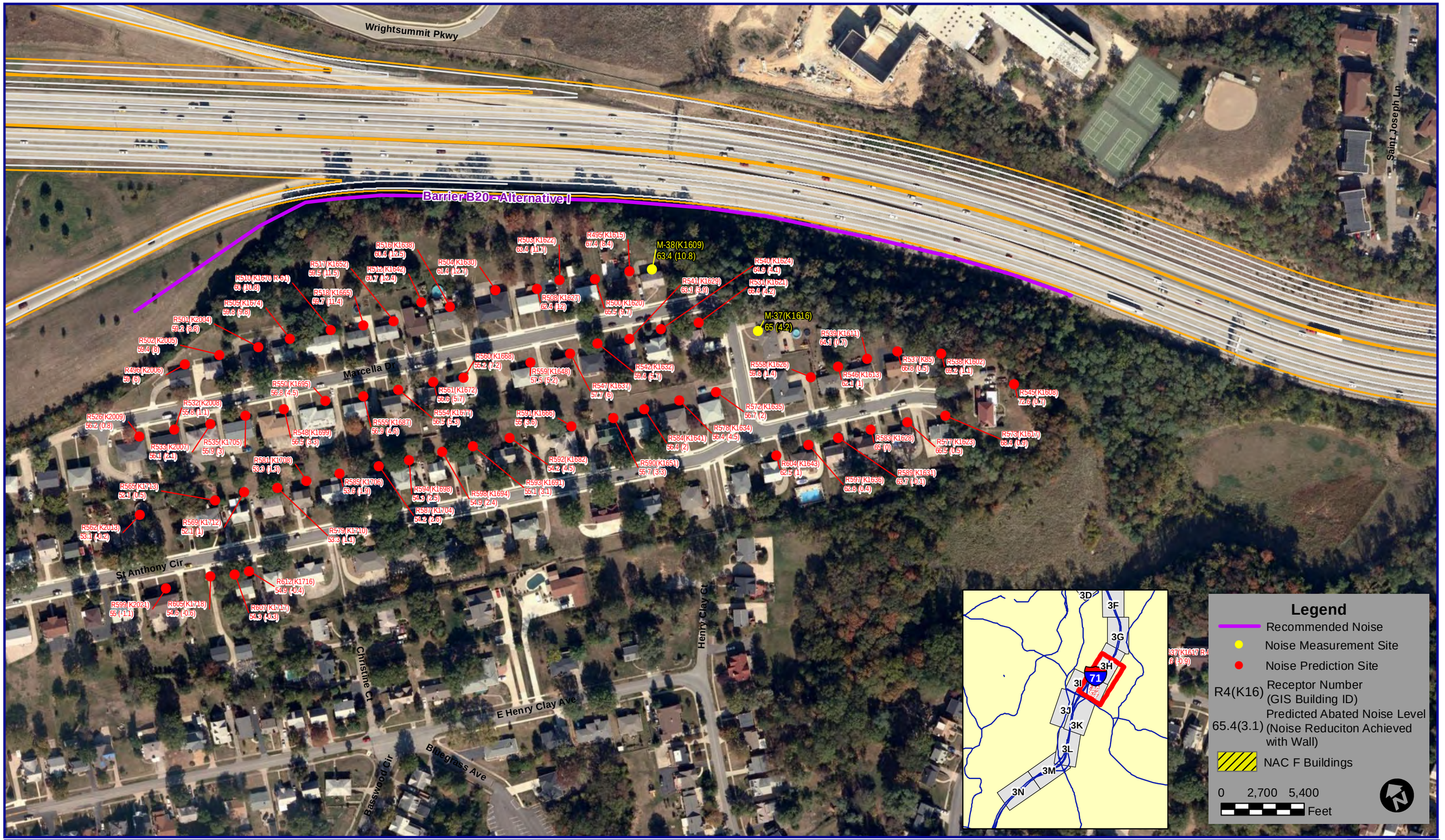
0 80 160 Feet

U.S. Department of Transportation
Federal Highway Administration

Alternative I Barrier B19 (20 feet)

EXHIBIT **18**

Prepared by:
PARSONS BRINCKERHOFF

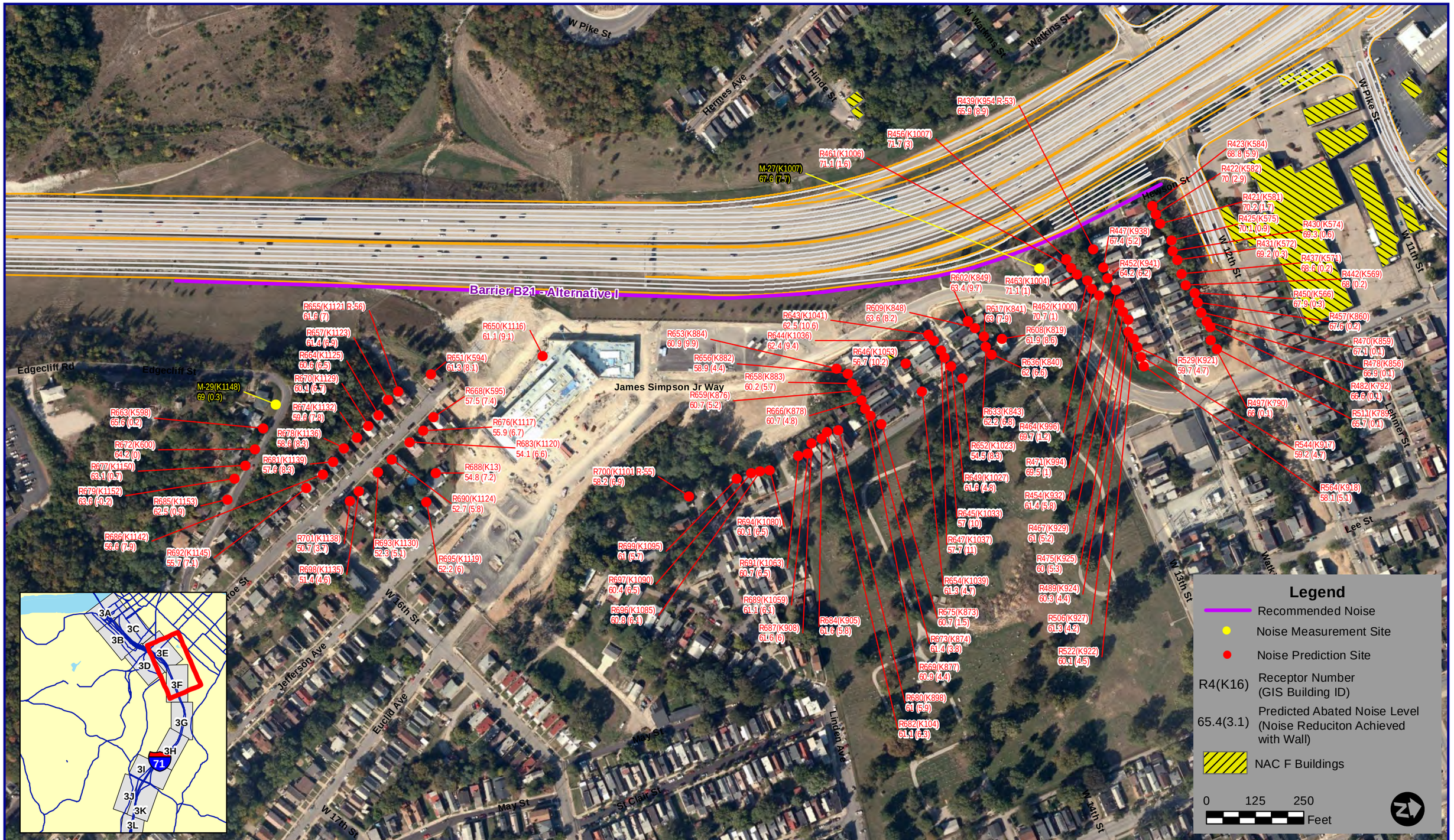


U.S. Department of Transportation
Federal Highway Administration

Alternative I Barrier B20 (24 feet)

EXHIBIT
19

Prepared by:
PARSONS BRINCKERHOFF



U.S. Department of Transportation
Federal Highway Administration

Alternative I Barrier B21 (22 feet)

EXHIBIT
20

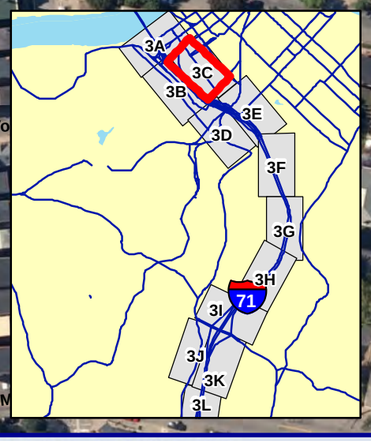
Prepared by:
PARSONS BRINCKERHOFF

Barrier 22 A - (26 ft)

Barrier 22 B - (30 ft)

R97P(K115) 65.6 (5.5)
R97Q(K115) 64.5 (6.3)
R97R(K115) 66.5 (4.4)
R97S(K115) 71.4 (0.7)
R97o(K115) 71.5 (1.5)
R97n(K115) 69.3 (3.4)
R97a(K115) 73.9 (0)
R97T(K115) 71.7 (0.7)
R97U(K115) 71.9 (0.7)
R97b(K115) 72.5 (0.1)
R97(K115) 62.4 (9.8)
R97V(K115) 65.9 (5.5)
R97W(K115) 64.1 (7.5)
R97X(K115) 62.4 (9.5)
R97Y(K115) 69.4 (4.1)
R97c(K115) 68.8 (2.7)
R97d(K115) 66.3 (4.7)
R97e(K115) 66.4 (4.8)
R97f(K115) 67.2 (4.6)
R97g(K115) 69.1 (3.7)
R97m(K115) 66.5 (4.2)
R97Z(K115) 69.3 (4.5)
R97AA(K115) 71.2 (2.7)
R97h(K115) 70.5 (2.2)
R97k(K115) 67.2 (2.7)
R97l(K115) 67.4 (1.7)
R97j(K115) 70.4 (0)
R97i(K115) 69.8 (0.1)
M-20(K309) 69.7 (0)
R95(K314 R-46) 72.9 (0.1)
R100(K318) 72.6 (0)
R110(K361) 71.9 (0)
R108(K354) 72.3 (0)
R109(K349) 71.7 (0)
R119(K322) 67.6 (0)
R129(K340) 65.7 (-0.1)
R136(K326) 65.2 (-0.1)
R130(K308) 66.3 (-0.3)
R131(K299) 66.7 (-0.4)
R134(K313) 65.7 (-0.4)
R141(K317) 65.3 (-0.2)
R164(K332) 62.5 (-0.5)
R151(K337) 66 (0.1)
R156(K344) 62.1 (-0.1)
R157(K347) 61.9 (-0.2)
R150(K353) 61 (0.1)
R154(K358) 59.1 (0.1)
R155(K362) 61.5 (0)
R158(K367) 60 (0.1)
R124(K364) 70.1 (0)
R122(K365) 71.4 (0)
R126(K370) 71.4 (0)
R139(K409 R-47) 71.9 (0.7)
R148(K360) 65 (-0.1)
R118(K335) 69.5 (-0.2)
R135(K346) 66 (-0.3)
R140(K352) 65.2 (-0.1)
R142(K368) 67.9 (-0.1)
R152(K373) 69.5 (-0.2)
R153(K379) 70 (-0.2)
R162(K386) 70.8 (-0.1)
R169(K388) 70.8 (-0.2)
R168(K396) 70.7 (-0.2)
R159(K401) 67.5 (0.4)
R171(K402) 67.7 (0)
R160(K382) 70.5 (-0.2)
R206(K445) 68.1 (0.4)
R200(K432) 68.9 (0.2)
R192(K427) 68.4 (0.2)
R212(K454) 67.8 (0.4)
R218(K461) 67.8 (0.7)
R245(K525) 69.1 (0.2)
R254(K534) 69.7 (0.3)
R248(K519) 67.5 (0.1)
R253(K499) 64.7 (0.7)
R255(K510) 65.1 (0.4)
R241(K478) 63.1 (-0.1)
R234(K477) 67.3 (-0.3)
R233(K466) 66 (-0.1)
R232(K452) 59.1 (-0.1)
R220(K457) 64.8 (0.1)
R214(K435) 61.1 (0)
R226(K447) 60.5 (0.6)
R229(K430) 53.6 (-0.2)
R238(K451) 55.3 (0)
R244(K458) 56.9 (0)
R252(K469) 58.9 (-0.1)
R257(K475) 57.6 (0)
R271(K515) 59.8 (-0.1)
R265(K503) 58.2 (0)
R263(K498) 58 (0)
R261(K491) 59.3 (0.2)
R260(K486) 59.2 (0.2)
R184(K389) 62.5 (-0.2)
R183(K384) 62.6 (-0.1)
R196(K400) 66.2 (-0.5)
R181(K381) 56.4 (-0.3)
R186(K369) 59.4 (0)
R197(K380) 58.1 (0)
R201(K383) 57.7 (0)
R193(K387) 60.2 (0)
R199(K397) 61.6 (-0.3)
R202(K413) 65.2 (-0.3)
R207(K420) 64.6 (-0.3)
R225(K412) 53.1 (-0.1)
R228(K419) 50.8 (-0.1)
R216(K422) 60.3 (-0.3)
R210(K425) 61.7 (-0.1)
R222(K439) 58.8 (0.3)
R223(K444) 60.4 (0.4)
R178(K371) 56 (0)
R182(K378) 54 (0)

Philadelphia St
Perry St
W 6th St
W 7th St
Bakewell St
W 5th St



Legend

- Barrier 22 A - (26 ft)
- Barrier 22 B - (30 ft)
- Noise Measurement Site
- Noise Prediction Site
- R4(K16) — Receptor Number (GIS Building ID)
- 65.4(3.1) — Predicted Abated Noise Level (Noise Reduciton Achieved with Wall)
- NAC F Buildings

0 85 170 Feet

U.S. Department of Transportation
Federal Highway Administration

Alternative I Barrier B22A (26 feet) and Barrier B22B (30 feet)

EXHIBIT
21

Prepared by:
PARSONS BRINCKERHOFF

HAM - 71/75 - 0.000/0.22 PID - 75119

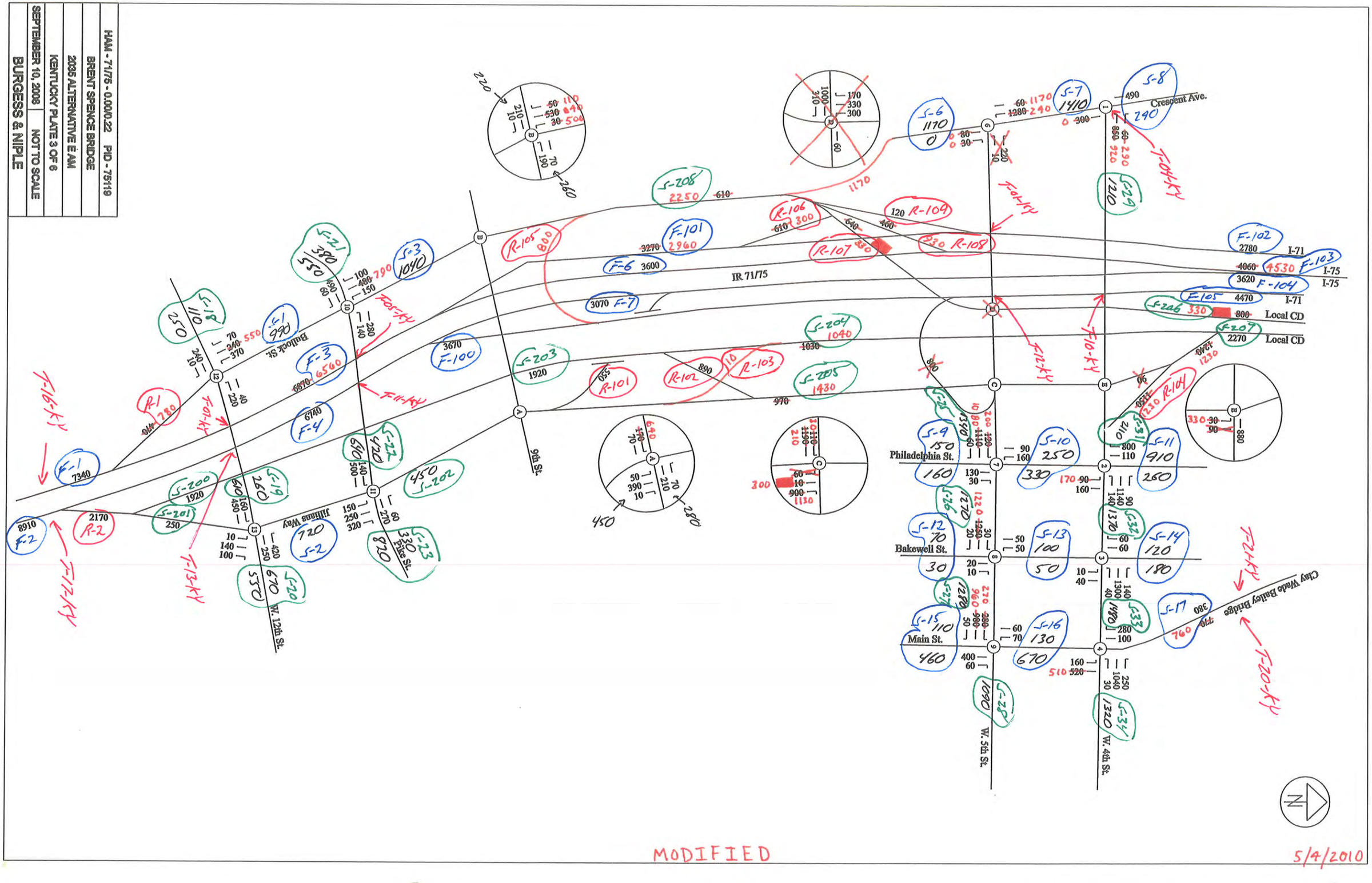
BRENT SPENCE BRIDGE

2035 ALTERNATIVE E AM

KENTUCKY PLATE 3 OF 6

SEPTEMBER 10, 2008 | NOT TO SCALE

BURGESS & NIPLE


I-71/75 NB
I-71/75 SB
I-71
I-75
I-75
Local CD
Local CD
Crescent Ave.
Philadelphia St.
Bakewell St.
Main St.
Pike St.
Jillians Way
9th St.
W. 12th St.
W. 5th St.
W. 4th St.
Clay Wade Bailey Bridge
Bullock St.
IR 71/75
F-1 7340
F-2 8910
R-1 780
R-2 2170
F-3 6560
F-4 6140
F-6 3600
F-7 3070
F-100 3670
F-101 2960
F-102 2780
F-103 4530
F-104 3620
F-105 4470
F-106 300
F-107 80
R-101 055
R-102 890
R-103 10
R-104 1230
R-105 800
R-106 610
R-107 80
R-108 230
R-109 120
S-1 990
S-2 720
S-3 1040
S-4 1410
S-5 1170
S-6 1170
S-7 1410
S-8 490
S-9 150
S-10 250
S-11 910
S-12 70
S-13 100
S-14 120
S-15 110
S-16 130
S-17 760
S-18 550
S-19 260
S-20 670
S-21 550
S-22 720
S-23 820
S-31 210
S-32 1370
S-33 1440
S-34 1320
S-35 390
S-36 1090
S-200 1920
S-201 250
S-202 450
S-203 1920
S-204 1040
S-205 1430
S-206 330
S-207 2270
S-208 2250
T-10-KY
T-11-KY
T-12-KY
T-13-KY
T-14-KY
T-15-KY
T-16-KY
T-17-KY
T-20-KY
F-10-KY
F-11-KY
F-12-KY
F-13-KY
F-14-KY
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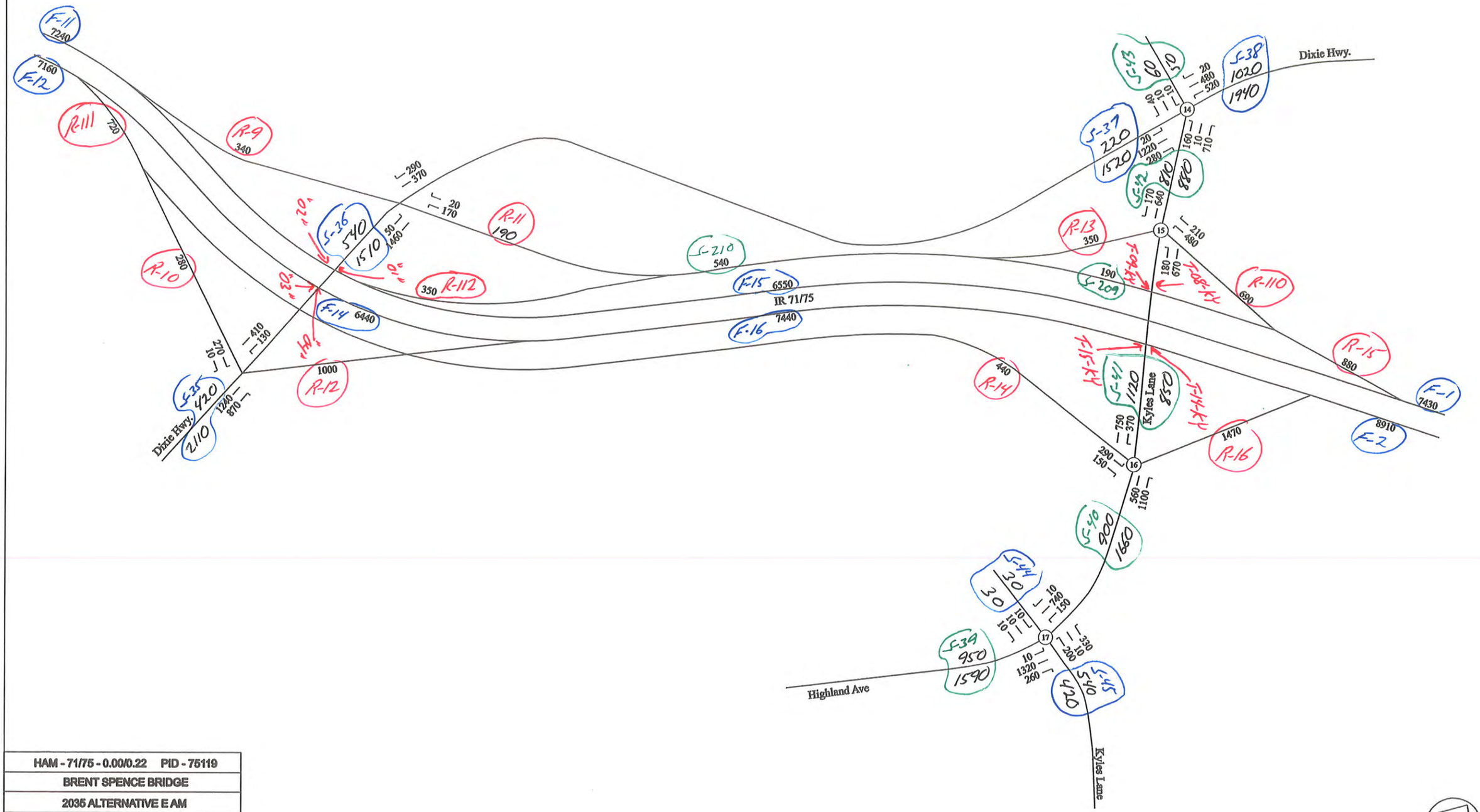
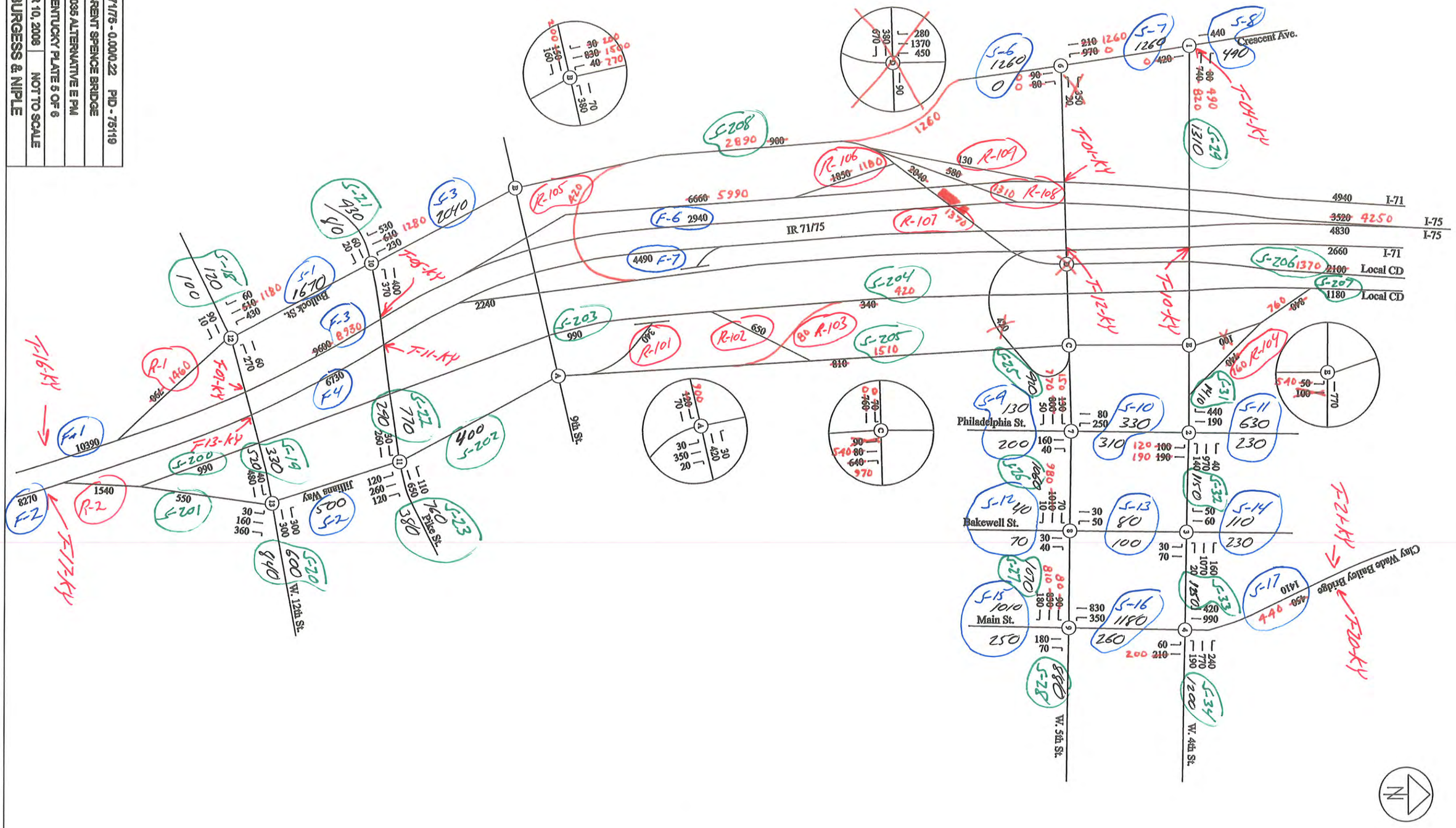


HAM - 71/75 - 0.00/0.22 PID - 75119	
BRENT SPENCE BRIDGE	
2035 ALTERNATIVE E AM	
KENTUCKY PLATE 4 OF 6	
SEPTEMBER 10, 2008	NOT TO SCALE
BURGESS & NIPLE	

MODIFIED

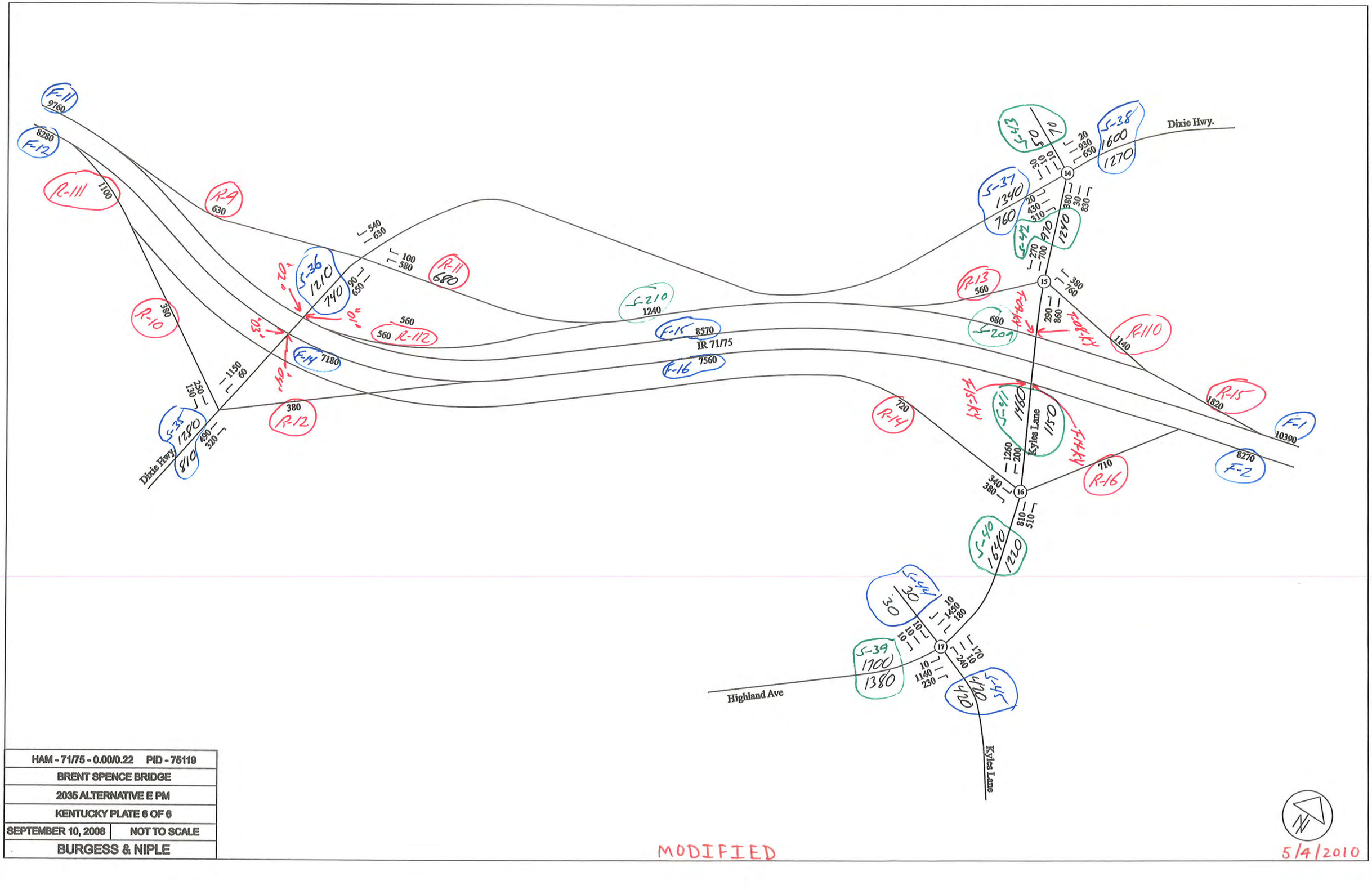
5/4/2010

HAM - 71/75 - 0.000/.22	PID - 75119
BRENT SPENCE BRIDGE	
2035 ALTERNATIVE E PM	
KENTUCKY PLATE 5 OF 6	
SEPTEMBER 10, 2008	NOT TO SCALE
BURGESS & NIPLE	



MODIFIED

5/4/2010



HAM - 71/75 - 0.00/0.22	PID - 75119
BRENT SPENCE BRIDGE	
2035 ALTERNATIVE E PM	
KENTUCKY PLATE 6 OF 6	
SEPTEMBER 10, 2008	NOT TO SCALE
BURGESS & NIPLE	

MODIFIED

5/4/2010

HAM - 71/75 - 0.00/0.22	PID - 75119
BRENT SPENCE BRIDGE	
2035 ALTERNATIVE C-D AM	
KENTUCKY PLATE 4 OF 9	
APRIL 16, 2010	NOT TO SCALE
BURGESS & NIPLE	

IR 71/75

Crescent Ave.

Local CD

I-75

I-71

I-71

I-75

Local CD

Bullock St.

9th St.

Philadelphia St.

Bakewell St.

Main St.

Pike St.

W. 12th St.

W. 5th St.

W. 4th St.

Clay Wade Bailey Bridge

T-01-KY

T-02-KY

T-03-KY

T-04-KY

T-05-KY

T-06-KY

T-07-KY

T-08-KY

T-09-KY

T-10-KY

T-11-KY

T-12-KY

T-13-KY

T-14-KY

T-15-KY

T-16-KY

T-17-KY

T-18-KY

T-19-KY

T-20-KY

T-21-KY

F-1 7340

F-2 8910

F-3 6560

F-4 5700

F-5 2310

F-6 2310

F-7 2450

F-100 3250

F-101 3690

F-102 3920

F-103 4250

F-104 330

F-105 280

F-106 610

F-107 1410

F-108 4220

F-109 3060

F-110 1160

F-111 1430

F-112 990

F-113 1160

F-114 780

F-115 1340

F-116 1070

F-117 980

F-118 1110

F-119 660

F-120 640

F-121 920

F-122 1550

F-123 390

F-124 800

F-125 1340

F-126 1070

F-127 980

F-128 1110

F-129 90

F-130 400

F-131 1160

F-132 850

F-133 880

F-134 920

F-135 1550

F-136 390

F-137 800

F-138 1340

F-139 1070

F-140 980

F-141 1110

F-142 660

F-143 640

F-144 920

F-145 1550

F-146 390

F-147 800

F-148 1340

F-149 1070

F-150 980

F-151 1110

F-152 660

F-153 640

F-154 920

F-155 1550

F-156 390

F-157 800

F-158 1340

F-159 1070

F-160 980

F-161 1110

F-162 660

F-163 640

F-164 920

F-165 1550

F-166 390

F-167 800

F-168 1340

F-169 1070

F-170 980

F-171 1110

F-172 660

F-173 640

F-174 920

F-175 1550

F-176 390

F-177 800

F-178 1340

F-179 1070

F-180 980

F-181 1110

F-182 660

F-183 640

F-184 920

F-185 1550

F-186 390

F-187 800

F-188 1340

F-189 1070

F-190 980

F-191 1110

F-192 660

F-193 640

F-194 920

F-195 1550

F-196 390

F-197 800

F-198 1340

F-199 1070

F-200 2070

F-201 1140

F-202 370

F-203 3060

F-204 4220

F-205 1410

F-206 610

F-207 280

F-208 330

F-209 90

F-210 310

F-211 250

F-212 550

F-213 230

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F-215 230

F-216 240

F-217 280

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F-279 40

F-280 210

F-281 70

F-282 210

F-283 50

F-284 200

F-285 50

F-286 40

F-287 140

F-288 150

F-289 90

F-290 310

F-291 250

F-292 550

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F-294 250

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F-1100 210

F-1101 70

F-1102 210

F-1103 50

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F-1397 280

F-1398 10

F-1399 40

F-1400 210

F-1401 70

F-1402 210

F-1403 50

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F-1405 50

F-1406 40

F-1407 140

F-1408 150

F-1409 90

F-1410 310

F-1411 250

F-1412 550

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F-1502 210

F-1503 50

F-1504 200

F-1505 50

F-1506 40

F-1507 140

F-1508 150

F-1509 90

F-1510 310

F-1511 250

F-1512 550

F-1513 230

F-1514 250

F-1515 230

F-1516 240

F-1517 280

F-1518 10

F-1519 40

F-1520 210

F-1521 70

F-1522 210

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F-1524 200

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F-1526 40

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F-1528 150

F-1529 90

F-1530 310

F-1531 250

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F-1534 250

F-1535 230

F-1536 240

F-1537 280

F-1538 10

F-1539 40

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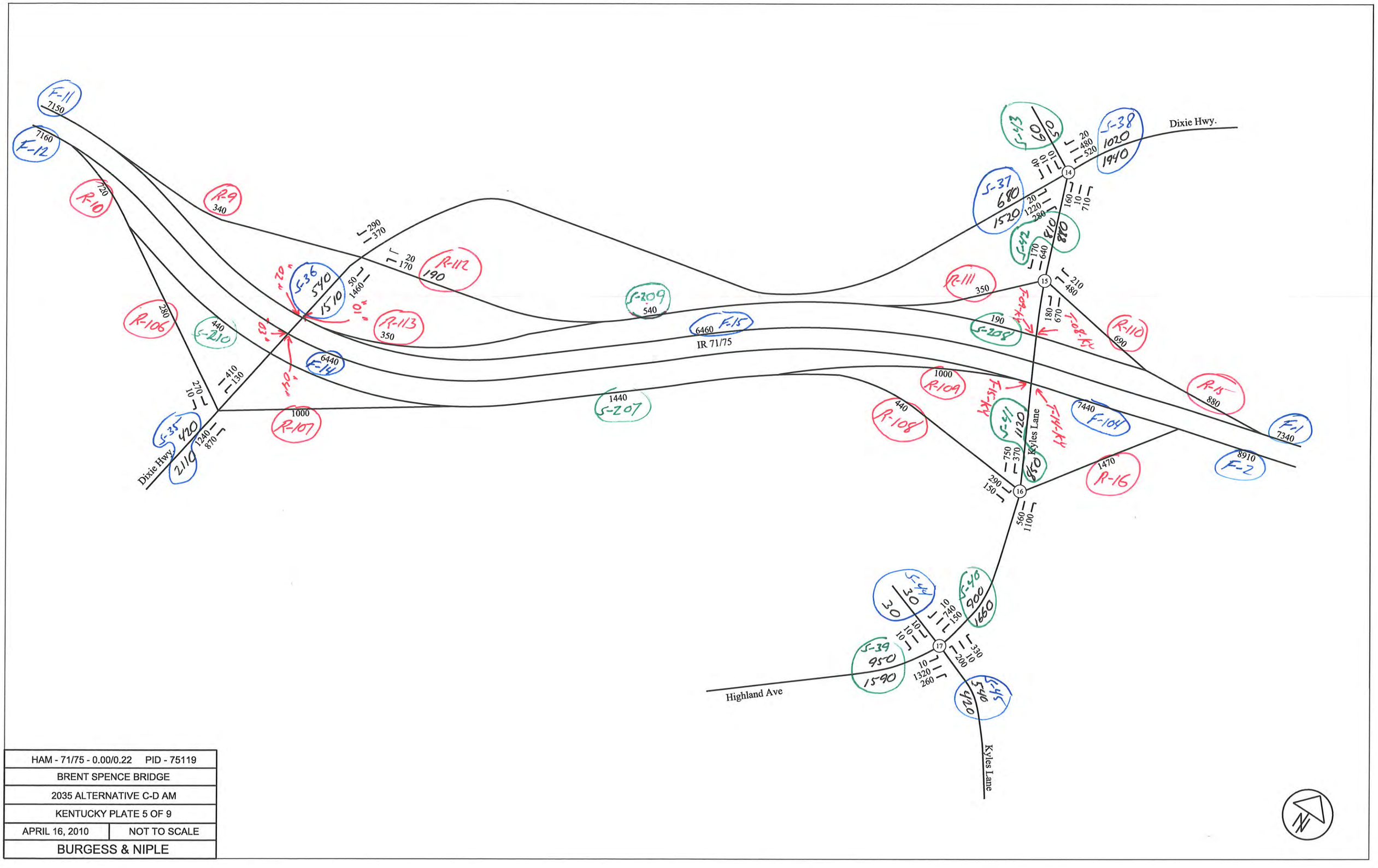

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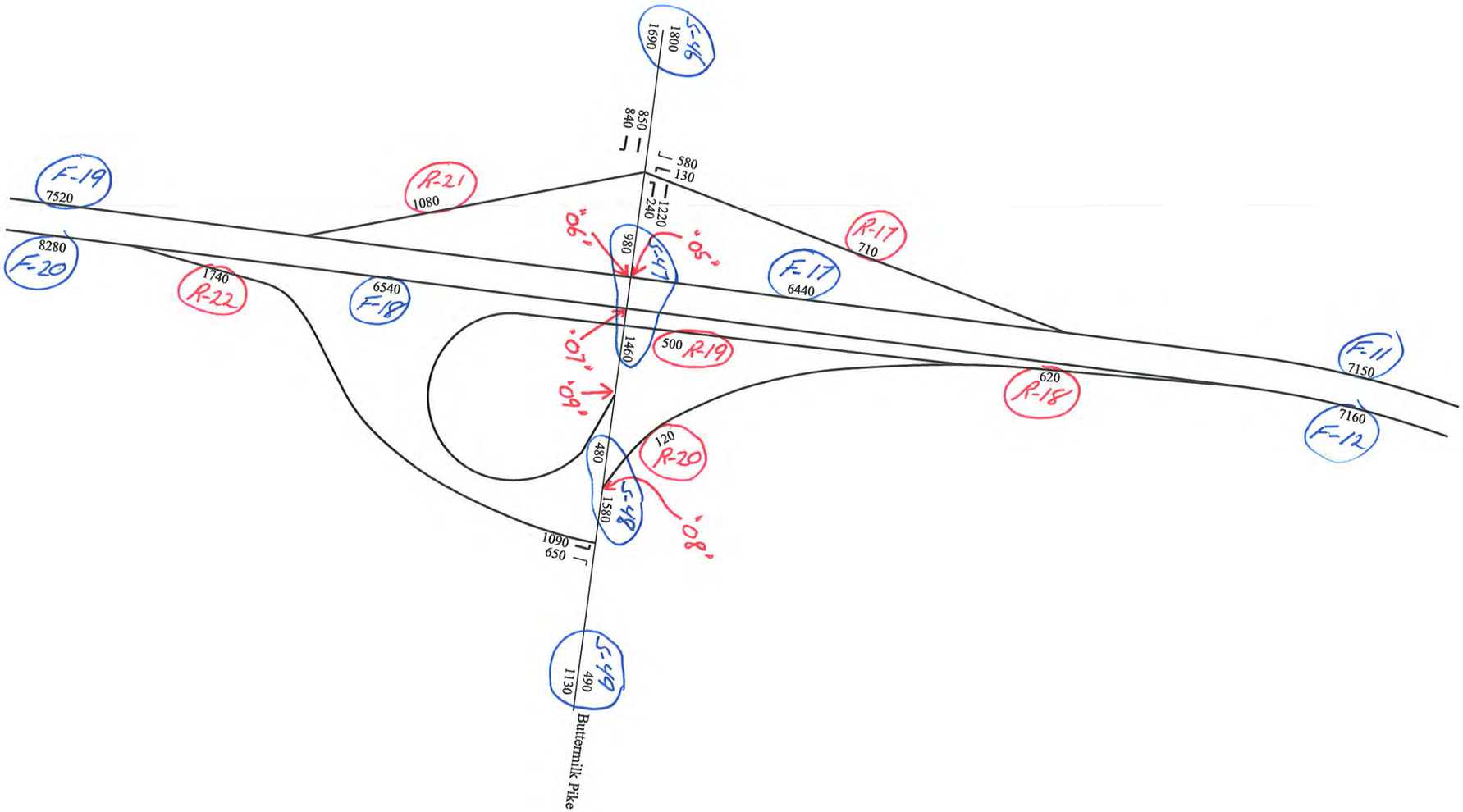
2035 ALTERNATIVE C-D AM	
KENTUCKY PLATE 5 OF 9	
APRIL 16, 2010	NOT TO SCALE
BURGESS & NIPLE	



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KENTUCKY PLATE 6 OF 9	
APRIL 16, 2010	NOT TO SCALE
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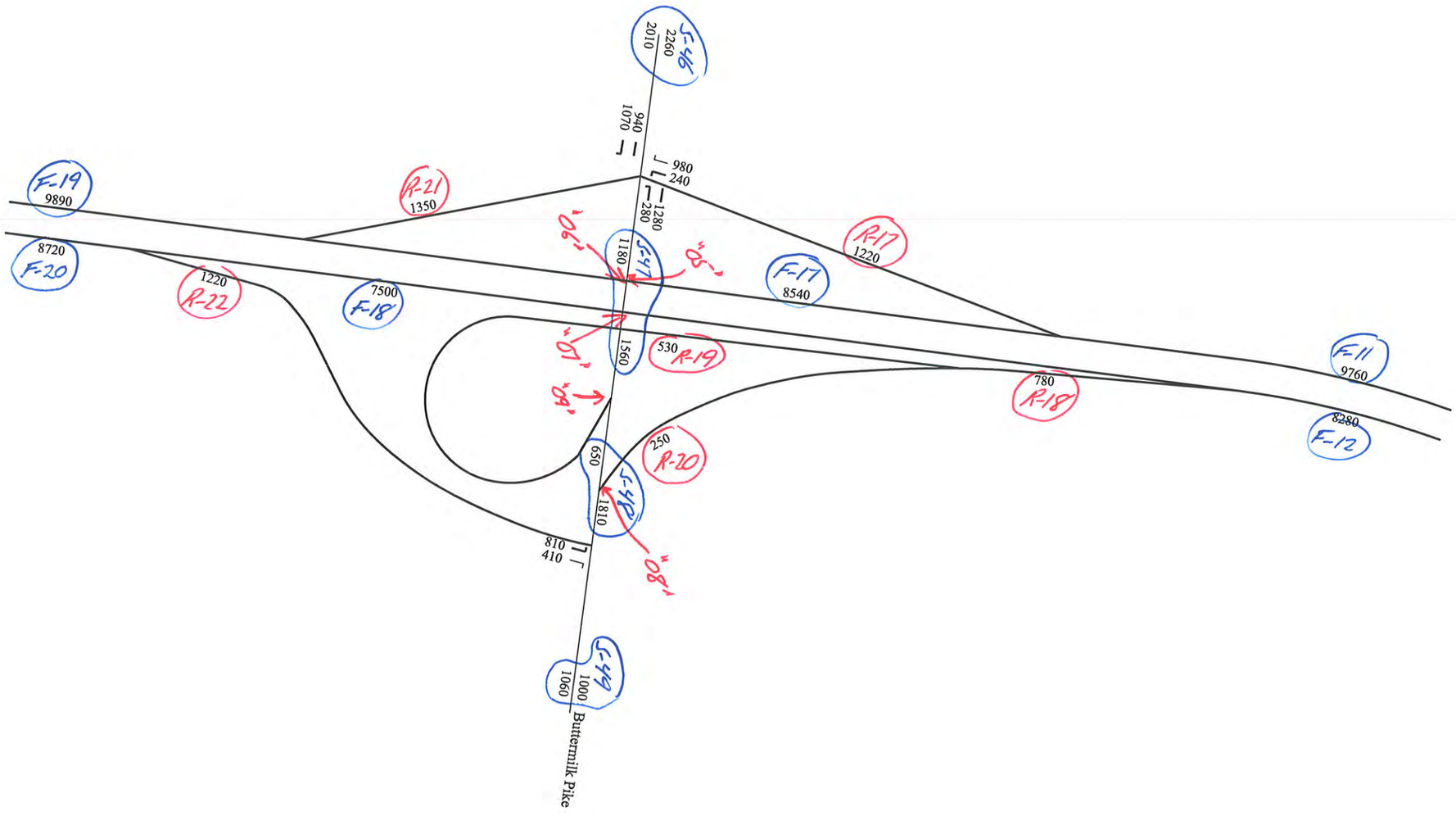

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KENTUCKY PLATE 9 OF 9	
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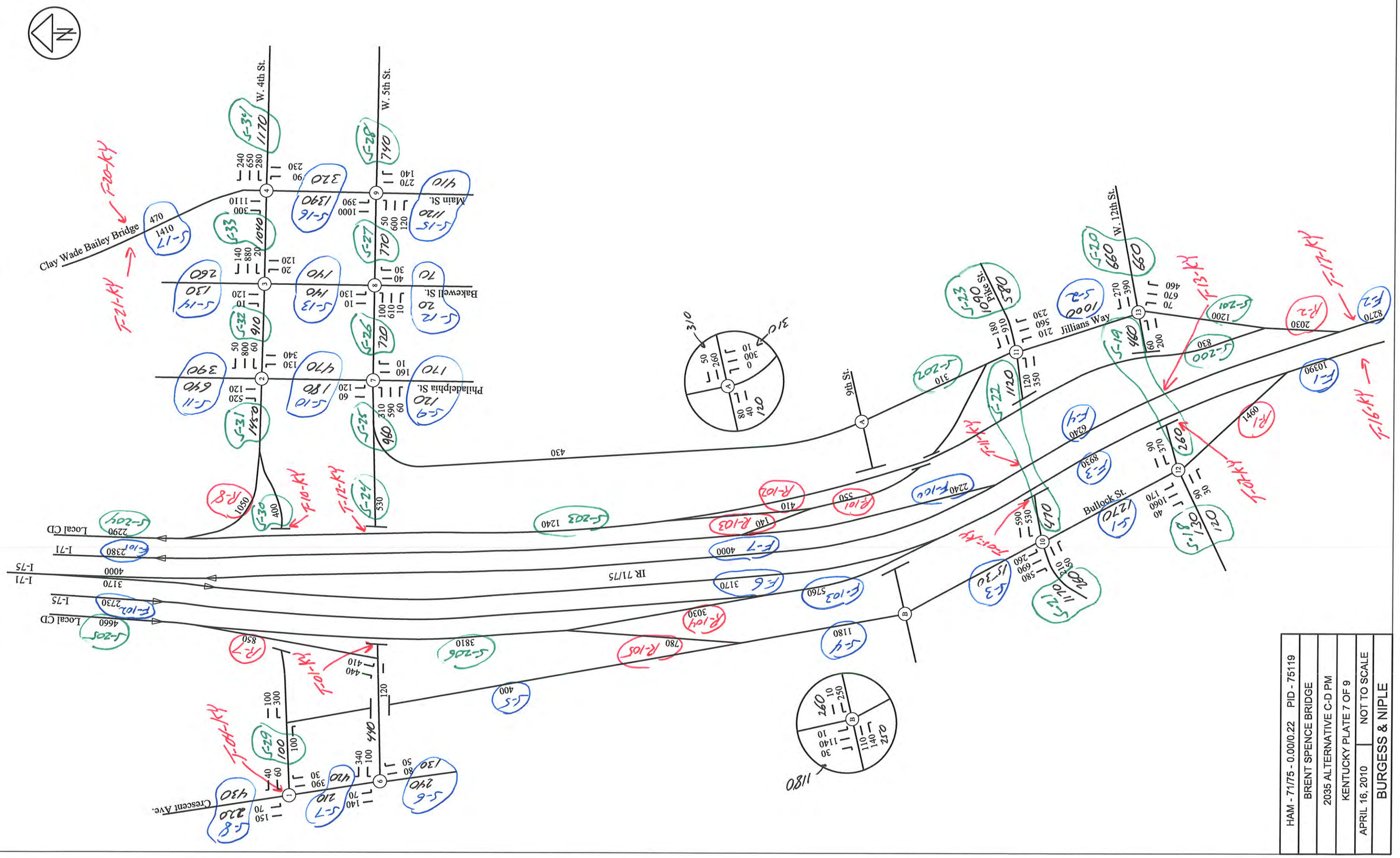
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W. 4th St.
W. 5th St.
Main St.
Bakewell St.
Philadelphia St.
9th St.
W. 12th St.
Jillians Way
Bullock St.
Crescent Ave.
Clay Wade Bailey Bridge
I-71
I-75
IR 71/75
Local CD
430
1180
1460
1050
1410
1110
1040
910
800
880
1120
1170
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1200
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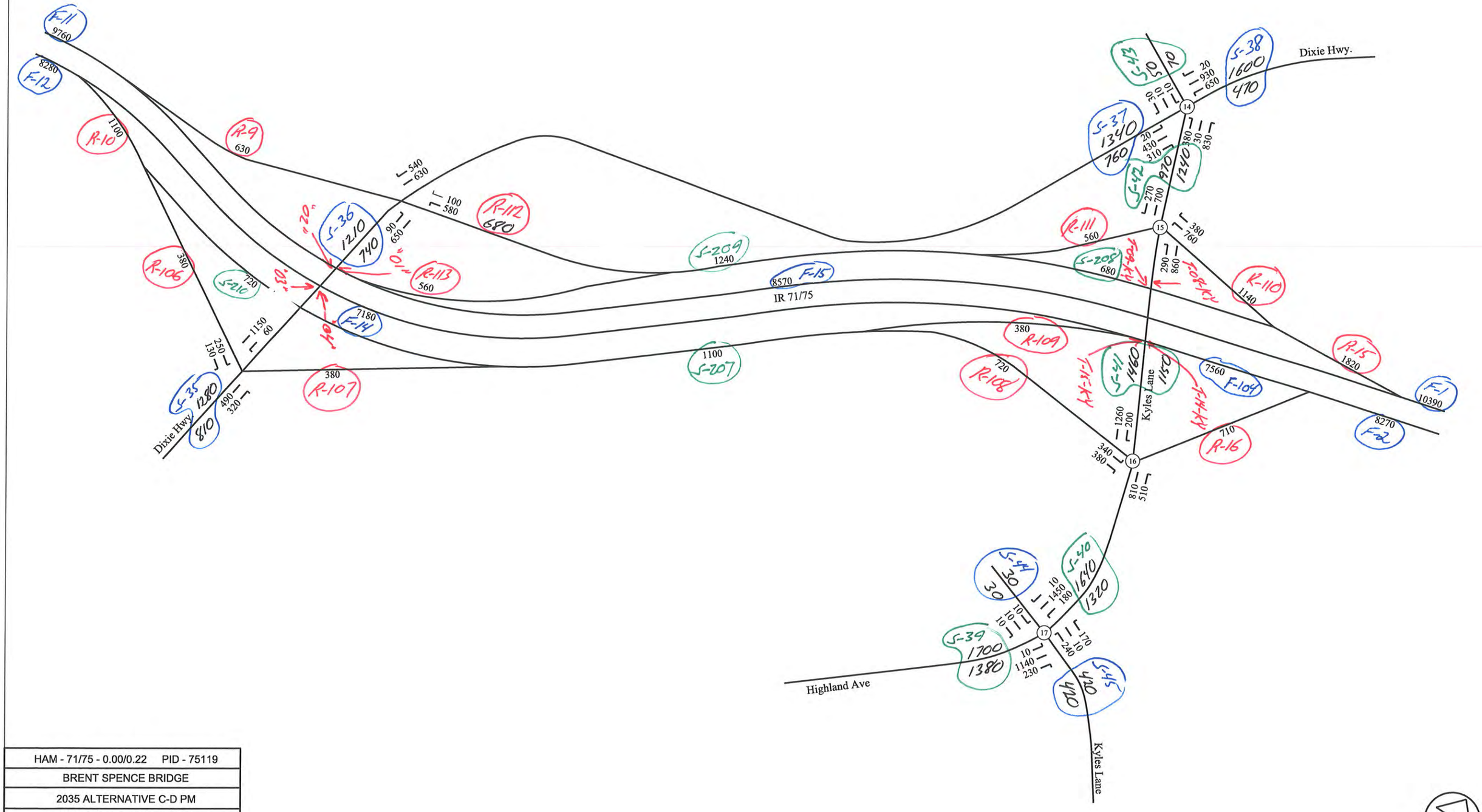

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KENTUCKY PLATE 8 OF 9	
APRIL 16, 2010	NOT TO SCALE
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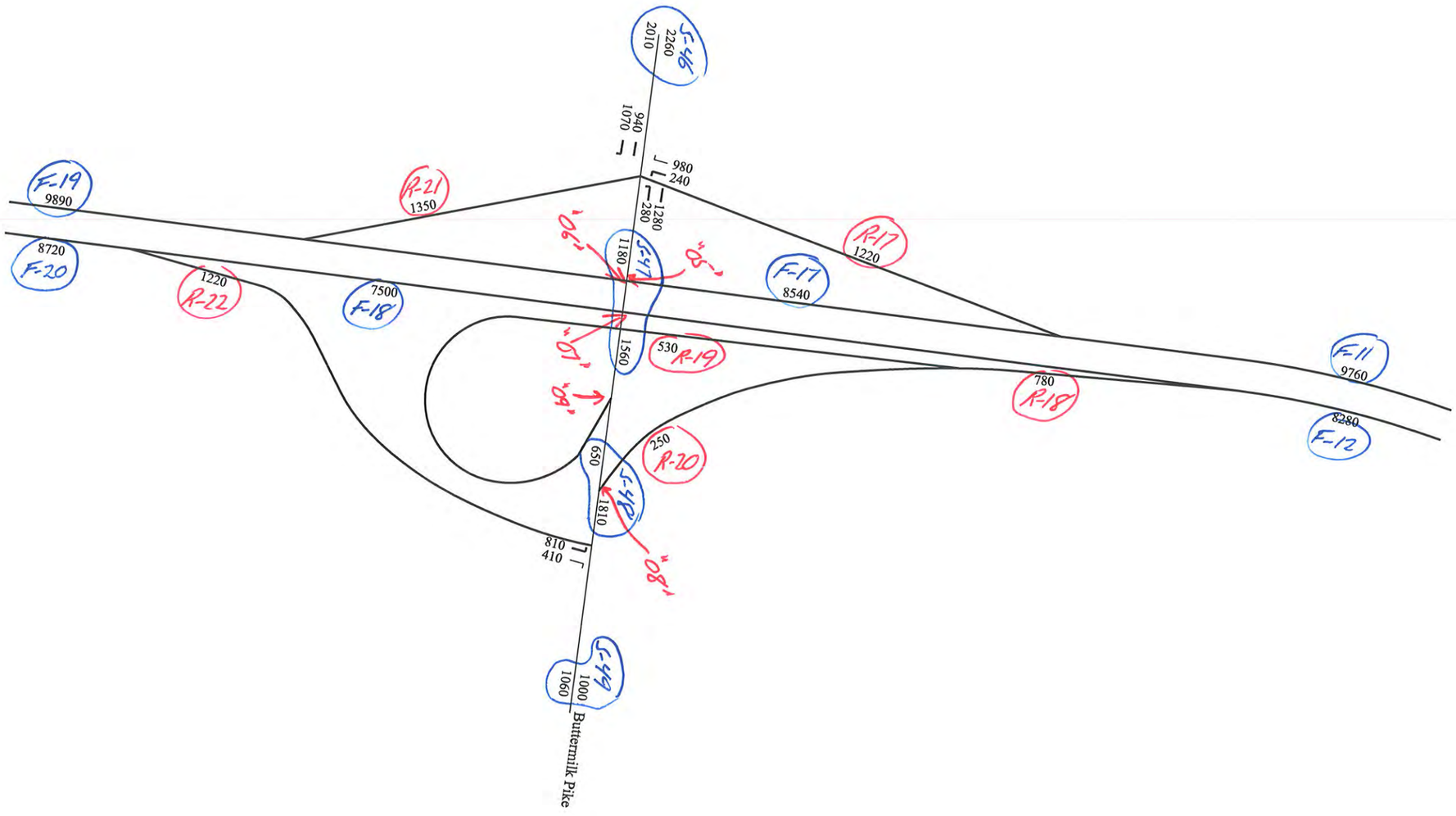

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KENTUCKY PLATE 9 OF 9	
APRIL 16, 2010	NOT TO SCALE
BURGESS & NIPLE	

HAM - 71/75 - 0.000-22 PID - 76119

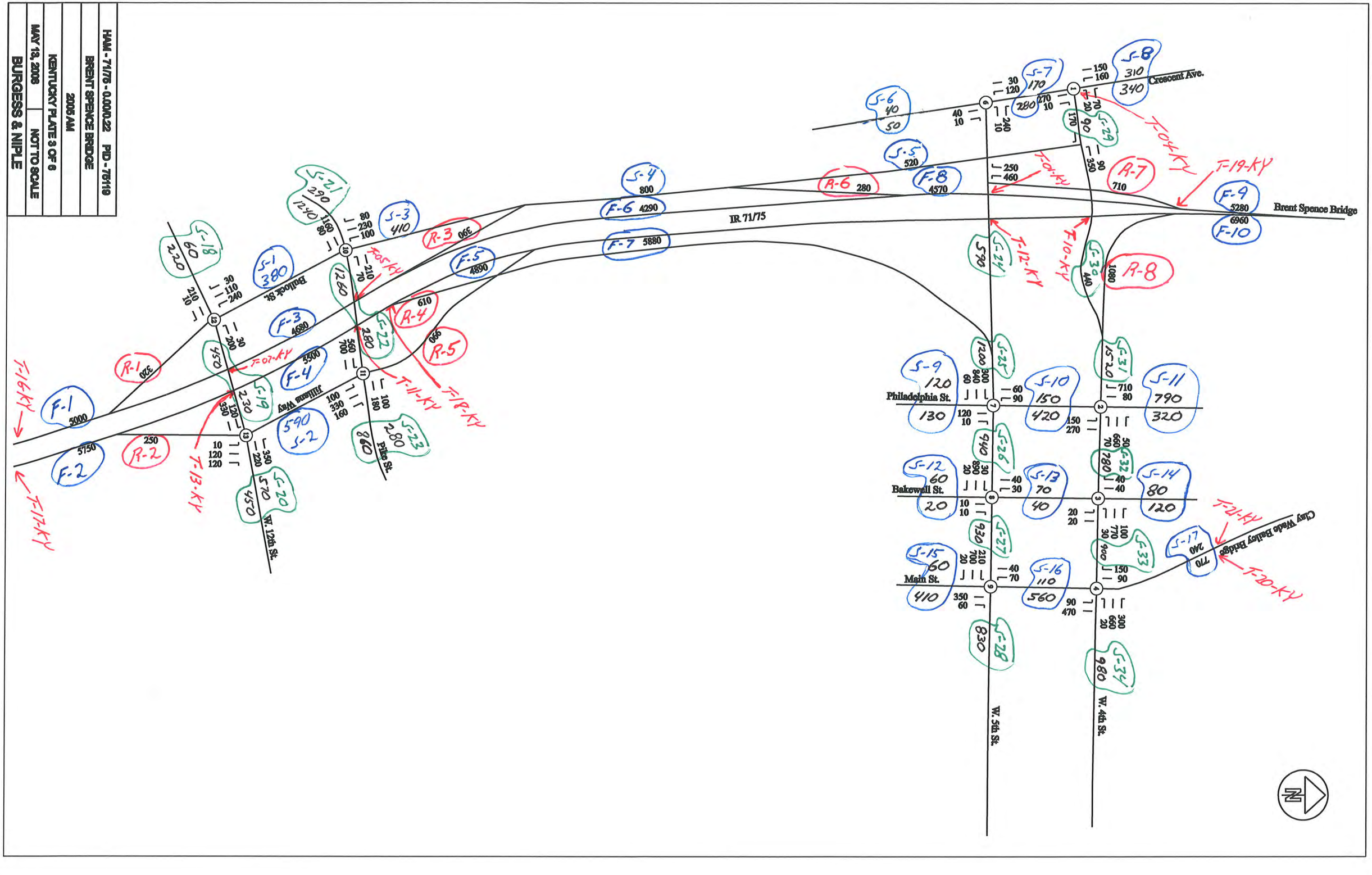
BRENT SPENCE BRIDGE

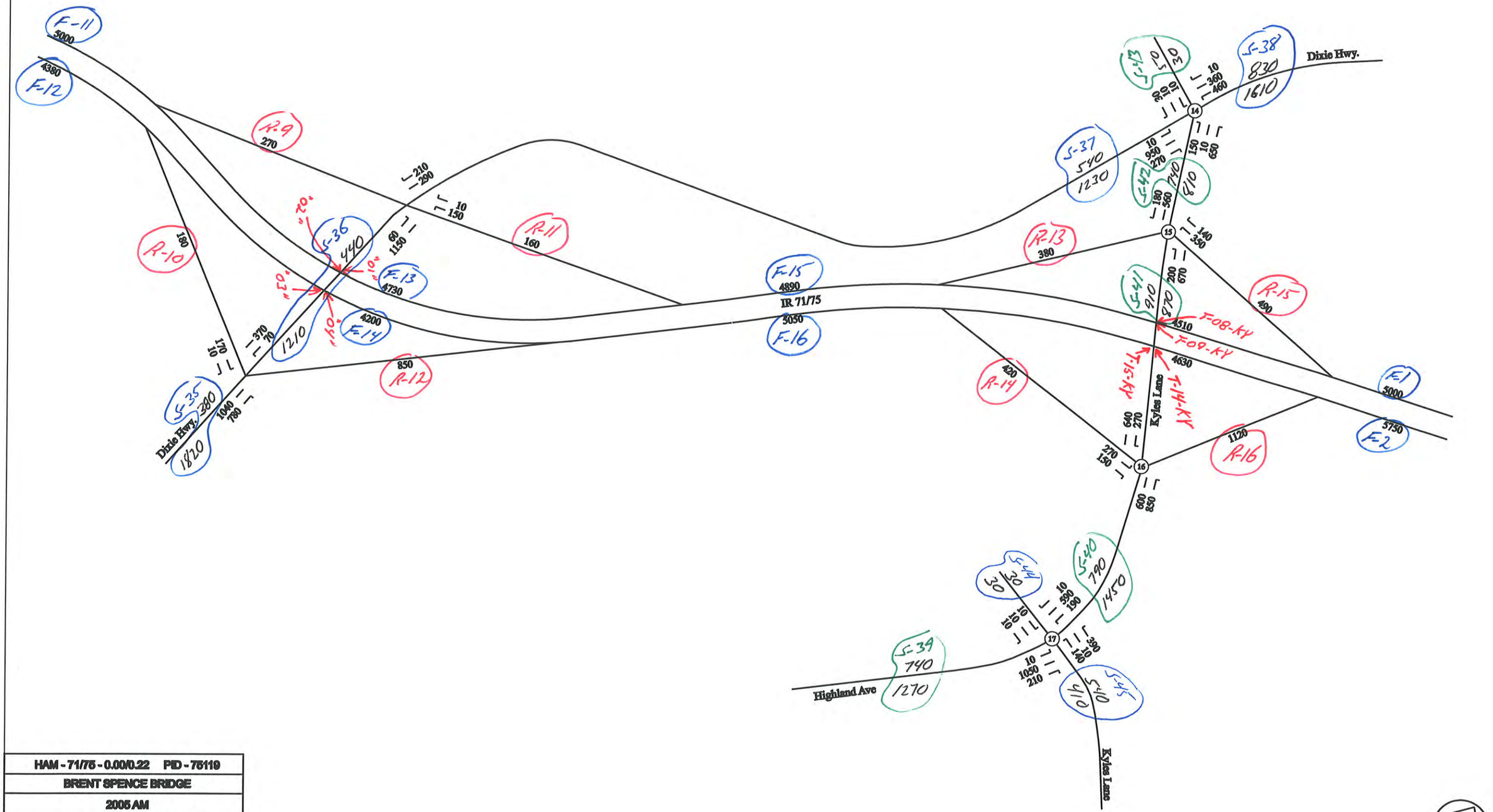
2005 AM

KENTUCKY PLATE 3 OF 6

MAY 13, 2003 | NOT TO SCALE

BURGESS & NIPLE





HAM - 71/75 - 0.00/0.22 PID - 75119	
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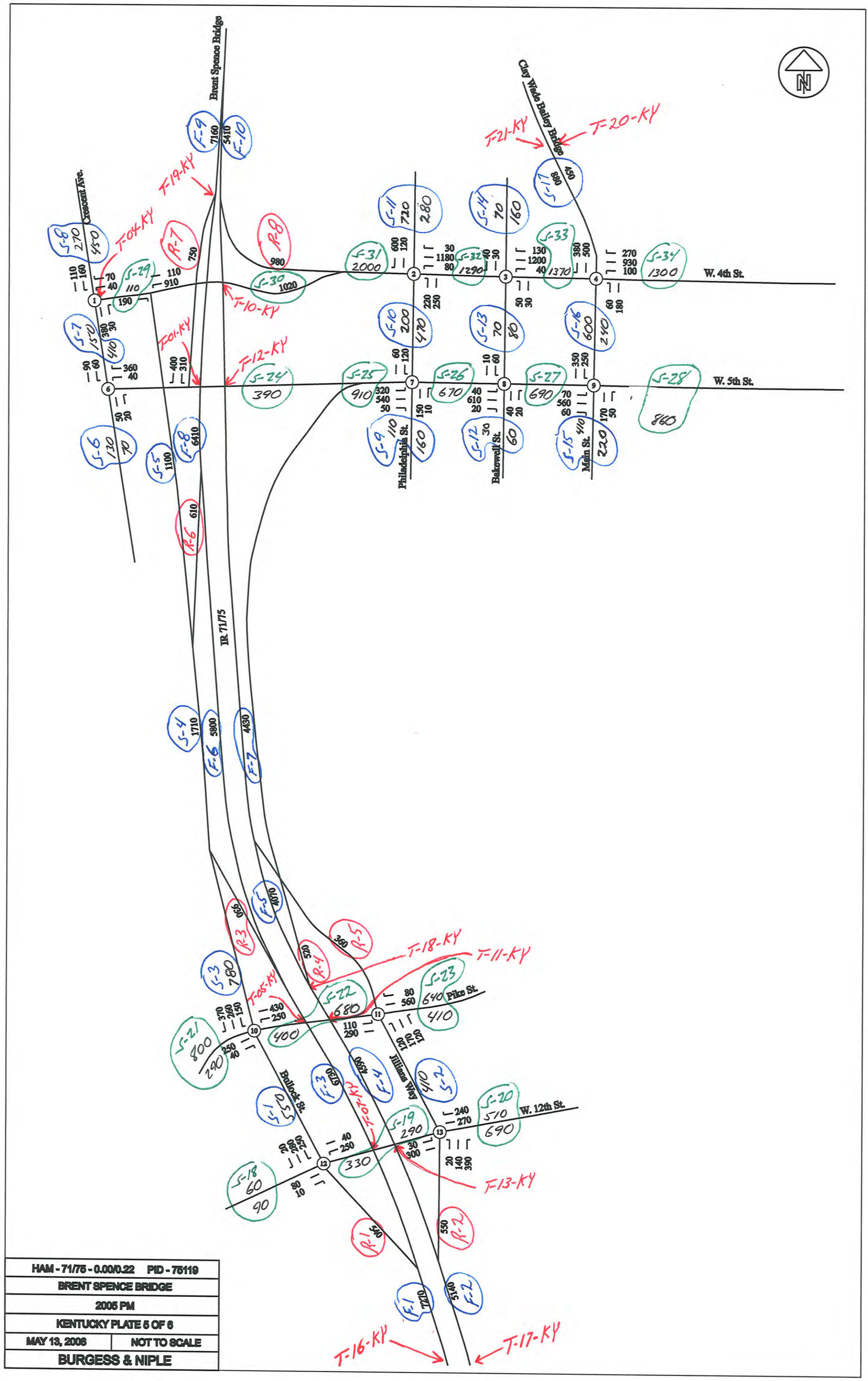
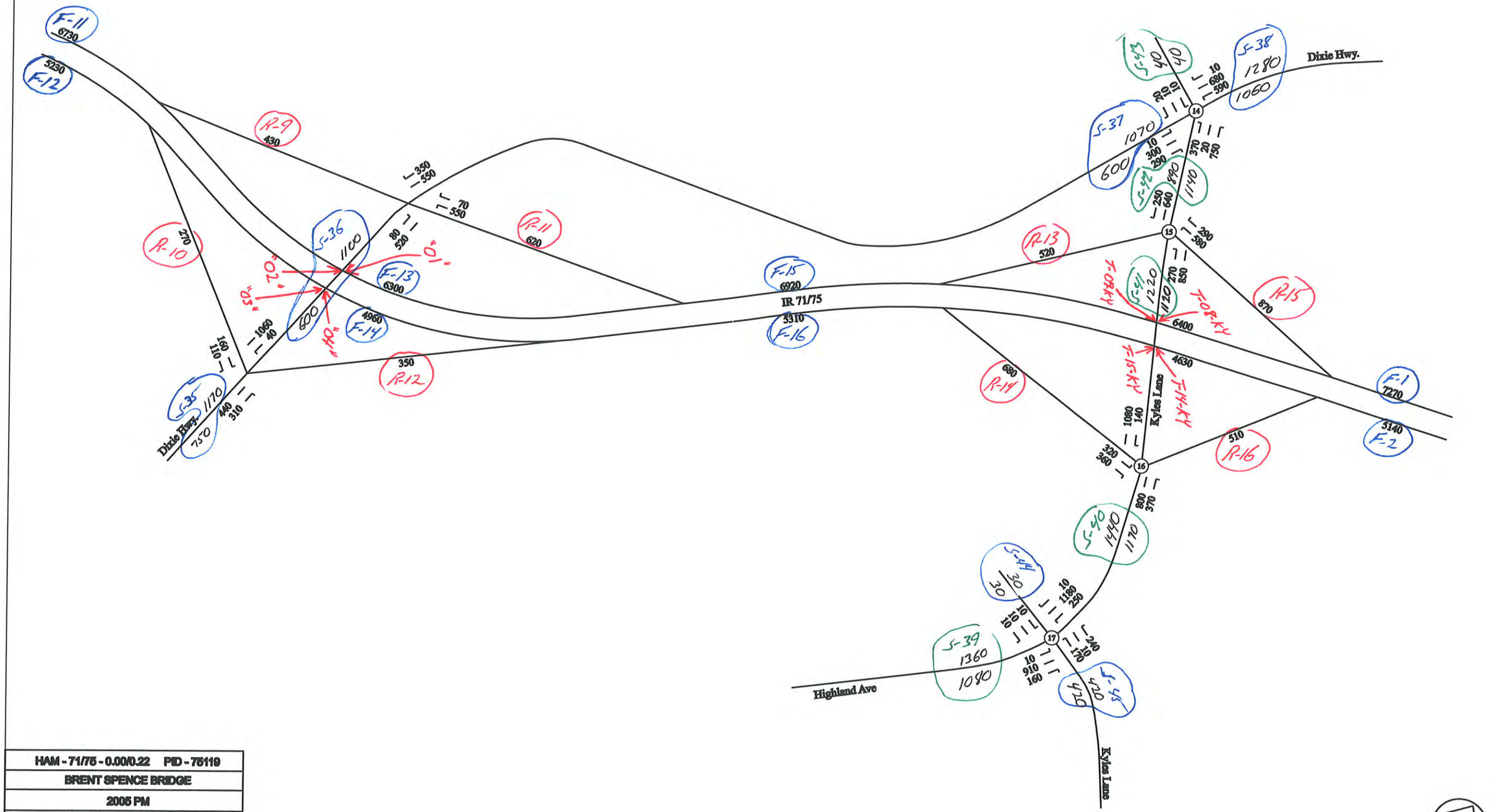
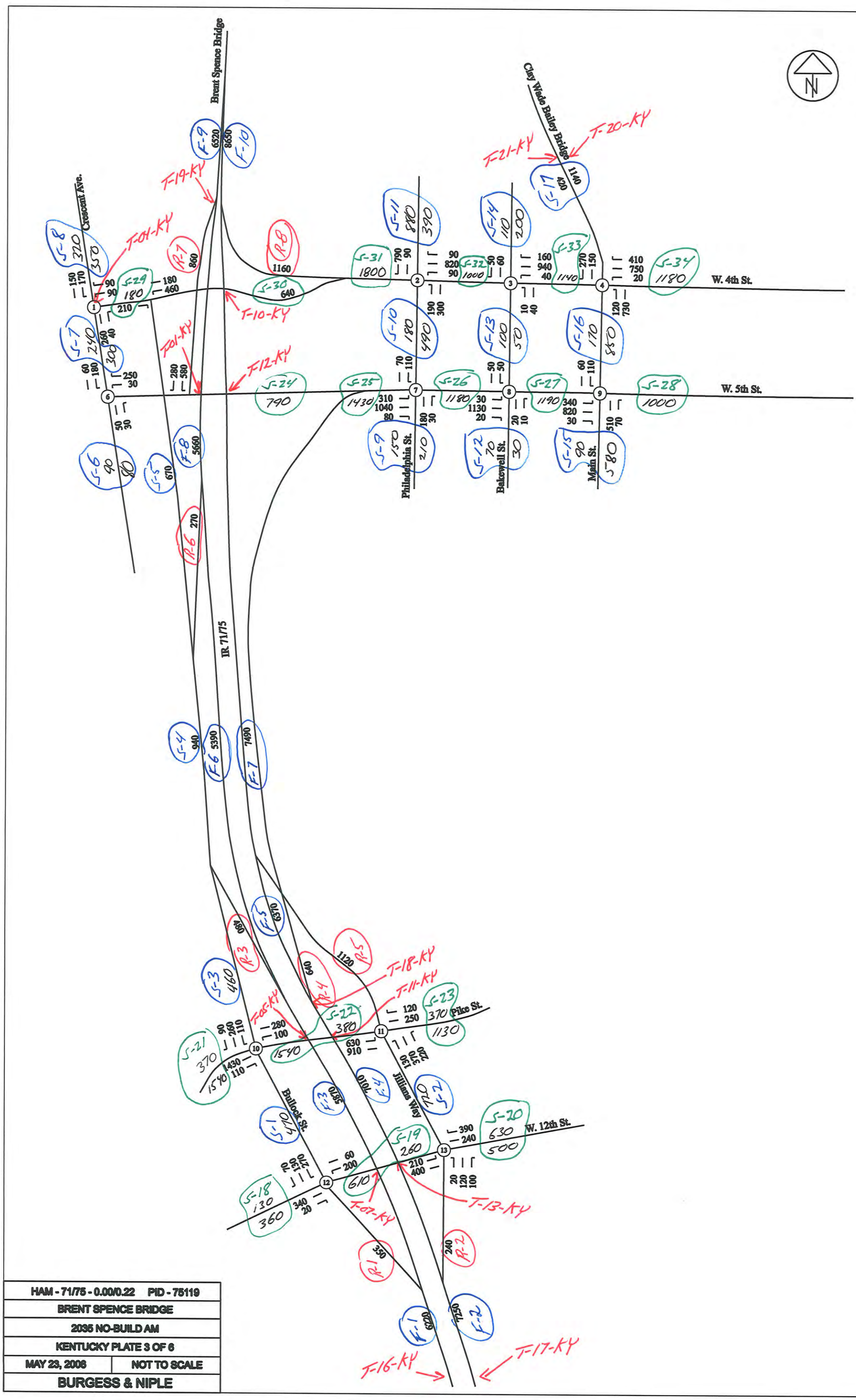
2005 AM	
KENTUCKY PLATE 4 OF 6	
MAY 13, 2008	NOT TO SCALE
BURGESS & NIPLE	

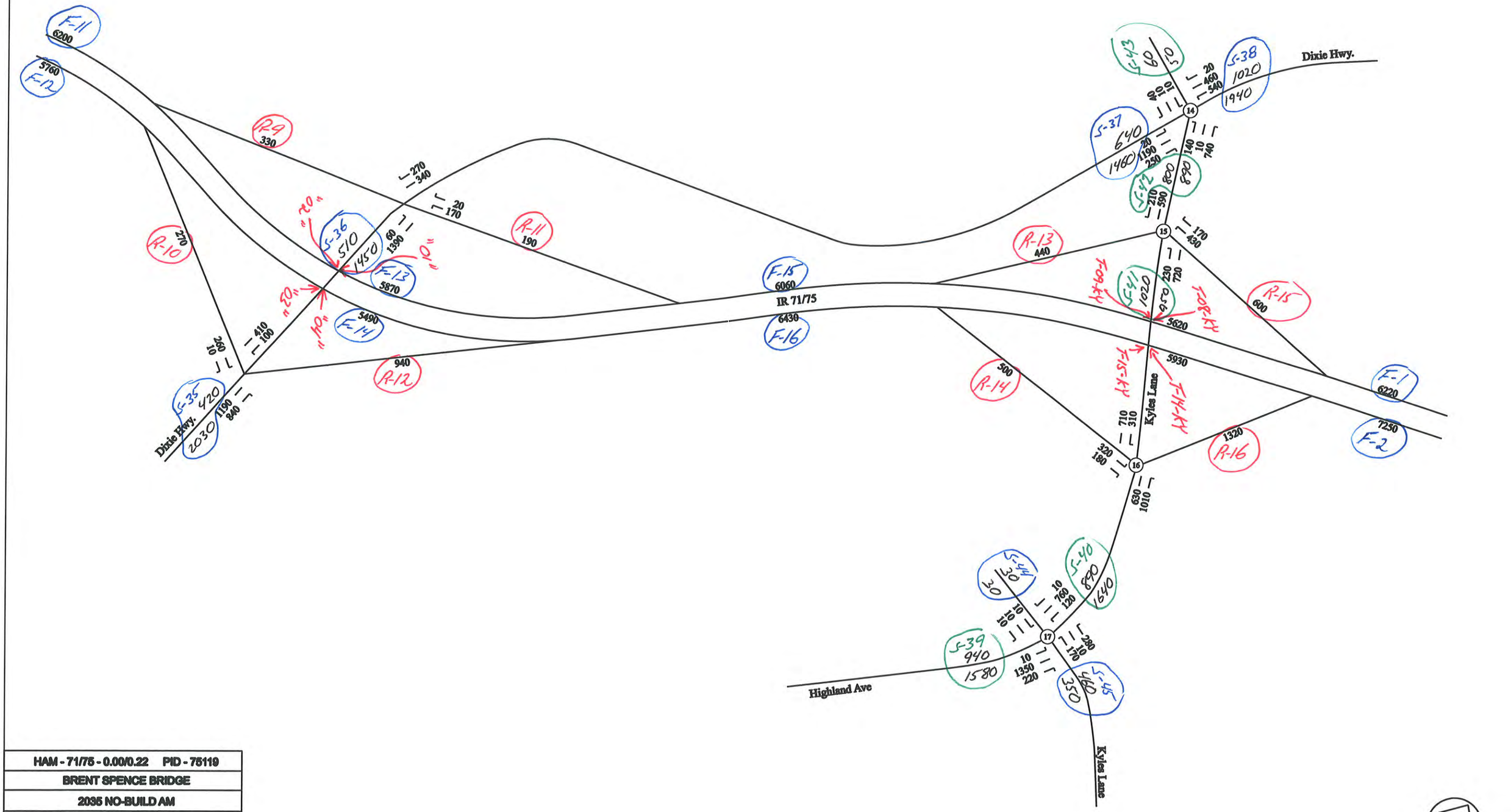


HAM - 71/75 - 0.00/0.22	PID - 75119
BRENT SPENCE BRIDGE	
2005 PM	
KENTUCKY PLATE 5 OF 6	
MAY 13, 2008	NOT TO SCALE
BURGESS & NIPLE	

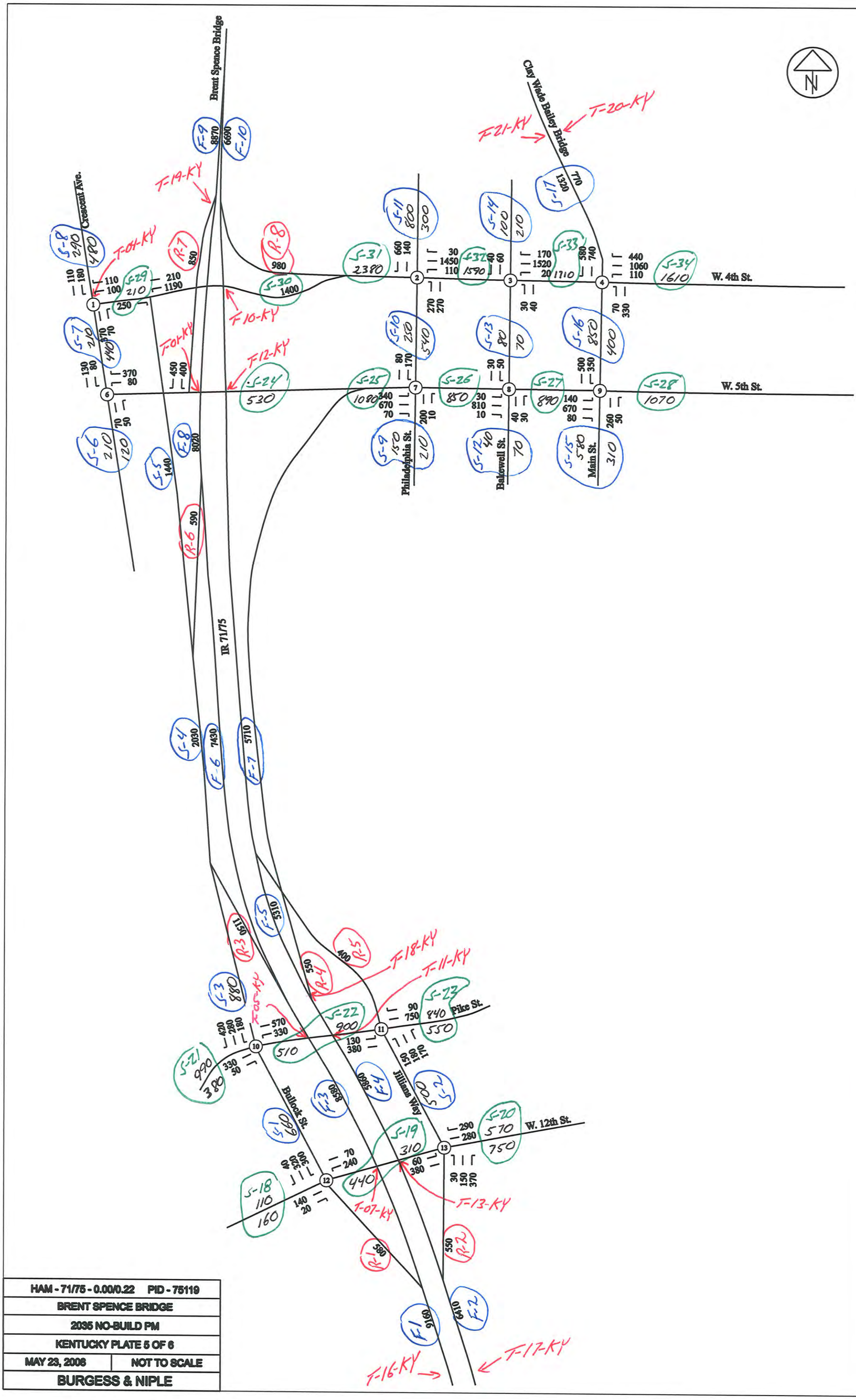


HAM - 71/75 - 0.00/0.22 PID - 76119	
BRENT SPENCE BRIDGE	
2005 PM	
KENTUCKY PLATE 6 OF 6	
MAY 13, 2006	NOT TO SCALE
BURGESS & NIPLE	

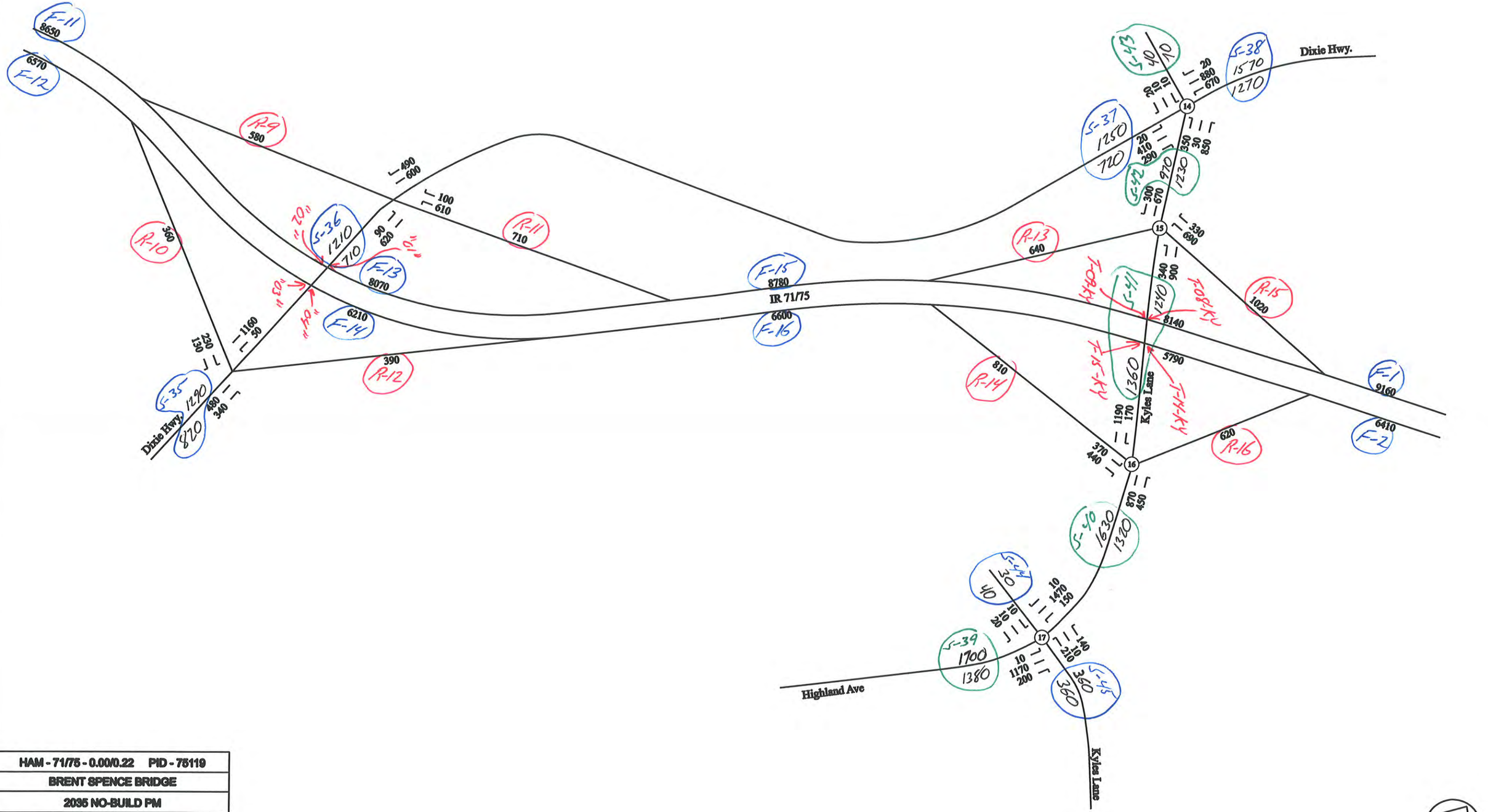

Brent Spence Bridge
Clay Wade Bailey Bridge
Crescent Ave.
W. 4th St.
W. 5th St.
Philadelphia St.
Bakewell St.
Main St.
Pike St.
Ballock St.
Jillians Way
W. 12th St.
IR 71/75
T-01-KY
T-02-KY
T-03-KY
T-04-KY
T-05-KY
T-06-KY
T-07-KY
T-08-KY
T-09-KY
T-10-KY
T-11-KY
T-12-KY
T-13-KY
T-14-KY
T-15-KY
T-16-KY
T-17-KY
T-18-KY
T-19-KY
T-20-KY
T-21-KY
HAM - 71/75 - 0.00/0.22 PID - 75119
BRENT SPENCE BRIDGE
2035 NO-BUILD AM
KENTUCKY PLATE 3 OF 6
MAY 23, 2008
NOT TO SCALE
BURGESS & NIPLE



HAM - 71/75 - 0.00/0.22 PID - 75119	
BRENT SPENCE BRIDGE	
2035 NO-BUILD AM	
KENTUCKY PLATE 4 OF 6	
MAY 23, 2006	NOT TO SCALE
BURGESS & NIPLE	



HAM - 71/75 - 0.00/0.22	PID - 75119
BRENT SPENCE BRIDGE	
2035 NO-BUILD PM	
KENTUCKY PLATE 5 OF 6	
MAY 23, 2008	NOT TO SCALE
BURGESS & NIPLE	



HAM - 71/75 - 0.00/0.22 PID - 75119	
BRENT SPENCE BRIDGE	
2035 NO-BUILD PM	
KENTUCKY PLATE 6 OF 6	
MAY 23, 2008	NOT TO SCALE
BURGESS & NIPLE	

[illegible] Computation Sheet

Subject: Noise Monitoring - M-17

Receptor: 881 Highway Ave

Made by: R Yang

Date: 1/28/16

Checked by:

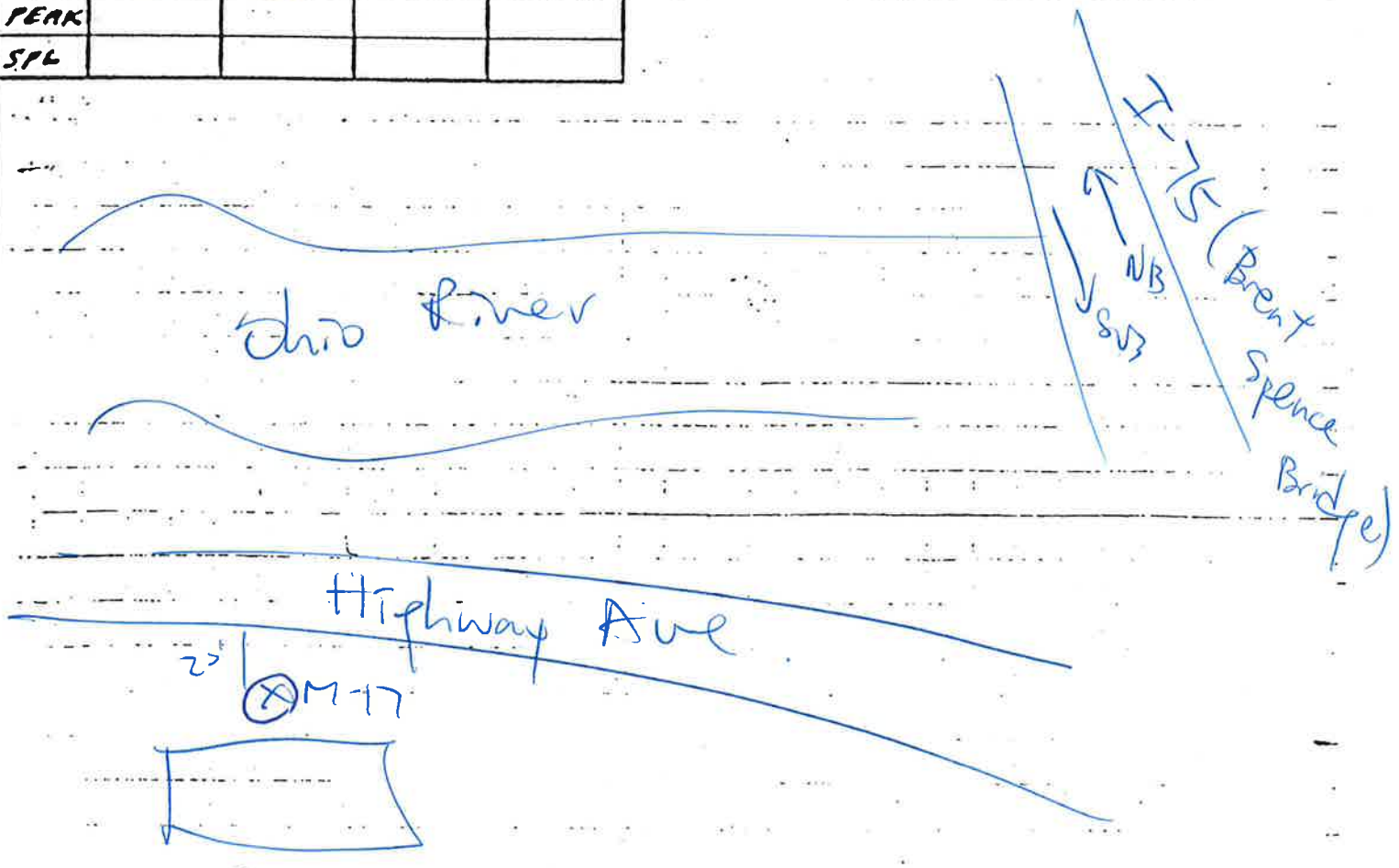
Date:

Weather:

Date →	1/28	1/28		
Time →	7:30am	4:20pm		
LEQ	63.6	63.8		
SEL	93	92		
L99	58	50		
L90	59	64		
L50	62	60		
L10	67	64		
L1	70	70		
INST				
MINL	62	59		
MAXL	78	74		
MAXF	95	88		
PEAK				
SPL				

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Construction Computation Sheet

Subject: Noise Monitoring - M-18
Receptor: 407 Western Ave

Made by: R Yang
Date: 1/28/10
Checked by:
Date:

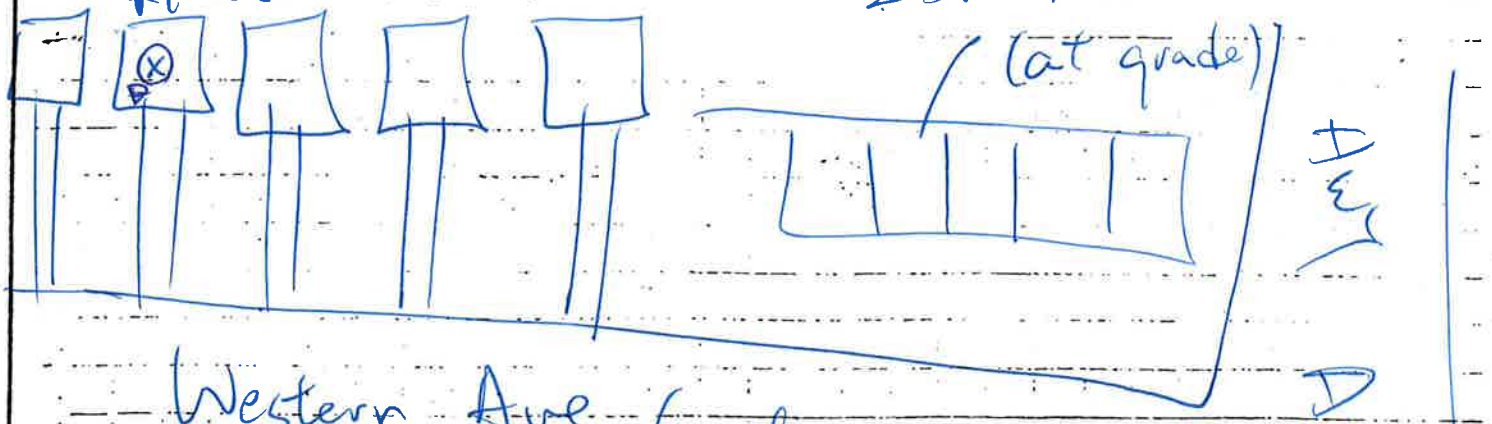
Weather:

Date →	1/28	1/28		
Time →	7:40am	4:22pm		
LEQ	65.3	65.5		
SEL	95	95		
L99	63	62		
L90	64	63		
L50	65	64		
L10	66	67		
L1	68	70		
INST				
MINL	63	61		
MAXL	85	88		
MAXF	88	89		
PEAK				
SPL	93.9	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

M-18 (Front Deck)



Construction Computation Sheet

Subject Noise Monitoring – M-19

Receptor 514 Western Ave

Made by R Yap

Date 1/28/10

Checked by

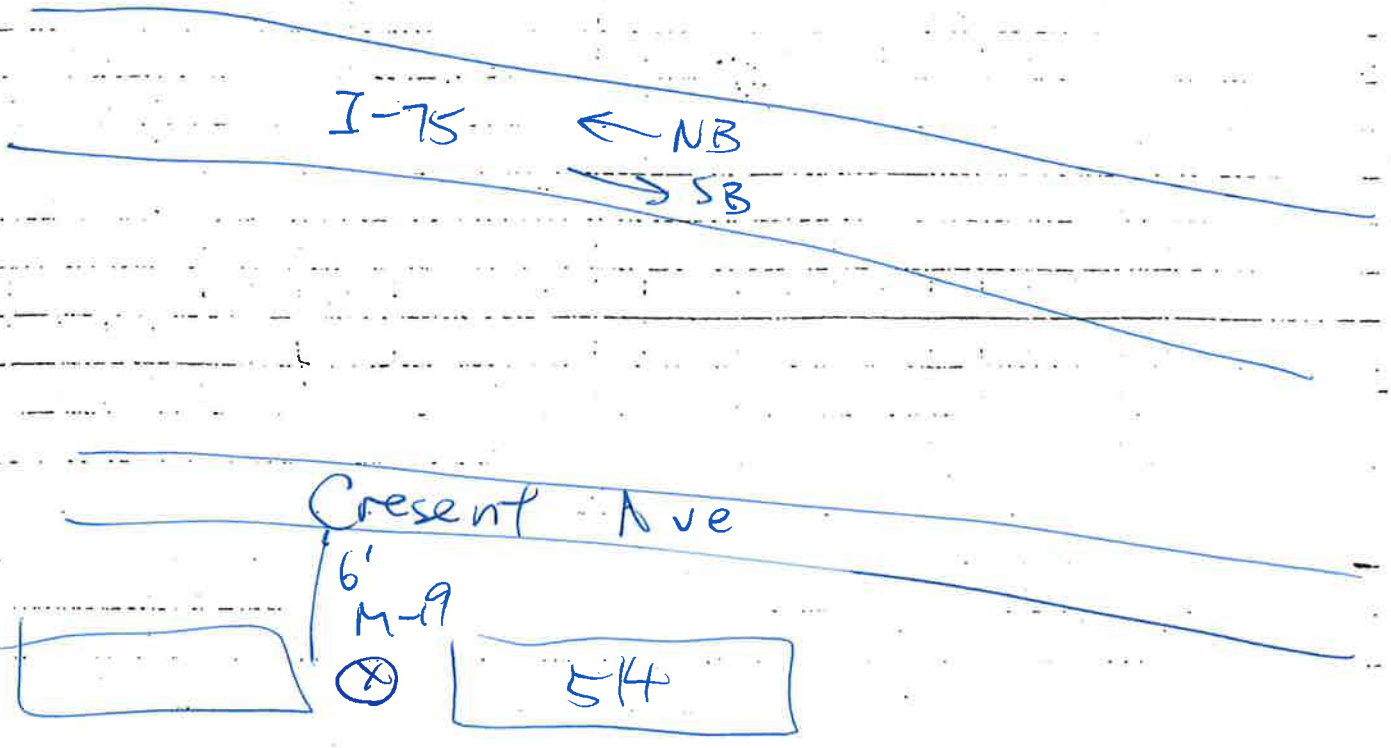
Date

Weather:

Date →	1/28	1/28		
Time →	8:06am	4:46pm		
LEQ	67.0	64.5		
SEL	96	94		
L99	63	62		
L90	65	63		
L50	67	64		
L10	68	66		
L1	70	69		
INST				
MIN	62	60		
MAXL	75	78		
MAXF	90	97		
PEAK				
SPL				

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



[redacted] Computation Sheet

Subject: Noise Monitoring - M-20

Receptor: Goebel Park
Northern End of Philadelphia St

Made by: R Yang

Date: 1/29

Checked by:

Date:

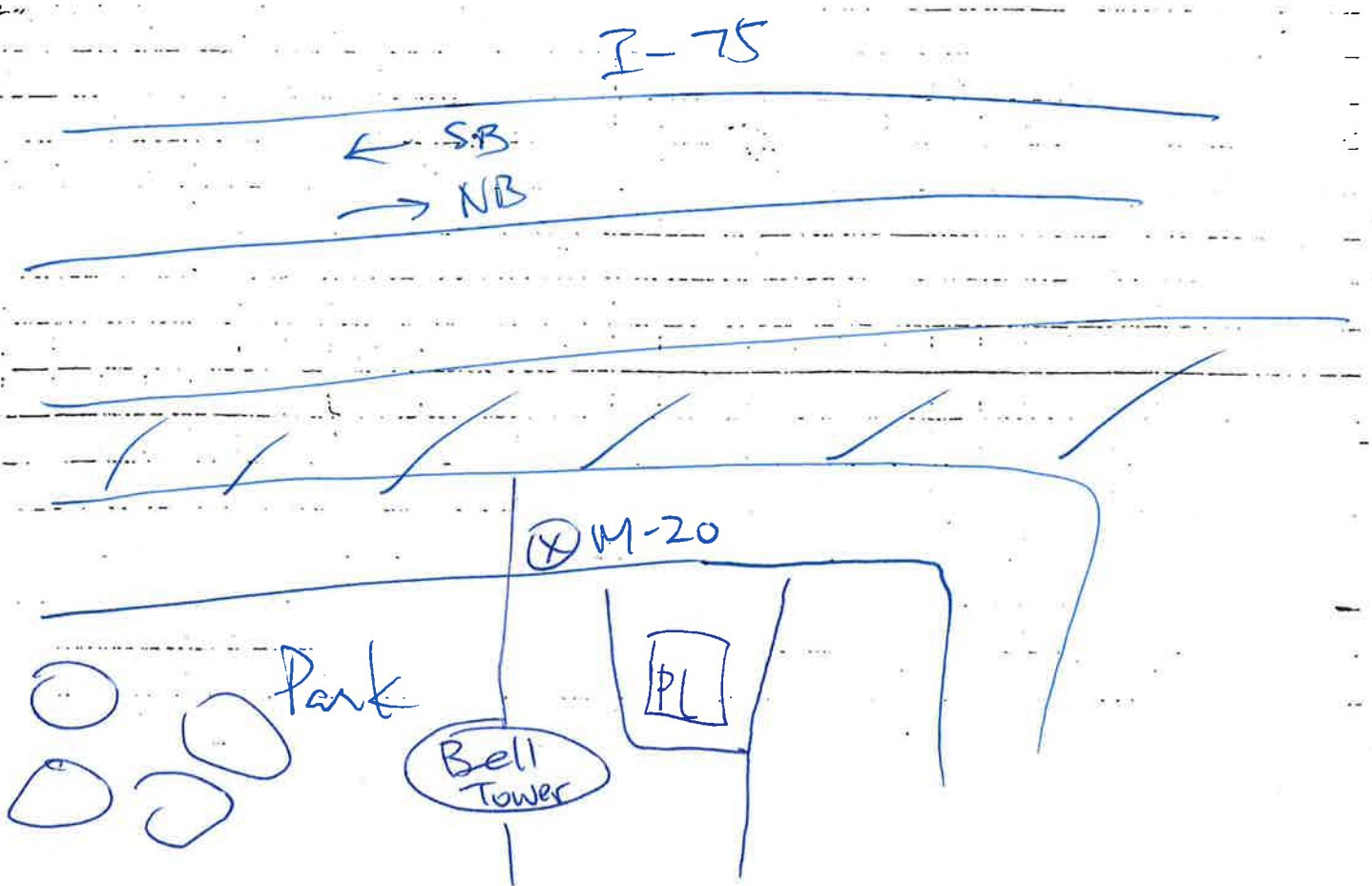
Weather:

Date →	1/29	2/22		
Time →	7:00am	4:00pm		
LEQ	66.2	69.5		
SEL	95*	99		
L99	64	65		
L90	65	66		
L50	66	67		
L10	67	71		
L1	69	80		
INST				
MINL	61	66		
MAXL	70	85		
MAXF	97	97		
PEAK				
SPL				

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

4:14 - Bell Tower started chiming.



Computation Sheet

Subject: Noise Monitoring - M-21

Receptor: 641 Crescent Ave.

Made by: R Yang

Date: 1/28/10

Checked by:

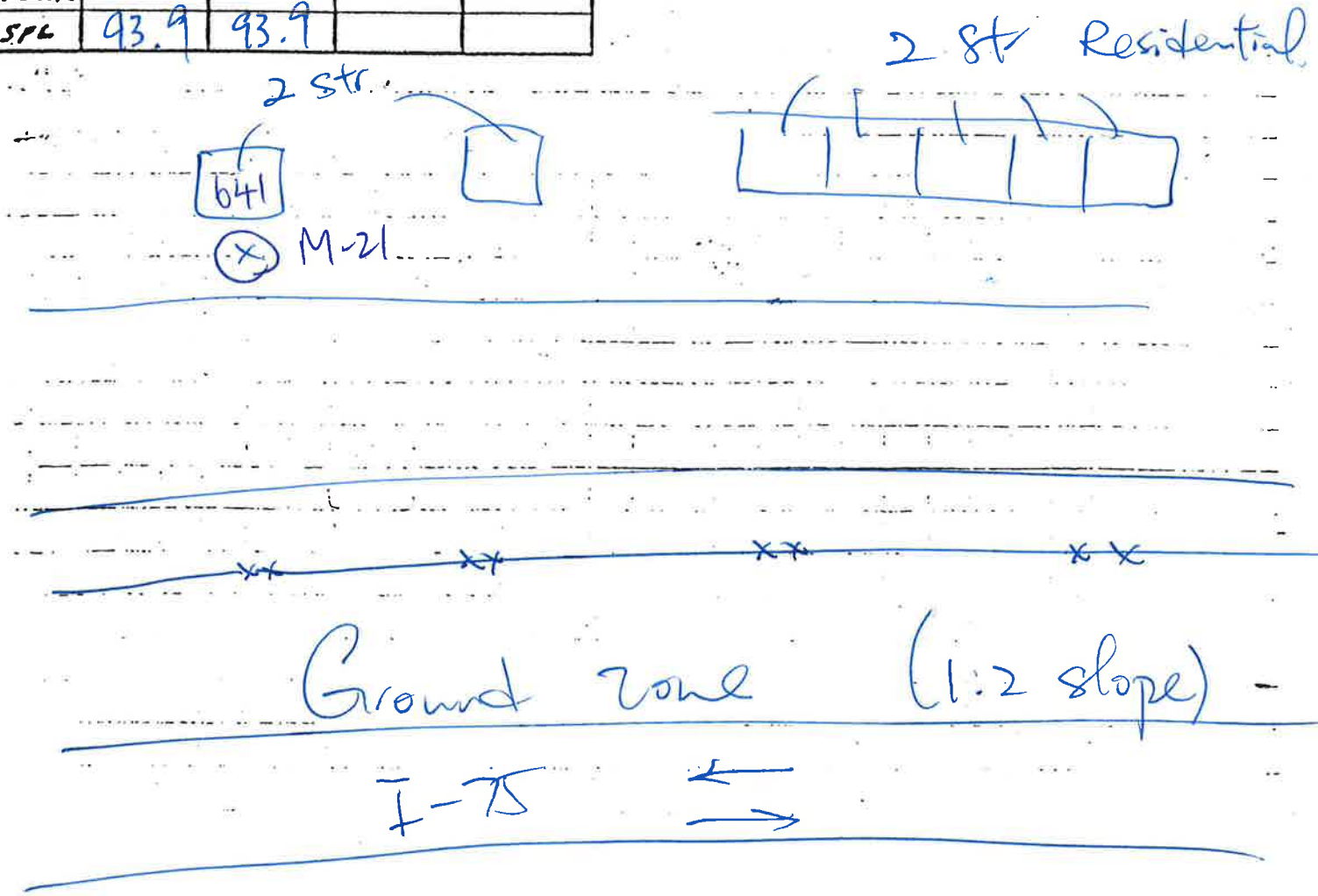
Date:

Weather:

Date →	1/28	1/28		
Time →	8:10am	4:52pm		
LEQ	70.8	68.5		
SEL	100	98		
L99	66	63		
L90	68	64		
L50	70	66		
L10	72	70		
L1	79	78		
INST				
MINL	64	62		
MAXL	90	92		
MAXF	97	96		
PEAK				
SPL	93.9	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



[illegible] Computation Sheet

Subject: Noise Monitoring - M-22

Receptor: 818 Crescent Ave

Made by: R [illegible]

Date: 1/28/10

Checked by:

Date:

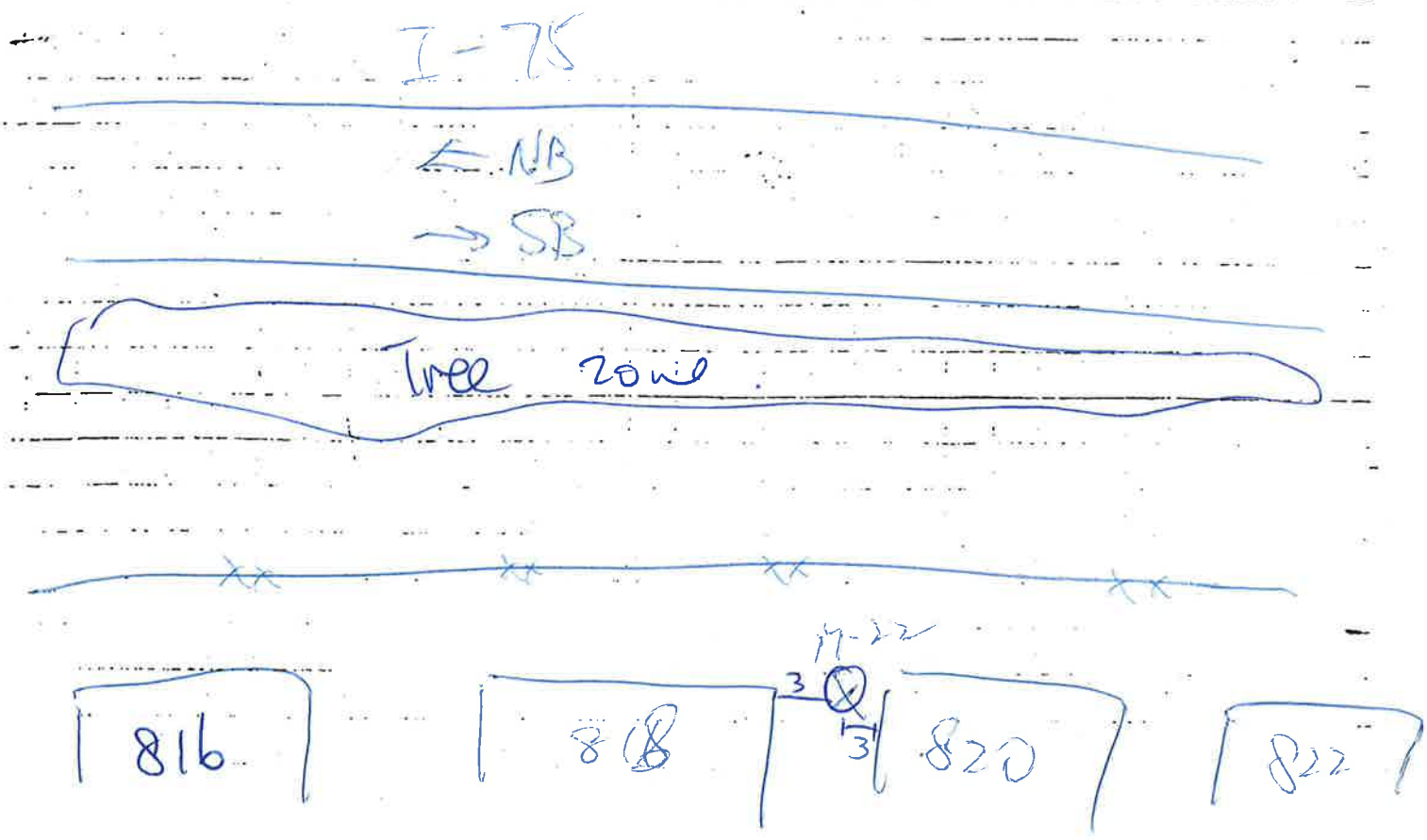
Weather:

Date →	1/28	1/28		
Time →	8:35am	5:15pm		
LEQ	72.5	69.6		
SEL	103	99		
L99	68	66		
L90	71	68		
L50	73	69		
L10	75	71		
L1	77	74		
INST				
MINL	66	67		
MAXL	81	84		
MAXF	94	111		
PEAK				
SPL				

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

receptor 20' above road.



Brinckerhoff Computation Sheet

Made by _____
Date 1/28
Checked by _____
Date _____

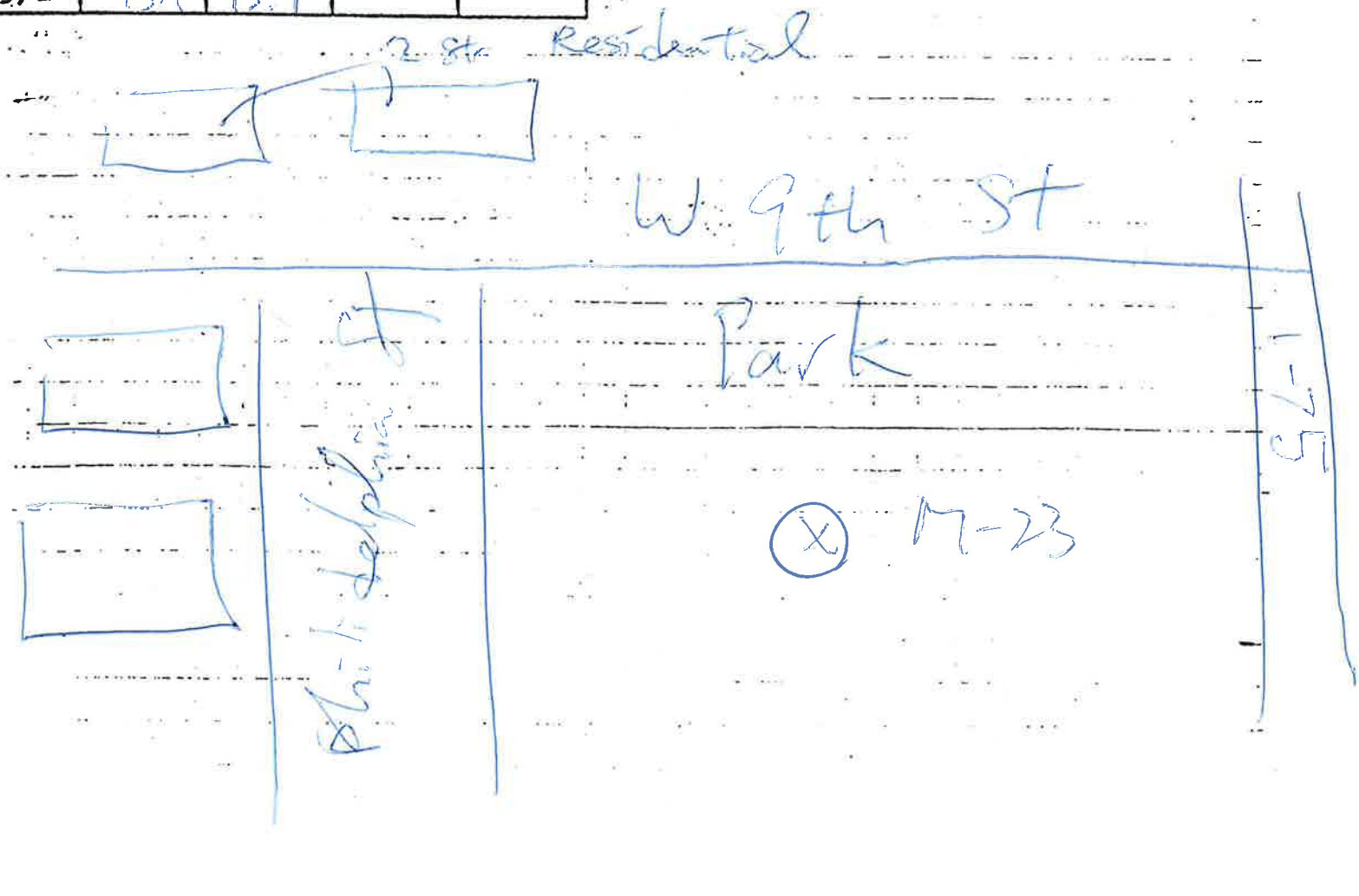
Subject Noise Monitoring - M-23
Receptor Goebel Park (Southern End)
W 9th St & Philadelphia St

Weather:

Date →	1/28	1/28		
Time →	8:41am	5:17pm		
LEQ	67.0	65.6		
SEL	96	95		
L99	64	62		
L90	65	63		
L50	67	65		
L10	68	66		
L1	71	69		
INST				
MIN	62	61		
MAXL	84	87		
MAXP	91	97		
PEAK				
SPL	93.9	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS
I-75	1048	15	122	3
(AM) 8min				
15min	1965	28	229	6
PM	1343	8	98	1
15min	2518	15	184	2



Brinckerhoff Computation Sheet

Subject: Noise Monitoring – M-24
Receptor: 619 Pike St

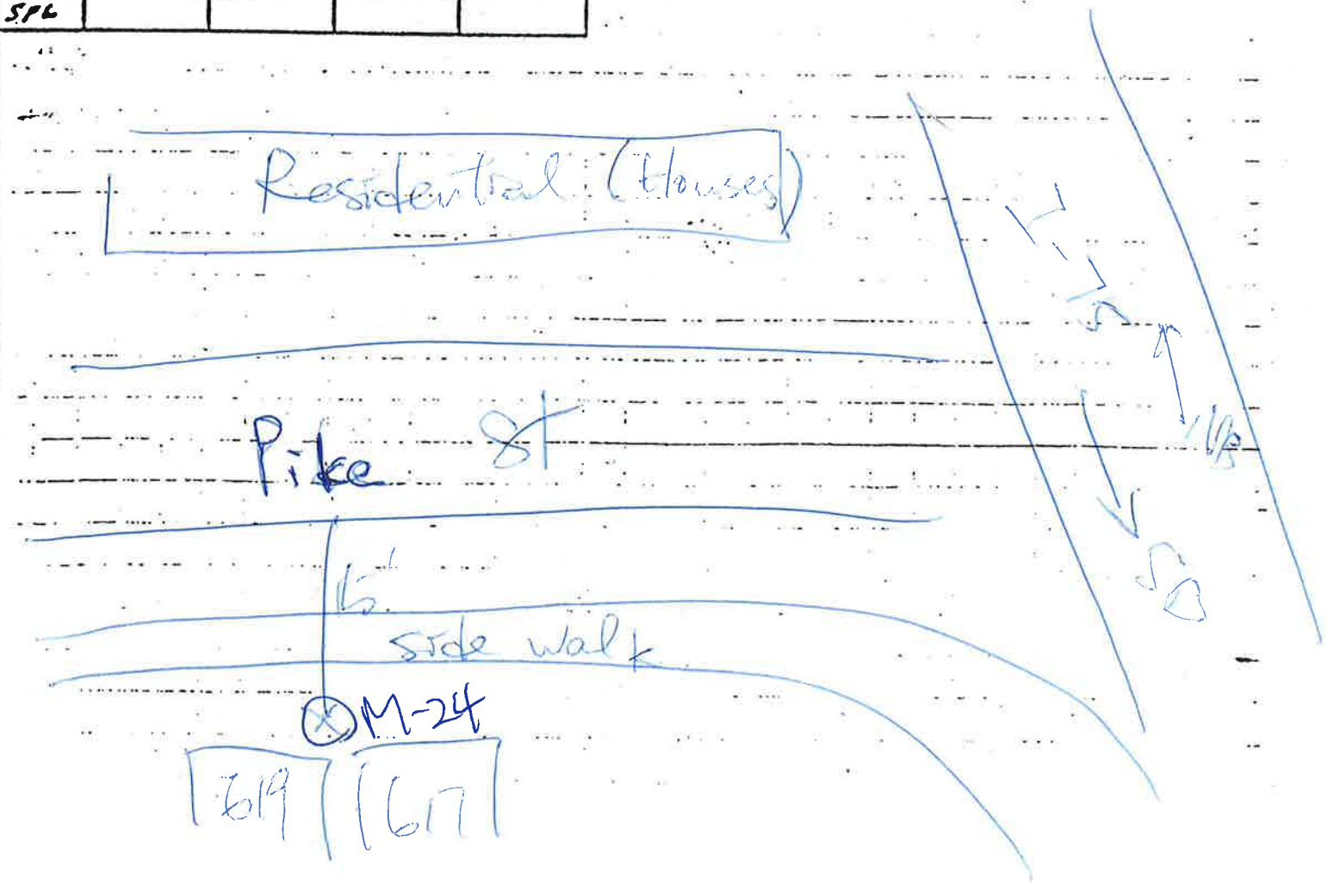
Made by: R Sharp
Date: 1/29/10
Checked by:
Date:

Weather:

Date →	1/29	2/22		
Time →	7:46am	4:58pm		
LEQ	71.7	71.2		
SEL	101	101		
L99	65	67		
L90	69	69		
L50	71	71		
L10	74	73		
L1	76	75		
INST				
MINL	62	66		
MAXL	80	81		
MAXF	98	96		
PEAK				
SPL				

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject: Noise Monitoring - M-25

Receptor: 605 W-11 St

Made by: [illegible]

Date: 1/29/10

Checked by:

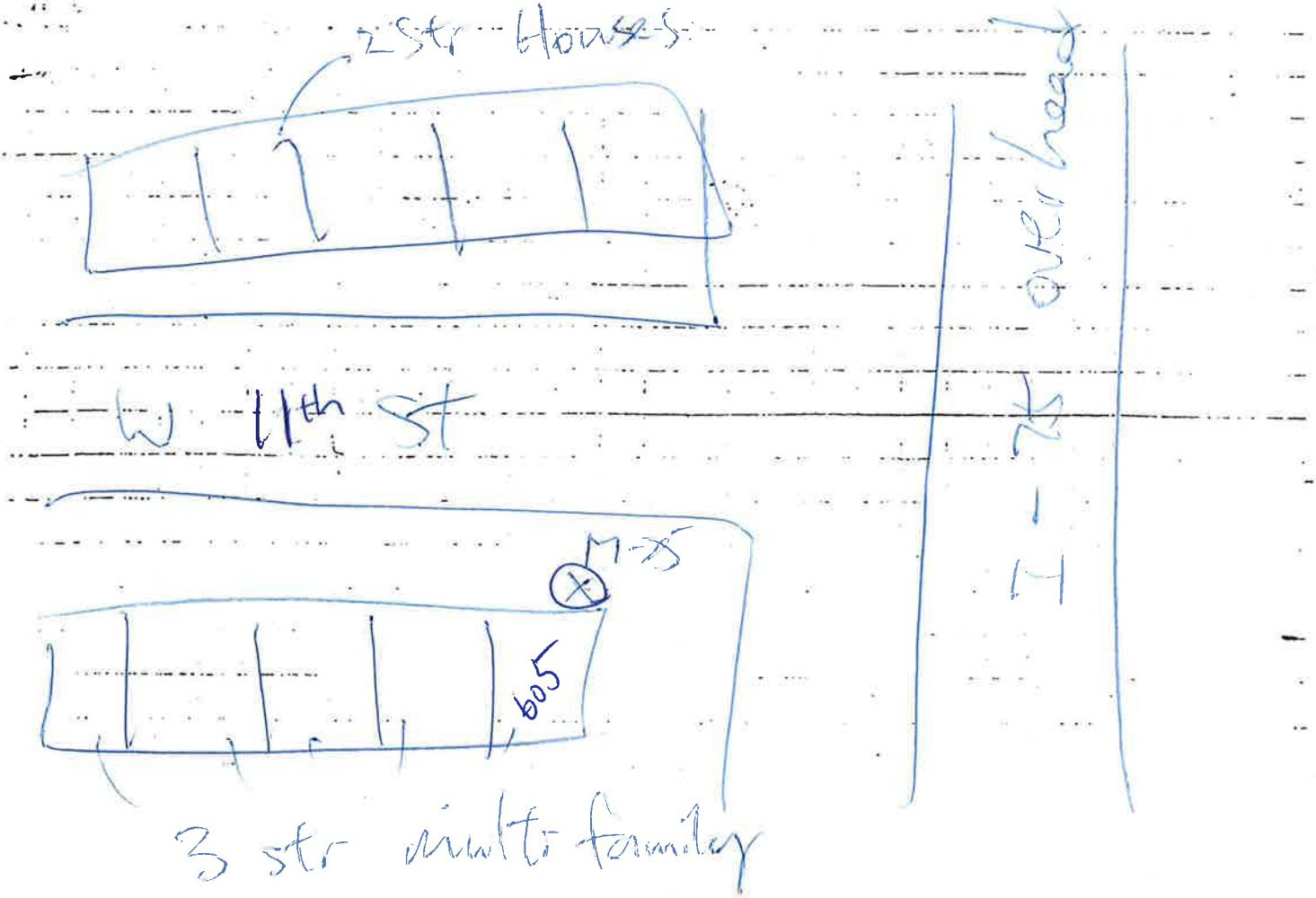
Date:

Weather:

Date →	1/29	2/22		
Time →	9:11am	3:50pm		
LEQ	70.9	70.7		
SEL	96	100		
L99	68	68		
L90	71	69		
L50	73	71		
L10	74	73		
L1	75	75		
INST				
MINL	65	67		
MAXL	76	75		
MAXF	97	98		
PEAK				
SPL	93.7	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject: Noise Monitoring – M-26

Receptor: 522 W 12th St

Made by: R. You

Date: 1/29/21

Checked by:

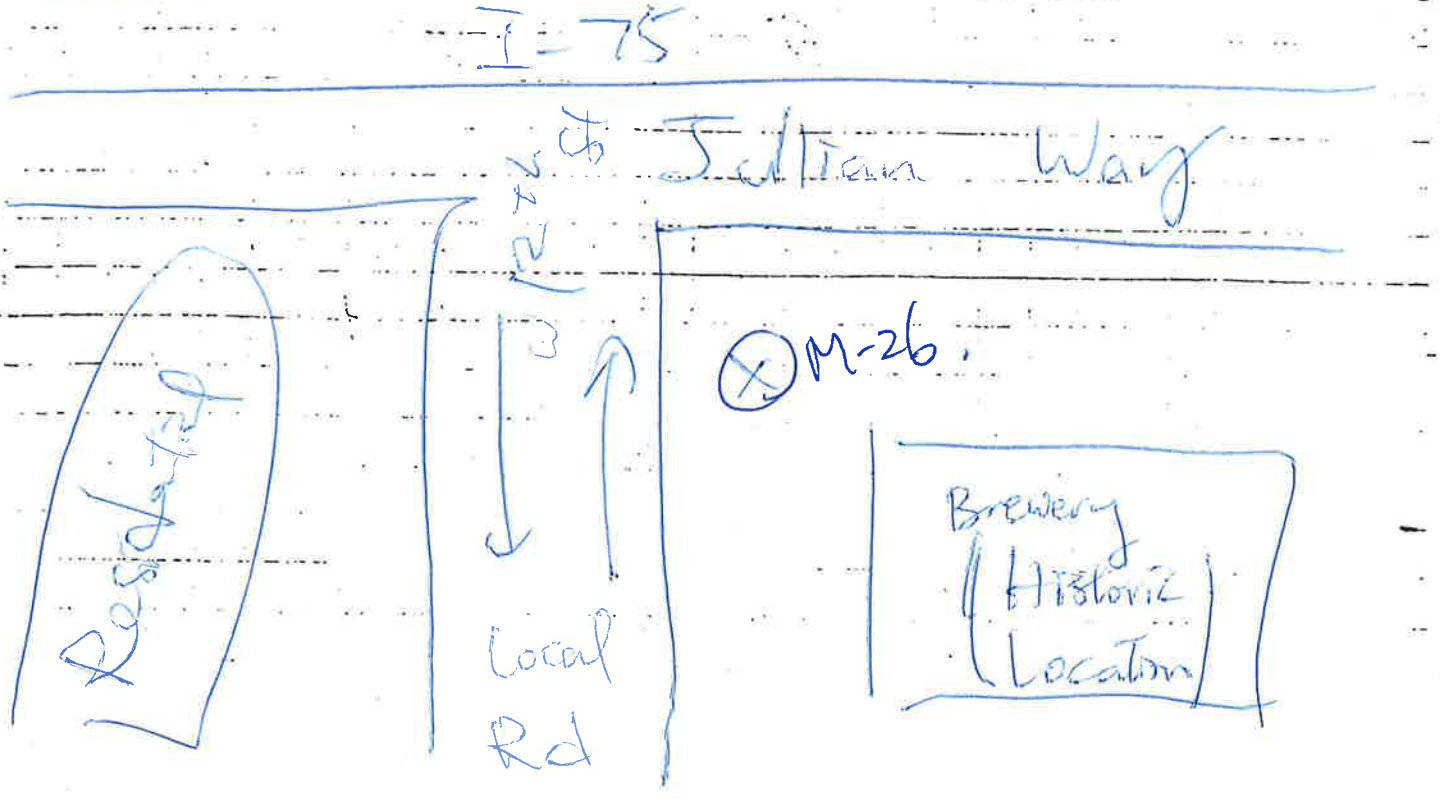
Date:

Weather:

Date →	1/29	2/22		
Time →	7:42am	4:26pm		
LEQ	71.3	71.5		
SEL	101	101		
L99	59	64		
L90	62	66		
L50	70	70		
L10	75	74		
L1	77	74		
INST				
MINL	55	63		
MAXL	79	84		
MAXF	98	100		
PEAK				
SPL	93.7	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



[redacted] Computation Sheet

Subject: Noise Monitoring – M27

Receptor: KY-6 536 West 13th street

Made by: M. Coffin

Date: 1/28

Checked by:

Date:

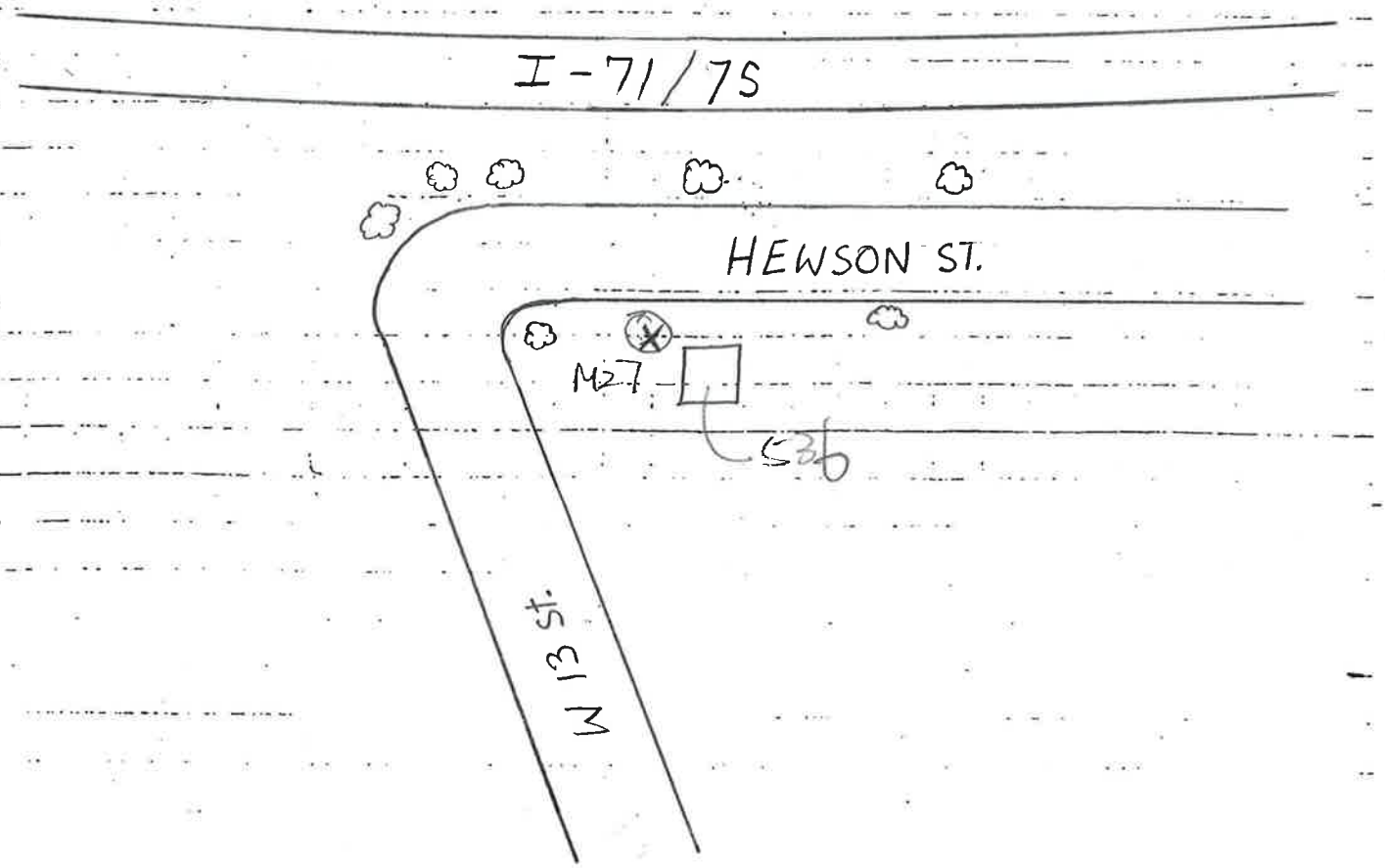
Weather:

Date →	1/28	2/22		
Time →	8:18 am	4:52 pm		
LEQ	70.9	74.1		
SEL	97	106		
L99	67	71		
L90	69	72		
L50	71	74		
L10	72	76		
L1	74	77		
INST				
MINL	65	72		
MAXL	85	90		
MAXF	92	98		
PEAK				
SPL	93.7	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

PM Measurement has Heavier Truck Traffic



Computation Sheet

Subject: Noise Monitoring – M-28

Receptor: KY-3 1304 Hinde Street

Made by: M. Coffin

Date: 1/29

Checked by:

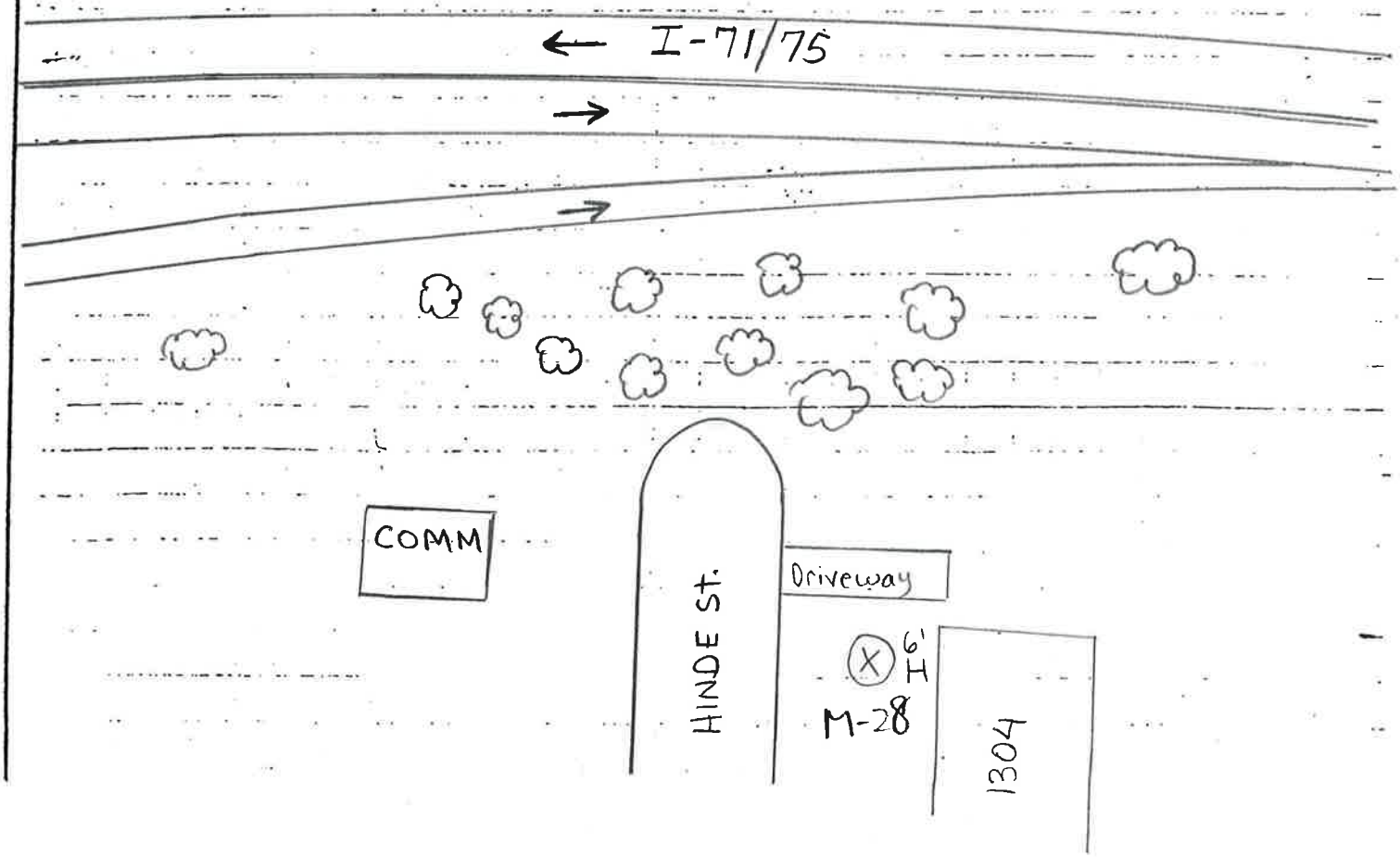
Date:

Weather:

Date →	1/29	2/22		
Time →	8:05am	4:25pm		
LEQ	71.7	69.5		
SEL	99.6	98.9		
L99	66.4	65.9		
L90	68.4	67.4		
L50	71.4	69.4		
L10	73.9	71.4		
L1	76.4	72.9		
INST				
MINL	62.4	65		
MAXL	79.5	74.7		
MAXF	97.9	88.9		
PEAK				
SPL	67.9	20.7		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Brinckerhoff Computation Sheet

Subject Noise Monitoring - M-29

Receptor KY-34 625 Edgecliff Road

Made by M. Coffin

Date 2/25/10

Checked by

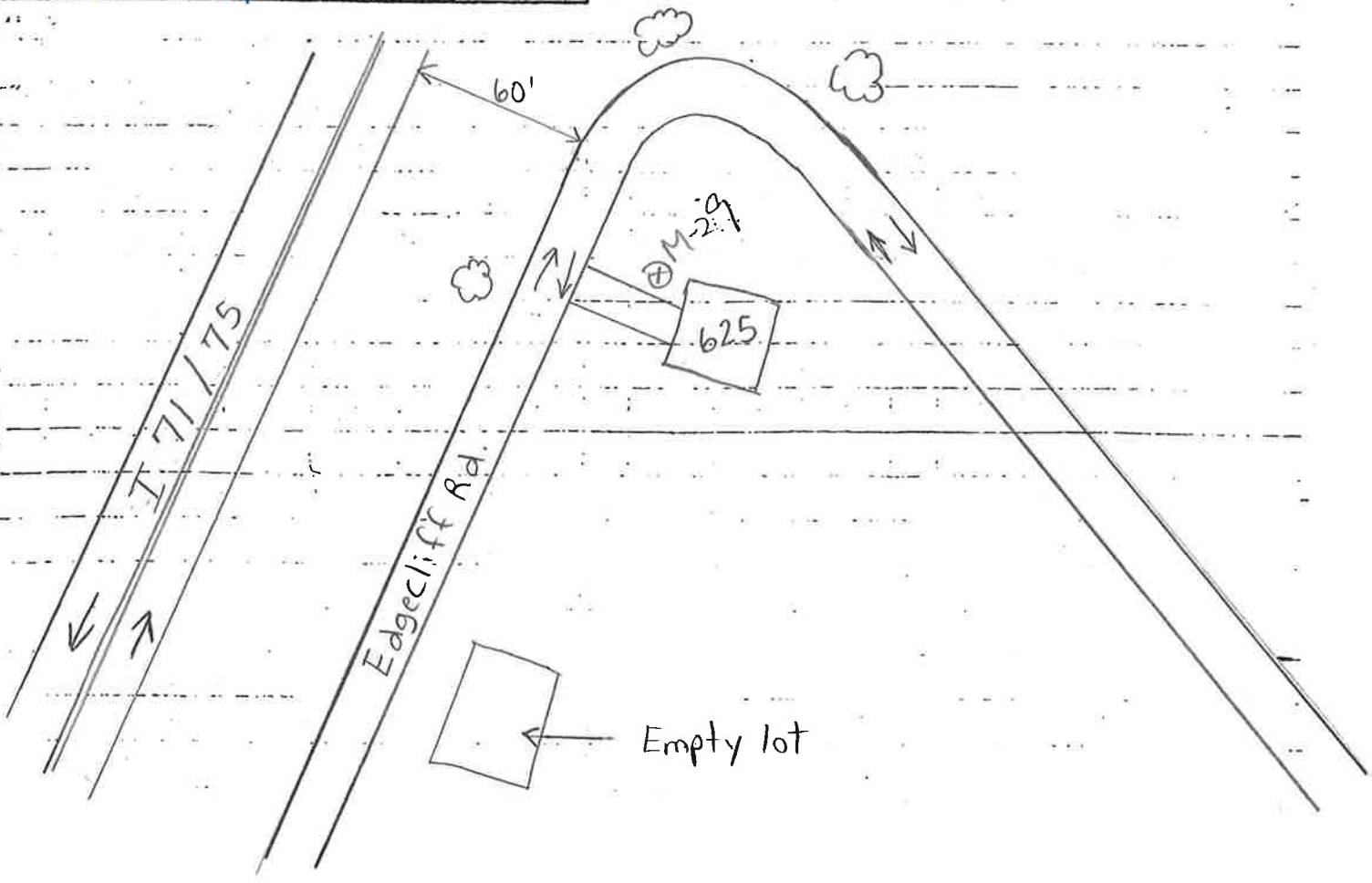
Date

Weather:

Date →	2/25	2/25		
Time →	9:00 am	5:12 pm		
LEQ	61.1	64.5		
SEL	97	99		
L99	57	61		
L90	59	62		
L50	61	64		
L10	63	66		
L1	65	69		
INST				
MIN	64	66		
MAXL	74	75		
MAXP	89	99		
PEAK				
SPL	94	94		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Construction Computation Sheet

Subject: Noise Monitoring – M-30

Receptor: KY-12 506 Scenic Dr

Made by: M Coffey

Date: 2/25/16

Checked by:

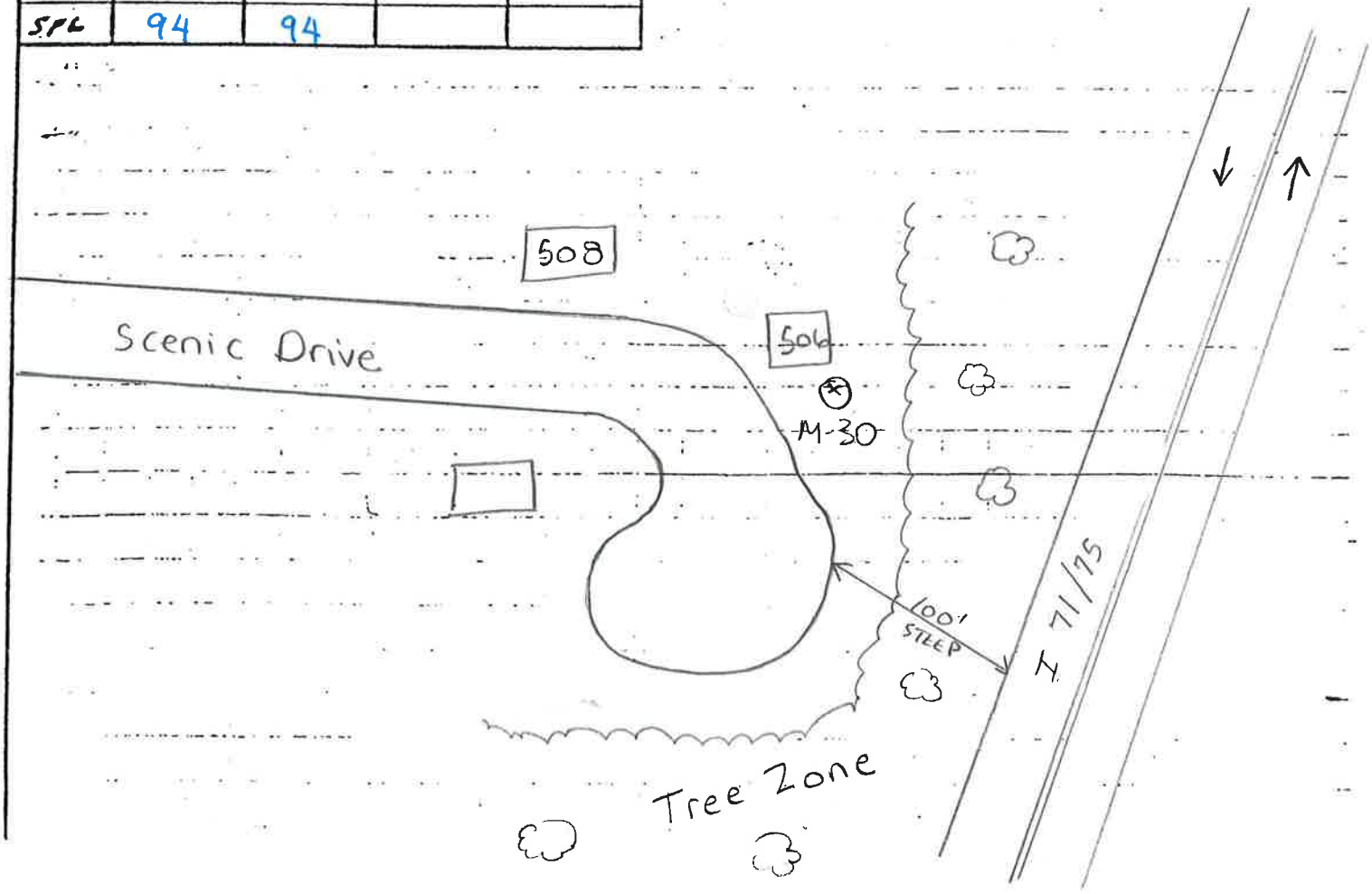
Date:

Weather:

Date →	2/26	2/25		
Time →	8:21 am	5:31 pm		
LEQ	65.1	68.1		
SEL	87	90		
L99	63	64		
L90	64	65		
L50	65	66		
L10	67	68		
L1	69	70		
INST				
MINL	54	55		
MAXL	62	85		
MAXF	83	81		
PEAK				
SPL	94	94		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Brinckerhoff Computation Sheet

Page ____ of ____

Made by Matt Coffin

Date 2/25/10

Checked by ____

Date ____

Subject Noise Monitoring – Cedar Ridge Dr

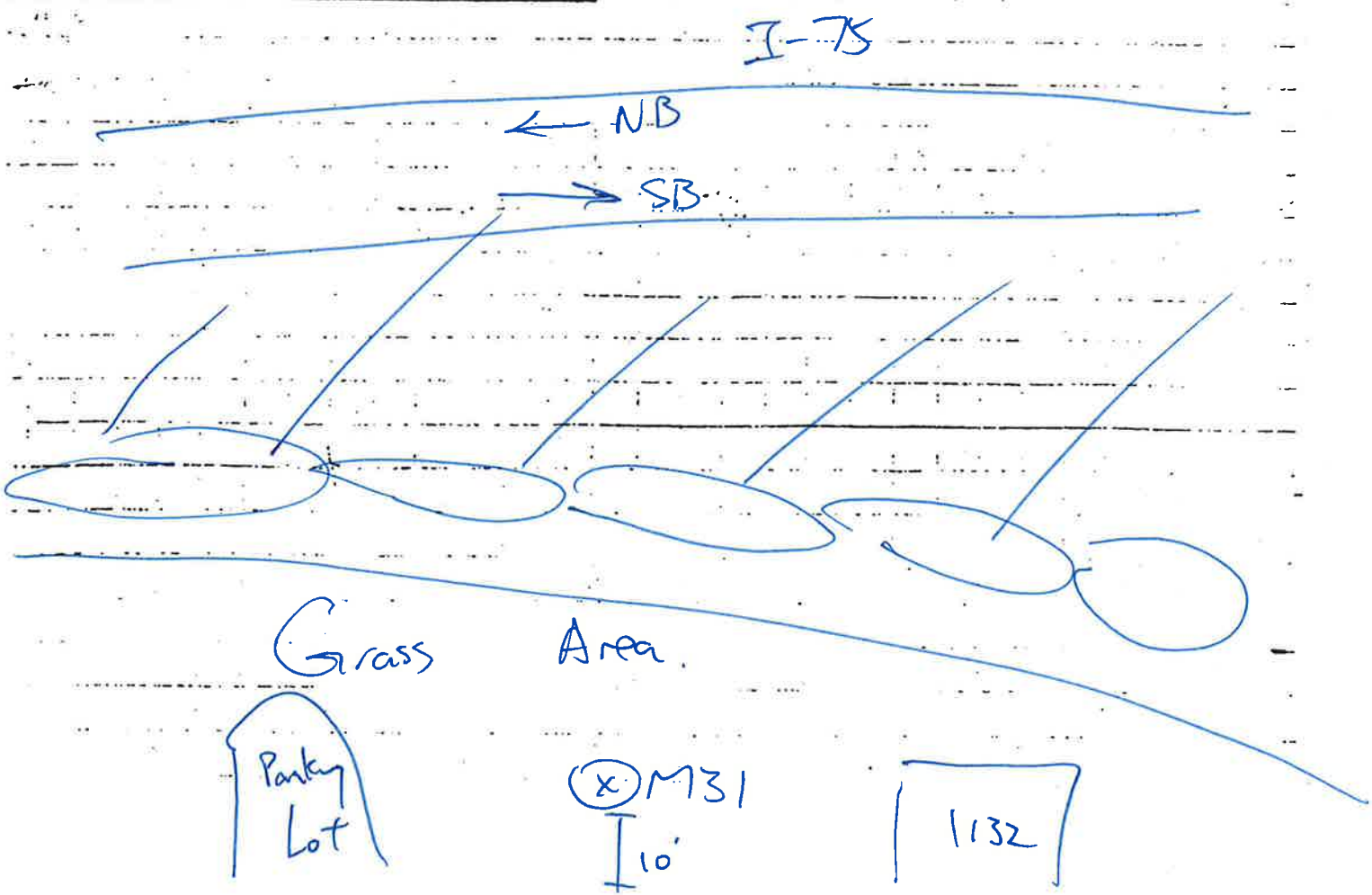
Receptor M31 1132 Cedar Ridge Apt

Weather:

Date →	2/26	2/25		
Time →	8:24am	5:45pm		
LEQ	68.9	66.6		
SEL	89	87		
L99	67	64		
L90	68	65		
L50	69	67		
L10	71	69		
L1	72	70		
INST				
MINL	60	59		
MAXL	84	83		
MAXP	91	89		
PEAK				
[illegible]				

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject: Noise Monitoring – M-32

Receptor: KY-32 500 Highland Ave.

Made by: M. Curtis

Date: 2/25/12

Checked by:

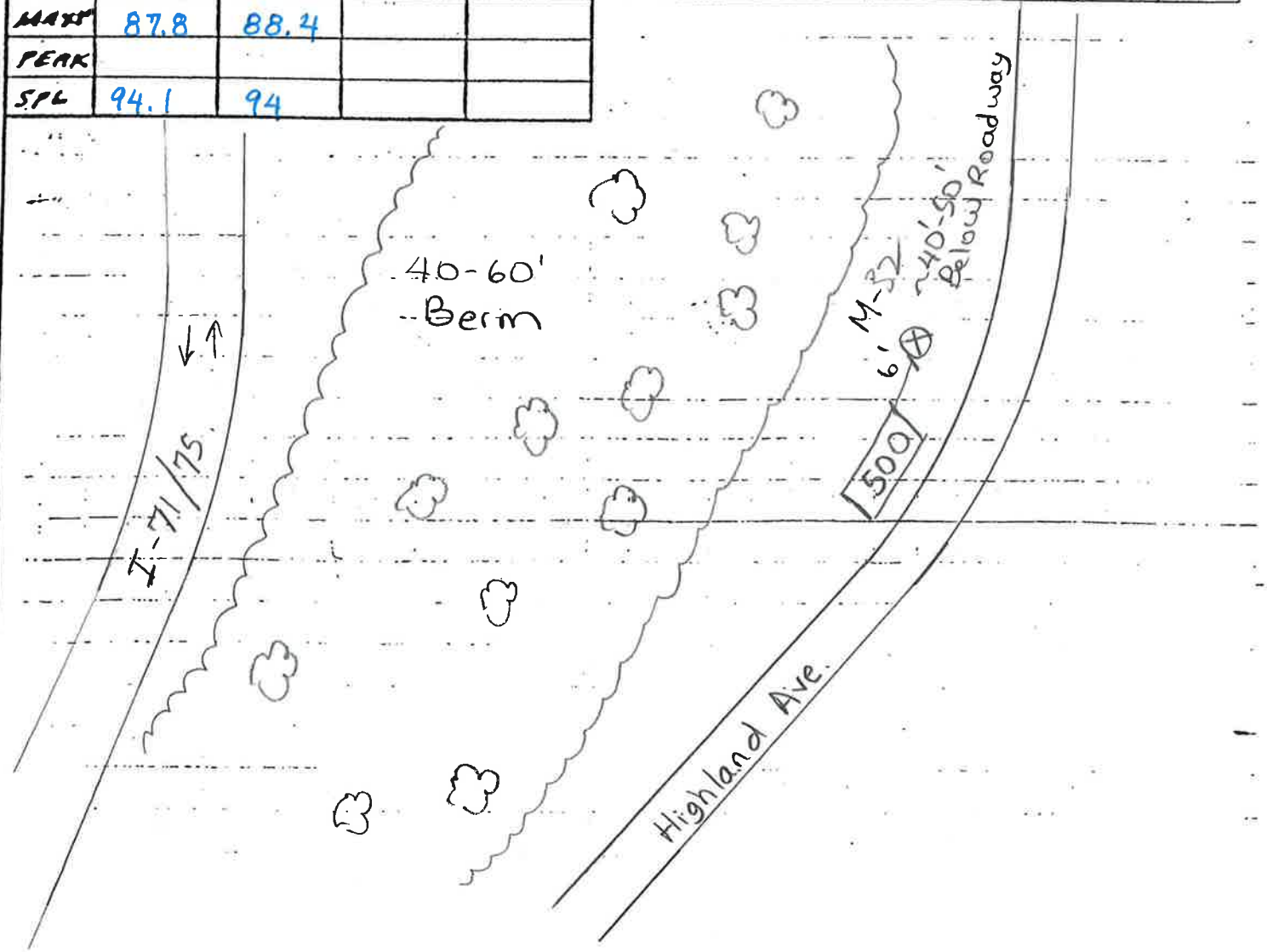
Date:

Weather:

Date →	2/25	2/25		
Time →	8:45 am	5:10 pm		
LEQ	61.1	62.2		
SEL	90.5	91.7		
L99	57.4	58.4		
L90	58.4	59.9		
L50	60.4	61.4		
L10	62.9	63.9		
L1	67.9	68.9		
INST				
MINL	56.8	57.2		
MAXL	73.4	73.3		
MAXF	87.8	88.4		
PEAK				
SPL	94.1	94		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject: Noise Monitoring – M-33

Receptor: KY-28 1000 Emery Dr

Made by: M. Coffin

Date: 2/25/12

Checked by:

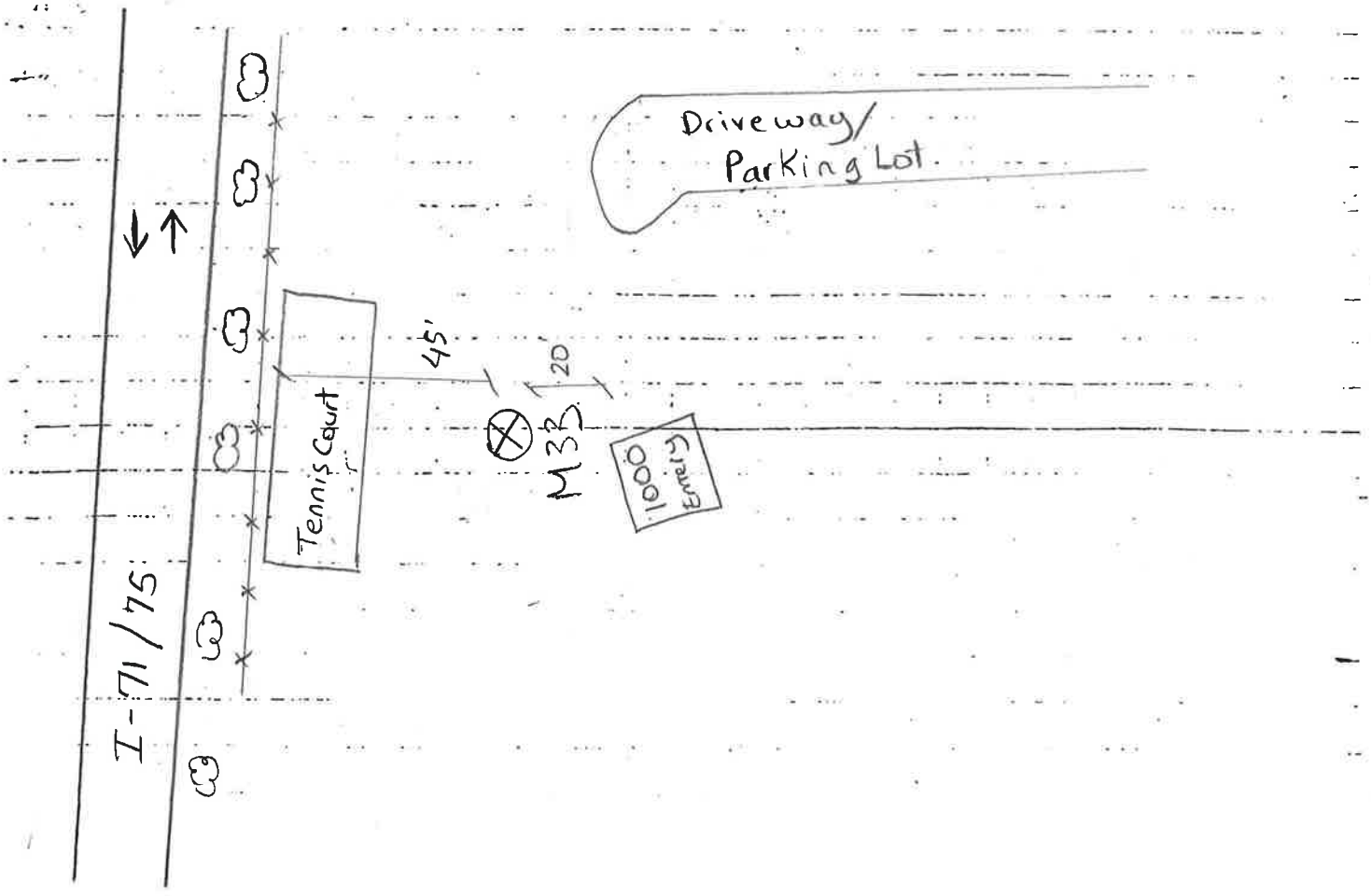
Date:

Weather:

Date →	2/25	2/25		
Time →	8:25am	4:46pm		
LEQ	69.9	75.0		
SEL	99.4	104.4		
L99	65.4	67.9		
L90	66.9	70.9		
L50	68.4	73.4		
L10	71.4	76.4		
L1	76.4	83.4		
INST				
MINL	64.4	65.7		
MAXL	88.6	93.3		
MAXF	105.1	108.0		
PEAK				
SPL	94.1	94.0		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Brinckerhoff Computation Sheet

Subject Noise Monitoring - M-34
Receptor KY-26 1042 Emery Dr.

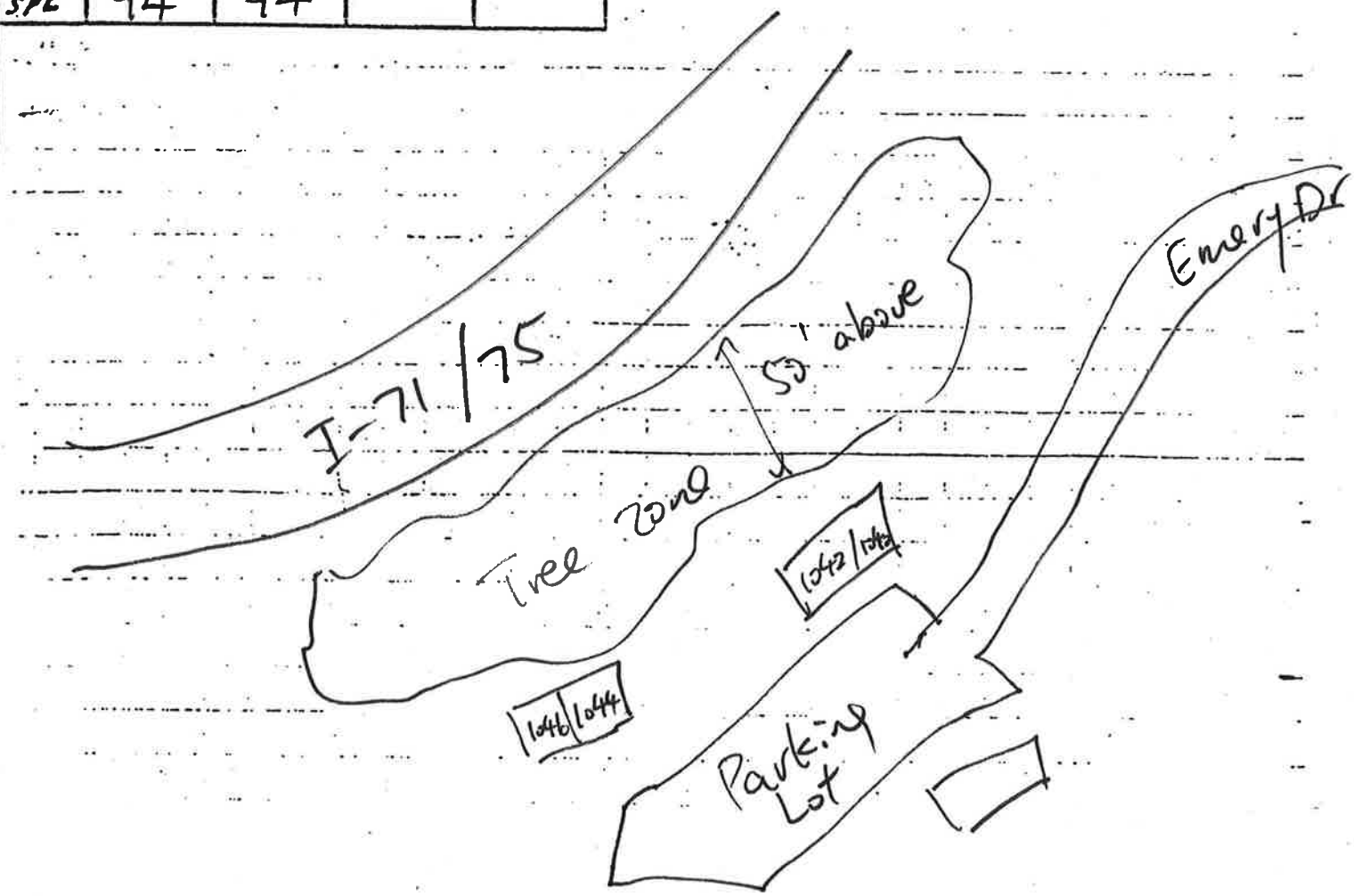
Page ____ of ____
Made by Matt Coffin
Date 2/25/10
Checked by ____
Date ____

Weather:

Date →	2/25	2/25		
Time →	8:30am	4:46 pm		
LEQ	53.8	55.5		
SEL	78	88		
L99	49	52		
L90	50	53		
L50	52	55		
L10	54	57		
L1	58	63		
INST				
MINL	47	55		
MAXL	60	68		
MAXF	72	80		
PEAK				
SPL	94	94		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



[redacted] Computation Sheet

Subject: Noise Monitoring - M-35

Receptor: KY-11 502 St. Joseph Lane

Made by: M. Coffman

Date: 2/24/10

Checked by: _____

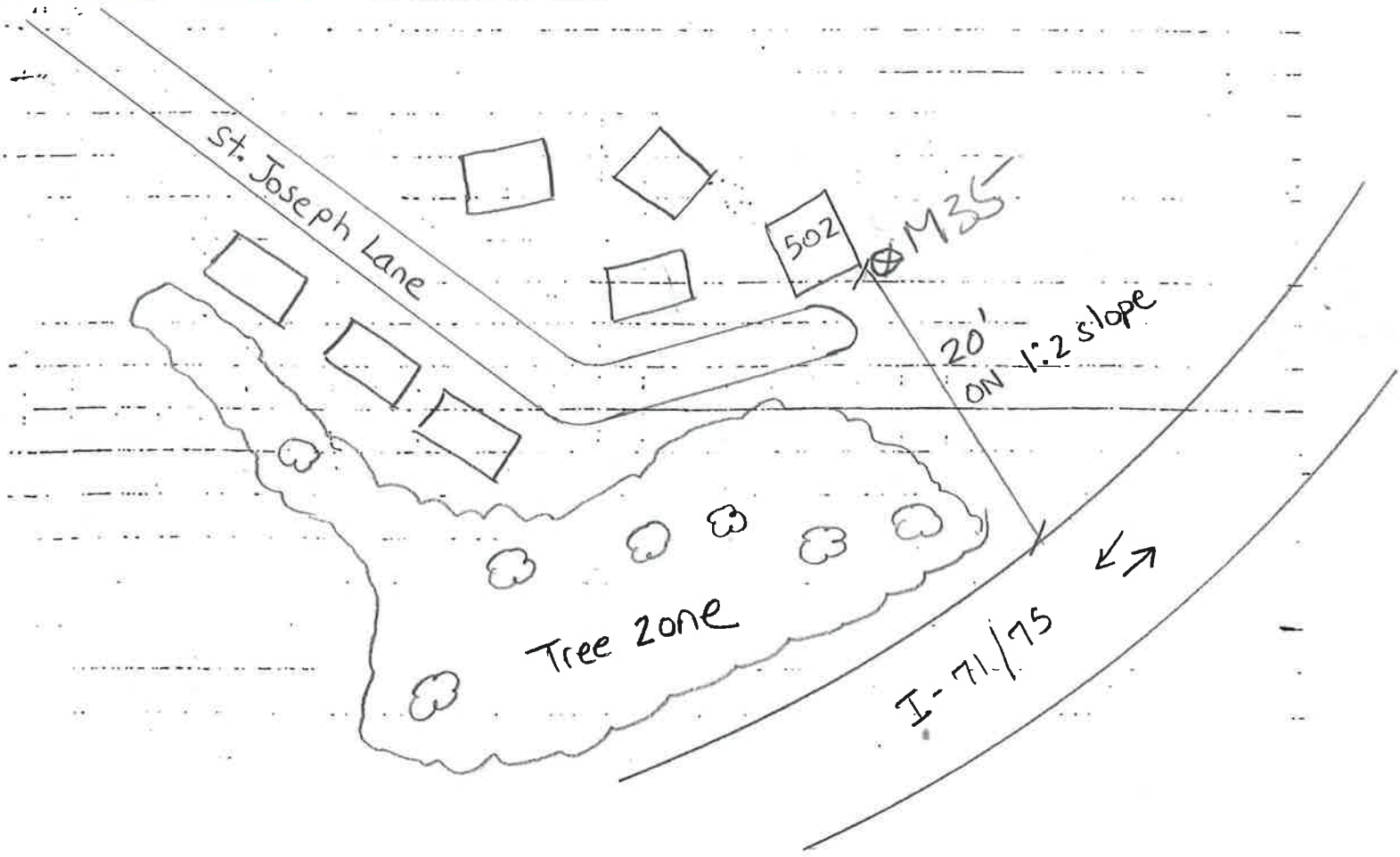
Date: _____

Weather:

Date →	2/24	2/24		
Time →	8:10am	5:11pm		
LEQ	67.3	68.7		
SEL	99	98		
L99	62	66		
L90	64	67		
L50	66	68		
L10	69	71		
L1	74	74		
INST				
MINL	63	66		
MAXL	87	77		
MAXF	91	90		
PEAK				
SPL	94	95.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



[illegible] Computation Sheet

Subject Noise Monitoring - M-36

Receptor KY-24 1699 Hilton Dr (school)

Made by M Coffin

Date 2/24/10

Checked by

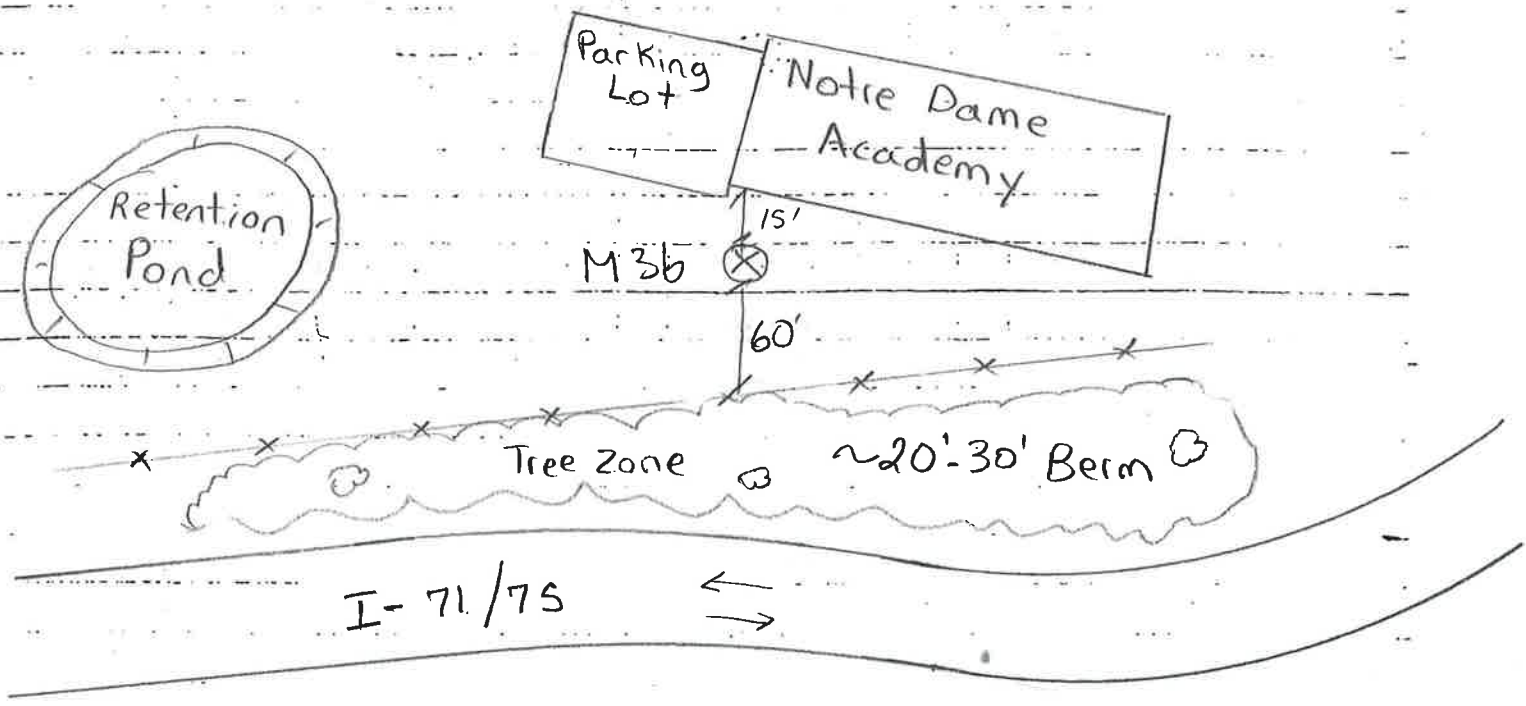
Date

Weather:

Date →	2/29	2/24		
Time →	8:00 am	5:10 pm		
LEQ	67.7	67.3		
SEL	97.2	96.8		
L99	64.9	64.9		
L90	65.9	65.9		
L50	67.4	67.4		
L10	69.4	68.9		
L1	71.4	69.9		
INST				
MINL	63.2	64.1		
MAXL	73.0	71.1		
MAXF	88.8	87.1		
PEAK				
SPL	68.7	69.7		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Brinckerhoff Computation Sheet

Page ____ of ____

Made by Matt Coffin

Date 2/25/10

Checked by ____

Date ____

Subject Noise Monitoring - 1565 St. Anthony St.

Receptor M37

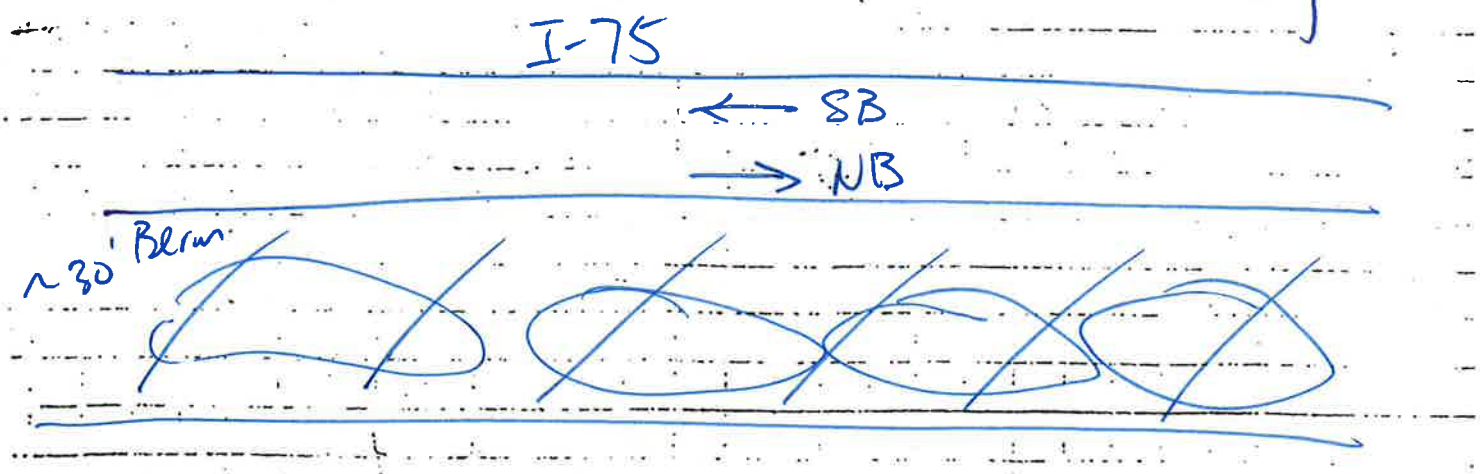
Weather:

Date →	2/24	2/24		
Time →	7:30am	4:44pm		
LEQ	69.8	70.6		
SEL	94	96		
L99	66	68		
L90	67	69		
L50	69	71		
L10	72	73		
L1	74	75		
INST				
MINL	61	64		
MAXL	76	79		
MAXF	87	88		
PEAK				
SPL	94	94		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

4:44 to 4:46PM Dog on Premises barking Continuously



Receiver above roadway ~30'

1565 St. Anthony

Computation Sheet

Subject: Noise Monitoring – M-38

Receptor: KY-9 1586 Marcella Dr.

Made by: M Giffin

Date: 2/24/10

Checked by:

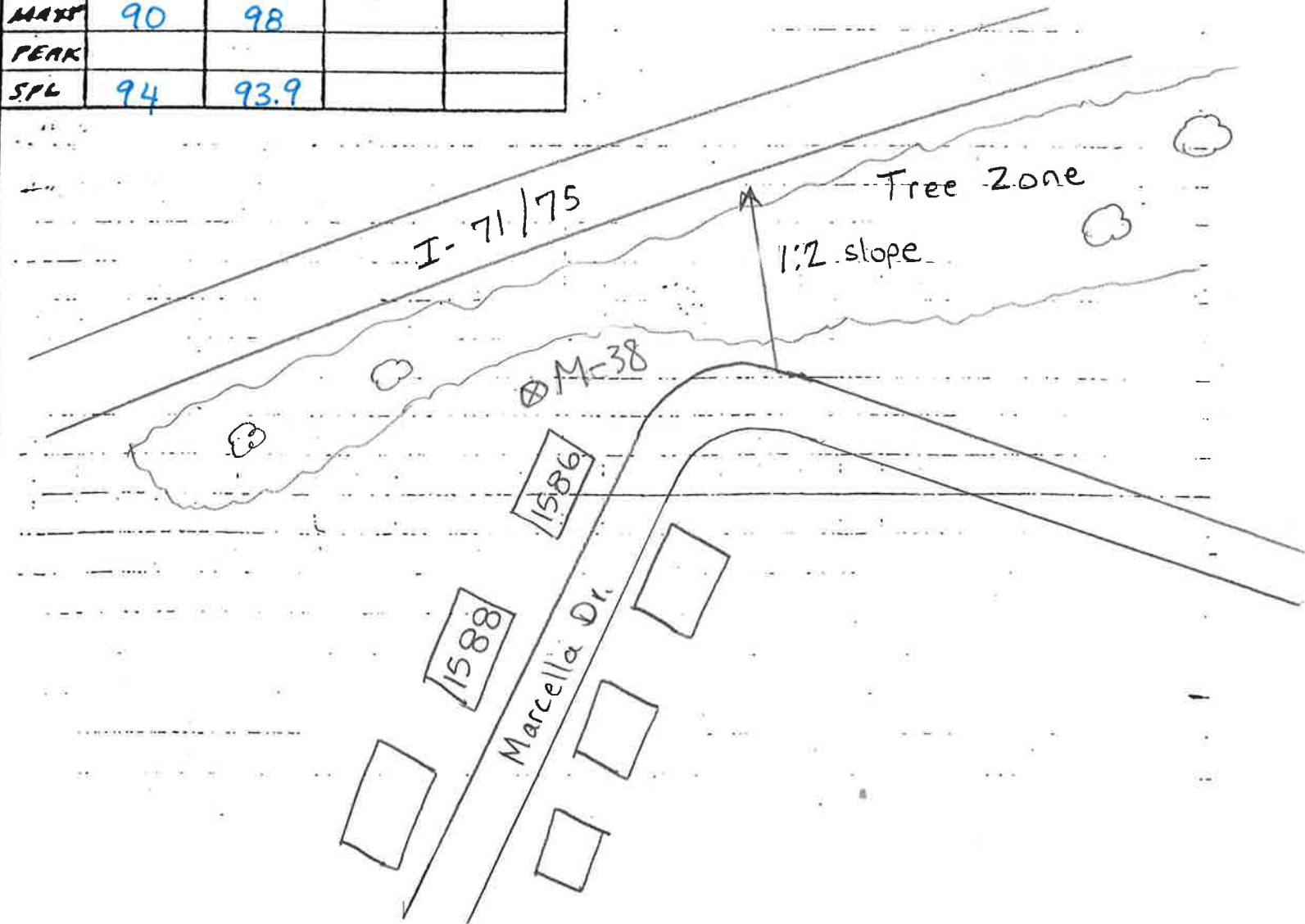
Date:

Weather:

Date →	2/24	2/24		
Time →	7:32 AM	4:38 PM		
LEQ	70.3	72.6		
SEL	98	102		
L99	65	69		
L90	67	71		
L50	70	73		
L10	72	74		
L1	74	78		
INST				
MINL	63	67		
MAXL	86	82		
MAXF	90	98		
PEAK				
SPL	94	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



[illegible] Computation Sheet

Subject: Noise Monitoring – M-39

Receptor: KY-20 101 Kyles Lane

Made by: M Coffin

Date: 2/24/15

Checked by:

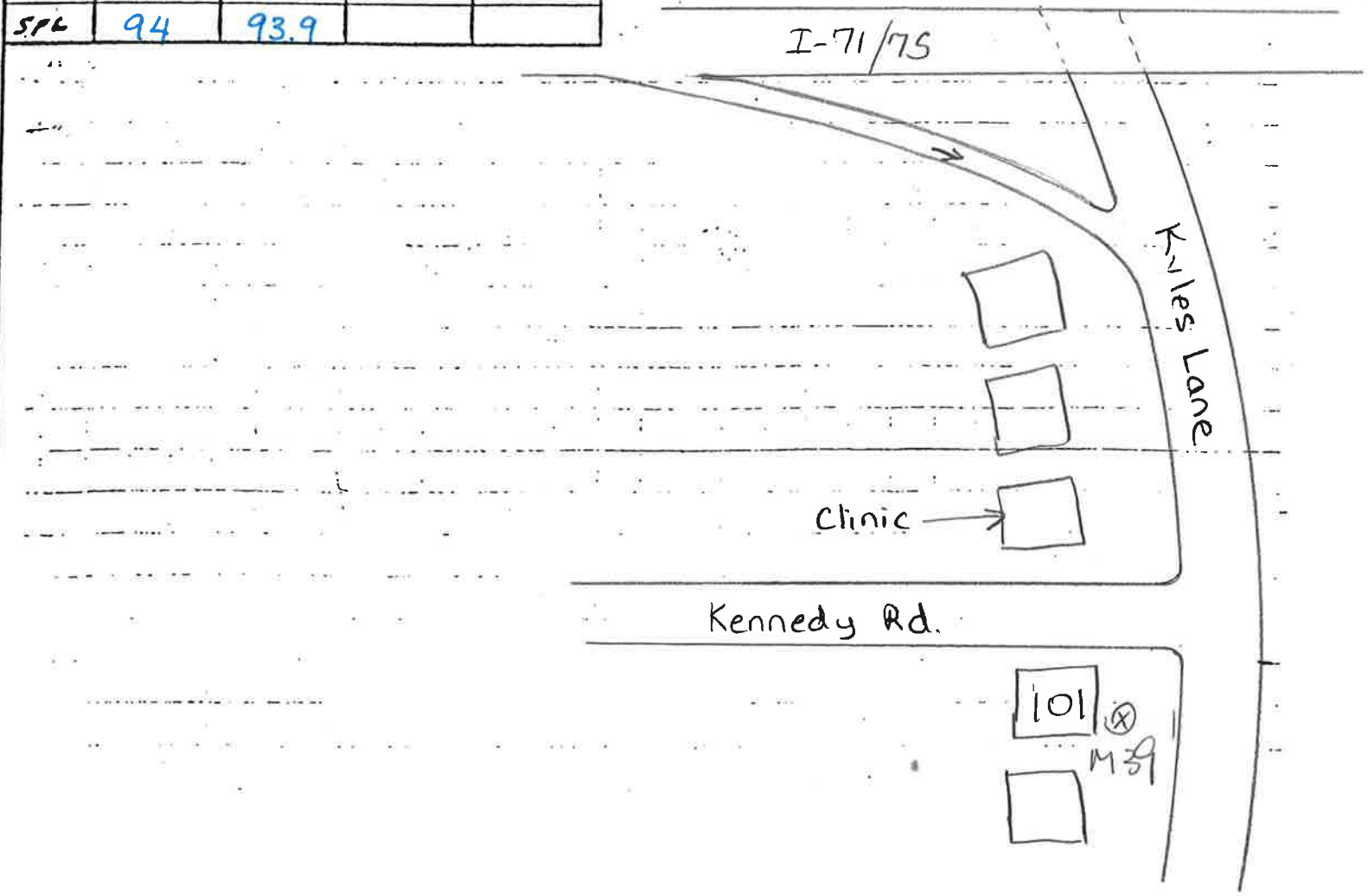
Date:

Weather:

Date →	2/24	2/24		
Time →	7:05AM	4:15 pm		
LEQ	68.1	64.6		
SEL	98	94		
L99	57	58		
L90	63	60		
L50	68	64		
L10	71	67		
L1	73	71		
INST				
MINL	50	56		
MAXL	78	74		
MAXF	92	96		
PEAK				
SPL	94	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject: Noise Monitoring – M-40

Receptor: KY-19 7 Lake Street

Made by: M Coffin

Date: 2/23/12

Checked by:

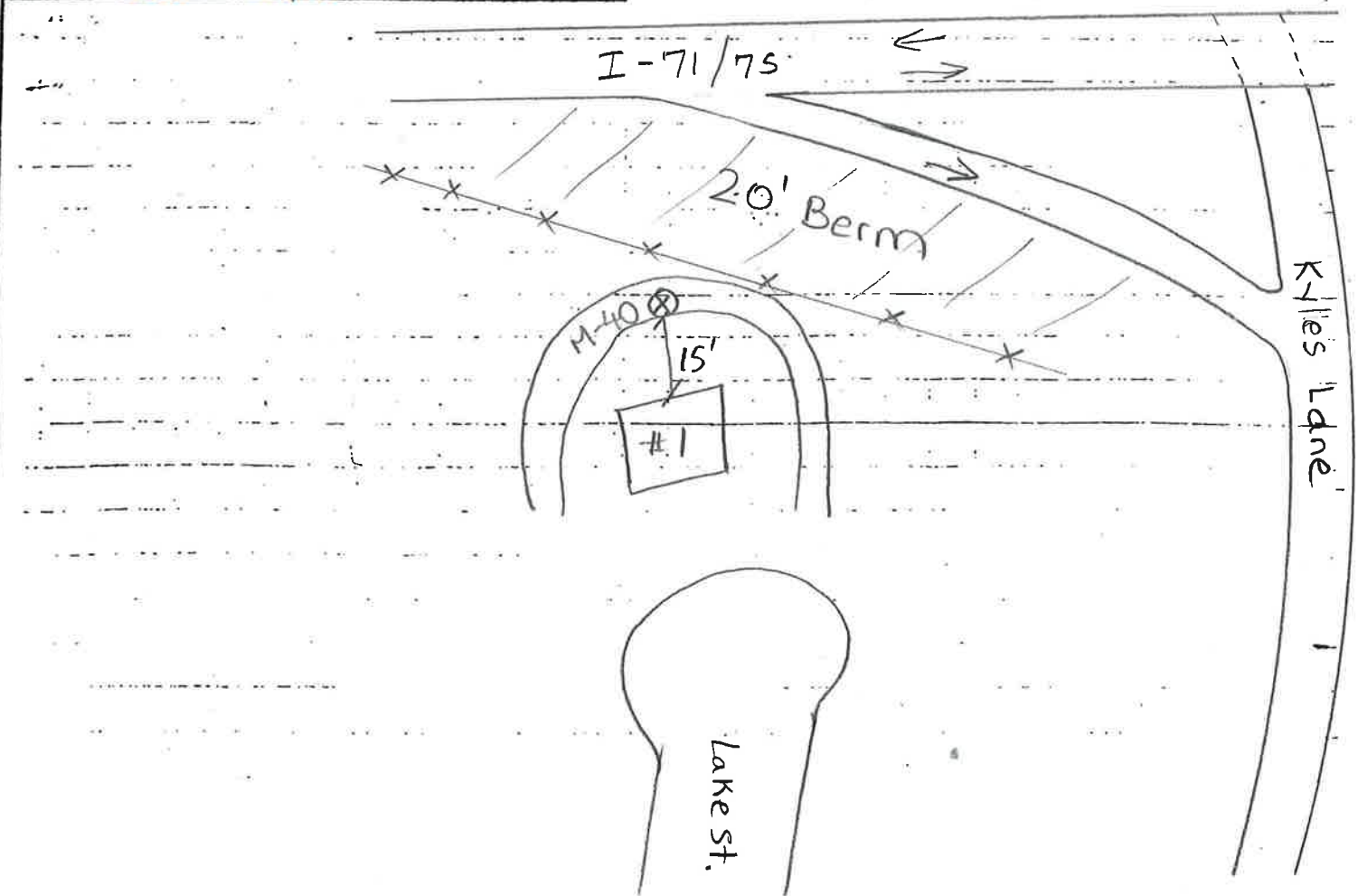
Date:

Weather:

Date →	2/23	2/24		
Time →	8:25AM	4:00 pm		
LEQ	61.2	61		
SEL	90.6	95.5		
L99	56.9	56.9		
L90	58.4	58.4		
L50	60.4	60.4		
L10	62.9	62.9		
L1	66.4	65.9		
INST				
MINL	55.9	60.5		
MAXL	73.7	74.1		
MAXF	88.7	97.9		
PEAK				
SPL	60.1	64.2		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



[illegible] Computation Sheet

Subject Noise Monitoring – M-41

Receptor KY-19a 15 Highview Dr

Made by M Coffin

Date 2/23/10

Checked by

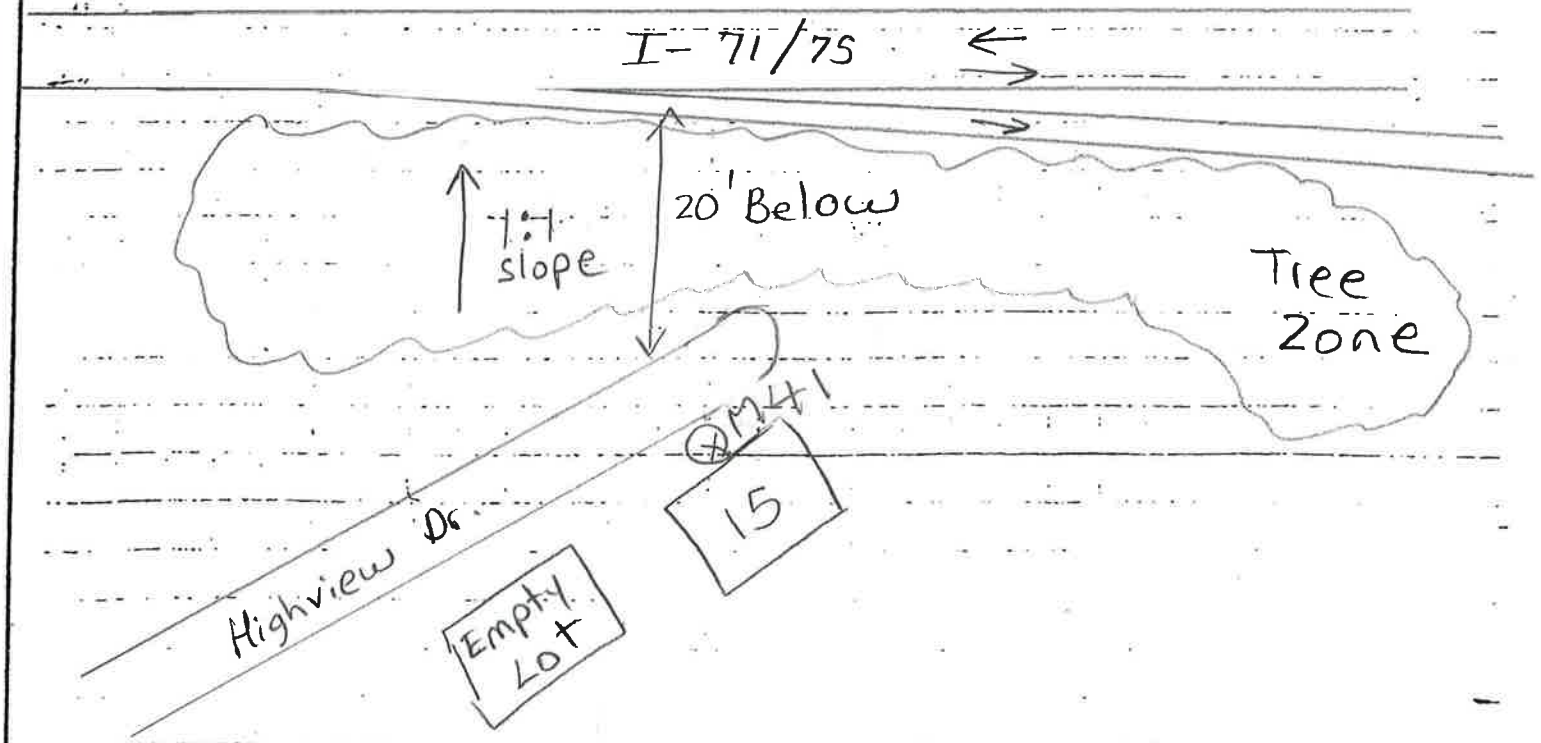
Date

Weather:

Date →	2/23	2/24		
Time →	8:27 AM	3:48 PM		
LEQ	70.7	72.1		
SEL	98	101		
L99	67	70		
L90	69	71		
L50	71	72		
L10	73	73		
L1	74	74		
INST				
MINL	65	68		
MAXL	82	76		
MAXF	89	90		
PEAK				
SPL	94	93.9		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject: Noise Monitoring – M-42

Receptor: KY-13 1 Highview Dr

Made by: M Coffin

Date: 2/23/10

Checked by:

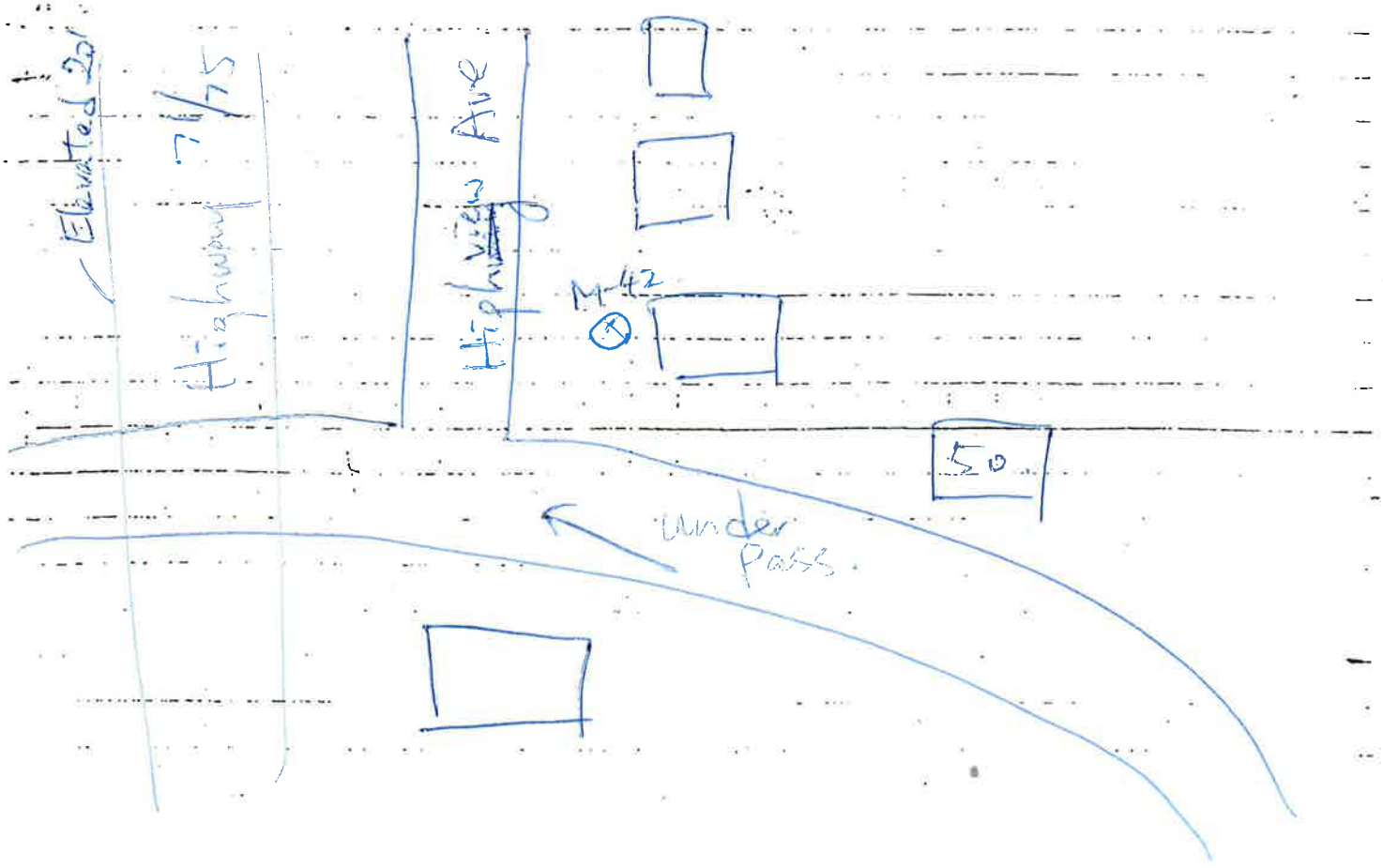
Date:

Weather:

Date →	2/23	2/23		
Time →	7:59 AM	4:38 PM		
LEQ	66.4	70.7		
SEL	96	100		
L99	63	68		
L90	65	69		
L50	66	70		
L10	68	72		
L1	70	74		
INST				
MINL	62	67		
MAXL	85	91		
MAXF	92	93		
PEAK				
SPL	94	93.8		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject Noise Monitoring - M-43

Receptor KY-18 1945 Dixie Highway

Made by M. Griffin

Date 2/23/10

Checked by

Date

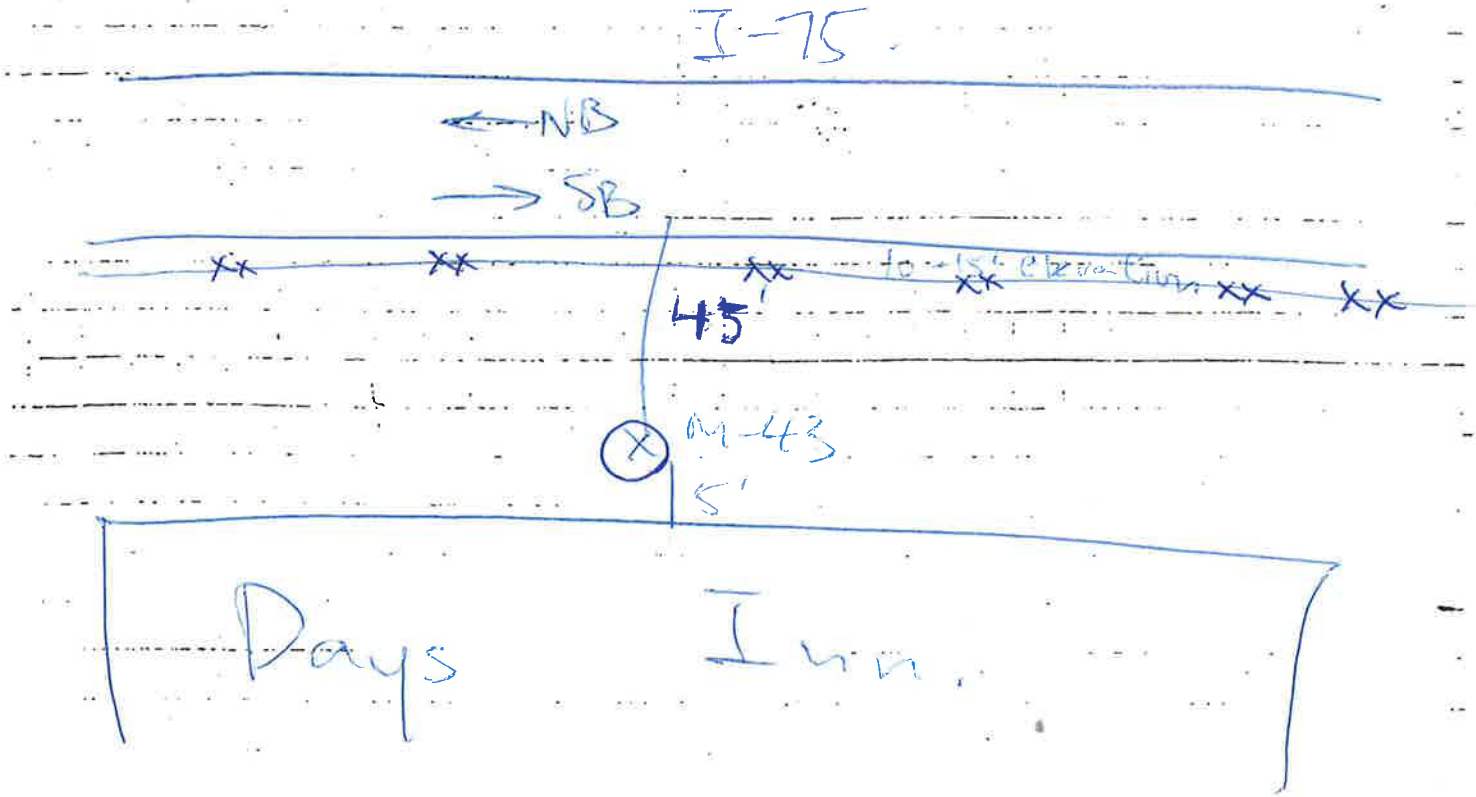
Weather:

Date →	2/23	2/23		
Time →	7:53 AM	4:57 PM		
LEQ	74.4	76.1		
SEL	103.9	105.5		
L99	68.4	73.4		
L90	71.4	74.4		
L50	73.9	75.9		
L10	76.4	77.4		
L1	78.4	78.4		
INST				
MINL	64.4	72.7		
MAXL	80.2	81.6		
MAXF	94.1	94.2		
PEAK				
SPL	74.1	76.8		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

Receptor - ~10' above roadway.



Computation Sheet

Subject: Noise Monitoring – M-44

Receptor: KY-13a 1971 Pieck Dr.

Made by: M. Coffin

Date: 2/23/10

Checked by:

Date:

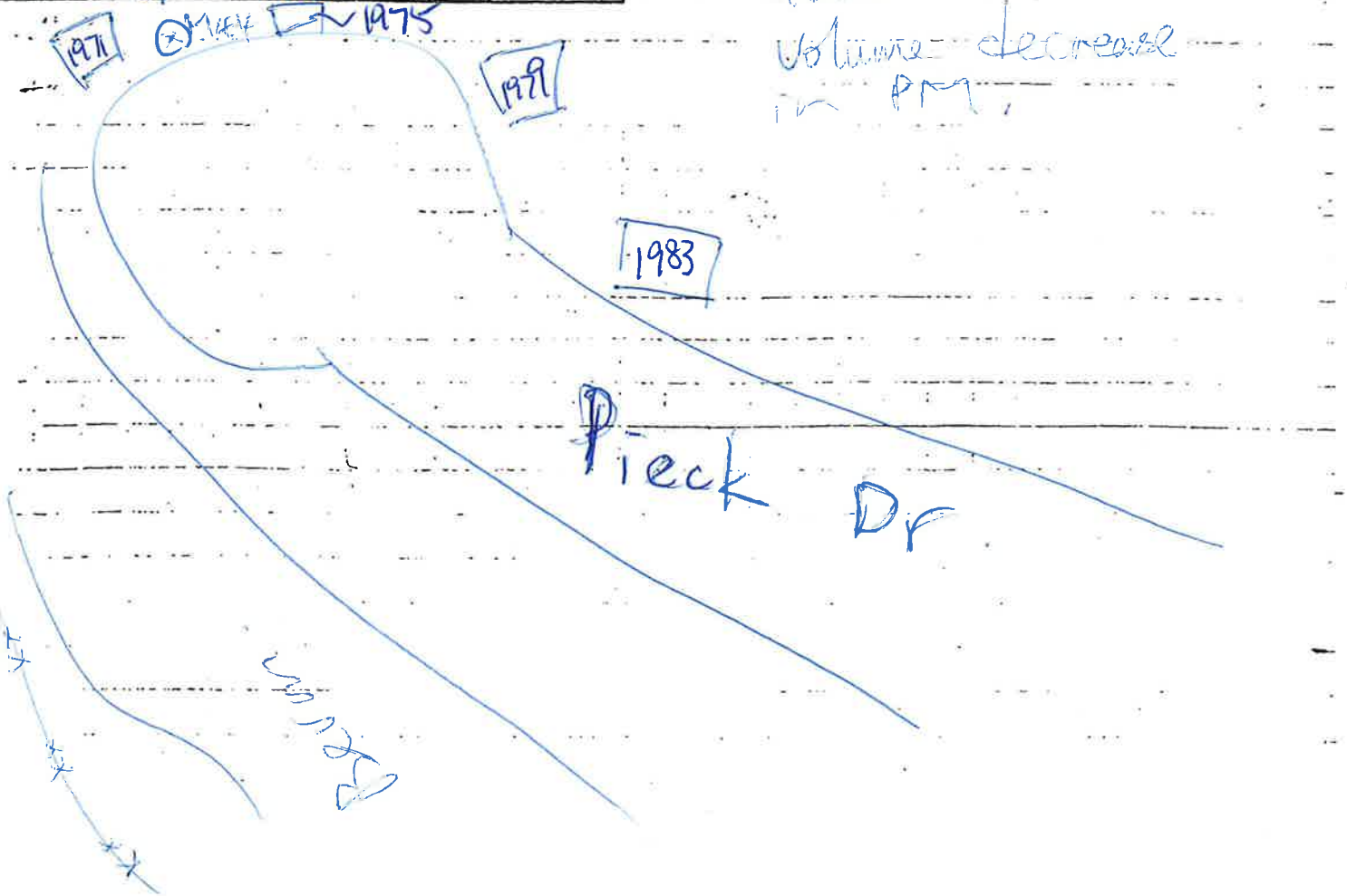
Weather:

Date →	2/23	2/23		
Time →	7:28 AM	4:14 PM		
LEQ	68.1	72.3		
SEL	98	102		
L99	63	67		
L90	64	70		
L50	67	72		
L10	69	74		
L1	71	75		
INST				
MINL	62	68		
MAXL	91	86		
MAXF	97	94		
PEAK				
SPL	94	93.8		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

PM traffic ~~a~~ a lot faster than AM volume decreased in PM.



Computation Sheet

Subject: Noise Monitoring – M-45

Receptor: KY-136 2006 Pieck Dr

Made by: M Coffin

Date: 2/25/10

Checked by:

Date:

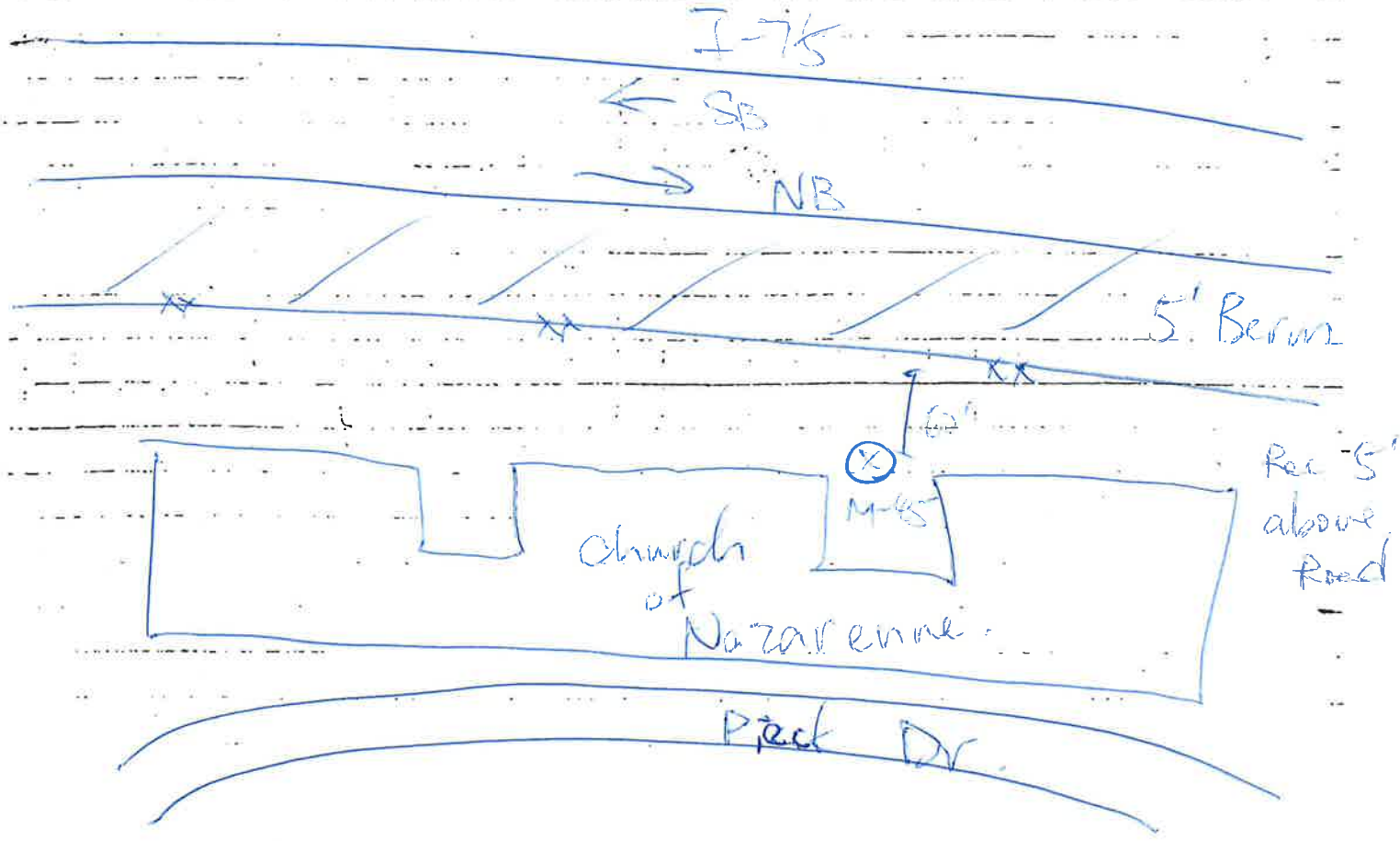
Weather:

Date →	2/25	2/25		
Time →	7:42 AM	4:02 pm		
LEQ	70.4	73.7		
SEL	102.9	108.1		
L99	66.9	69.9		
L90	68.9	71.4		
L50	70.4	73.9		
L10	72.4	75.4		
L1	73.4	77.4		
INST				
MINL	68.1	73.5		
MAXL	78.7	85.9		
MAXF	97.4	109.1		
PEAK				
SPL	94.1	94		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

NB Traffic free flow for PM



Computation Sheet

Subject: Noise Monitoring – M-46

Receptor: KY-13c 15 Leslie Ave.

Made by: M. Griffin

Date: 2/23/10

Checked by:

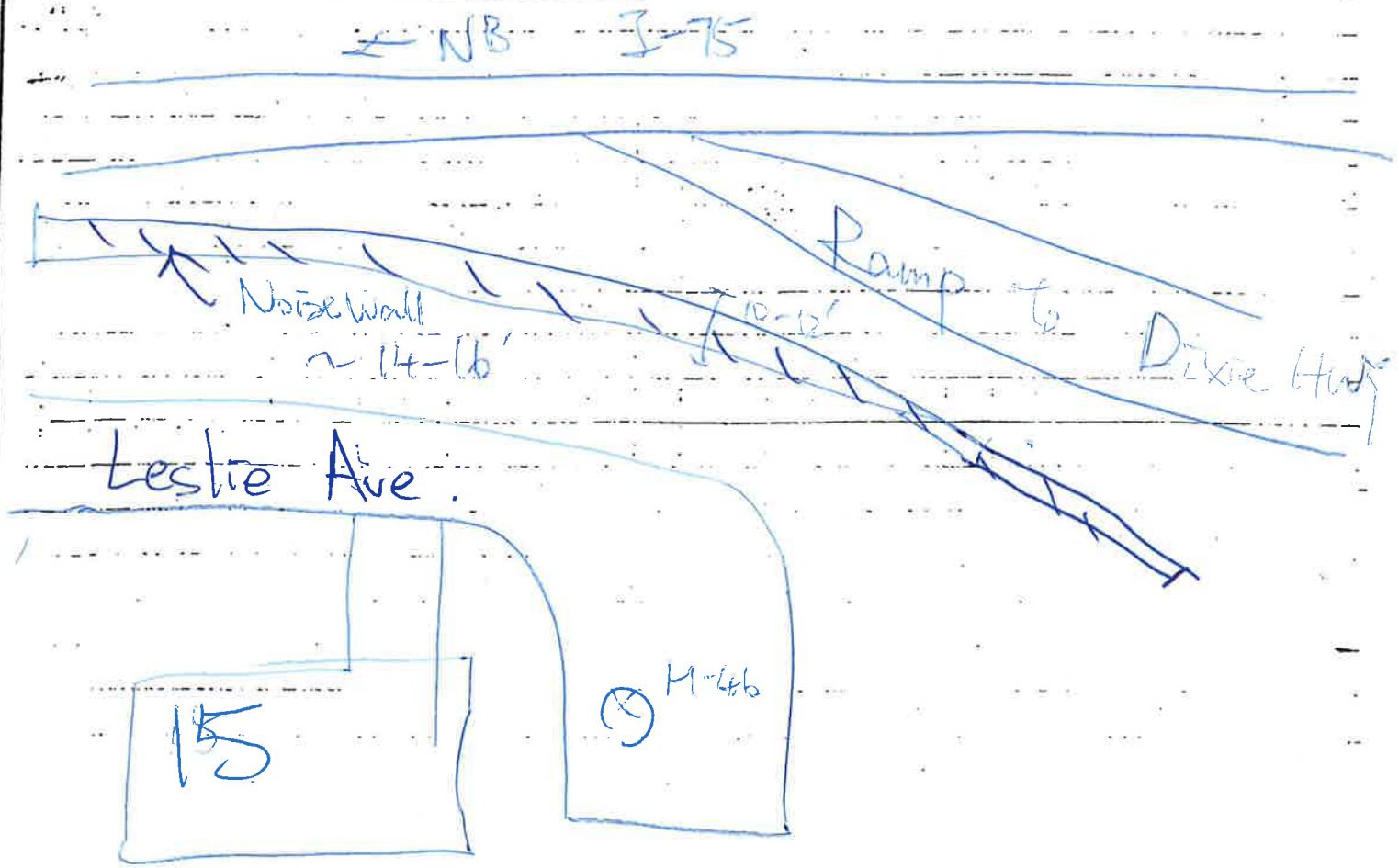
Date:

Weather:

Date →	2/23	2/23		
Time →	7:25 AM	4:12 PM		
LEQ	68.3	69.2		
SEL	95.7	98.7		
L99	64.4	66.9		
L90	65.9	67.9		
L50	68.4	69.4		
L10	69.9	70.4		
L1	70.9	71.4		
INST				
MINL	60.5	65.6		
MAXL	70.2	72.3		
MAXF	90.8	84.8		
PEAK				
SPL	68.7	70.8		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Brinckerhoff Computation Sheet

Subject Noise Monitoring - M-47

Receptor 54 Beachwood Rd.
Beechwood Elementary School

Made by Matt Coffin

Date 2/25/10

Checked by

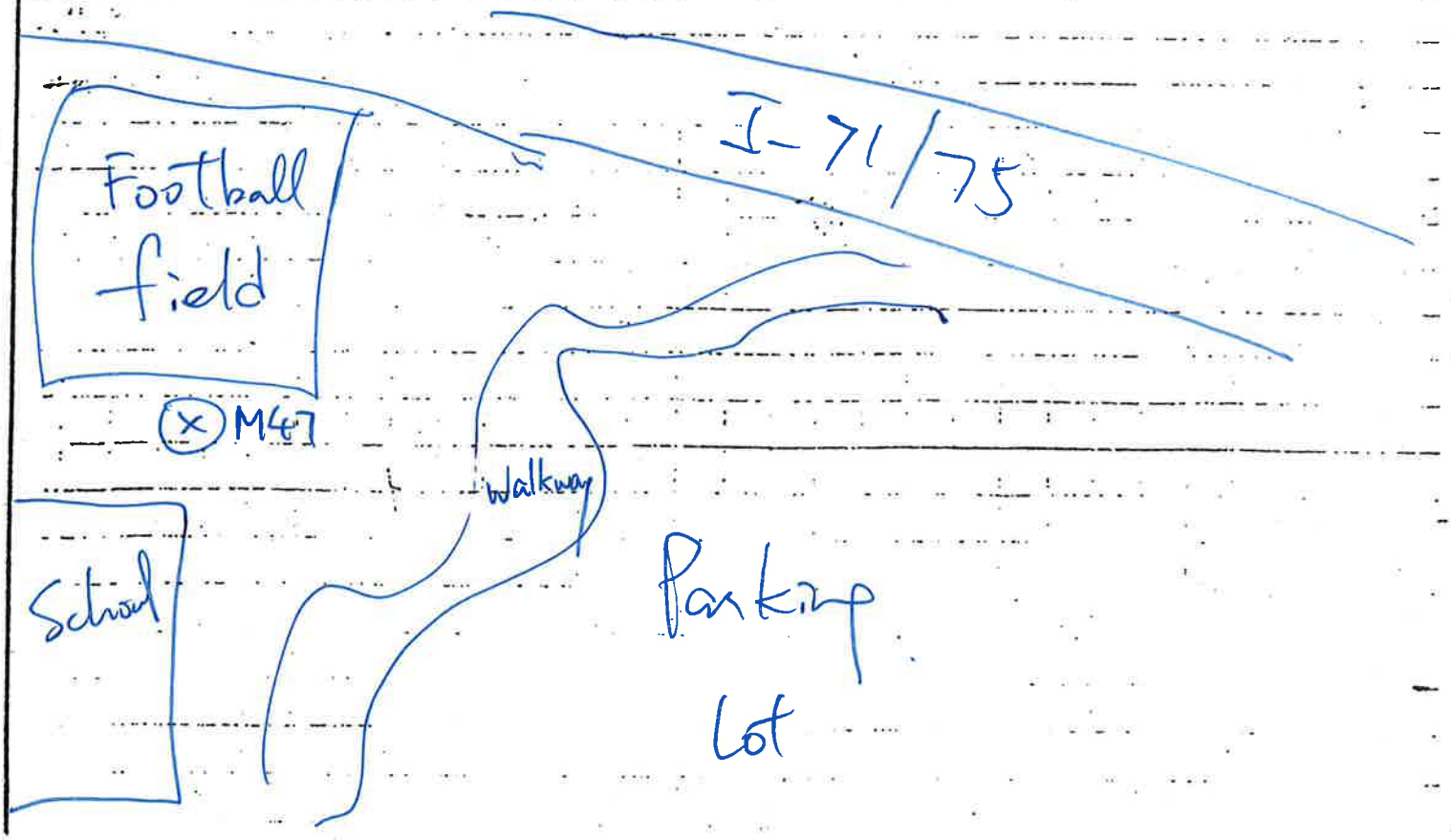
Date

Weather:

Date →	2/25	2/25		
Time →	7:46am	4:06pm		
LEQ	56.8	59.1		
SEL	89	92		
L99	52	55		
L90	53	57		
L50	54	59		
L10	56	61		
L1	63	62		
INST				
MINL	55	58		
MAXL	85	66		
MAXF	92	86		
PEAK				
SPL	94.0	94.0		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS



Computation Sheet

Subject: Noise Monitoring – M-48

Receptor: KY-13f 102 West Maple Ave.

Made by: M. Coffin

Date: 2/23/10

Checked by:

Date:

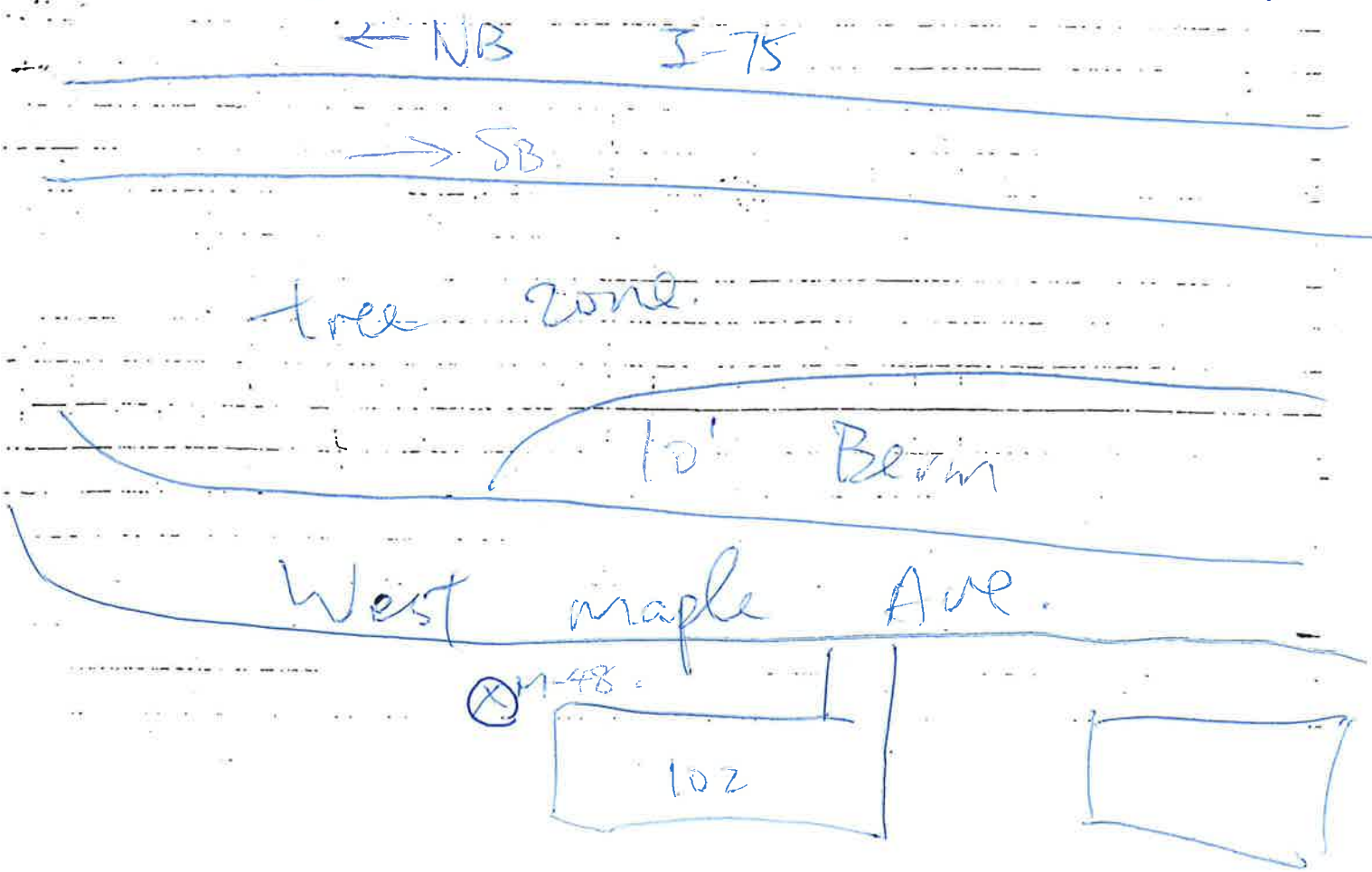
Weather:

Date →	2/23	2/23		
Time →	7:00 AM	4:00 PM		
LEQ	62.1	63.7		
SEL	96.6	99.1		
L99	55.4	58.9		
L90	57.9	60.4		
L50	61.4	63.4		
L10	64.9	65.9		
L1	67.4	67.9		
INST				
MINL	58.5	63.4		
MAXL	75.7	79.2		
MAXF	90.0	95.8		
PEAK				
SPL	64.6	66.4		

TRAFFIC VOLUMES

ROADWAY	AUTO	LT	HT	BUS

Receiver elev. at about same elev as roadway



Appendix D

FHWA TNM Version 2.5 Determined Noise Reduction Levels Achieved For Proposed Noise Barriers Located in Kentucky for Alternative E

Table Number	Table Name	Page Number
D1	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B1	D-1
D2	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B2	D-5
D3	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B3	D-8
D4	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B4	D-11
D5	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B5	D-16
D6	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B6	D-18
D7	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B7	D-20
D8	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B8	D-23
D9	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B9	D-27
D10	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B10	D-31
D11	Alternative E Individual Property Noise Abatement Analysis Findings Barrier B11	D-36

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Table D1: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B1

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R69(K407)	71.5	4	68.5	3	0	68.3	3.2	0	68.1	3.4	0
R71(K440)	71	1	66.5	4.5	0	66	5	1	65.6	5.4	1
R72(K18)	71.2	1	67	4.2	0	66.7	4.5	0	66.4	4.8	0
R74(K456)	70.6	1	67.3	3.3	0	67	3.6	0	66.8	3.8	0
R77(KV418)	75.6	1	75.3	0.3	0	75.2	0.4	0	74.7	0.9	0
R78(K470)	69.6	6	67.3	2.3	0	67.1	2.5	0	67	2.6	0
R80(KV460)	75.2	1	72.7	2.5	0	71.5	3.7	0	70.5	4.7	0
R81(K485)	68.8	1	67.1	1.7	0	66.9	1.9	0	66.7	2.1	0
R82(KV460)	75	1	70.5	4.5	0	69.4	5.6	1	68.5	6.5	1
R83(K513)	68	1	65	3	0	64.9	3.1	0	64.7	3.3	0
R85(K494)	68.7	1	66.2	2.5	0	65.8	2.9	0	65.5	3.2	0
R86(K460)	74.7	1	63.3	11.4	1	62.7	12	1	62.3	12.4	1
R87(K467)	74.4	1	64.2	10.2	1	63.8	10.6	1	63.5	10.9	1
R88(K474)	74.3	1	65.5	8.8	1	65.1	9.2	1	64.8	9.5	1
R90(K532)	68.9	1	67.9	1	0	67.8	1.1	0	67.8	1.1	0
R91(K488)	73.9	1	67.2	6.7	1	66.9	7	1	66.7	7.2	1
R92(K518)	71.3	1	68.1	3.2	0	67.8	3.5	0	67.5	3.8	0
R96(K526)	67	1	61.8	5.2	1	61.4	5.6	1	61.1	5.9	1
R102(K15)	75.8	1	70.1	5.7	1	68.6	7.2	1	66.7	9.1	1
R103(K1771)	67.5	1	67.4	0.1	0	67.2	0.3	0	67	0.5	0
R104(K1832)	67.2	1	67.2	0	0	67.1	0.1	0	67	0.2	0
R105(K524)	75.7	2	71.2	4.5	0	69.4	6.3	2	67	8.7	2
R107(K541)	67.5	1	65.2	2.3	0	64.6	2.9	0	63.8	3.7	0
R111(K527)	75.4	1	68.7	6.7	1	66.2	9.2	1	64.5	10.9	1
R112(K1841)	67.5	1	67.4	0.1	0	67.3	0.2	0	67.2	0.3	0

Table D1: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B1

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R113(K548)	69.3	1	66.8	2.5	0	65.7	3.6	0	64.5	4.8	0
R114(K1846)	67.7	1	67.6	0.1	0	67.5	0.2	0	67.3	0.4	0
R115(KV536)	75.3	1	74.6	0.7	0	74.4	0.9	0	74.3	1	0
R116(K1816)	68.7	1	68.4	0.3	0	68.2	0.5	0	68	0.7	0
R117(KV1846)	68.7	1	68.5	0.2	0	68.4	0.3	0	68.2	0.5	0
R120(KV1795)	72.8	1	72.4	0.4	0	72.1	0.7	0	71.5	1.3	0
R123(K536)	75.2	2	65.2	10	2	64.1	11.1	2	63.1	12.1	2
R125(K1795)	68.1	1	67.4	0.7	0	67.2	0.9	0	67	1.1	0
R127(K1800)	70.1	1	68.1	2	0	67.8	2.3	0	67.5	2.6	0
R128(K1877)	68	1	67.8	0.2	0	67.6	0.4	0	67.5	0.5	0
R132(K545)	75.6	1	63.8	11.8	1	63	12.6	1	62.2	13.4	1
R133(K1811)	66.5	1	64.1	2.4	0	63.9	2.6	0	63.8	2.7	0
R138(K552)	76.1	1	64.2	11.9	1	63.4	12.7	1	62.7	13.4	1
R143(K562)	76.1	1	64.2	11.9	1	63.5	12.6	1	63	13.1	1
R144(K1784)	76.3	1	64.5	11.8	1	63.8	12.5	1	63	13.3	1
R146(K1772)	65.6	1	64.1	1.5	0	64	1.6	0	63.8	1.8	0
R147(KV1801)	74.2	1	72.3	1.9	0	71.5	2.7	0	70.9	3.3	0
R149(K1790 R-48)	76.3	1	65.3	11	1	64.6	11.7	1	63.8	12.5	1
R161(K1777)	63	1	62.5	0.5	0	62.2	0.8	0	62	1	0
R163(K1801)	75.4	1	64.5	10.9	1	63.5	11.9	1	62.7	12.7	1
R165(K1885)	66.7	0	66.7	0	0	66.7	0	0	66.7	0	0
R166(K1828)	62.9	1	62.5	0.4	0	62.3	0.6	0	62.2	0.7	0
R167(K1883)	66.5	0	66.5	0	0	66.5	0	0	66.5	0	0
R170(K1812)	74.7	1	65	9.7	1	64.1	10.6	1	63	11.7	1
R172(K1839)	62.7	1	62.2	0.5	0	62	0.7	0	61.8	0.9	0

Table D1: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B1

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R654(K1039)	66.1	0	66.6	-0.5	0	66.6	-0.5	0	66.6	-0.5	0
R174(K1765)	67.5	0	67.4	0.1	0	67.4	0.1	0	67.4	0.1	0
R176(K1759)	66.3	0	67.1	-0.8	0	67.1	-0.8	0	67	-0.7	0
R177(K1770)	74.2	1	65.6	8.6	1	64.5	9.7	1	63.3	10.9	1
R179(K1879)	66.4	0	67.2	-0.8	0	67.1	-0.7	0	67	-0.6	0
R185(K1820)	73.6	1	65.1	8.5	1	63.7	9.9	1	62.7	10.9	1
R187(K1755)	65.4	1	66.2	-0.8	0	66.2	-0.8	0	66.2	-0.8	0
R189(K1873)	66.2	1	66.3	-0.1	0	66.3	-0.1	0	66.2	0	0
R190(K1834)	73.1	1	65.1	8	1	64	9.1	1	63.4	9.7	1
R191(K1871)	66.7	1	66.7	0	0	66.7	0	0	66.7	0	0
R194(K1864)	66.7	1	67.2	-0.5	0	67.1	-0.4	0	67.1	-0.4	0
R195(K1844)	72.3	1	64.3	8	1	64.1	8.2	1	63.9	8.4	1
R198(K1850)	72.1	1	66.7	5.4	1	66.6	5.5	1	66.5	5.6	1
R205(K1861)	72.1	2	69.1	3	0	69	3.1	0	69	3.1	0

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B1

Barrier B1		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	69	**Total Number of Benefited Dwelling Units**	21	**Total Number of Benefited Dwelling Units**	25	**Total Number of Benefited Dwelling Units**	25
Total Number of Impacted Dwelling Units	65	**Total Number of Benefited Impacted Dwelling Units**	21	**Total Number of Benefited Impacted Dwelling Units**	25	**Total Number of Benefited Impacted Dwelling Units**	25
Barrier Length (feet)	1,129	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	76.2%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	76.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	84.0%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	32.3%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	38.5%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	38.5%
		Maximum Noise Reduction dB(A)	11.9	**Maximum Noise Reduction dB(A)**	12.7	**Maximum Noise Reduction dB(A)**	13.4
		Estimated Total Barrier Cost ($)	$677,400	**Estimated Total Barrier Cost ($)**	$745,140	**Estimated Total Barrier Cost ($)**	$812,880
		Cost/Benefit Dwelling Unit	$32,257	**Cost/Benefit Dwelling Unit**	$29,806	**Cost/Benefit Dwelling Unit**	$32,515

Table D2: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B2

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R175(K1915)	67.5	1	68.6	-1.1	0	68.6	-1.1		68.6	-1.1	0
R180(K1909)	68.8	1	69.3	-0.5	0	69.3	-0.5		69.3	-0.5	0
R188(K1903)	63.9	1	66.1	-2.2	0	66.1	-2.2		66	-2.1	0
R203(K1913)	58.5	1	61.6	-3.1	0	61.6	-3.1		61.5	-3	0
R204(K1891)	67.9	1	69.2	-1.3	0	69.2	-1.3		69.1	-1.2	0
R208(K1764)	68.7	6	69.3	-0.6	0	69.2	-0.5		69.1	-0.4	0
R209(K1897)	65.4	1	67.1	-1.7	0	67	-1.6		66.9	-1.5	0
R211(K1761)	71.8	1	70.8	1	0	70.4	1.4		70	1.8	0
R213(K1905)	66.1	1	67.1	-1	0	67	-0.9		66.7	-0.6	0
R215(K1926)	61.3	3	62	-0.7	0	62	-0.7		61.9	-0.6	0
R217(K1932)	59.6	1	60.3	-0.7	0	60.3	-0.7		60.1	-0.5	0
R219(K1910)	66.8	1	67.2	-0.4	0	67	-0.2		66.5	0.3	0
R221(K1938)	62.6	1	63.3	-0.7	0	63.3	-0.7		63.3	-0.7	0
R224(K1919)	67.8	2	68.2	-0.4	0	68	-0.2		67.6	0.2	0
R227(K1944)	62.5	1	63.1	-0.6	0	63	-0.5		62.9	-0.4	0
R230(K1927)	67.9	2	68.1	-0.2	0	67.9	0		67.6	0.3	0
R231(K626)	60.6	3	60.9	-0.3	0	60.7	-0.1		60.5	0.1	0
R236(K1937)	67.6	1	68	-0.4	0	67.8	-0.2		67.5	0.1	0
R237(K620)	65.8	1	65.9	-0.1	0	65.8	0		65.6	0.2	0
R239(K649)	52.4	0	54.5	-2.1	0	54.5	-2.1		54.5	-2.1	0
R240(K1954)	65.5	1	65.2	0.3	0	65	0.5		64.5	1	0
R242(K644)	52.3	0	54.5	-2.2	0	54.5	-2.2		54.4	-2.1	0
R243(K1948)	67.9	1	66.9	1	0	66.3	1.6		65.7	2.2	0
R246(K1963)	64.7	1	64.4	0.3	0	63.9	0.8		63.4	1.3	0
R247(K643)	51.8	0	53.9	-2.1	0	53.9	-2.1		53.9	-2.1	0

Table D2: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B2

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R249(K1947)	69.4	3	66.9	2.5	0	66.2	3.2	0	64.9	4.5	0
R250(K642)	54.6	0	55.9	-1.3	0	55.9	-1.3	0	55.8	-1.2	0
R251(K1966)	62.1	0	59.9	2.2	0	59.2	2.9	0	58.1	4	0
R256(K641)	57.5	0	58	-0.5	0	57.8	-0.3	0	57.6	-0.1	0
R258(K614)	68.3	1	67.5	0.8	0	67.1	1.2	0	66.3	2	0
R259(K639)	65	0	65.1	-0.1	0	64.9	0.1	0	64.7	0.3	0
R262(K613)	69.2	1	67.7	1.5	0	66.9	2.3	0	66.1	3.1	0
R266(K610)	69.6	1	67.2	2.4	0	66.3	3.3	0	65.3	4.3	0
R267(K608)	70.3	1	66.7	3.6	0	65.7	4.6	0	64.5	5.8	1
R269(K607)	71	1	66.5	4.5	0	65.6	5.4	1	64.6	6.4	1
R270(K606 R-50)	71.6	1	64.6	7	1	63.7	7.9	1	63	8.6	1

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B2

Barrier B2		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	42	**Total Number of Benefited Dwelling Units**	1	**Total Number of Benefited Dwelling Units**	2	**Total Number of Benefited Dwelling Units**	3
Total Number of Impacted Dwelling Units	26	**Total Number of Benefited Impacted Dwelling Units**	1	**Total Number of Benefited Impacted Dwelling Units**	2	**Total Number of Benefited Impacted Dwelling Units**	3
Barrier Length (feet)	593	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	100.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	50.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	33.3%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	3.8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	7.7%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	11.5%
		Maximum Noise Reduction dB(A)	7	**Maximum Noise Reduction dB(A)**	7.9	**Maximum Noise Reduction dB(A)**	8.6
		Estimated Total Barrier Cost ($)	$355,800	**Estimated Total Barrier Cost ($)**	$391,380	**Estimated Total Barrier Cost ($)**	$426,960
		Cost/Benefit Dwelling Unit	$355,800	**Cost/Benefit Dwelling Unit**	$195,690	**Cost/Benefit Dwelling Unit**	$142,320

Table D3: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B3

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R272(K722)	67.7	0	66.9	0.8	0	66.9	0.8	0	66.9	0.8	0
R273(K729)	67.3	0	66.4	0.9	0	66.4	0.9	0	66.4	0.9	0
R275(K720)	66.3	0	65.7	0.6	0	65.7	0.6	0	65.7	0.6	0
R277(K680)	71.9	25	71.6	0.3	0	71.5	0.4	0	71.5	0.4	0
M-24(K655)	72.4	1	71.6	0.8	0	71.5	0.9	0	71.5	0.9	0
R282(K730)	60.2	6	60.3	-0.1	0	60.3	-0.1	0	58.5	1.7	0
R283(K735)	59.6	0	59.6	0	0	59.6	0	0	57.8	1.8	0
R285(K755)	59.1	0	59.2	-0.1	0	59.2	-0.1	0	57.6	1.5	0
R287(K645)	73.7	1	71.7	2	0	71.6	2.1	0	71.5	2.2	0
R288(K715)	64.9	0	62.2	2.7	0	61.3	3.6	0	60.4	4.5	0
R293(K699)	66.4	1	65	1.4	0	64.5	1.9	0	64.1	2.3	0
R295(K791)	60.7	1	60.7	0	0	60.7	0	0	60.7	0	0
R297(K909)	61.5	5	61.5	0	0	61.5	0	0	61.1	0.4	0
R298(K784)	61.1	1	61	0.1	0	61	0.1	0	61	0.1	0
R300(K775)	53.4	1	53.4	0	0	53.4	0	0	53.4	0	0
R301(K782)	58.2	1	58.2	0	0	58.2	0	0	58.2	0	0
R302(K966)	48.7	0	48.6	0.1	0	48.6	0.1	0	48.6	0.1	0
R303(K687)	75.1	1	71.2	3.9	0	69.3	5.8	1	68	7.1	1
R304(K963)	60.9	0	60.9	0	0	60.9	0	0	60.6	0.3	0
R307(K759)	55.3	1	55.3	0	0	55.3	0	0	55.3	0	0
R309(K779)	63.3	3	63.3	0	0	63.1	0.2	0	62.7	0.6	0
R311(K692)	69.7	1	69.5	0.2	0	68.2	1.5	0	67.4	2.3	0
R312(K950)	61.3	0	61.3	0	0	61.3	0	0	61	0.3	0
R315(K942)	61.2	0	61.2	0	0	61.2	0	0	60.2	1	0
R316(K935)	61.8	0	61.8	0	0	61.8	0	0	60.7	1.1	0

Table D3: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B3

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R317(K923)	61	0	61.1	-0.1	0	60.8	0.2	0	60.2	0.8	0
R318(K926)	61.3	0	61.4	-0.1	0	61.4	-0.1	0	60.2	1.1	0
R319(K737)	66.4	1	66.4	0	0	66.2	0.2	0	65.6	0.8	0
R320(K756)	65.8	1	65.8	0	0	65.7	0.1	0	65.1	0.7	0
R321(K916)	60.5	0	60.5	0	0	60.3	0.2	0	60	0.5	0
R323(K733)	66.8	1	66.5	0.3	0	66.4	0.4	0	66.2	0.6	0
R324(K745)	68.1	1	67.6	0.5	0	66.8	1.3	0	66.1	2	0
R326(K915)	61.5	1	61.5	0	0	61.3	0.2	0	60.9	0.6	0
R329(K736)	68.8	1	68	0.8	0	66.9	1.9	0	65.7	3.1	0
R331(K717)	69.3	1	67.5	1.8	0	66.2	3.1	0	65.5	3.8	0
R332(K910)	62	1	61.8	0.2	0	61.6	0.4	0	60.8	1.2	0
R337(K587)	62.2	1	61.7	0.5	0	61.3	0.9	0	60.5	1.7	0
R338(K718)	71.4	1	64.5	6.9	1	64.4	7	1	63.7	7.7	1
R339(K583)	61.9	1	61.2	0.7	0	60.6	1.3	0	59.8	2.1	0
R340(K576)	62.8	1	61.6	1.2	0	61.1	1.7	0	60.6	2.2	0
R341(K568)	64.8	1	62.5	2.3	0	61.8	3	0	60.5	4.3	0
R342(K573)	63.1	1	61.5	1.6	0	60.5	2.6	0	60.2	2.9	0
R343(K785)	69.6	2	61.8	7.8	2	61.1	8.5	2	61	8.6	2
R345(K857)	64.1	1	61.2	2.9	0	60	4.1	0	58.9	5.2	1
R349(K714)	74.2	2	62.1	12.1	2	61.9	12.3	2	61.7	12.5	2

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B3

Barrier B3		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	68	**Total Number of Benefited Dwelling Units**	5	**Total Number of Benefited Dwelling Units**	6	**Total Number of Benefited Dwelling Units**	7
Total Number of Impacted Dwelling Units	41	**Total Number of Benefited Impacted Dwelling Units**	5	**Total Number of Benefited Impacted Dwelling Units**	6	**Total Number of Benefited Impacted Dwelling Units**	6
Barrier Length (feet)	491	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	80.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	83.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	85.7%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	12.2%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	14.6%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	14.6%
		Maximum Noise Reduction dB(A)	12.1	**Maximum Noise Reduction dB(A)**	12.3	**Maximum Noise Reduction dB(A)**	12.5
		Estimated Total Barrier Cost ($)	$294,600	**Estimated Total Barrier Cost ($)**	$324,060	**Estimated Total Barrier Cost ($)**	$353,520
		Cost/Benefit Dwelling Unit	$58,920	**Cost/Benefit Dwelling Unit**	$54,010	**Cost/Benefit Dwelling Unit**	$50,503

Table D4: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B4

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R386(K988)	51.4	0	51.3	0.1	0	51.3	0.1	0	51.4	0	0
R387(K978)	51.5	0	51.4	0.1	0	51.4	0.1	0	52.3	-0.8	0
R388(K997)	53.6	0	53.5	0.1	0	53.5	0.1	0	53.5	0.1	0
R389(K987)	59	0	58.2	0.8	0	56.9	2.1	0	56.1	2.9	0
R390(K995)	58.3	0	58.3	0	0	56.7	1.6	0	56.2	2.1	0
R391(K980)	59.4	6	57.4	2	0	56.4	3	0	55.6	3.8	0
R392(K1012)	58.3	0	58.2	0.1	0	58	0.3	0	57.4	0.9	0
R393(K811)	60.6	0	60.3	0.3	0	60.1	0.5	0	59.9	0.7	0
R394(K959)	61.9	1	60.1	1.8	0	59	2.9	0	57.9	4	0
R395(K971)	61.2	1	59.4	1.8	0	58.4	2.8	0	57.3	3.9	0
R396(KV811)	67.9	0	67.8	0.1	0	67.8	0.1	0	67.7	0.2	0
R397(K802)	64.3	0	64.3	0	0	64	0.3	0	63.9	0.4	0
R398(K804)	62.8	0	62.8	0	0	62.7	0.1	0	62.7	0.1	0
R399(K961)	64.5	1	61.6	2.9	0	60.4	4.1	0	58.9	5.6	1
R400(K949)	67.7	1	63.8	3.9	0	62.1	5.6	1	60.6	7.1	1
R401(K798)	64.3	0	64.3	0	0	64.1	0.2	0	63.9	0.4	0
R402(K796)	64.5	0	64.4	0.1	0	64.1	0.4	0	63.9	0.6	0
R403(K931)	69.6	1	65.2	4.4	0	63.5	6.1	1	62	7.6	1
R404(K1019)	64	2	64	0	0	63.6	0.4	0	63.3	0.7	0
R405(K1016)	64.1	2	63.8	0.3	0	63.3	0.8	0	62.9	1.2	0
R406(K928)	71.1	1	67.3	3.8	0	65.7	5.4	1	64.3	6.8	1
R407(K1013)	63.7	2	63.2	0.5	0	61.9	1.8	0	61.3	2.4	0
R408(K834)	63.6	1	64.9	-1.3	0	64.8	-1.2	0	64.5	-0.9	0
R409(K1010)	64.3	2	63.1	1.2	0	61.3	3	0	60.3	4	0
R410(K1009)	65.5	2	63.9	1.6	0	62	3.5	0	60.8	4.7	0

Table D4: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B4

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R411(K989)	68.6	1	67.1	1.5	0	66	2.6	0	64.4	4.2	0
R413(K833)	64.5	2	65.6	-1.1	0	65.6	-1.1	0	65.4	-0.9	0
R414(K1005)	70.4	1	68.6	1.8	0	67.5	2.9	0	66.3	4.1	0
R415(K829)	65.9	1	66.6	-0.7	0	66.5	-0.6	0	66.3	-0.4	0
R416(K1032)	57.7	1	57.9	-0.2	0	57.9	-0.2	0	57.8	-0.1	0
R417(K999)	72.8	1	68.5	4.3	0	67.2	5.6	1	66.1	6.7	1
R418(K847)	64.8	1	65.5	-0.7	0	65.4	-0.6	0	65.2	-0.4	0
R419(K828)	66.3	1	66.9	-0.6	0	66.9	-0.6	0	66.6	-0.3	0
R420(K1038)	57.7	1	57.9	-0.2	0	57.9	-0.2	0	57.8	-0.1	0
R424(K825)	66.8	1	67.3	-0.5	0	67.2	-0.4	0	67	-0.2	0
R426(K824)	67.7	1	68	-0.3	0	68	-0.3	0	67.8	-0.1	0
R427(K821)	67.7	1	68.1	-0.4	0	68.1	-0.4	0	67.9	-0.2	0
R428(K1048)	59.2	1	59.4	-0.2	0	59.4	-0.2	0	59.4	-0.2	0
R429(K850)	67.8	1	68.2	-0.4	0	68.1	-0.3	0	67.6	0.2	0
R432(K1054)	61.9	1	62.1	-0.2	0	62.1	-0.2	0	62	-0.1	0
R433(K1020)	68.1	2	68.4	-0.3	0	68.2	-0.1	0	67.6	0.5	0
R434(K817)	68.8	1	69.1	-0.3	0	69	-0.2	0	68.8	0	0
R435(K864)	64.7	1	65	-0.3	0	65	-0.3	0	64.8	-0.1	0
R436(K1026)	68.7	1	68.9	-0.2	0	68.6	0.1	0	68	0.7	0
R438(K812)	68.3	1	68.7	-0.4	0	68.6	-0.3	0	68.3	0	0
R440(K813)	68.9	1	69.2	-0.3	0	69.1	-0.2	0	68.7	0.2	0
R441(K1030)	68.7	1	68.8	-0.1	0	68.5	0.2	0	67.8	0.9	0
R443(K806)	72.4	1	71.6	0.8	0	70.7	1.7	0	69.5	2.9	0
R444(K814)	72.1	1	72.2	-0.1	0	71.6	0.5	0	70.5	1.6	0
R445(K1035)	68.6	2	68.8	-0.2	0	68.4	0.2	0	67.8	0.8	0

Table D4: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B4

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R654(K1039)	66.1	1	71.3	-5.2	0	70	-3.9	0	68.8	-2.7	0
R448(K799)	72.8	1	70.1	2.7	0	68.6	4.2	0	67.4	5.4	1
R449(K872)	62.7	1	62.6	0.1	0	62.6	0.1	0	62.5	0.2	0
R451(KV903)	70.4	1	70.2	0.2	0	70	0.4	0	69.9	0.5	0
R453(K797)	72.6	1	68.9	3.7	0	67.9	4.7	0	66.6	6	1
R455(K1017)	73.1	1	66.9	6.2	1	65.9	7.2	1	64.9	8.2	1
R458(K875)	61.1	1	61.9	-0.8	0	61.5	-0.4	0	61	0.1	0
R459(K1043)	68.6	2	68.7	-0.1	0	68.2	0.4	0	67.6	1	0
R466(K1050)	68.8	2	68.8	0	0	68.2	0.6	0	67.7	1.1	0
R472(KV903)	70.9	1	70.7	0.2	0	70.5	0.4	0	70.4	0.5	0
R480(K861)	69.2	2	69.4	-0.2	0	68.9	0.3	0	68.2	1	0
R485(KV1061)	71.2	1	71	0.2	0	70.8	0.4	0	70.6	0.6	0
R488(K863)	69.7	1	69.8	-0.1	0	69.4	0.3	0	68.9	0.8	0
R498(K869)	69.8	2	69.9	-0.1	0	69.4	0.4	0	68.9	0.9	0
R513(K899)	63.5	1	63.5	0	0	63.5	0	0	63.3	0.2	0
R521(KV1061)	71.7	1	71.5	0.2	0	71.3	0.4	0	71.1	0.6	0
R524(K881)	66.2	1	66.4	-0.2	0	66.4	-0.2	0	66.3	-0.1	0
R528(K903)	63.3	1	63	0.3	0	62.4	0.9	0	62.2	1.1	0
R534(K879)	71.1	1	70.8	0.3	0	70.5	0.6	0	69.8	1.3	0
M-28(K879)	76	1	76	0	0	75.9	0.1	0	75.8	0.2	0
R543(K886)	69.9	2	68	1.9	0	67.2	2.7	0	66.2	3.7	0
R549(KV1077)	72	1	71.8	0.2	0	71.6	0.4	0	71.4	0.6	0
R574(K891)	72.9	1	71.6	1.3	0	71.1	1.8	0	70.3	2.6	0
R582(K1061)	64.6	1	64.4	0.2	0	64.2	0.4	0	64.1	0.5	0
R588(KV1089)	72.7	1	72.6	0.1	0	72.3	0.4	0	72.2	0.5	0

Table D4: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B4

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R603(K904)	73.8	1	71.8	2	0	71.1	2.7	0	70	3.8	0
R622(K907)	74	1	71.4	2.6	0	70.5	3.5	0	69.2	4.8	0
R628(K1077)	68.6	1	67.3	1.3	0	66.8	1.8	0	66.6	2	0
R630(K1058)	74.4	1	71.5	2.9	0	70.3	4.1	0	69.1	5.3	1
R632(K1079)	70.5	1	68.5	2	0	68	2.5	0	67.6	2.9	0
R635(K1062)	74.8	1	71.7	3.1	0	70.4	4.4	0	69.1	5.7	1
R638(K1065)	75.4	1	72.1	3.3	0	70.8	4.6	0	69.8	5.6	1
R639(K1089)	73.6	1	71	2.6	0	70.3	3.3	0	69.7	3.9	0
R640(K1069)	75.8	1	72.6	3.2	0	71.4	4.4	0	70.4	5.4	1
R642(K1075 R-54)	76.5	1	73.4	3.1	0	72.3	4.2	0	71.2	5.3	1

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B4

Barrier B4		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	91	**Total Number of Benefited Dwelling Units**	1	**Total Number of Benefited Dwelling Units**	5	**Total Number of Benefited Dwelling Units**	13
Total Number of Impacted Dwelling Units	60	**Total Number of Benefited Impacted Dwelling Units**	1	**Total Number of Benefited Impacted Dwelling Units**	5	**Total Number of Benefited Impacted Dwelling Units**	12
Barrier Length (feet)	1,257	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	0.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	20.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	23.1%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	1.7%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	8.3%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	20.0%
		Maximum Noise Reduction dB(A)	6.2	**Maximum Noise Reduction dB(A)**	7.2	**Maximum Noise Reduction dB(A)**	8.2
		Estimated Total Barrier Cost ($)	$754,200	**Estimated Total Barrier Cost ($)**	$829,620	**Estimated Total Barrier Cost ($)**	$905,040
		Cost/Benefit Dwelling Unit	$754,200	**Cost/Benefit Dwelling Unit**	$165,924	**Cost/Benefit Dwelling Unit**	$69,618

Table D5: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B5

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R721(K1381)	61.5	0	62.3	-0.8	0	62.2	-0.7	0	62.2	-0.7	0
R722(K1404)	62.1	0	60.1	2	0	59.8	2.3	0	59.6	2.5	0
R723(K1405)	62.9	1	59.5	3.4	0	59.4	3.5	0	59.3	3.6	0
R724(K1415)	58.5	1	55.8	2.7	0	55.4	3.1	0	55.3	3.2	0
R728(K1419)	61.3	1	57.9	3.4	0	57.8	3.5	0	57.6	3.7	0
R729(K1422)	61.8	1	58.6	3.2	0	58.4	3.4	0	58.2	3.6	0
R731(K1429)	61.4	1	58.5	2.9	0	58.2	3.2	0	58	3.4	0
R732(K65)	63.1	1	59.1	4	0	58.9	4.2	0	58.8	4.3	0
R738(K1412)	66.8	1	61.6	5.2	1	60.7	6.1	1	60.1	6.7	1
R739(K1424)	66.9	1	59.6	7.3	1	59	7.9	1	58.6	8.3	1
R740(K1454)	66.1	1	60.6	5.5	1	60.4	5.7	1	60.3	5.8	1
R742(K1450)	63.9	0	59.1	4.8	0	58.9	5	0	58.8	5.1	0
R746(K1458)	68.9	1	63.6	5.3	1	63.5	5.4	1	63.4	5.5	1
R750(K1435)	70.1	1	59.8	10.3	1	59.2	10.9	1	58.7	11.4	1
R751(K1427)	70.1	1	61.2	8.9	1	60.4	9.7	1	59.7	10.4	1
R752(K1438)	71	1	60.5	10.5	1	59.8	11.2	1	59.2	11.8	1
R753(K1472)	68.3	26	63.1	5.2	26	63	5.3	26	62.9	5.4	26
R758(K1448)	72	1	61.7	10.3	1	60.9	11.1	1	60.3	11.7	1
R760(K1433)	70.6	1	61.7	8.9	1	61.1	9.5	1	60.5	10.1	1
R762(K1455)	73.7	1	62.6	11.1	1	61.7	12	1	61.2	12.5	1
R765(K1459)	75	1	63	12	1	62.2	12.8	1	61.6	13.4	1
R768(K1437)	72.8	1	61.8	11	1	61.3	11.5	1	60.8	12	1
R773(KV1469)	75.1	1	62.7	12.4	1	62.3	12.8	1	61.9	13.2	1
R781(K1456)	77.2	1	62.1	15.1	1	61.6	15.6	1	61	16.2	1
M-46(K1469)	78.6	1	63.1	15.5	1	62.3	16.3	1	61.6	17	1

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B5

Barrier B5		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	47	**Total Number of Benefited Dwelling Units**	41	**Total Number of Benefited Dwelling Units**	41	**Total Number of Benefited Dwelling Units**	41
Total Number of Impacted Dwelling Units	15	**Total Number of Benefited Impacted Dwelling Units**	15	**Total Number of Benefited Impacted Dwelling Units**	15	**Total Number of Benefited Impacted Dwelling Units**	15
Barrier Length (feet)	1041	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	29.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	29.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	29.3%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	100.0%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	100.0%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	100.0%
		Maximum Noise Reduction dB(A)	15.5	**Maximum Noise Reduction dB(A)**	16.3	**Maximum Noise Reduction dB(A)**	17
		Estimated Total Barrier Cost ($)	$624,600	**Estimated Total Barrier Cost ($)**	$687,060	**Estimated Total Barrier Cost ($)**	$749,520
		Cost/Benefit Dwelling Unit	$15,234	**Cost/Benefit Dwelling Unit**	$16,758	**Cost/Benefit Dwelling Unit**	$18,281

Table D6: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B6

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R709(K1471)	64.7	6	63.3	1.4	0	63.2	1.5	0	63.1	1.6	0
R710(K64)	63.3	1	60	3.3	0	59.7	3.6	0	59.5	3.8	0
R711(K1474)	65.7	1	62	3.7	0	61.5	4.2	0	61.3	4.4	0
R714(K1493)	71.1	4	66.2	4.9	0	65.8	5.3	4	65.5	5.6	4
R715(K1481)	68.2	1	61.3	6.9	1	60.6	7.6	1	59.9	8.3	1
R717(K1266)	74.3	0	74.3	0	0	74.3	0	0	74.3	0	0
R726(K1487)	70	1	62.3	7.7	1	61.5	8.5	1	60.7	9.3	1
R734(K1201)	74.3	6	66.5	7.8	6	65.9	8.4	6	65.4	8.9	6
R744(K1497)	72.4	1	65.2	7.2	1	64.3	8.1	1	63.7	8.7	1
R755(K1488)	72	1	65	7	1	64.2	7.8	1	63.4	8.6	1
R779(K1195)	71.7	1	64.8	6.9	1	63.9	7.8	1	63.2	8.5	1
R801(K1205)	69.2	1	64.2	5	1	63.7	5.5	1	63.2	6	1
M-48(K37)	62.4	1	61.1	1.3	0	61	1.4	0	60.6	1.8	0

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B6

Barrier B6		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	26	**Total Number of Benefited Dwelling Units**	12	**Total Number of Benefited Dwelling Units**	16	**Total Number of Benefited Dwelling Units**	16
Total Number of Impacted Dwelling Units	17	**Total Number of Benefited Impacted Dwelling Units**	12	**Total Number of Benefited Impacted Dwelling Units**	16	**Total Number of Benefited Impacted Dwelling Units**	16
Barrier Length (feet)	1,453	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	75.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	68.8%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	68.8%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	70.6%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	94.1%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	94.1%
		Maximum Noise Reduction dB(A)	7.8	**Maximum Noise Reduction dB(A)**	8.5	**Maximum Noise Reduction dB(A)**	9.3
		Estimated Total Barrier Cost ($)	$871,800	**Estimated Total Barrier Cost ($)**	$958,980	**Estimated Total Barrier Cost ($)**	$1,046,160
		Cost/Benefit Dwelling Unit	$72,650	**Cost/Benefit Dwelling Unit**	$59,936	**Cost/Benefit Dwelling Unit**	$65,385

Table D7: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B7

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R748(K2091)	78.5	1	76.3	2.2	0	76	2.5	0	75.1	3.4	0
R749(K1767)	78	1	75.3	2.7	0	74.1	3.9	0	71.3	6.7	1
R756(K2109B)	77.7	1	75.5	2.2	0	75.3	2.4	0	73.6	4.1	0
R757(K2105)	75.2	1	64	11.2	1	63.5	11.7	1	62.9	12.3	1
R764(KV2092)	75.1	1	70.7	4.4	0	68.8	6.3	1	67.1	8	1
R766(K2085)	76.4	6	69.9	6.5	6	68.1	8.3	6	66.2	10.2	6
R769(K2119)	73.5	1	63	10.5	1	62.2	11.3	1	61.5	12	1
R771(K2101)	70.1	1	62.7	7.4	1	61.2	8.9	1	60.5	9.6	1
R772(K2109E)	74.4	1	68.5	5.9	1	65.7	8.7	1	64.1	10.3	1
R776(K2087)	73.4	1	68.5	4.9	0	67.4	6	1	65.5	7.9	1
R777(K2106)	71.8	1	69	2.8	0	68	3.8	0	66.4	5.4	1
R778(K2104)	72.7	1	70.8	1.9	0	69.3	3.4	0	67.4	5.3	1
R783(K1722C)	71.8	1	64.5	7.3	1	64.2	7.6	1	63.9	7.9	1
R784(K1769)	71.1	1	65.5	5.6	1	64	7.1	1	61.9	9.2	1
R785(K2083)	77.9	1	73.5	4.4	0	71.4	6.5	1	68.9	9	1
R787(K2122)	70.8	1	61.8	9	1	60.7	10.1	1	59.8	11	1
R788(K1722B)	71	1	65	6	1	64.7	6.3	1	64.5	6.5	1
R797(K2124)	70.8	1	61.1	9.7	1	60.3	10.5	1	59.4	11.4	1
R800(K2086)	74.6	1	67.9	6.7	1	65.3	9.3	1	63	11.6	1
R808(K2109)	66.5	1	62.4	4.1	0	60.1	6.4	1	58.6	7.9	1
R811(K2095)	69.6	1	64.1	5.5	1	62.3	7.3	1	60.5	9.1	1
R813(K2114)	67.8	1	59.9	7.9	1	59.3	8.5	1	58.8	9	1
R814(K2125)	68.4	1	62.1	6.3	1	60.6	7.8	1	59.7	8.7	1
R819(K2088)	74.5	1	68.2	6.3	1	65.6	8.9	1	63.8	10.7	1
R820(K2138)	68.3	1	61.4	6.9	1	60.8	7.5	1	60.5	7.8	1

Table D7: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B7

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R821(K1722A)	64.6	1	62	2.6	0	61.8	2.8	0	61.7	2.9	0
R823(K1722)	67.3	1	62.7	4.6	0	61.8	5.5	1	61.6	5.7	1
R824(K2099)	67.4	1	62.4	5	1	60.7	6.7	1	59.4	8	1
R825(K2127)	67.9	1	65.3	2.6	0	63.9	4	0	62.5	5.4	1
R826(K2144)	67.7	1	61.4	6.3	1	60.8	6.9	1	60.3	7.4	1
R827(K2109C)	67.5	1	63.9	3.6	0	62	5.5	1	59.8	7.7	1
R828(K1720)	67.5	1	62.9	4.6	0	61.7	5.8	1	61.3	6.2	1
R838(K2109F)	65.9	1	59.2	6.7	1	58.2	7.7	1	57.3	8.6	1
R840(K2109A)	62.9	1	58.8	4.1	0	57.2	5.7	1	56.2	6.7	1
R841(K30)	64.3	1	57.5	6.8	1	56.9	7.4	1	56.7	7.6	1
R845(K2103)	65.8	1	61.7	4.1	0	60	5.8	1	58.5	7.3	1
R850(K1721)	65	1	58.3	6.7	1	57.6	7.4	1	56.8	8.2	1
R851(K2094)	74	1	67.9	6.1	1	65.5	8.5	1	63.9	10.1	1
R852(K2109D)	62	1	59	3	0	56.7	5.3	1	55.7	6.3	1
R860(K2097)	73.7	1	65.8	7.9	1	63.9	9.8	1	62	11.7	1
R864(K2117)	64.4	1	60	4.4	0	58.9	5.5	1	57.5	6.9	1
R870(K2102)	72.7	1	64.2	8.5	1	62.4	10.3	1	60.2	12.5	1
R871(K2120)	63.3	1	58.4	4.9	0	56.9	6.4	1	56	7.3	1
R872(KV2147)	63	1	55.8	7.2	1	55	8	1	54.4	8.6	1
R873(K2107)	72.4	1	63.7	8.7	1	61.7	10.7	1	59.8	12.6	1
R876(K2128)	62.7	1	57.6	5.1	1	56.4	6.3	1	55.7	7	1
R878(K2141)	75.9	75	70.7	5.2	75	68.8	7.1	75	67.5	8.4	75
R879(K2121)	72.1	1	63.8	8.3	1	62.2	9.9	1	60.4	11.7	1
R881(K2130)	62.2	1	57.1	5.1	1	56.1	6.1	1	55.2	7	1
R885(K2126)	71.8	1	64.3	7.5	1	63.1	8.7	1	61.3	10.5	1

Table D7: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B7

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R654(K1039)	66.1	1	57.1	9	1	56	10.1	1	55	11.1	1
R890(K2131)	71.4	1	63.1	8.3	1	61.8	9.6	1	60.1	11.3	1
R891(K2140)	61.3	1	56.2	5.1	1	55.2	6.1	1	54.3	7	1
R894(K2111)	70.9	1	62.4	8.5	1	60.8	10.1	1	59	11.9	1
R896(K2142)	60.9	1	55.6	5.3	1	54.7	6.2	1	53.9	7	1
R897(K2139)	70.4	1	61.9	8.5	1	60.4	10	1	58.8	11.6	1
M-47(K2141)	62.3	75	57.1	5.2	75	56.7	5.6	75	56.3	6	75

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B7

Barrier B7		18 feet High Barrier		20 feet High Barrier		22 feet High Barrier	
Total Number of Dwelling Units behind Barrier	210	Total Number of Benefited Dwelling Units	191	Total Number of Benefited Dwelling Units	203	Total Number of Benefited Dwelling Units	207
Total Number of Impacted Dwelling Units	123	Total Number of Benefited Impacted Dwelling Units	109	Total Number of Benefited Impacted Dwelling Units	117	Total Number of Benefited Impacted Dwelling Units	121
Barrier Length (feet)	4,487	% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction	8.9%	% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction	53.7%	% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction	58.9%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	88.6%	% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	95.1%	% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	98.4%
		Maximum Noise Reduction dB(A)	11.2	Maximum Noise Reduction dB(A)	11.7	Maximum Noise Reduction dB(A)	12.6
		Estimated Total Barrier Cost ($)	$2,422,980	Estimated Total Barrier Cost ($)	$2,692,200	Estimated Total Barrier Cost ($)	$2,961,420
		Cost/Benefit Dwelling Unit	$12,686	Cost/Benefit Dwelling Unit	$13,262	Cost/Benefit Dwelling Unit	$14,306

Table D8: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B8

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R774(K1346)	71.2	1	60.9	10.3	1	60.4	10.8	1	59.9	11.3	1
M-41(K1318)	75.1	1	74.9	0.2	0	74.6	0.5	0	73.4	1.7	0
R780(K1383)	72	1	62	10	1	61.3	10.7	1	60.5	11.5	1
M-44(K75)	72.8	2	63.2	9.6	2	62.4	10.4	2	61.7	11.1	2
M-42(K1348)	68.8	1	55.6	13.2	1	54.9	13.9	1	54.2	14.6	1
R790(K1360)	73.4	1	62.5	10.9	1	61.7	11.7	1	61	12.4	1
R791(K1365)	70.6	1	61.2	9.4	1	60.6	10	1	60	10.6	1
R792(K1421)	76.5	1	71.2	5.3	1	68	8.5	1	66.6	9.9	1
R794(KV1318)	70.5	1	65	5.5	1	64.2	6.3	1	63.3	7.2	1
R795(K74)	68.8	2	60.7	8.1	2	60.1	8.7	2	59.5	9.3	2
R796(K1341)	74.1	1	62.8	11.3	1	62	12.1	1	61.3	12.8	1
R799(K1391)	69.3	1	60	9.3	1	59.2	10.1	1	58.5	10.8	1
R802(K1331)	72.4	1	66.4	6	1	65	7.4	1	63.8	8.6	1
R805(K78)	73.1	1	62.8	10.3	1	62	11.1	1	61.2	11.9	1
R807(K1336)	72.4	1	63.5	8.9	1	62.6	9.8	1	61.7	10.7	1
R809(K71)	66.5	2	59.5	7	2	58.9	7.6	2	58.3	8.2	2
R812(K1386)	65.4	1	57.4	8	1	56.7	8.7	1	56	9.4	1
R815(K73)	64.4	2	57.3	7.1	2	56.7	7.7	2	56.2	8.2	2
R816(K1372)	63.9	1	56.6	7.3	1	56.1	7.8	1	55.6	8.3	1
R817(K1395)	69.2	1	60	9.2	1	59.2	10	1	58.5	10.7	1
R830(K68)	67.1	2	59.2	7.9	2	58.4	8.7	2	57.8	9.3	2
M-45(K1484)	75.2	3	66.4	8.8	3	65.2	10	3	64.1	11.1	3
R832(K1362)	60.8	1	55.8	5	1	55.3	5.5	1	54.9	5.9	1
R833(K1370)	62.8	1	56.2	6.6	1	55.8	7	1	55.4	7.4	1
R834(K1402)	67.5	1	58.7	8.8	1	57.9	9.6	1	57.2	10.3	1

Table D8: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B8

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R835(K1446)	70.4	1	62.6	7.8	1	61.7	8.7	1	60.8	9.6	1
R836(K67)	66.7	2	59.6	7.1	2	58.8	7.9	2	58.2	8.5	2
R842(K1353)	60.4	41	55.3	5.1	41	55.2	5.2	41	55.1	5.3	41
R843(K1406)	64.2	1	56.9	7.3	1	56.2	8	1	55.6	8.6	1
R846(K1396)	62.1	1	55.2	6.9	1	54.6	7.5	1	54	8.1	1
R847(K1403)	63.3	1	56	7.3	1	55.3	8	1	54.8	8.5	1
R849(K1397)	60.8	1	54.6	6.2	1	54	6.8	1	53.5	7.3	1
R854(K1460)	64	1	58.4	5.6	1	57.6	6.4	1	57	7	1
R855(K1392)	60.6	1	54.4	6.2	1	53.9	6.7	1	53.6	7	1
R856(K1394)	60	1	54.4	5.6	1	53.8	6.2	1	53.4	6.6	1
R857(K1193)	72.1	1	61.3	10.8	1	60.5	11.6	1	59.9	12.2	1
R858(K1379)	59.2	1	54.5	4.7	0	54.2	5	1	54	5.2	1
R859(K1385)	58.6	1	54.1	4.5	0	53.7	4.9	0	53.4	5.2	1
R861(K1390)	57.5	1	53.5	4	0	53.1	4.4	0	52.8	4.7	0
R862(K1449)	64.6	1	58.4	6.2	1	57.7	6.9	1	57	7.6	1
R867(K1196)	69.8	1	60.1	9.7	1	59.3	10.5	1	58.4	11.4	1
R868(KV1492)	62.3	1	57.4	4.9	0	56.6	5.7	1	56.2	6.1	1
R869(K1492)	64.1	2	60.9	3.2	0	59.7	4.4	0	59	5.1	2
R874(K1473)	53.6	1	49.9	3.7	0	49.5	4.1	0	49.2	4.4	0
R875(K1203)	68.1	1	59.6	8.5	1	58.7	9.4	1	57.8	10.3	1
R877(K40)	63.9	1	60.5	3.4	0	59.2	4.7	0	58.7	5.2	1
R880(K1202)	64.4	1	59.2	5.2	1	58	6.4	1	57.4	7	1
R882(K1211)	71.1	1	60.9	10.2	1	60.1	11	1	59.4	11.7	1
R883(K1209)	66.7	1	58.7	8	1	57.9	8.8	1	57	9.7	1
R884(K1213)	69.3	1	58.8	10.5	1	57.8	11.5	1	57	12.3	1

Table D8: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B8

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R886(K1206)	64.6	1	58.4	6.2	1	57.6	7	1	56.9	7.7	1
R888(K1218)	67.6	1	57.8	9.8	1	56.9	10.7	1	56.1	11.5	1
R889(K36)	65.5	1	58.7	6.8	1	57.9	7.6	1	57	8.5	1
R892(K1216)	64.7	1	58.4	6.3	1	57.6	7.1	1	57	7.7	1
R893(K1220)	65.5	1	57	8.5	1	56	9.5	1	55.3	10.2	1
R895(K1219)	58.6	1	53.9	4.7	0	52.9	5.7	1	52.1	6.5	1
R898(K1224)	64.7	1	59	5.7	1	58.7	6	1	58.3	6.4	1
R899(K1223)	64.4	1	59.2	5.2	1	59	5.4	1	58.7	5.7	1
R900(K1222)	59.6	1	55.6	4	0	55.3	4.3	0	55	4.6	0
M-44a(K75)	73	2	61.8	11.2	2	61.3	11.7	2	60.4	12.6	2

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B8

Barrier B8		18 feet High Barrier		20 feet High Barrier		22 feet High Barrier	
Total Number of Dwelling Units behind Barrier	110	**Total Number of Benefited Dwelling Units**	99	**Total Number of Benefited Dwelling Units**	102	**Total Number of Benefited Dwelling Units**	106
Total Number of Impacted Dwelling Units	40	**Total Number of Benefited Impacted Dwelling Units**	37	**Total Number of Benefited Impacted Dwelling Units**	37	**Total Number of Benefited Impacted Dwelling Units**	37
Barrier Length (feet)	2,617	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	41.4%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	46.1%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	50.9%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	92.5%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	92.5%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	92.5%
		Maximum Noise Reduction dB(A)	13.2	**Maximum Noise Reduction dB(A)**	13.9	**Maximum Noise Reduction dB(A)**	14.6
		Estimated Total Barrier Cost ($)	$1,413,180	**Estimated Total Barrier Cost ($)**	$1,570,200	**Estimated Total Barrier Cost ($)**	$1,727,220
		Cost/Benefit Dwelling Unit	$14,275	**Cost/Benefit Dwelling Unit**	$15,394	**Cost/Benefit Dwelling Unit**	$16,295

Table D9: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B9

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R495(K1615)	75.8	1	69	6.8	1	68.5	7.3	1	67.4	8.4	1
R496(K2006)	65	1	59.6	5.4	1	59.3	5.7	1	59	6	1
M-38(K1609)	74.2	1	66.2	8	1	64.9	9.3	1	63.4	10.8	1
R500(K1620)	75.2	1	66.9	8.3	1	66.3	8.9	1	65.5	9.7	1
R501(K2004)	68	1	60.2	7.8	1	59.7	8.3	1	59.2	8.8	1
R502(K2005)	67.4	1	60.2	7.2	1	59.8	7.6	1	59.4	8	1
R503(K1622)	75.1	1	65.7	9.4	1	65	10.1	1	63.4	11.7	1
R504(K1630)	74.1	1	63.1	11	1	62.3	11.8	1	61.4	12.7	1
R505(K1674)	69.6	1	60.9	8.7	1	60.3	9.3	1	59.8	9.8	1
R508(K1627)	74.4	1	64.7	9.7	1	63.3	11.1	1	62.4	12	1
R510(K1670 R-61)	70.8	1	61.3	9.5	1	60.6	10.2	1	60	10.8	1
R512(K1642)	73.1	1	62	11.1	1	61.3	11.8	1	60.7	12.4	1
R516(K1638)	72.9	1	61.9	11	1	61	11.9	1	60.4	12.5	1
R517(K1652)	71	1	60.7	10.3	1	60.1	10.9	1	59.5	11.5	1
R518(K1665)	71.1	1	60.9	10.2	1	60.3	10.8	1	59.7	11.4	1
R526(K2009)	57	2	56.3	0.7	0	56.2	0.8	0	56.2	0.8	0
R531(K1621)	70.6	1	67.5	3.1	0	66.9	3.7	0	66.4	4.2	0
R532(K2008)	56.9	2	56.1	0.8	0	55.9	1	0	55.8	1.1	0
M-37(K1616)	69.2	1	66	3.2	0	65.6	3.6	0	65	4.2	0
R533(K2007)	58.2	2	56.4	1.8	0	56.3	1.9	0	56.1	2.1	0
R535(K1705)	58.9	2	56.4	2.5	0	56.1	2.8	0	55.9	3	0
R537(K85)	67.3	1	67.2	0.1	0	67.1	0.2	0	66.8	0.5	0
R538(K1602)	70.3	1	69.5	0.8	0	69.3	1	0	69.2	1.1	0
R539(K1611)	64.8	1	64.7	0.1	0	64.6	0.2	0	64.1	0.7	0
R540(K1624)	69	1	65.7	3.3	0	65.4	3.6	0	64.9	4.1	0

Table D9: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B9

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R541(K1629)	67	1	64.2	2.8	0	63.8	3.2	0	63.1	3.9	0
R542(K1632)	65.1	1	60.1	5	0	60	5.1	1	59.4	5.7	1
R545(K1608)	73.3	1	72.7	0.6	0	72.6	0.7	0	72.6	0.7	0
R546(K1613)	63.1	1	63.1	0	0	63	0.1	0	62.1	1	0
R547(K1637)	63.7	1	59.1	4.6	0	58.4	5.3	1	57.7	6	1
R548(K1699)	59.8	2	57	2.8	0	56.7	3.1	0	56.5	3.3	0
R550(K1695)	61.3	2	57.3	4	0	57	4.3	0	56.8	4.5	0
R554(K1677)	61.8	1	57.1	4.7	0	56.7	5.1	1	56.5	5.3	1
R555(K1687)	61.5	2	57.2	4.3	0	57.2	4.3	0	56.9	4.6	0
R558(K1626)	61.2	1	61.1	0.1	0	60.8	0.4	0	59.8	1.4	0
R559(K1648)	62.7	1	58.3	4.4	0	58	4.7	0	57.5	5.2	1
R560(K1668)	62.4	1	56	6.4	1	55.4	7	1	55.2	7.2	1
R561(K1672)	62.3	1	57.5	4.8	0	57	5.3	1	56.6	5.7	1
R562(K2013)	52.9	1	53.3	-0.4	0	53.2	-0.3	0	53.1	-0.2	0
R565(K1713)	52.6	1	52.3	0.3	0	52.1	0.5	0	52.1	0.5	0
R569(K1712)	53.1	1	52.3	0.8	0	52.2	0.9	0	52.1	1	0
R572(K1635)	58.7	1	57.7	1	0	57.6	1.1	0	56.7	2	0
R573(K1617)	69.3	1	69	0.3	0	68.8	0.5	0	68.4	0.9	0
R577(K1623)	67	1	66.8	0.2	0	66.6	0.4	0	66.5	0.5	0
R578(K1634)	60.9	1	57.7	3.2	0	57.3	3.6	0	56.4	4.5	0
R579(K1710)	54.4	1	53.5	0.9	0	53.3	1.1	0	53.3	1.1	0
R581(K1708)	54.6	1	53.7	0.9	0	53.5	1.1	0	53.3	1.3	0
R583(K1628)	65	1	65	0	0	65	0	0	65	0	0
R584(K1641)	58.4	1	57.5	0.9	0	56.9	1.5	0	56.4	2	0
R585(K1706)	55.5	1	53.9	1.6	0	53.8	1.7	0	53.6	1.9	0

Table D9: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B9

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R587(K1704)	56.8	1	54.5	2.3	0	54.3	2.5	0	54.2	2.6	0
R589(K1631)	63.6	1	63.7	-0.1	0	63.7	-0.1	0	63.7	-0.1	0
R590(K1651)	59	1	56.8	2.2	0	56.1	2.9	0	55.7	3.3	0
R591(K1666)	58.6	1	56	2.6	0	55.4	3.2	0	55	3.6	0
R592(K1682)	58.7	1	54.9	3.8	0	54.6	4.1	0	54.2	4.5	0
R593(K1691)	58.2	1	55.6	2.6	0	55.5	2.7	0	55.1	3.1	0
R594(K1698)	56.8	1	54.7	2.1	0	54.5	2.3	0	54.3	2.5	0
R597(K1636)	63.2	1	62.9	0.3	0	62.8	0.4	0	62.8	0.4	0
R598(K1694)	57.3	1	55	2.3	0	54.8	2.5	0	54.9	2.4	0
R599(K2021)	53.9	4	55	-1.1	0	55	-1.1	0	55	-1.1	0
R604(K1643)	63.5	1	63.3	0.2	0	63	0.5	0	62.5	1	0
R605(K1718)	54	2	54.7	-0.7	0	54.7	-0.7	0	54.6	-0.6	0
R607(K1717)	54	2	54.4	-0.4	0	54.3	-0.3	0	54.3	-0.3	0
R612(K1716)	54.5	1	54.9	-0.4	0	54.9	-0.4	0	54.9	-0.4	0
R637(K1617 R-60)	67.7	1	68.7	-1	0	68.6	-0.9	0	68.6	-0.9	0

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B9

Barrier B9		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	77	**Total Number of Benefited Dwelling Units**	16	**Total Number of Benefited Dwelling Units**	20	**Total Number of Benefited Dwelling Units**	21
Total Number of Impacted Dwelling Units	24	**Total Number of Benefited Impacted Dwelling Units**	14	**Total Number of Benefited Impacted Dwelling Units**	14	**Total Number of Benefited Impacted Dwelling Units**	14
Barrier Length (feet)	1,990	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	81.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	75.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	71.4%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	58.3%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	58.3%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	58.3%
		Maximum Noise Reduction dB(A)	11.1	**Maximum Noise Reduction dB(A)**	11.9	**Maximum Noise Reduction dB(A)**	12.7
		Estimated Total Barrier Cost ($)	$1,194,000	**Estimated Total Barrier Cost ($)**	$1,313,400	**Estimated Total Barrier Cost ($)**	$1,432,800
		Cost/Benefit Dwelling Unit	$74,625	**Cost/Benefit Dwelling Unit**	$65,670	**Cost/Benefit Dwelling Unit**	$68,229

Table D10: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B10

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R421(K581)	71.5	2	71.4	0.1	0	70.4	1.1	0	69.9	1.6	0
R422(K582)	72.6	1	71.8	0.8	0	70.7	1.9	0	70	2.6	0
R423(K584)	74.3	1	70.9	3.4	0	69.7	4.6	0	69.1	5.2	1
R425(K575)	70.7	1	70.7	0	0	70.2	0.5	0	69.7	1	0
R430(K574)	69.6	1	69.6	0	0	69.5	0.1	0	68.9	0.7	0
R431(K572)	69.3	6	69.3	0	0	69.3	0	0	68.9	0.4	0
R437(K571)	68.5	2	68.6	-0.1	0	68.5	0	0	68.3	0.2	0
R439(K954 R-53)	74.6	1	68.6	6	1	67	7.6	1	65.2	9.4	1
R442(K569)	67.9	1	68	-0.1	0	68	-0.1	0	67.7	0.2	0
R447(K938)	72.5	1	69.3	3.2	0	68	4.5	0	66	6.5	1
R450(K566)	68	1	68	0	0	68	0	0	67.7	0.3	0
R452(K941)	70.4	2	66.2	4.2	0	64	6.4	2	62.3	8.1	2
R454(K932)	67.3	1	62.5	4.8	0	61.2	6.1	1	59.5	7.8	1
R456(K1007)	74.5	1	72.3	2.2	0	70.6	3.9	0	69	5.5	1
R457(K860)	67.7	1	67.7	0	0	67.7	0	0	67.5	0.2	0
R461(K1006)	72.6	1	71.6	1	0	70.3	2.3	0	69.1	3.5	0
R462(K1000)	71.7	1	71	0.7	0	70.4	1.3	0	69.4	2.3	0
R463(K1004)	72	1	71.3	0.7	0	70.6	1.4	0	69.4	2.6	0
R464(K996)	71	1	70.4	0.6	0	69.9	1.1	0	69.1	1.9	0
R467(K929)	66.4	1	62.6	3.8	0	61.1	5.3	1	59.7	6.7	1
R470(K859)	67.2	1	67.2	0	0	67.2	0	0	67	0.2	0
R471(K994)	70.7	1	70.2	0.5	0	69.7	1	0	69.1	1.6	0
R475(K925)	65.4	1	61.2	4.2	0	59.9	5.5	1	58.1	7.3	1
M-27(K1007)	75.1	1	68.9	6.2	1	67.3	7.8	1	65.7	9.4	1
R478(K856)	67.1	1	67.1	0	0	67	0.1	0	66.9	0.2	0

Table D10: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B10

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R482(K792)	66.9	1	66.9	0	0	66.8	0.1	0	66.7	0.2	0
R489(K924)	64.9	1	61.1	3.8	0	60.2	4.7	0	59.1	5.8	1
R497(K790)	66.3	1	66.3	0	0	66.2	0.1	0	66.1	0.2	0
R506(K927)	65.9	1	62.4	3.5	0	61.5	4.4	0	60.4	5.5	1
R511(K789)	66	1	66.1	-0.1	0	66	0	0	65.8	0.2	0
R522(K922)	65	1	61	4	0	60.2	4.8	0	59.1	5.9	1
R529(K921)	64.9	1	60.6	4.3	0	59.8	5.1	1	58.8	6.1	1
R544(K917)	64.4	2	60.2	4.2	0	59.4	5	2	58.4	6	2
R564(K918)	63.8	2	59.3	4.5	0	58.5	5.3	2	57.6	6.2	2
R602(K849)	73.8	1	65.1	8.7	1	63.9	9.9	1	62.8	11	1
R608(K819)	71.4	1	65.3	6.1	1	63.5	7.9	1	62	9.4	1
R609(K848)	72.5	1	65.7	6.8	1	64.3	8.2	1	63.1	9.4	1
R617(K841)	71.6	1	65.7	5.9	1	64.3	7.3	1	62.9	8.7	1
R633(K843)	69.7	1	65.6	4.1	0	64.1	5.6	1	62.5	7.2	1
R636(K840)	69.3	1	65.7	3.6	0	64.1	5.2	1	62.4	6.9	1
R643(K1041)	73.6	1	65.1	8.5	1	63.6	10	1	62.4	11.2	1
R644(K1036)	72.5	1	65.6	6.9	1	64.3	8.2	1	62.7	9.8	1
R645(K1033)	68.2	2	59.9	8.3	2	58.8	9.4	2	58	10.2	2
R646(K1053)	67.6	1	58.4	9.2	1	57.6	10	1	56.8	10.8	1
R647(K1037)	69.9	2	60.5	9.4	2	59.5	10.4	2	58.7	11.2	2
R649(K1027)	67.4	2	63.6	3.8	0	62.7	4.7	0	62.3	5.1	2
R650(K1116)	68.2	5	60.5	7.7	5	60	8.2	5	59.6	8.6	5
R651(K594)	67.1	1	60.1	7	1	59.6	7.5	1	59.2	7.9	1
R652(K1023)	63.8	1	57.2	6.6	1	56.2	7.6	1	55.6	8.2	1
R653(K884)	70	1	61	9	1	60.4	9.6	1	59.8	10.2	1

Table D10: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B10

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R654(K1039)	66.1	1	61.6	4.5	0	60.9	5.2	1	60.3	5.8	1
R655(K1121 R-56)	67	1	60.3	6.7	1	59.9	7.1	1	59.5	7.5	1
R656(K882)	62.4	1	58.3	4.1	0	57.5	4.9	0	56.9	5.5	1
R657(K1123)	67	1	60.1	6.9	1	59.6	7.4	1	59.3	7.7	1
R658(K883)	65.7	1	59.7	6	1	59	6.7	1	58.2	7.5	1
M-29(K1148)	69.2	1	68.4	0.8	0	68.3	0.9	0	66.1	3.1	0
R659(K876)	65.6	1	60.7	4.9	0	59.7	5.9	1	58.8	6.8	1
R663(K598)	65.2	1	65	0.2	0	63.7	1.5	0	63.2	2	0
R664(K1125)	66.4	1	59.4	7	1	58.9	7.5	1	58.6	7.8	1
R666(K878)	65.3	1	60.6	4.7	0	59.5	5.8	1	58.7	6.6	1
R668(K595)	63.6	1	56.8	6.8	1	56.4	7.2	1	55.9	7.7	1
R669(K877)	65.1	1	60.8	4.3	0	59.8	5.3	1	58.9	6.2	1
R670(K1129)	66	1	58.8	7.2	1	58.4	7.6	1	58	8	1
R672(K600)	64.1	1	62.8	1.3	0	62.3	1.8	0	61.9	2.2	0
R673(K874)	65	1	60.9	4.1	0	60.1	4.9	0	59.2	5.8	1
R674(K1132)	65.3	1	58.1	7.2	1	57.7	7.6	1	57.3	8	1
R675(K873)	61.8	1	59.9	1.9	0	59	2.8	0	58.4	3.4	0
R676(K1117)	61.5	1	55	6.5	1	54.5	7	1	54.2	7.3	1
R677(K1150)	63.6	1	61	2.6	0	60.6	3	0	59.8	3.8	0
R678(K1136)	64.6	1	56.8	7.8	1	56.2	8.4	1	55.7	8.9	1
R679(K1152)	63	1	61.9	1.1	0	61.4	1.6	0	61.2	1.8	0
R680(K898)	66.5	2	61	5.5	2	60	6.5	2	59.1	7.4	2
R681(K1139)	64	1	55.6	8.4	1	55.1	8.9	1	54.6	9.4	1
R682(K104)	67	2	61.2	5.8	2	60	7	2	59.3	7.7	2
R683(K1120)	59.2	1	53.1	6.1	1	52.6	6.6	1	52.2	7	1

Table D10: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B10

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R684(K905)	67.4	2	61.6	5.8	2	60.5	6.9	2	59.8	7.6	2
R685(K1153)	62.7	1	61.6	1.1	0	61.4	1.3	0	61.1	1.6	0
R686(K1142)	62.9	1	54.5	8.4	1	54	8.9	1	53.5	9.4	1
R687(K908)	67.5	1	61.5	6	1	60.3	7.2	1	59.8	7.7	1
R688(K13)	60.9	1	54.5	6.4	1	54.1	6.8	1	53.7	7.2	1
R689(K1059)	66.9	1	61.2	5.7	1	59.9	7	1	59.4	7.5	1
R690(K1124)	57.2	1	52.1	5.1	1	51.6	5.6	1	51.2	6	1
R691(K1063)	66.7	1	60.2	6.5	1	59.5	7.2	1	58.9	7.8	1
R692(K1145)	61.2	1	53.9	7.3	1	53.4	7.8	1	52.9	8.3	1
R693(K1130)	56.2	1	51.7	4.5	0	51.4	4.8	0	51.2	5	1
R694(K1080)	65.9	1	59.5	6.4	1	58.9	7	1	58.4	7.5	1
R695(K1119)	58.4	1	52.2	6.2	1	51.8	6.6	1	51.4	7	1
R696(K1085)	66.2	1	59.7	6.5	1	59.1	7.1	1	58.6	7.6	1
R697(K1090)	66.3	1	59.7	6.6	1	59.2	7.1	1	58.7	7.6	1
R698(K1135)	54.9	1	51.1	3.8	0	50.8	4.1	0	50.3	4.6	0
R699(K1095)	66.1	2	59.6	6.5	2	59.1	7	2	58.6	7.5	2
R700(K1101 R-55)	65	1	58	7	1	57.6	7.4	1	57.2	7.8	1
R701(K1138)	53.6	1	50.5	3.1	0	50	3.6	0	49.6	4	0

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B10

Barrier B10		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	114	**Total Number of Benefited Dwelling Units**	52	**Total Number of Benefited Dwelling Units**	68	**Total Number of Benefited Dwelling Units**	79
Total Number of Impacted Dwelling Units	80	**Total Number of Benefited Impacted Dwelling Units**	39	**Total Number of Benefited Impacted Dwelling Units**	47	**Total Number of Benefited Impacted Dwelling Units**	53
Barrier Length (feet)	2,603	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	40.4%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	60.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	70.9%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	48.8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	58.8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	66.3%
		Maximum Noise Reduction dB(A)	9.4	**Maximum Noise Reduction dB(A)**	10.4	**Maximum Noise Reduction dB(A)**	11.2
		Estimated Total Barrier Cost ($)	$1,561,800	**Estimated Total Barrier Cost ($)**	$1,717,980	**Estimated Total Barrier Cost ($)**	$1,874,160
		Cost/Benefit Dwelling Unit	$30,035	**Cost/Benefit Dwelling Unit**	$25,264	**Cost/Benefit Dwelling Unit**	$23,724

Table D11: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B11

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
M-20(K309)	69.2	3.5	69.9	-0.7	0	69.9	-0.7	0	69.8	-0.6	0
R95(K314 R-46)	72.2	1	72.3	-0.1	0	72.3	-0.1	0	72.3	-0.1	0
R97(K115)	63.4	3.5	55.4	7.6	3.5	55.1	7.9	3.5	54.8	8.2	3.5
R100(K318)	72	1	72.1	-0.1	0	72.1	-0.1	0	72.1	-0.1	0
R108(K354)	71.8	1	71.5	0.3	0	70.5	1.3	0	69.5	2.3	0
R109(K349)	71.3	1	71.3	0	0	71.3	0	0	70.7	0.6	0
R110(K361)	70.3	1	68.9	1.4	0	67.8	2.5	0	66.8	3.5	0
R118(K335)	69.2	1	69.3	-0.1	0	69.3	-0.1	0	69.3	-0.1	0
R119(K322)	66.8	1	67.1	-0.3	0	67.1	-0.3	0	67.1	-0.3	0
R122(K365)	69.9	1	67.7	2.2	0	66.7	3.2	0	65.8	4.1	0
R124(K364)	67.9	1	66.1	1.8	0	64.4	3.5	0	62.9	5	1
R126(K370)	69.9	2	67.5	2.4	0	66.6	3.3	0	65.6	4.3	0
R129(K340)	65.3	1	65.5	-0.2	0	65.5	-0.2	0	65.5	-0.2	0
R130(K308)	65.2	2	66.1	-0.9	0	66.1	-0.9	0	66.1	-0.9	0
R131(K299)	65.9	1	66.7	-0.8	0	66.7	-0.8	0	66.7	-0.8	0
R134(K313)	64.7	1	65.4	-0.7	0	65.4	-0.7	0	65.4	-0.7	0
R135(K346)	66.1	1	66.1	0	0	66.1	0	0	66.1	0	0
R136(K326)	64.3	0	64.9	-0.6	0	64.9	-0.6	0	64.9	-0.6	0
R139(K409 R-47)	71.9	15	63.1	8.8	15	62.5	9.4	15	61.8	10.1	15
R140(K352)	65.6	1	65.7	-0.1	0	65.7	-0.1	0	65.7	-0.1	0
R141(K317)	64	1	64.8	-0.8	0	64.8	-0.8	0	64.8	-0.8	0
R142(K368)	67.3	1	67.3	0	0	67.3	0	0	66.4	0.9	0
R148(K360)	64.7	1	64.7	0	0	64.7	0	0	64.7	0	0
R150(K353)	60.6	2	60.8	-0.2	0	60.8	-0.2	0	60.8	-0.2	0

Table D11: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B11

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R151(K337)	56.1	3	56.1	0	0	56.1	0	0	56.1	0	0
R152(K373)	68.6	1	68.6	0	0	68	0.6	0	67.2	1.4	0
R153(K379)	69.1	1	69.1	0	0	68	1.1	0	67.1	2	0
R154(K358)	59.2	2	59.2	0	0	59.2	0	0	59.2	0	0
R155(K362)	61.3	1	61.3	0	0	61.3	0	0	61.2	0.1	0
R156(K344)	61.6	1	61.8	-0.2	0	61.8	-0.2	0	61.8	-0.2	0
R157(K347)	62	1	62.3	-0.3	0	62.3	-0.3	0	62.3	-0.3	0
R158(K367)	60	1	60.2	-0.2	0	60.2	-0.2	0	60.2	-0.2	0
R159(K401)	66	1	65.3	0.7	0	64.6	1.4	0	64.1	1.9	0
R160(K382)	69.6	1	69	0.6	0	68.1	1.5	0	67.4	2.2	0
R162(K386)	70.1	1	69	1.1	0	68.2	1.9	0	67.4	2.7	0
R164(K332)	61.9	0	62.6	-0.7	0	62.6	-0.7	0	62.6	-0.7	0
R168(K396)	69.6	1	68.2	1.4	0	67.5	2.1	0	66.6	3	0
R169(K388)	69.9	1	68.7	1.2	0	67.9	2	0	67	2.9	0
R171(K402)	65.7	1	65	0.7	0	64.5	1.2	0	64	1.7	0
R178(K371)	56.4	1	56.4	0	0	56.4	0	0	56.2	0.2	0
R181(K381)	55.9	2	56.1	-0.2	0	55.5	0.4	0	55.3	0.6	0
R182(K378)	54.4	1	54.4	0	0	54.4	0	0	54.5	-0.1	0
R183(K384)	62.1	1	62.1	0	0	61.9	0.2	0	61.8	0.3	0
R184(K389)	62.1	1	62.1	0	0	62.1	0	0	62.1	0	0
R186(K369)	59.5	1	59.7	-0.2	0	59.7	-0.2	0	59.7	-0.2	0
R192(K427)	67	1	66.8	0.2	0	66.5	0.5	0	66.2	0.8	0
R193(K387)	60.3	2	60.4	-0.1	0	60.4	-0.1	0	60.4	-0.1	0
R196(K400)	64.4	4	64.5	-0.1	0	64.3	0.1	0	64.2	0.2	0
R197(K380)	58.3	2	58.4	-0.1	0	58.4	-0.1	0	58.4	-0.1	0

Table D11: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B11

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R199(K397)	60.5	1	60.6	-0.1	0	60.6	-0.1	0	60.5	0	0
R200(K432)	67.5	1	67.2	0.3	0	67	0.5	0	66.7	0.8	0
R201(K383)	57.9	2	58	-0.1	0	58	-0.1	0	58	-0.1	0
R202(K413)	63.5	2	63.8	-0.3	0	63.8	-0.3	0	63.5	0	0
R206(K445)	67.1	4	66.9	0.2	0	66.8	0.3	0	66.6	0.5	0
R207(K420)	63.6	2	63.9	-0.3	0	63.8	-0.2	0	63.5	0.1	0
R210(K425)	61.4	1	61.7	-0.3	0	61.7	-0.3	0	61.7	-0.3	0
R212(K454)	66.8	4	66.6	0.2	0	66.5	0.3	0	66.3	0.5	0
R214(K435)	60.6	1	60.9	-0.3	0	60.9	-0.3	0	60.9	-0.3	0
R216(K422)	60.3	1	60.4	-0.1	0	60.4	-0.1	0	60.1	0.2	0
R218(K461)	67	1	67	0	0	66.9	0.1	0	66.8	0.2	0
R222(K439)	58.3	4	58.3	0	0	58.3	0	0	58.3	0	0
R223(K444)	59.9	1	59.9	0	0	59.9	0	0	59.9	0	0
R225(K412)	52.1	1	54.9	-2.8	0	54.9	-2.8	0	54.9	-2.8	0
R226(K447)	60.4	1	60.4	0	0	60.4	0	0	60.4	0	0
R228(K419)	48.2	1	53	-4.8	0	53	-4.8	0	53	-4.8	0
R229(K430)	52.7	1	52.7	0	0	52.7	0	0	52.8	-0.1	0
R97a(K115)	73.2	3.5	70.9	2.3	0	69.7	3.5	0	68.9	4.3	0
R97b(K115)	71.1	3.5	65.7	5.4	3.5	64.8	6.3	3.5	63.9	7.2	3.5
R97c(K115)	70.3	3.5	61.2	9.1	3.5	60.5	9.8	3.5	60	10.3	3.5
R97d(K115)	67.7	3.5	58.3	9.4	3.5	58.1	9.6	3.5	57.8	9.9	3.5
R97e(K115)	67.5	3.5	58	9.5	3.5	57.7	9.8	3.5	57.5	10	3.5
R97f(K115)	68.4	3.5	58.5	9.9	3.5	58.1	10.3	3.5	57.8	10.6	3.5
R97g(K115)	71.2	3.5	66.5	4.7	0	64.8	6.4	3.5	63.2	8	3.5
R97h(K115)	70.9	3.5	67.5	3.4	0	66.3	4.6	0	65.1	5.8	3.5

Table D11: Alternative E Individual Property Noise Abatement Analysis Findings Barrier B11

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R97i(K115)	68.5	3.5	69.3	-0.8	0	69.3	-0.8	0	69.2	-0.7	0
R97j(K115)	69.2	3.5	69.3	-0.1	0	69.2	0	0	68.8	0.4	0
R97k(K115)	68.6	3.5	64.9	3.7	0	64.3	4.3	0	63.8	4.8	0
R97l(K115)	68	3.5	64.8	3.2	0	64.3	3.7	0	63.7	4.3	0
R97m(K115)	68.5	3.5	59	9.5	3.5	58.7	9.8	3.5	58.3	10.2	3.5
R97n(K115)	69.2	3.5	58.2	11	3.5	57.8	11.4	3.5	57.5	11.7	3.5
R97o(K115)	75.1	3.5	75.1	0	0	75.1	0	0	75.1	0	0

Summary - Alternative E Individual Property Noise Abatement Analysis Findings Barrier B11

Barrier B11		18 feet High Barrier		20 feet High Barrier		22 feet High Barrier	
Total Number of Dwelling Units behind Barrier	160	Total Number of Benefited Dwelling Units	43	Total Number of Benefited Dwelling Units	47	Total Number of Benefited Dwelling Units	51
Total Number of Impacted Dwelling Units	105	Total Number of Benefited Impacted Dwelling Units	40	Total Number of Benefited Impacted Dwelling Units	43	Total Number of Benefited Impacted Dwelling Units	49
Barrier Length (feet)	1,473	% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction	91.9%	% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction	84.1%	% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction	91.2%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	37.6%	% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	42.9%	% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	47.0%
		Maximum Noise Reduction dB(A)	11.0	Maximum Noise Reduction dB(A)	11.4	Maximum Noise Reduction dB(A)	11.7
		Estimated Total Barrier Cost ($)	$795,420	Estimated Total Barrier Cost ($)	$883,800	Estimated Total Barrier Cost ($)	$972,180
		Cost/Benefit Dwelling Unit	$18,498	Cost/Benefit Dwelling Unit	$18,804	Cost/Benefit Dwelling Unit	$19,062

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Appendix E

FHWA TNM Version 2.5 Determined Noise Reduction Levels Achieved For Proposed Noise Barriers Located in Kentucky for Alternative I

Table Number	Table Name	Page Number
E1	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B12	E-1
E2	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B13	E-5
E3	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B14	E-8
E4	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B15	E-11
E5	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B16	E-16
E6	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B17	E-18
E7	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B18	E-20
E8	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B19	E-24
E9	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B20	E-28
E10	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B21	E-32
E11	Alternative I Individual Property Noise Abatement Analysis Findings Barrier B22	E-37

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Table E1: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B12

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R69(K407)	70.1	4	67.5	2.6	0	67.4	2.7	0	67	3.1	0
R71(K440)	69.7	1	68.6	1.1	0	68.4	1.3	0	68.1	1.6	0
R72(K18)	70	1	68.7	1.3	0	68.4	1.6	0	68.1	1.9	0
R74(K456)	69.7	1	68.7	1	0	68.5	1.2	0	68.3	1.4	0
R76(K418)	71.6	4	66.3	5.3	4	65.8	5.8	4	65.4	6.2	4
R77(KV418)	74.3	1	72.9	1.4	0	72.6	1.7	0	72.3	2	0
R78(K470)	68.6	1	68	0.6	0	67.9	0.7	0	67.7	0.9	0
R80(KV460)	73.7	1	73	0.7	0	72.6	1.1	0	72.1	1.6	0
R81(K485)	68	1	67.5	0.5	0	67.2	0.8	0	66.9	1.1	0
R82(KV460)	73.3	1	72.7	0.6	0	72.2	1.1	0	71.8	1.5	0
R83(K513)	66.3	1	65.7	0.6	0	65.5	0.8	0	65.3	1	0
R85(K494)	67.5	1	66.8	0.7	0	66.4	1.1	0	65.9	1.6	0
R86(K460)	68.7	1	67.4	1.3	0	66.3	2.4	0	65.4	3.3	0
R87(K467)	67	1	65.9	1.1	0	64.9	2.1	0	64	3	0
R88(K474)	63.5	1	64.8	-1.3	0	63.8	-0.3	0	62.9	0.6	0
R90(K532)	68.4	1	67.8	0.6	0	67.3	1.1	0	67	1.4	0
R91(K488)	64.1	1	64.2	-0.1	0	63.6	0.5	0	63.3	0.8	0
R92(K518)	70	1	68.3	1.7	0	67.7	2.3	0	67.2	2.8	0
R96(K526)	66.7	1	62.7	4	0	62.2	4.5	0	61.8	4.9	0
R98(K480)	76.4	1	70.5	5.9	1	69.6	6.8	1	68	8.4	1
M-22(K484)	76.3	1	71.6	4.7	0	70.6	5.7	1	68.9	7.4	1
R101(K492)	76.1	1	71.4	4.7	0	69.8	6.3	1	68.2	7.9	1
R102(K15)	75	1	67.8	7.2	1	65.9	9.1	1	64.6	10.4	1
R103(K1771)	67.5	1	66.9	0.6	0	66.6	0.9	0	66.5	1	0
R104(K1832)	67.3	1	66.9	0.4	0	66.7	0.6	0	66.6	0.7	0

Table E1: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B12

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R105(K524)	75	2	67.4	7.6	2	65.7	9.3	2	64.6	10.4	2
R106(KV492)	75.9	1	74.1	1.8	0	73.2	2.7	0	72.3	3.6	0
R107(K541)	66.7	1	64.3	2.4	0	63.6	3.1	0	63	3.7	0
R111(K527)	74.9	1	65.6	9.3	1	64.6	10.3	1	63.8	11.1	1
R112(K1841)	67.5	1	67.1	0.4	0	66.9	0.6	0	66.6	0.9	0
R113(K548)	69.3	1	64.4	4.9	0	63.6	5.7	1	63.2	6.1	1
R114(K1846)	67.7	1	67.1	0.6	0	67	0.7	0	66.7	1	0
R115(KV536)	74.8	1	72.8	2	0	72	2.8	0	71.2	3.6	0
R116(K1816)	68.8	1	67.6	1.2	0	67.3	1.5	0	67.1	1.7	0
R117(KV1846)	68.7	1	68.1	0.6	0	67.9	0.8	0	67.6	1.1	0
R120(KV1795)	72.7	1	70.7	2	0	70.2	2.5	0	69.4	3.3	0
R123(K536)	74.9	2	64.6	10.3	2	63.9	11	2	63.3	11.6	2
R125(K1795)	68	1	67.1	0.9	0	66.8	1.2	0	66.7	1.3	0
R127(K1800)	70	1	67.5	2.5	0	67.4	2.6	0	67.1	2.9	0
R128(K1877)	68.1	1	67.3	0.8	0	67.1	1	0	66.9	1.2	0
R132(K545)	75.2	1	64.2	11	1	63.7	11.5	1	62.9	12.3	1
R133(K1811)	66.6	1	63.5	3.1	0	63.4	3.2	0	63.1	3.5	0
R138(K552)	75.5	1	65	10.5	1	64.4	11.1	1	63.8	11.7	1
R143(K562)	75.6	1	65.4	10.2	1	64.9	10.7	1	64.3	11.3	1
R144(K1784)	75.7	1	66.1	9.6	1	65.4	10.3	1	64.9	10.8	1
R146(K1772)	66	1	63.7	2.3	0	63.5	2.5	0	63.5	2.5	0
R147(KV1801)	74	1	71	3	0	70.1	3.9	0	69.3	4.7	0
R149(K1790 R-48)	75.8	1	66.9	8.9	1	66.1	9.7	1	65.7	10.1	1
R161(K1777)	63.2	1	62.2	1	0	62.1	1.1	0	61.9	1.3	0
R163(K1801)	75.3	1	65.8	9.5	1	65	10.3	1	64	11.3	1

Table E1: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B12

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R165(K1885)	66.8	0	66.7	0.1	0	66.7	0.1	0	66.7	0.1	0
R166(K1828)	63.3	1	62.3	1	0	62.2	1.1	0	62	1.3	0
R167(K1883)	66.6	0	66.4	0.2	0	66.4	0.2	0	66.4	0.2	0
R170(K1812)	74.6	1	65.6	9	1	64.7	9.9	1	63.9	10.7	1
R172(K1839)	63.1	1	62.1	1	0	61.9	1.2	0	61.7	1.4	0
R173(K1882)	66.7	0	66.4	0.3	0	66.4	0.3	0	66.4	0.3	0
R174(K1765)	67.7	0	67.4	0.3	0	67.4	0.3	0	67.4	0.3	0
R176(K1759)	66.1	0	66.8	-0.7	0	66.8	-0.7	0	66.7	-0.6	0
R177(K1770)	74	1	65.6	8.4	1	64.9	9.1	1	64.1	9.9	1
R179(K1879)	67.1	0	66.9	0.2	0	66.5	0.6	0	66.4	0.7	0
R185(K1820)	73.1	1	64.8	8.3	1	64.2	8.9	1	64	9.1	1
R187(K1755)	65.6	1	66.3	-0.7	0	66.2	-0.6	0	66.2	-0.6	0
R189(K1873)	66.3	1	66.3	0	0	66.2	0.1	0	66.2	0.1	0
R190(K1834)	72.5	1	65.3	7.2	1	65	7.5	1	64.9	7.6	1
R191(K1871)	66.6	1	66.7	-0.1	0	66.7	-0.1	0	66.6	0	0
R194(K1864)	66.6	1	67.2	-0.6	0	67.2	-0.6	0	67.2	-0.6	0
R195(K1844)	71.1	1	65.3	5.8	1	65.2	5.9	1	65.2	5.9	1
R198(K1850)	71.1	1	66.8	4.3	0	66.8	4.3	0	66.8	4.3	0
R205(K1861)	71	2	68.1	2.9	0	68.1	2.9	0	68.1	2.9	0
R272(K722)	69.3	1	71.1	-1.8	0	71.1	-1.8	0	71.1	-1.8	0
R273(K729)	68.3	3	70.8	-2.5	0	70.8	-2.5	0	70.8	-2.5	0

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B12

Barrier B12		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	76	**Total Number of Benefited Dwelling Units**	22	**Total Number of Benefited Dwelling Units**	25	**Total Number of Benefited Dwelling Units**	25
Total Number of Impacted Dwelling Units	65	**Total Number of Benefited Impacted Dwelling Units**	22	**Total Number of Benefited Impacted Dwelling Units**	25	**Total Number of Benefited Impacted Dwelling Units**	25
Barrier Length (feet)	1,151	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	72.7%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	64.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	76.0%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	33.8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	38.5%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	38.5%
		Maximum Noise Reduction dB(A)	11.0	**Maximum Noise Reduction dB(A)**	11.5	**Maximum Noise Reduction dB(A)**	12.3
		Estimated Total Barrier Cost ($)	$690,600	**Estimated Total Barrier Cost ($)**	$759,660	**Estimated Total Barrier Cost ($)**	$828,720
		Cost/Benefit Dwelling Unit	$31,391	**Cost/Benefit Dwelling Unit**	$30,386	**Cost/Benefit Dwelling Unit**	$33,149

Table E2: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B13

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R175(K1915)	68.3	1	69.4	-1.1	0	69.1	-0.8	0	68.8	-0.5	0
R180(K1909)	68.9	1	69.4	-0.5	0	69	-0.1	0	68.8	0.1	0
R188(K1903)	63.4	1	65.6	-2.2	0	65.5	-2.1	0	65.3	-1.9	0
R203(K1913)	58.4	1	60.6	-2.2	0	60.5	-2.1	0	60.3	-1.9	0
R204(K1891)	67.7	1	68	-0.3	0	67.6	0.1	0	67.3	0.4	0
R208(K1764)	68.6	20	68.5	0.1	0	68.4	0.2	0	68.4	0.2	0
R209(K1897)	65.5	1	65.4	0.1	0	65	0.5	0	64.6	0.9	0
R211(K1761)	71.6	1	69.3	2.3	0	69.3	2.3	0	69.2	2.4	0
R213(K1905)	66.3	1	64.8	1.5	0	64.1	2.2	0	63.6	2.7	0
R215(K1926)	61.6	3	60.4	1.2	0	59.8	1.8	0	58.5	3.1	0
R217(K1932)	59	1	58.9	0.1	0	58.8	0.2	0	58.3	0.7	0
R219(K1910)	66.7	1	63.7	3	0	63.2	3.5	0	62.6	4.1	0
R221(K1938)	63	1	62	1	0	61.4	1.6	0	60.6	2.4	0
R224(K1919)	68	2	65.6	2.4	0	64.7	3.3	0	64.2	3.8	0
R227(K1944)	62.9	1	61.4	1.5	0	60.6	2.3	0	59.3	3.6	0
R230(K1927)	68.1	2	65.6	2.5	0	64.8	3.3	0	64.3	3.8	0
R231(K626)	60.5	3	60.6	-0.1	0	60.3	0.2	0	60	0.5	0
R236(K1937)	68	1	65.7	2.3	0	64.9	3.1	0	64.4	3.6	0
R237(K620)	65.8	1	64.7	1.1	0	64.2	1.6	0	63.3	2.5	0
R239(K649)	52.1	0	53.2	-1.1	0	53.2	-1.1	0	53.1	-1	0
R240(K1954)	65.4	1	62.6	2.8	0	61.8	3.6	0	61.4	4	0
R242(K644)	52	0	53.2	-1.2	0	53.2	-1.2	0	53.2	-1.2	0
R243(K1948)	68	1	63	5	1	62	6	1	61.4	6.6	1
R246(K1963)	64.6	1	62	2.6	0	61.5	3.1	0	61.2	3.4	0
R247(K643)	51.9	0	53.1	-1.2	0	53.1	-1.2	0	53.1	-1.2	0

Table E2: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B13

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R249(K1947)	69.3	3	62	7.3	3	61.1	8.2	3	60.7	8.6	3
R250(K642)	54.3	0	55.2	-0.9	0	55.1	-0.8	0	55.1	-0.8	0
R251(K1966)	61.8	0	59.2	2.6	0	58.6	3.2	0	57.4	4.4	0
R256(K641)	57.2	0	57.3	-0.1	0	57	0.2	0	56.8	0.4	0
R258(K614)	68.4	1	65.1	3.3	0	63.9	4.5	0	62.9	5.5	1
R259(K639)	65	0	64.2	0.8	0	63.7	1.3	0	62.9	2.1	0
R262(K613)	69.1	1	65.3	3.8	0	64.2	4.9	0	62.6	6.5	1
R266(K610)	69.4	1	65	4.4	0	63.8	5.6	1	61.5	7.9	1
R267(K608)	70.2	1	65.1	5.1	1	63.1	7.1	1	62.2	8	1
R269(K607)	71	1	66.3	4.7	0	64.4	6.6	1	64	7	1
R270(K606 R-50)	71.6	1	64.9	6.7	1	64.3	7.3	1	64	7.6	1
R272(K722)	69.3	1	71.4	-2.1	0	71.4	-2.1	0	71.3	-2	0
R273(K729)	68.3	3	71.1	-2.8	0	71	-2.7	0	71	-2.7	0

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B13

Barrier B13		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	60	**Total Number of Benefited Dwelling Units**	6	**Total Number of Benefited Dwelling Units**	8	**Total Number of Benefited Dwelling Units**	10
Total Number of Impacted Dwelling Units	44	**Total Number of Benefited Impacted Dwelling Units**	3	**Total Number of Benefited Impacted Dwelling Units**	5	**Total Number of Benefited Impacted Dwelling Units**	7
Barrier Length (feet)	606	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	50.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	62.5%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	70.0%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	6.8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	11.4%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	15.9%
		Maximum Noise Reduction dB(A)	7.3	**Maximum Noise Reduction dB(A)**	8.2	**Maximum Noise Reduction dB(A)**	8.6
		Estimated Total Barrier Cost ($)	$363,600	**Estimated Total Barrier Cost ($)**	$399,960	**Estimated Total Barrier Cost ($)**	$436,320
		Cost/Benefit Dwelling Unit	$60,600	**Cost/Benefit Dwelling Unit**	$49,995	**Cost/Benefit Dwelling Unit**	$43,632

Table E3: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B14

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R272(K722)	69.3	0	68.8	0.5	0	68.8	0.5	0	68.8	0.5	0
R273(K729)	68.3	0	67.9	0.4	0	67.9	0.4	0	67.9	0.4	0
R275(K720)	66.4	0	65.9	0.5	0	65.9	0.5	0	65.9	0.5	0
R277(K680)	72.5	25	72.2	0.3	0	72.2	0.3	0	72.2	0.3	0
M-24(K655)	73.3	1	72.2	1.1	0	72.2	1.1	0	72.1	1.2	0
R282(K730)	59	0	59.2	-0.2	0	58	1	0	57.6	1.4	0
R283(K735)	58.3	0	58.5	-0.2	0	57.2	1.1	0	56.9	1.4	0
R285(K755)	58.1	0	58.3	-0.2	0	57.3	0.8	0	57	1.1	0
R287(K645)	73.5	1	71.8	1.7	0	71.7	1.8	0	71.7	1.8	0
R288(K715)	64.8	1	61.7	3.1	0	61.3	3.5	0	59.7	5.1	1
R293(K699)	66.3	1	64.4	1.9	0	64.2	2.1	0	63.5	2.8	0
R295(K791)	60	1	60	0	0	60	0	0	60	0	0
R297(K909)	60.6	5	60.7	-0.1	0	60.7	-0.1	0	60.1	0.5	0
R298(K784)	60	1	60	0	0	60	0	0	59.9	0.1	0
R300(K775)	53.2	1	53.2	0	0	53.2	0	0	53.2	0	0
R301(K782)	57.2	1	57.2	0	0	57.2	0	0	57.2	0	0
R302(K966)	48.8	0	48.7	0.1	0	48.7	0.1	0	48.7	0.1	0
R303(K687)	72.9	1	69	3.9	0	67.6	5.3	1	67.2	5.7	1
R304(K963)	59.3	0	59.5	-0.2	0	59.5	-0.2	0	58.8	0.5	0
R307(K759)	54.8	1	54.8	0	0	54.8	0	0	54.8	0	0
R308(K682)	74.2	1	65.4	8.8	1	64	10.2	1	63	11.2	1
R309(K779)	62.2	3	62.3	-0.1	0	61.8	0.4	0	61.1	1.1	0
R311(K692)	69.2	1	68.6	0.6	0	67.4	1.8	0	66.8	2.4	0
R312(K950)	59.7	0	59.9	-0.2	0	59.8	-0.1	0	58.9	0.8	0
R315(K942)	60	0	60.1	-0.1	0	60	0	0	59	1	0

Table E3: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B14

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R316(K935)	60.4	0	60.6	-0.2	0	60.3	0.1	0	59.6	0.8	0
R317(K923)	60.1	0	60.3	-0.2	0	59.3	0.8	0	58.5	1.6	0
R318(K926)	59.9	0	60.2	-0.3	0	59.5	0.4	0	58.8	1.1	0
R319(K737)	65.4	1	65.3	0.1	0	65	0.4	0	64.7	0.7	0
R320(K756)	64.7	1	64.7	0	0	64.6	0.1	0	63.8	0.9	0
R321(K916)	59.7	0	60	-0.3	0	59	0.7	0	58.3	1.4	0
R323(K733)	64.6	1	64.7	-0.1	0	64.5	0.1	0	64.3	0.3	0
R324(K745)	66.9	1	67.2	-0.3	0	65.9	1	0	65.2	1.7	0
R326(K915)	60.4	1	60.6	-0.2	0	60	0.4	0	59.2	1.2	0
R329(K736)	69.5	1	68.7	0.8	0	67.5	2	0	66	3.5	0
R331(K717)	68.6	1	67.3	1.3	0	66.5	2.1	0	64.8	3.8	0
R332(K910)	60.8	1	60.5	0.3	0	60	0.8	0	59.3	1.5	0
R337(K587)	61.2	1	60.6	0.6	0	60.2	1	0	59.2	2	0
R338(K718)	70.2	1	66.3	3.9	0	65.1	5.1	1	63.8	6.4	1
R339(K583)	61.1	1	60.4	0.7	0	59.9	1.2	0	58.9	2.2	0
R340(K576)	62.3	1	61.4	0.9	0	60.9	1.4	0	59.9	2.4	0
R341(K568)	64.3	1	62.6	1.7	0	61.6	2.7	0	60.5	3.8	0
R342(K573)	62.5	1	61.2	1.3	0	60.5	2	0	59.7	2.8	0
R343(K785)	68.1	2	64.4	3.7	0	62.7	5.4	2	61.1	7	2
R345(K857)	63.5	1	60.8	2.7	0	60.7	2.8	0	58.3	5.2	1
R349(K714)	72.9	2	65.1	7.8	2	64.7	8.2	2	63.8	9.1	2
R355(K783)	69.1	1	61.6	7.5	1	61	8.1	1	60.4	8.7	1
R361(K773)	69.9	1	61.6	8.3	1	61.3	8.6	1	61.1	8.8	1

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B14

Barrier B14		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	66	**Total Number of Benefited Dwelling Units**	5	**Total Number of Benefited Dwelling Units**	9	**Total Number of Benefited Dwelling Units**	11
Total Number of Impacted Dwelling Units	41	**Total Number of Benefited Impacted Dwelling Units**	5	**Total Number of Benefited Impacted Dwelling Units**	9	**Total Number of Benefited Impacted Dwelling Units**	9
Barrier Length (feet)	504	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	100.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	55.6%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	45.5%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	12.2%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	22.0%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	22.0%
		Maximum Noise Reduction dB(A)	8.8	**Maximum Noise Reduction dB(A)**	10.2	**Maximum Noise Reduction dB(A)**	11.2
		Estimated Total Barrier Cost ($)	$302,400	**Estimated Total Barrier Cost ($)**	$332,640	**Estimated Total Barrier Cost ($)**	$362,880
		Cost/Benefit Dwelling Unit	$60,480	**Cost/Benefit Dwelling Unit**	$36,960	**Cost/Benefit Dwelling Unit**	$32,989

Table E4: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B15

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R386(K988)	50.5	0	50.5	0	0	50.5	0	0	50.5	0	0
R387(K978)	50.8	0	50.8	0	0	50.8	0	0	50.8	0	0
R388(K997)	52.7	0	52.6	0.1	0	52.6	0.1	0	52.6	0.1	0
R389(K987)	58.4	0	58.5	-0.1	0	58.5	-0.1	0	58.5	-0.1	0
R390(K995)	57.6	0	57.7	-0.1	0	57.7	-0.1	0	57.7	-0.1	0
R391(K980)	59.4	0	59.4	0	0	59.4	0	0	59.3	0.1	0
R392(K1012)	57.1	0	57.2	-0.1	0	57.2	-0.1	0	57.2	-0.1	0
R393(K811)	59.8	0	59.8	0	0	59.8	0	0	59.8	0	0
R394(K959)	63	1	63.1	-0.1	0	63.1	-0.1	0	62.8	0.2	0
R395(K971)	61.9	1	62	-0.1	0	62	-0.1	0	62	-0.1	0
R396(KV811)	67.7	0	67.6	0.1	0	67.6	0.1	0	67.5	0.2	0
R397(K802)	64	0	64	0	0	64	0	0	64	0	0
R398(K804)	62.2	0	62.2	0	0	62.2	0	0	62.2	0	0
R399(K961)	65.5	1	65.5	0	0	65.5	0	0	65.4	0.1	0
R400(K949)	68.5	1	68.6	-0.1	0	68.6	-0.1	0	68.5	0	0
R401(K798)	64.1	0	64.1	0	0	64.1	0	0	64.1	0	0
R402(K796)	64.2	0	64.2	0	0	64.2	0	0	64.2	0	0
R403(K931)	70.6	1	70.6	0	0	70.4	0.2	0	68.9	1.7	0
R404(K1019)	63.3	2	63.4	-0.1	0	63.4	-0.1	0	63.4	-0.1	0
R405(K1016)	63.3	2	63.3	0	0	63.3	0	0	63.3	0	0
R406(K928)	71.8	1	71.7	0.1	0	71.4	0.4	0	69.8	2	0
R407(K1013)	62.8	2	62.8	0	0	62.8	0	0	62.8	0	0
R408(K834)	63.4	1	63.7	-0.3	0	63.2	0.2	0	62.4	1	0
R409(K1010)	63.8	2	63.9	-0.1	0	63.9	-0.1	0	63.9	-0.1	0
R410(K1009)	64.9	2	65	-0.1	0	65	-0.1	0	65	-0.1	0

Table E4: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B15

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R411(K989)	68.2	1	68.2	0	0	68.2	0	0	68.2	0	0
R413(K833)	64.2	2	64.6	-0.4	0	63.9	0.3	0	63.1	1.1	0
R414(K1005)	70.4	1	70.4	0	0	70.4	0	0	70.4	0	0
R415(K829)	65.9	1	65.9	0	0	65.1	0.8	0	64.4	1.5	0
R416(K1032)	57.2	1	56.9	0.3	0	56.6	0.6	0	55.8	1.4	0
R417(K999)	73.7	1	73.7	0	0	73.6	0.1	0	73.2	0.5	0
R418(K847)	64.1	1	64.5	-0.4	0	64.1	0	0	63.4	0.7	0
R419(K828)	66.4	1	66.3	0.1	0	65.7	0.7	0	64.8	1.6	0
R420(K1038)	57.2	1	56.7	0.5	0	56.5	0.7	0	55.7	1.5	0
R424(K825)	66.7	1	66.6	0.1	0	66.1	0.6	0	65.2	1.5	0
R426(K824)	67.4	1	67.5	-0.1	0	66.9	0.5	0	66.3	1.1	0
R427(K821)	67.5	1	67.6	-0.1	0	67.1	0.4	0	66.3	1.2	0
R428(K1048)	58.6	1	58.4	0.2	0	58.2	0.4	0	57.2	1.4	0
R429(K850)	67.7	1	67.5	0.2	0	66.9	0.8	0	66.3	1.4	0
R432(K1054)	60.4	1	60.7	-0.3	0	60.4	0	0	59.8	0.6	0
R433(K1020)	68.2	2	67.7	0.5	0	67.1	1.1	0	66.3	1.9	0
R434(K817)	68.4	1	68.6	-0.2	0	68.1	0.3	0	67	1.4	0
R435(K864)	63.6	1	64	-0.4	0	63.9	-0.3	0	63.6	0	0
R436(K1026)	68.8	1	68.2	0.6	0	67.5	1.3	0	66.6	2.2	0
R438(K812)	68	1	68.2	-0.2	0	67.5	0.5	0	66.3	1.7	0
R440(K813)	68.5	1	68.8	-0.3	0	68.1	0.4	0	66.4	2.1	0
R441(K1030)	68.9	1	68.1	0.8	0	67.4	1.5	0	66.4	2.5	0
R443(K806)	71.8	1	71.9	-0.1	0	71.1	0.7	0	69.7	2.1	0
R444(K814)	71.4	1	71.8	-0.4	0	71.3	0.1	0	70.3	1.1	0
R445(K1035)	68.9	2	68.1	0.8	0	67.4	1.5	0	66.3	2.6	0

Table E4: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B15

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R446(K803)	72.1	1	72.2	-0.1	0	71	1.1	0	69.5	2.6	0
R448(K799)	72.5	1	72.1	0.4	0	70.6	1.9	0	69	3.5	0
R449(K872)	61.7	1	61.5	0.2	0	61.3	0.4	0	61.1	0.6	0
R451(KV903)	70.1	1	69.8	0.3	0	69.6	0.5	0	69.5	0.6	0
R453(K797)	73.9	1	73.2	0.7	0	71.8	2.1	0	70.2	3.7	0
R455(K1017)	74.6	1	73.7	0.9	0	72.5	2.1	0	71.1	3.5	0
R458(K875)	61.4	1	60.7	0.7	0	59.6	1.8	0	59.1	2.3	0
R459(K1043)	69	2	67.9	1.1	0	67.3	1.7	0	66.3	2.7	0
R466(K1050)	69.1	2	68	1.1	0	67.3	1.8	0	66.4	2.7	0
R472(KV903)	70.6	1	70.2	0.4	0	70.1	0.5	0	69.9	0.7	0
R480(K861)	69.5	2	68.6	0.9	0	67.8	1.7	0	67	2.5	0
R485(KV1061)	70.8	1	70.4	0.4	0	70.3	0.5	0	70.2	0.6	0
R488(K863)	69.7	1	69.4	0.3	0	68.7	1	0	67.9	1.8	0
R498(K869)	69.7	2	69.4	0.3	0	68.6	1.1	0	67.9	1.8	0
R513(K899)	63.2	1	62.3	0.9	0	61.9	1.3	0	61.4	1.8	0
R521(KV1061)	71.3	1	70.9	0.4	0	70.8	0.5	0	70.6	0.7	0
R524(K881)	65.4	1	65.9	-0.5	0	65.5	-0.1	0	65.2	0.2	0
R528(K903)	63.7	1	61.6	2.1	0	60.7	3	0	59.8	3.9	0
R534(K879)	70.4	1	70.8	-0.4	0	69.8	0.6	0	68.8	1.6	0
M-28(K879)	75.3	1	75.8	-0.5	0	75.7	-0.4	0	75.4	-0.1	0
R543(K886)	69.7	2	68.3	1.4	0	67.3	2.4	0	66.3	3.4	0
R549(KV1077)	71.8	1	71.3	0.5	0	71.2	0.6	0	71	0.8	0
R574(K891)	72.3	1	71.8	0.5	0	71.1	1.2	0	69.9	2.4	0
R582(K1061)	64.3	1	62	2.3	0	60.9	3.4	0	60.1	4.2	0
R588(KV1089)	72.4	1	72	0.4	0	71.9	0.5	0	71.7	0.7	0

Table E4: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B15

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R603(K904)	73.2	1	71.9	1.3	0	70.9	2.3	0	69.7	3.5	0
R622(K907)	73.5	1	71.5	2	0	70.2	3.3	0	68.7	4.8	0
R628(K1077)	68.3	1	65	3.3	0	63.3	5	1	62.5	5.8	1
R630(K1058)	74	1	71.5	2.5	0	70.1	3.9	0	68.5	5.5	1
R632(K1079)	70.1	1	66.4	3.7	0	64.7	5.4	1	63.6	6.5	1
R635(K1062)	74.4	1	71.6	2.8	0	70.4	4	0	68.7	5.7	1
R638(K1065)	75	1	72.2	2.8	0	70.7	4.3	0	69.3	5.7	1
R639(K1089)	73.1	1	69.1	4	0	67.6	5.5	1	66.6	6.5	1
R640(K1069)	75.4	1	72.7	2.7	0	71.2	4.2	0	69.4	6	1
R642(K1075 R-54)	76.1	1	73.5	2.6	0	71.9	4.2	0	70.3	5.8	1

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B15

Barrier B15		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	85	**Total Number of Benefited Dwelling Units**	0	**Total Number of Benefited Dwelling Units**	3	**Total Number of Benefited Dwelling Units**	8
Total Number of Impacted Dwelling Units	58	**Total Number of Benefited Impacted Dwelling Units**	0	**Total Number of Benefited Impacted Dwelling Units**	3	**Total Number of Benefited Impacted Dwelling Units**	8
Barrier Length (feet)	1,407	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	0.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	0.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	0.0%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	0.0%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	5.2%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	13.8%
		Maximum Noise Reduction dB(A)	4	**Maximum Noise Reduction dB(A)**	5.5	**Maximum Noise Reduction dB(A)**	6.5
		Estimated Total Barrier Cost ($)	$844,200	**Estimated Total Barrier Cost ($)**	$928,620	**Estimated Total Barrier Cost ($)**	$1,013,040
		Cost/Benefit Dwelling Unit	$0	**Cost/Benefit Dwelling Unit**	$309,540	**Cost/Benefit Dwelling Unit**	$126,630

Table E5: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B16

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R721(K1381)	61.5	0	62.3	-0.8	0	62.2	-0.7	0	62.2	-0.7	0
R722(K1404)	62.1	0	60.1	2	0	59.8	2.3	0	59.6	2.5	0
R723(K1405)	62.9	1	59.5	3.4	0	59.4	3.5	0	59.3	3.6	0
R724(K1415)	58.5	1	55.8	2.7	0	55.4	3.1	0	55.3	3.2	0
R728(K1419)	61.3	1	57.9	3.4	0	57.8	3.5	0	57.6	3.7	0
R729(K1422)	61.8	1	58.6	3.2	0	58.4	3.4	0	58.2	3.6	0
R731(K1429)	61.4	1	58.5	2.9	0	58.2	3.2	0	58	3.4	0
R732(K65)	63.1	1	59.1	4	0	58.9	4.2	0	58.8	4.3	0
R738(K1412)	66.8	1	61.6	5.2	1	60.7	6.1	1	60.1	6.7	1
R739(K1424)	66.9	1	59.6	7.3	1	59	7.9	1	58.6	8.3	1
R740(K1454)	66.1	1	60.6	5.5	1	60.4	5.7	1	60.3	5.8	1
R742(K1450)	63.9	0	59.1	4.8	0	58.9	5	0	58.8	5.1	0
R746(K1458)	68.9	1	63.6	5.3	1	63.5	5.4	1	63.4	5.5	1
R750(K1435)	70.1	1	59.8	10.3	1	59.2	10.9	1	58.7	11.4	1
R751(K1427)	70.1	1	61.2	8.9	1	60.4	9.7	1	59.7	10.4	1
R752(K1438)	71	1	60.5	10.5	1	59.8	11.2	1	59.2	11.8	1
R753(K1472)	68.3	26	63.1	5.2	26	63	5.3	26	62.9	5.4	26
R758(K1448)	72	1	61.7	10.3	1	60.9	11.1	1	60.3	11.7	1
R760(K1433)	70.6	1	61.7	8.9	1	61.1	9.5	1	60.5	10.1	1
R762(K1455)	73.7	1	62.6	11.1	1	61.7	12	1	61.2	12.5	1
R765(K1459)	75	1	63	12	1	62.2	12.8	1	61.6	13.4	1
R768(K1437)	72.8	1	61.8	11	1	61.3	11.5	1	60.8	12	1
R773(KV1469)	75.1	1	62.7	12.4	1	62.3	12.8	1	61.9	13.2	1
R781(K1456)	77.2	1	62.1	15.1	1	61.6	15.6	1	61	16.2	1
M-46(K1469)	78.6	1	63.1	15.5	1	62.3	16.3	1	61.6	17	1

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B16

Barrier B16		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	47	**Total Number of Benefited Dwelling Units**	41	**Total Number of Benefited Dwelling Units**	41	**Total Number of Benefited Dwelling Units**	41
Total Number of Impacted Dwelling Units	15	**Total Number of Benefited Impacted Dwelling Units**	15	**Total Number of Benefited Impacted Dwelling Units**	15	**Total Number of Benefited Impacted Dwelling Units**	15
Barrier Length (feet)	1041	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	29.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	29.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	29.3%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	100.0%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	100.0%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	100.0%
		Maximum Noise Reduction dB(A)	15.5	**Maximum Noise Reduction dB(A)**	16.3	**Maximum Noise Reduction dB(A)**	17
		Estimated Total Barrier Cost ($)	$624,600	**Estimated Total Barrier Cost ($)**	$687,060	**Estimated Total Barrier Cost ($)**	$749,520
		Cost/Benefit Dwelling Unit	$15,234	**Cost/Benefit Dwelling Unit**	$16,758	**Cost/Benefit Dwelling Unit**	$18,281

Table E6: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B17

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R709(K1471)	64.7	6	63.3	1.4	0	63.2	1.5	0	63.1	1.6	0
R710(K64)	63.3	1	60	3.3	0	59.7	3.6	0	59.5	3.8	0
R711(K1474)	65.7	1	62	3.7	0	61.5	4.2	0	61.3	4.4	0
R714(K1493)	71.1	4	66.2	4.9	0	65.8	5.3	4	65.5	5.6	4
R715(K1481)	68.2	1	61.3	6.9	1	60.6	7.6	1	59.9	8.3	1
R717(K1266)	74.3	0	74.3	0	0	74.3	0	0	74.3	0	0
R726(K1487)	70	1	62.3	7.7	1	61.5	8.5	1	60.7	9.3	1
R734(K1201)	74.3	6	66.5	7.8	6	65.9	8.4	6	65.4	8.9	6
R744(K1497)	72.4	1	65.2	7.2	1	64.3	8.1	1	63.7	8.7	1
R755(K1488)	72	1	65	7	1	64.2	7.8	1	63.4	8.6	1
R779(K1195)	71.7	1	64.8	6.9	1	63.9	7.8	1	63.2	8.5	1
R801(K1205)	69.2	1	64.2	5	1	63.7	5.5	1	63.2	6	1
M-48(K37)	62.4	1	61.1	1.3	0	61	1.4	0	60.6	1.8	0
R822(K1204)	66.8	1	63.8	3	0	63.2	3.6	0	62.7	4.1	0

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B17

Barrier B17		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	26	**Total Number of Benefited Dwelling Units**	12	**Total Number of Benefited Dwelling Units**	16	**Total Number of Benefited Dwelling Units**	16
Total Number of Impacted Dwelling Units	17	**Total Number of Benefited Impacted Dwelling Units**	12	**Total Number of Benefited Impacted Dwelling Units**	16	**Total Number of Benefited Impacted Dwelling Units**	16
Barrier Length (feet)	1,453	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	75.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	68.8%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	68.8%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	70.6%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	94.1%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	94.1%
		Maximum Noise Reduction dB(A)	7.8	**Maximum Noise Reduction dB(A)**	8.5	**Maximum Noise Reduction dB(A)**	9.3
		Estimated Total Barrier Cost ($)	$871,800	**Estimated Total Barrier Cost ($)**	$958,980	**Estimated Total Barrier Cost ($)**	$1,046,160
		Cost/Benefit Dwelling Unit	$72,650	**Cost/Benefit Dwelling Unit**	$59,936	**Cost/Benefit Dwelling Unit**	$65,385

Table E7: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B18

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R748(K2091)	78.5	1	76.2	2.3	0	75.9	2.6	0	75	3.5	0
R749(K1767)	78	1	75.3	2.7	0	74.1	3.9	0	71.3	6.7	1
R756(K2109B)	77.7	1	75.5	2.2	0	75.3	2.4	0	73.5	4.2	0
R757(K2105)	75.2	1	64	11.2	1	63.4	11.8	1	62.9	12.3	1
R764(KV2092)	75	1	70.7	4.3	0	68.8	6.2	1	67.1	7.9	1
R766(K2085)	76.4	1	69.9	6.5	1	68.1	8.3	1	66.2	10.2	1
R769(K2119)	73.5	1	63	10.5	1	62.2	11.3	1	61.4	12.1	1
R771(K2101)	70.1	1	62.6	7.5	1	61.2	8.9	1	60.4	9.7	1
R772(K2109E)	74.4	1	68.4	6	1	65.7	8.7	1	64	10.4	1
R776(K2087)	73.4	1	68.5	4.9	0	67.4	6	1	65.5	7.9	1
R777(K2106)	71.8	1	68.9	2.9	0	68	3.8	0	66.3	5.5	1
R778(K2104)	72.7	1	70.7	2	0	69.2	3.5	0	67.3	5.4	1
R783(K1722C)	71.8	1	64.5	7.3	1	64.2	7.6	1	63.9	7.9	1
R784(K1769)	71.2	1	65.4	5.8	1	63.9	7.3	1	61.9	9.3	1
R785(K2083)	77.9	1	73.6	4.3	0	71.4	6.5	1	68.9	9	1
R787(K2122)	70.7	1	61.8	8.9	1	60.7	10	1	59.8	10.9	1
R788(K1722B)	71	1	65	6	1	64.7	6.3	1	64.5	6.5	1
R797(K2124)	70.7	1	61.1	9.6	1	60.2	10.5	1	59.4	11.3	1
R800(K2086)	74.6	1	67.9	6.7	1	65.7	8.9	1	63.1	11.5	1
R808(K2109)	66.4	1	62.3	4.1	0	60.1	6.3	1	58.6	7.8	1
R811(K2095)	69.6	1	64.1	5.5	1	62.3	7.3	1	60.7	8.9	1
R813(K2114)	67.8	1	59.8	8	1	59.3	8.5	1	58.8	9	1
R814(K2125)	68.4	1	62.1	6.3	1	60.5	7.9	1	59.7	8.7	1
R819(K2088)	74.5	1	68.2	6.3	1	65.6	8.9	1	63.9	10.6	1

Table E7: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B18

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R820(K2138)	68.3	1	61.3	7	1	60.8	7.5	1	60.4	7.9	1
R821(K1722A)	64.6	1	61.9	2.7	0	61.8	2.8	0	61.6	3	0
R823(K1722)	67.2	1	62.6	4.6	0	61.8	5.4	1	61.5	5.7	1
R824(K2099)	67.4	1	62.4	5	1	60.7	6.7	1	59.4	8	1
R825(K2127)	67.9	1	65.3	2.6	0	63.8	4.1	0	62.4	5.5	1
R826(K2144)	67.7	1	61.3	6.4	1	60.8	6.9	1	60.2	7.5	1
R827(K2109C)	67.5	1	63.9	3.6	0	61.9	5.6	1	59.8	7.7	1
R828(K1720)	67.4	1	62.8	4.6	0	61.7	5.7	1	61.3	6.1	1
R838(K2109F)	65.9	1	59.2	6.7	1	58.1	7.8	1	57.3	8.6	1
R840(K2109A)	62.9	1	58.8	4.1	0	57.2	5.7	1	56.2	6.7	1
R841(K30)	64.3	1	57.4	6.9	1	56.9	7.4	1	56.7	7.6	1
R845(K2103)	65.8	1	61.7	4.1	0	60	5.8	1	58.5	7.3	1
R850(K1721)	64.9	1	58.3	6.6	1	57.5	7.4	1	56.8	8.1	1
R851(K2094)	74.1	1	67.8	6.3	1	65.4	8.7	1	64.1	10	1
R852(K2109D)	62	1	59	3	0	56.6	5.4	1	55.7	6.3	1
R860(K2097)	73.7	1	65.8	7.9	1	64.3	9.4	1	62	11.7	1
R864(K2117)	64.4	1	60	4.4	0	58.9	5.5	1	57.5	6.9	1
R870(K2102)	72.7	1	64.1	8.6	1	62.5	10.2	1	60.1	12.6	1
R871(K2120)	63.2	1	58.4	4.8	0	56.9	6.3	1	56	7.2	1
R872(KV2147)	63	1	55.8	7.2	1	55	8	1	54.3	8.7	1
R873(K2107)	72.4	1	63.6	8.8	1	61.6	10.8	1	59.8	12.6	1
R876(K2128)	62.7	1	57.8	4.9	0	56.5	6.2	1	55.7	7	1
R878(K2141)	75.9	75	70.5	5.4	75	68.6	7.3	75	67.1	8.8	75
R879(K2121)	72.1	1	63.7	8.4	1	62.6	9.5	1	60.4	11.7	1
R881(K2130)	62.2	1	57	5.2	1	56	6.2	1	55.1	7.1	1

Table E7: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B18

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R885(K2126)	71.8	1	64.1	7.7	1	62.8	9	1	61.2	10.6	1
R887(K2113)	61.9	1	57	4.9	0	55.9	6	1	55	6.9	1
R890(K2131)	71.4	1	62.9	8.5	1	61.9	9.5	1	60	11.4	1
R891(K2140)	61.3	1	56.2	5.1	1	55.1	6.2	1	54.2	7.1	1
R894(K2111)	70.9	1	62.1	8.8	1	61.2	9.7	1	59	11.9	1
R896(K2142)	60.9	1	55.6	5.3	1	54.7	6.2	1	53.8	7.1	1
R897(K2139)	70.5	1	61.7	8.8	1	60.7	9.8	1	58.8	11.7	1
M-47(K2141)	61.8	75	57.1	4.7	0	56.7	5.1	75	56.4	5.4	75

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B18

Barrier B18		18 feet High Barrier		20 feet High Barrier		22 feet High Barrier	
Total Number of Dwelling Units behind Barrier	205	**Total Number of Benefited Dwelling Units**	109	**Total Number of Benefited Dwelling Units**	198	**Total Number of Benefited Dwelling Units**	202
Total Number of Impacted Dwelling Units	117	**Total Number of Benefited Impacted Dwelling Units**	103	**Total Number of Benefited Impacted Dwelling Units**	111	**Total Number of Benefited Impacted Dwelling Units**	115
Barrier Length (feet)	4,487	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	15.6%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	52.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	57.4%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	88.0%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	94.9%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	98.3%
		Maximum Noise Reduction dB(A)	11.2	**Maximum Noise Reduction dB(A)**	11.8	**Maximum Noise Reduction dB(A)**	12.6
		Estimated Total Barrier Cost ($)	$2,422,980	**Estimated Total Barrier Cost ($)**	$2,692,200	**Estimated Total Barrier Cost ($)**	$2,961,420
		Cost/Benefit Dwelling Unit	$22,229	**Cost/Benefit Dwelling Unit**	$13,597	**Cost/Benefit Dwelling Unit**	$14,660

Table E8: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B19

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R774(K1346)	71.2	1	60.9	10.3	1	60.4	10.8	1	59.9	11.3	1
M-41(K1318)	75.1	1	74.9	0.2	0	74.6	0.5	0	73.4	1.7	0
R780(K1383)	72	1	62	10	1	61.3	10.7	1	60.5	11.5	1
M-44(K75)	72.8	2	63.2	9.6	2	62.4	10.4	2	61.7	11.1	2
M-42(K1348)	68.8	1	55.6	13.2	1	54.9	13.9	1	54.2	14.6	1
R790(K1360)	73.4	1	62.5	10.9	1	61.7	11.7	1	61	12.4	1
R791(K1365)	70.6	1	61.2	9.4	1	60.6	10	1	60	10.6	1
R792(K1421)	76.5	1	71.2	5.3	1	68	8.5	1	66.6	9.9	1
R794(KV1318)	70.5	1	65	5.5	1	64.2	6.3	1	63.3	7.2	1
R795(K74)	68.8	2	60.7	8.1	2	60.1	8.7	2	59.5	9.3	2
R796(K1341)	74.1	1	62.8	11.3	1	62	12.1	1	61.3	12.8	1
R799(K1391)	69.3	1	60	9.3	1	59.2	10.1	1	58.5	10.8	1
R802(K1331)	72.4	1	66.4	6	1	65	7.4	1	63.8	8.6	1
R805(K78)	73.1	1	62.8	10.3	1	62	11.1	1	61.2	11.9	1
R807(K1336)	72.4	1	63.5	8.9	1	62.6	9.8	1	61.7	10.7	1
R809(K71)	66.5	2	59.5	7	2	58.9	7.6	2	58.3	8.2	2
R812(K1386)	65.4	1	57.4	8	1	56.7	8.7	1	56	9.4	1
R815(K73)	64.4	2	57.3	7.1	2	56.7	7.7	2	56.2	8.2	2
R816(K1372)	63.9	1	56.6	7.3	1	56.1	7.8	1	55.6	8.3	1
R817(K1395)	69.2	1	60	9.2	1	59.2	10	1	58.5	10.7	1
R830(K68)	67.1	2	59.2	7.9	2	58.4	8.7	2	57.8	9.3	2
M-45(K1484)	75.2	3	66.4	8.8	3	65.2	10	3	64.1	11.1	3
R832(K1362)	60.8	1	55.8	5	1	55.3	5.5	1	54.9	5.9	1
R833(K1370)	62.8	1	56.2	6.6	1	55.8	7	1	55.4	7.4	1
R834(K1402)	67.5	1	58.7	8.8	1	57.9	9.6	1	57.2	10.3	1

Table E8: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B19

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R835(K1446)	70.4	1	62.6	7.8	1	61.7	8.7	1	60.8	9.6	1
R836(K67)	66.7	2	59.6	7.1	2	58.8	7.9	2	58.2	8.5	2
R842(K1353)	60.4	41	55.3	5.1	41	55.2	5.2	41	55.1	5.3	41
R843(K1406)	64.2	1	56.9	7.3	1	56.2	8	1	55.6	8.6	1
R846(K1396)	62.1	1	55.2	6.9	1	54.6	7.5	1	54	8.1	1
R847(K1403)	63.3	1	56	7.3	1	55.3	8	1	54.8	8.5	1
R849(K1397)	60.8	1	54.6	6.2	1	54	6.8	1	53.5	7.3	1
R854(K1460)	64	1	58.4	5.6	1	57.6	6.4	1	57	7	1
R855(K1392)	60.6	1	54.4	6.2	1	53.9	6.7	1	53.6	7	1
R856(K1394)	60	1	54.4	5.6	1	53.8	6.2	1	53.4	6.6	1
R857(K1193)	72.1	1	61.3	10.8	1	60.5	11.6	1	59.9	12.2	1
R858(K1379)	59.2	1	54.5	4.7	0	54.2	5	1	54	5.2	1
R859(K1385)	58.6	1	54.1	4.5	0	53.7	4.9	0	53.4	5.2	1
R861(K1390)	57.5	1	53.5	4	0	53.1	4.4	0	52.8	4.7	0
R862(K1449)	64.6	1	58.4	6.2	1	57.7	6.9	1	57	7.6	1
R867(K1196)	69.8	1	60.1	9.7	1	59.3	10.5	1	58.4	11.4	1
R868(KV1492)	62.3	1	57.4	4.9	0	56.6	5.7	1	56.2	6.1	1
R869(K1492)	64.1	2	60.9	3.2	0	59.7	4.4	0	59	5.1	2
R874(K1473)	53.6	1	49.9	3.7	0	49.5	4.1	0	49.2	4.4	0
R875(K1203)	68.1	1	59.6	8.5	1	58.7	9.4	1	57.8	10.3	1
R877(K40)	63.9	1	60.5	3.4	0	59.2	4.7	0	58.7	5.2	1
R880(K1202)	64.4	1	59.2	5.2	1	58	6.4	1	57.4	7	1
R882(K1211)	71.1	1	60.9	10.2	1	60.1	11	1	59.4	11.7	1
R883(K1209)	66.7	1	58.7	8	1	57.9	8.8	1	57	9.7	1

Table E8: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B19

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	18 feet High Barrier			20 feet High Barrier			22 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R884(K1213)	69.3	1	58.8	10.5	1	57.8	11.5	1	57	12.3	1
R886(K1206)	64.6	1	58.4	6.2	1	57.6	7	1	56.9	7.7	1
R888(K1218)	67.6	1	57.8	9.8	1	56.9	10.7	1	56.1	11.5	1
R889(K36)	65.5	1	58.7	6.8	1	57.9	7.6	1	57	8.5	1
R892(K1216)	64.7	1	58.4	6.3	1	57.6	7.1	1	57	7.7	1
R893(K1220)	65.5	1	57	8.5	1	56	9.5	1	55.3	10.2	1
R895(K1219)	58.6	1	53.9	4.7	0	52.9	5.7	1	52.1	6.5	1
R898(K1224)	64.7	1	59	5.7	1	58.7	6	1	58.3	6.4	1
R899(K1223)	64.4	1	59.2	5.2	1	59	5.4	1	58.7	5.7	1
R900(K1222)	59.6	1	55.6	4	0	55.3	4.3	0	55	4.6	0
M-44a(K75)	73	2	61.8	11.2	2	61.3	11.7	2	60.4	12.6	2

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B19

Barrier B19		18 feet High Barrier		20 feet High Barrier		22 feet High Barrier	
Total Number of Dwelling Units behind Barrier	110	**Total Number of Benefited Dwelling Units**	99	**Total Number of Benefited Dwelling Units**	102	**Total Number of Benefited Dwelling Units**	106
Total Number of Impacted Dwelling Units	40	**Total Number of Benefited Impacted Dwelling Units**	37	**Total Number of Benefited Impacted Dwelling Units**	37	**Total Number of Benefited Impacted Dwelling Units**	37
Barrier Length (feet)	2,617	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	41.4%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	46.1%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	50.9%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	92.5%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	92.5%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	92.5%
		Maximum Noise Reduction dB(A)	13.2	**Maximum Noise Reduction dB(A)**	13.9	**Maximum Noise Reduction dB(A)**	14.6
		Estimated Total Barrier Cost ($)	$1,413,180	**Estimated Total Barrier Cost ($)**	$1,570,200	**Estimated Total Barrier Cost ($)**	$1,727,220
		Cost/Benefit Dwelling Unit	$14,275	**Cost/Benefit Dwelling Unit**	$15,394	**Cost/Benefit Dwelling Unit**	$16,295

Table E9: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B20

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R495(K1615)	75.8	1	69	6.8	1	68.5	7.3	1	67.4	8.4	1
R496(K2006)	65	1	59.6	5.4	1	59.3	5.7	1	59	6	1
M-38(K1609)	74.2	1	66.2	8	1	64.9	9.3	1	63.4	10.8	1
R500(K1620)	75.2	1	66.9	8.3	1	66.3	8.9	1	65.5	9.7	1
R501(K2004)	68	1	60.2	7.8	1	59.7	8.3	1	59.2	8.8	1
R502(K2005)	67.4	1	60.2	7.2	1	59.8	7.6	1	59.4	8	1
R503(K1622)	75.1	1	65.7	9.4	1	65	10.1	1	63.4	11.7	1
R504(K1630)	74.1	1	63.1	11	1	62.3	11.8	1	61.4	12.7	1
R505(K1674)	69.6	1	60.9	8.7	1	60.3	9.3	1	59.8	9.8	1
R508(K1627)	74.4	1	64.7	9.7	1	63.3	11.1	1	62.4	12	1
R510(K1670 R-61)	70.8	1	61.3	9.5	1	60.6	10.2	1	60	10.8	1
R512(K1642)	73.1	1	62	11.1	1	61.3	11.8	1	60.7	12.4	1
R516(K1638)	72.9	1	61.9	11	1	61	11.9	1	60.4	12.5	1
R517(K1652)	71	1	60.7	10.3	1	60.1	10.9	1	59.5	11.5	1
R518(K1665)	71.1	1	60.9	10.2	1	60.3	10.8	1	59.7	11.4	1
R526(K2009)	57	2	56.3	0.7	0	56.2	0.8	0	56.2	0.8	0
R531(K1621)	70.6	1	67.5	3.1	0	66.9	3.7	0	66.4	4.2	0
R532(K2008)	56.9	2	56.1	0.8	0	55.9	1	0	55.8	1.1	0
M-37(K1616)	69.2	1	66	3.2	0	65.6	3.6	0	65	4.2	0
R533(K2007)	58.2	2	56.4	1.8	0	56.3	1.9	0	56.1	2.1	0
R535(K1705)	58.9	2	56.4	2.5	0	56.1	2.8	0	55.9	3	0
R537(K85)	67.3	1	67.2	0.1	0	67.1	0.2	0	66.8	0.5	0
R538(K1602)	70.3	1	69.5	0.8	0	69.3	1	0	69.2	1.1	0
R539(K1611)	64.8	1	64.7	0.1	0	64.6	0.2	0	64.1	0.7	0
R540(K1624)	69	1	65.7	3.3	0	65.4	3.6	0	64.9	4.1	0

Table E9: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B20

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R541(K1629)	67	1	64.2	2.8	0	63.8	3.2	0	63.1	3.9	0
R542(K1632)	65.1	1	60.1	5	0	60	5.1	1	59.4	5.7	1
R545(K1608)	73.3	1	72.7	0.6	0	72.6	0.7	0	72.6	0.7	0
R546(K1613)	63.1	1	63.1	0	0	63	0.1	0	62.1	1	0
R547(K1637)	63.7	1	59.1	4.6	0	58.4	5.3	1	57.7	6	1
R548(K1699)	59.8	2	57	2.8	0	56.7	3.1	0	56.5	3.3	0
R550(K1695)	61.3	2	57.3	4	0	57	4.3	0	56.8	4.5	0
R554(K1677)	61.8	1	57.1	4.7	0	56.7	5.1	1	56.5	5.3	1
R555(K1687)	61.5	2	57.2	4.3	0	57.2	4.3	0	56.9	4.6	0
R558(K1626)	61.2	1	61.1	0.1	0	60.8	0.4	0	59.8	1.4	0
R559(K1648)	62.7	1	58.3	4.4	0	58	4.7	0	57.5	5.2	1
R560(K1668)	62.4	1	56	6.4	1	55.4	7	1	55.2	7.2	1
R561(K1672)	62.3	1	57.5	4.8	0	57	5.3	1	56.6	5.7	1
R562(K2013)	52.9	1	53.3	-0.4	0	53.2	-0.3	0	53.1	-0.2	0
R565(K1713)	52.6	1	52.3	0.3	0	52.1	0.5	0	52.1	0.5	0
R569(K1712)	53.1	1	52.3	0.8	0	52.2	0.9	0	52.1	1	0
R572(K1635)	58.7	1	57.7	1	0	57.6	1.1	0	56.7	2	0
R573(K1617)	69.3	1	69	0.3	0	68.8	0.5	0	68.4	0.9	0
R577(K1623)	67	1	66.8	0.2	0	66.6	0.4	0	66.5	0.5	0
R578(K1634)	60.9	1	57.7	3.2	0	57.3	3.6	0	56.4	4.5	0
R579(K1710)	54.4	1	53.5	0.9	0	53.3	1.1	0	53.3	1.1	0
R581(K1708)	54.6	1	53.7	0.9	0	53.5	1.1	0	53.3	1.3	0
R583(K1628)	65	1	65	0	0	65	0	0	65	0	0
R584(K1641)	58.4	1	57.5	0.9	0	56.9	1.5	0	56.4	2	0
R585(K1706)	55.5	1	53.9	1.6	0	53.8	1.7	0	53.6	1.9	0

Table E9: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B20

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R587(K1704)	56.8	1	54.5	2.3	0	54.3	2.5	0	54.2	2.6	0
R589(K1631)	63.6	1	63.7	-0.1	0	63.7	-0.1	0	63.7	-0.1	0
R590(K1651)	59	1	56.8	2.2	0	56.1	2.9	0	55.7	3.3	0
R591(K1666)	58.6	1	56	2.6	0	55.4	3.2	0	55	3.6	0
R592(K1682)	58.7	1	54.9	3.8	0	54.6	4.1	0	54.2	4.5	0
R593(K1691)	58.2	1	55.6	2.6	0	55.5	2.7	0	55.1	3.1	0
R594(K1698)	56.8	1	54.7	2.1	0	54.5	2.3	0	54.3	2.5	0
R597(K1636)	63.2	1	62.9	0.3	0	62.8	0.4	0	62.8	0.4	0
R598(K1694)	57.3	1	55	2.3	0	54.8	2.5	0	54.9	2.4	0
R599(K2021)	53.9	4	55	-1.1	0	55	-1.1	0	55	-1.1	0
R604(K1643)	63.5	1	63.3	0.2	0	63	0.5	0	62.5	1	0
R605(K1718)	54	2	54.7	-0.7	0	54.7	-0.7	0	54.6	-0.6	0
R607(K1717)	54	2	54.4	-0.4	0	54.3	-0.3	0	54.3	-0.3	0
R612(K1716)	54.5	1	54.9	-0.4	0	54.9	-0.4	0	54.9	-0.4	0
R637(K1617 R-60)	67.7	1	68.7	-1	0	68.6	-0.9	0	68.6	-0.9	0

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B20

Barrier B20		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	77	**Total Number of Benefited Dwelling Units**	16	**Total Number of Benefited Dwelling Units**	20	**Total Number of Benefited Dwelling Units**	21
Total Number of Impacted Dwelling Units	24	**Total Number of Benefited Impacted Dwelling Units**	14	**Total Number of Benefited Impacted Dwelling Units**	14	**Total Number of Benefited Impacted Dwelling Units**	14
Barrier Length (feet)	1,990	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	81.3%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	75.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	71.4%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	58.3%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	58.3%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	58.3%
		Maximum Noise Reduction dB(A)	11.1	**Maximum Noise Reduction dB(A)**	11.9	**Maximum Noise Reduction dB(A)**	12.7
		Estimated Total Barrier Cost ($)	$1,194,000	**Estimated Total Barrier Cost ($)**	$1,313,400	**Estimated Total Barrier Cost ($)**	$1,432,800
		Cost/Benefit Dwelling Unit	$74,625	**Cost/Benefit Dwelling Unit**	$65,670	**Cost/Benefit Dwelling Unit**	$68,229

Table E10: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B21

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R421(K581)	71.9	2	71	0.9	0	70.2	1.7	0	69.7	2.2	0
R422(K582)	72.9	1	71.1	1.8	0	70	2.9	0	69.6	3.3	0
R423(K584)	74.7	1	69.6	5.1	1	68.8	5.9	1	68.4	6.3	1
R425(K575)	71	1	70.6	0.4	0	70.1	0.9	0	69.8	1.2	0
R430(K574)	69.9	1	69.7	0.2	0	69.3	0.6	0	69.1	0.8	0
R431(K572)	69.5	1	69.4	0.1	0	69.2	0.3	0	68.9	0.6	0
R437(K571)	68.8	2	68.8	0	0	68.6	0.2	0	68.4	0.4	0
R439(K954 R-53)	74.8	1	68	6.8	1	65.9	8.9	1	64.3	10.5	1
R442(K569)	68.2	1	68.1	0.1	0	68	0.2	0	67.8	0.4	0
R447(K938)	72.6	1	69.3	3.3	0	67.4	5.2	1	65.3	7.3	1
R450(K566)	68.2	1	68.1	0.1	0	67.9	0.3	0	67.7	0.5	0
R452(K941)	70.4	2	66.2	4.2	0	64.2	6.2	2	62.2	8.2	2
R454(K932)	67.2	1	62.8	4.4	0	61.4	5.8	1	59.6	7.6	1
R456(K1007)	74.7	1	73	1.7	0	71.7	3	0	69.9	4.8	0
R457(K860)	67.8	1	67.7	0.1	0	67.6	0.2	0	67.4	0.4	0
R461(K1006)	72.7	1	72	0.7	0	71.1	1.6	0	69.8	2.9	0
R462(K1000)	71.7	1	71.3	0.4	0	70.7	1	0	69.8	1.9	0
R463(K1004)	72.1	1	71.6	0.5	0	71.1	1	0	69.9	2.2	0
R464(K996)	70.9	1	70.5	0.4	0	69.7	1.2	0	69.1	1.8	0
R467(K929)	66.2	1	62.5	3.7	0	61	5.2	1	59.5	6.7	1
R470(K859)	67.2	1	67.2	0	0	67.1	0.1	0	66.9	0.3	0
R471(K994)	70.5	1	70.2	0.3	0	69.5	1	0	68.9	1.6	0
R475(K925)	65.3	1	61.5	3.8	0	60	5.3	1	58.6	6.7	1
M-27(K1007)	75.3	1	69	6.3	1	67.6	7.7	1	65.9	9.4	1
R478(K856)	67	1	67	0	0	66.9	0.1	0	66.7	0.3	0

Table E10: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B21

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R482(K792)	66.7	1	66.7	0	0	66.6	0.1	0	66.5	0.2	0
R489(K924)	64.7	1	61.5	3.2	0	60.3	4.4	0	59.1	5.6	1
R497(K790)	66.1	1	66.1	0	0	66	0.1	0	65.9	0.2	0
R506(K927)	65.5	1	62.3	3.2	0	61.3	4.2	0	60.3	5.2	1
R511(K789)	65.8	1	65.8	0	0	65.7	0.1	0	65.6	0.2	0
R522(K922)	64.6	1	61.1	3.5	0	60.1	4.5	0	59.1	5.5	1
R529(K921)	64.4	1	60.6	3.8	0	59.7	4.7	0	58.6	5.8	1
R544(K917)	63.9	2	59.9	4	0	59.2	4.7	0	58.2	5.7	2
R564(K918)	63.2	2	59	4.2	0	58.1	5.1	2	57.2	6	2
R602(K849)	73.1	1	64.4	8.7	1	63.4	9.7	1	62.3	10.8	1
R608(K819)	70.5	1	63.4	7.1	1	61.9	8.6	1	60.7	9.8	1
R609(K848)	71.8	1	64.4	7.4	1	63.6	8.2	1	62.5	9.3	1
R617(K841)	70.9	1	63.9	7	1	63	7.9	1	61.9	9	1
R633(K843)	69	1	63.5	5.5	1	62.2	6.8	1	61	8	1
R636(K840)	68.6	1	63.1	5.5	1	62	6.6	1	60.8	7.8	1
R643(K1041)	73.1	1	63.7	9.4	1	62.5	10.6	1	61.5	11.6	1
R644(K1036)	71.8	1	63.5	8.3	1	62.4	9.4	1	61.3	10.5	1
R645(K1033)	67	2	57.8	9.2	2	57	10	2	56.2	10.8	2
R646(K1053)	66.9	1	57.6	9.3	1	56.7	10.2	1	56.1	10.8	1
R647(K1037)	68.7	2	58.6	10.1	2	57.7	11	2	56.9	11.8	2
R649(K1027)	66.4	2	61.9	4.5	0	61.6	4.8	0	61.2	5.2	2
R650(K1116)	70.2	5	61.7	8.5	5	61.1	9.1	5	60.6	9.6	5
R651(K594)	69.4	1	62	7.4	1	61.3	8.1	1	60.7	8.7	1
R652(K1023)	62.8	1	55.3	7.5	1	54.5	8.3	1	53.9	8.9	1
R653(K884)	70.8	1	61.7	9.1	1	60.9	9.9	1	60.2	10.6	1

Table E10: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B21

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R654(K1039)	66	1	62.3	3.7	0	61.3	4.7	0	60.8	5.2	1
R655(K1121 R-56)	68.6	1	62.2	6.4	1	61.6	7	1	61	7.6	1
R656(K882)	63.3	1	59.6	3.7	0	58.9	4.4	0	58.1	5.2	1
R657(K1123)	68.3	1	62.2	6.1	1	61.4	6.9	1	60.8	7.5	1
R658(K883)	65.9	1	60.8	5.1	1	60.2	5.7	1	59.4	6.5	1
M-29(K1148)	69.3	1	69.5	-0.2	0	69	0.3	0	68.7	0.6	0
R659(K876)	65.9	1	61.7	4.2	0	60.7	5.2	1	60.2	5.7	1
R663(K598)	65.8	1	66.1	-0.3	0	65.6	0.2	0	65.5	0.3	0
R664(K1125)	67.1	1	61.4	5.7	1	60.6	6.5	1	60	7.1	1
R666(K878)	65.5	1	61.5	4	0	60.7	4.8	0	60	5.5	1
R668(K595)	64.9	1	58.1	6.8	1	57.5	7.4	1	57	7.9	1
R669(K877)	65.3	1	61.9	3.4	0	60.9	4.4	0	60.1	5.2	1
R670(K1129)	66.8	1	60.9	5.9	1	60.1	6.7	1	59.5	7.3	1
R672(K600)	64.2	1	64.4	-0.2	0	64.2	0	0	64	0.2	0
R673(K874)	65.2	1	62.3	2.9	0	61.4	3.8	0	60.4	4.8	0
R674(K1132)	67.4	1	60.5	6.9	1	59.6	7.8	1	58.9	8.5	1
R675(K873)	62.2	1	61.3	0.9	0	60.7	1.5	0	59.9	2.3	0
R676(K1117)	62.6	1	56.6	6	1	55.9	6.7	1	55.4	7.2	1
R677(K1150)	63.8	1	63.3	0.5	0	63.1	0.7	0	62.1	1.7	0
R678(K1136)	66.9	1	59.6	7.3	1	58.6	8.3	1	57.7	9.2	1
R679(K1152)	63.4	1	63.9	-0.5	0	63.6	-0.2	0	62.8	0.6	0
R680(K898)	66.9	2	61.9	5	2	61	5.9	2	60.4	6.5	2
R681(K1139)	65.9	1	58.6	7.3	1	57.6	8.3	1	56.7	9.2	1
R682(K104)	67.4	2	62.1	5.3	2	61.1	6.3	2	60.4	7	2
R683(K1120)	60.7	1	54.9	5.8	1	54.1	6.6	1	53.4	7.3	1

Table E10: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B21

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	20 feet High Barrier			22 feet High Barrier			24 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R684(K905)	67.4	2	62.4	5	2	61.6	5.8	2	60.8	6.6	2
R685(K1153)	63.4	1	63.1	0.3	0	62.5	0.9	0	62.1	1.3	0
R686(K1142)	64.5	1	57.6	6.9	1	56.6	7.9	1	55.7	8.8	1
R687(K908)	67.6	1	62.5	5.1	1	61.6	6	1	60.9	6.7	1
R688(K13)	62	1	55.3	6.7	1	54.8	7.2	1	54.3	7.7	1
R689(K1059)	67.2	1	62	5.2	1	61.1	6.1	1	60.6	6.6	1
R690(K1124)	58.5	1	53.6	4.9	0	52.7	5.8	1	52.2	6.3	1
R691(K1063)	67.2	1	61.6	5.6	1	60.7	6.5	1	60	7.2	1
R692(K1145)	62.8	1	56.6	6.2	1	55.7	7.1	1	54.9	7.9	1
R693(K1130)	57.4	1	53.2	4.2	0	52.3	5.1	1	51.9	5.5	1
R694(K1080)	66.6	1	61	5.6	1	60.1	6.5	1	59.3	7.3	1
R695(K1119)	58.2	1	52.7	5.5	1	52.2	6	1	51.7	6.5	1
R696(K1085)	66.9	1	61.5	5.4	1	60.8	6.1	1	60	6.9	1
R697(K1090)	66.9	1	61.2	5.7	1	60.4	6.5	1	59.5	7.4	1
R698(K1135)	56	1	52.1	3.9	0	51.4	4.6	0	50.8	5.2	1
R699(K1095)	66.7	2	61.6	5.1	2	61	5.7	2	60.2	6.5	2
R700(K1101 R-55)	65.1	1	59.1	6	1	58.2	6.9	1	57.6	7.5	1
R701(K1138)	54.4	1	51.4	3	0	50.7	3.7	0	50.2	4.2	0

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B21

Barrier B21		20 feet High Barrier		22 feet High Barrier		24 feet High Barrier	
Total Number of Dwelling Units behind Barrier	109	**Total Number of Benefited Dwelling Units**	54	**Total Number of Benefited Dwelling Units**	65	**Total Number of Benefited Dwelling Units**	78
Total Number of Impacted Dwelling Units	80	**Total Number of Benefited Impacted Dwelling Units**	45	**Total Number of Benefited Impacted Dwelling Units**	51	**Total Number of Benefited Impacted Dwelling Units**	54
Barrier Length (feet)	2,593	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	38.9%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	43.1%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	59.0%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	56.3%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	63.8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	67.5%
		Maximum Noise Reduction dB(A)	10.1	**Maximum Noise Reduction dB(A)**	11	**Maximum Noise Reduction dB(A)**	11.8
		Estimated Total Barrier Cost ($)	$1,555,800	**Estimated Total Barrier Cost ($)**	$1,711,380	**Estimated Total Barrier Cost ($)**	$1,866,960
		Cost/Benefit Dwelling Unit	$28,811	**Cost/Benefit Dwelling Unit**	$26,329	**Cost/Benefit Dwelling Unit**	$23,935

Table E11: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B22

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	26 feet High Barrier			28 feet High Barrier			30 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
M-20(K309)	69.7	2	69.7	0	0	69.7	0	0	69.7	0	0
R95(K314 R-46)	73	1	72.9	0.1	0	72.9	0.1	0	72.9	0.1	0
R97(K115)	72.2	2	63.9	8.3	2	63	9.2	2	62.4	9.8	2
R100(K318)	72.6	1	72.6	0	0	72.6	0	0	72.6	0	0
R108(K354)	72.3	1	72.3	0	0	72.3	0	0	72.3	0	0
R109(K349)	71.7	1	71.7	0	0	71.7	0	0	71.7	0	0
R110(K361)	71.9	1	71.9	0	0	71.9	0	0	71.9	0	0
R118(K335)	69.3	1	69.5	-0.2	0	69.5	-0.2	0	69.5	-0.2	0
R119(K322)	67.6	1	67.6	0	0	67.6	0	0	67.6	0	0
R122(K365)	71.4	1	71.4	0	0	71.4	0	0	71.4	0	0
R124(K364)	70.1	1	70.1	0	0	70.1	0	0	70.1	0	0
R126(K370)	71.4	2	71.4	0	0	71.4	0	0	71.4	0	0
R129(K340)	65.6	1	65.7	-0.1	0	65.7	-0.1	0	65.7	-0.1	0
R130(K308)	66	2	66.3	-0.3	0	66.3	-0.3	0	66.3	-0.3	0
R131(K299)	66.3	1	66.7	-0.4	0	66.7	-0.4	0	66.7	-0.4	0
R134(K313)	65.3	1	65.7	-0.4	0	65.7	-0.4	0	65.7	-0.4	0
R135(K346)	65.7	1	66	-0.3	0	66	-0.3	0	66	-0.3	0
R136(K326)	65.1	0	65.2	-0.1	0	65.2	-0.1	0	65.2	-0.1	0
R139(K409 R-47)	72.6	15	72.5	0.1	0	72.5	0.1	0	71.9	0.7	0
R140(K352)	65.1	1	65.2	-0.1	0	65.2	-0.1	0	65.2	-0.1	0
R141(K317)	65.1	1	65.3	-0.2	0	65.3	-0.2	0	65.3	-0.2	0
R142(K368)	67.8	1	67.9	-0.1	0	67.9	-0.1	0	67.9	-0.1	0
R148(K360)	64.9	1	65	-0.1	0	65	-0.1	0	65	-0.1	0
R150(K353)	61.1	2	61	0.1	0	61	0.1	0	61	0.1	0

Table E11: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B22

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	26 feet High Barrier			28 feet High Barrier			30 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R151(K337)	56.1	3	56	0.1	0	56	0.1	0	56	0.1	0
R152(K373)	69.3	1	69.5	-0.2	0	69.5	-0.2	0	69.5	-0.2	0
R153(K379)	69.8	1	70	-0.2	0	70	-0.2	0	70	-0.2	0
R154(K358)	59.2	2	59.1	0.1	0	59.1	0.1	0	59.1	0.1	0
R155(K362)	61.5	1	61.5	0	0	61.5	0	0	61.5	0	0
R156(K344)	62	1	62.1	-0.1	0	62.1	-0.1	0	62.1	-0.1	0
R157(K347)	61.7	1	61.9	-0.2	0	61.9	-0.2	0	61.9	-0.2	0
R158(K367)	60.1	1	60	0.1	0	60	0.1	0	60	0.1	0
R159(K401)	67.6	1	67.5	0.1	0	67.5	0.1	0	67.5	0.1	0
R160(K382)	70.3	1	70.5	-0.2	0	70.5	-0.2	0	70.5	-0.2	0
R162(K386)	70.7	1	70.8	-0.1	0	70.8	-0.1	0	70.8	-0.1	0
R164(K332)	62	0	62.5	-0.5	0	62.5	-0.5	0	62.5	-0.5	0
R168(K396)	70.5	1	70.7	-0.2	0	70.7	-0.2	0	70.7	-0.2	0
R169(K388)	70.6	1	70.8	-0.2	0	70.8	-0.2	0	70.8	-0.2	0
R171(K402)	67.7	1	67.7	0	0	67.7	0	0	67.7	0	0
R178(K371)	56	1	56	0	0	56	0	0	56	0	0
R181(K381)	56.1	2	56.4	-0.3	0	56.4	-0.3	0	56.4	-0.3	0
R182(K378)	54	1	54	0	0	54	0	0	54	0	0
R183(K384)	62.5	1	62.6	-0.1	0	62.6	-0.1	0	62.6	-0.1	0
R184(K389)	62.3	1	62.5	-0.2	0	62.5	-0.2	0	62.5	-0.2	0
R186(K369)	59.4	1	59.4	0	0	59.4	0	0	59.4	0	0
R192(K427)	68.6	1	68.4	0.2	0	68.4	0.2	0	68.4	0.2	0
R193(K387)	60.2	2	60.2	0	0	60.2	0	0	60.2	0	0
R196(K400)	65.7	4	66.2	-0.5	0	66.2	-0.5	0	66.2	-0.5	0
R197(K380)	58.1	2	58.1	0	0	58.1	0	0	58.1	0	0

Table E11: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B22

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	26 feet High Barrier			28 feet High Barrier			30 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R199(K397)	61.3	1	61.6	-0.3	0	61.6	-0.3	0	61.6	-0.3	0
R200(K432)	69.1	1	68.9	0.2	0	68.9	0.2	0	68.9	0.2	0
R201(K383)	57.7	2	57.7	0	0	57.7	0	0	57.7	0	0
R202(K413)	64.9	2	65.2	-0.3	0	65.2	-0.3	0	65.2	-0.3	0
R206(K445)	68.5	4	68.1	0.4	0	68.1	0.4	0	68.1	0.4	0
R207(K420)	64.3	2	64.6	-0.3	0	64.6	-0.3	0	64.6	-0.3	0
R210(K425)	61.6	1	61.7	-0.1	0	61.7	-0.1	0	61.7	-0.1	0
R212(K454)	68.2	4	67.8	0.4	0	67.8	0.4	0	67.8	0.4	0
R214(K435)	61.1	1	61.1	0	0	61.1	0	0	61.1	0	0
R216(K422)	60	1	60.3	-0.3	0	60.3	-0.3	0	60.3	-0.3	0
R218(K461)	68.5	1	67.9	0.6	0	67.9	0.6	0	67.8	0.7	0
R220(K457)	64.9	1	64.8	0.1	0	64.8	0.1	0	64.8	0.1	0
R222(K439)	59.1	4	58.8	0.3	0	58.8	0.3	0	58.8	0.3	0
R223(K444)	60.8	1	60.4	0.4	0	60.4	0.4	0	60.4	0.4	0
R225(K412)	53	1	53.1	-0.1	0	53.1	-0.1	0	53.1	-0.1	0
R226(K447)	61.1	1	60.5	0.6	0	60.5	0.6	0	60.5	0.6	0
R228(K419)	50.7	1	50.8	-0.1	0	50.8	-0.1	0	50.8	-0.1	0
R229(K430)	53.4	1	53.6	-0.2	0	53.6	-0.2	0	53.6	-0.2	0
R232(K452)	59	1	59.1	-0.1	0	59.1	-0.1	0	59.1	-0.1	0
R233(K466)	65.9	4	66	-0.1	0	66	-0.1	0	66	-0.1	0
R234(K477)	67	1	67.3	-0.3	0	67.3	-0.3	0	67.3	-0.3	0
R235(K495)	68.1	1	68.2	-0.1	0	68.2	-0.1	0	68.2	-0.1	0
R238(K451)	55.3	1	55.3	0	0	55.3	0	0	55.3	0	0
R241(K478)	63	1	63.1	-0.1	0	63.1	-0.1	0	63.1	-0.1	0
R244(K458)	56.9	1	56.9	0	0	56.9	0	0	56.9	0	0

Table E11: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B22

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	26 feet High Barrier			28 feet High Barrier			30 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R245(K525)	69.3	1	69.1	0.2	0	69.1	0.2	0	69.1	0.2	0
R248(K519)	67.6	3	67.5	0.1	0	67.5	0.1	0	67.5	0.1	0
R252(K469)	58.8	1	58.9	-0.1	0	58.9	-0.1	0	58.9	-0.1	0
R253(K499)	65.4	1	64.7	0.7	0	64.7	0.7	0	64.7	0.7	0
R254(K534)	70	0	69.7	0.3	0	69.7	0.3	0	69.7	0.3	0
R255(K510)	65.5	2	65.1	0.4	0	65.1	0.4	0	65.1	0.4	0
R257(K475)	57.6	1	57.6	0	0	57.6	0	0	57.6	0	0
R260(K486)	59.4	1	59.2	0.2	0	59.2	0.2	0	59.2	0.2	0
R261(K491)	59.5	1	59.3	0.2	0	59.3	0.2	0	59.3	0.2	0
R263(K498)	58	1	58	0	0	58	0	0	58	0	0
R265(K503)	58.2	1	58.2	0	0	58.2	0	0	58.2	0	0
R271(K515)	59.7	1	59.8	-0.1	0	59.8	-0.1	0	59.8	-0.1	0
R97a(K115)	73.9	2	73.9	0	0	73.9	0	0	73.9	0	0
R97b(K115)	72.6	2	72.5	0.1	0	72.5	0.1	0	72.5	0.1	0
R97c(K115)	71.5	2	70.2	1.3	0	69.3	2.2	0	68.8	2.7	0
R97d(K115)	71	2	67.1	3.9	0	66.8	4.2	0	66.3	4.7	0
R97e(K115)	71.2	2	66.8	4.4	0	66.6	4.6	0	66.4	4.8	0
R97f(K115)	71.8	2	67.5	4.3	0	67.4	4.4	0	67.2	4.6	0
R97g(K115)	72.8	2	69.5	3.3	0	69.3	3.5	0	69.1	3.7	0
R97h(K115)	72.7	2	70.7	2	0	70.6	2.1	0	70.5	2.2	0
R97i(K115)	69.9	2	70	-0.1	0	69.9	0	0	69.8	0.1	0
R97j(K115)	70.4	2	70.4	0	0	70.4	0	0	70.4	0	0
R97k(K115)	69.9	2	68.5	1.4	0	67.8	2.1	0	67.2	2.7	0
R97l(K115)	69.1	2	68.3	0.8	0	67.8	1.3	0	67.4	1.7	0
R97m(K115)	70.7	2	66.9	3.8	0	66.7	4	0	66.5	4.2	0

Table E11: Alternative I Individual Property Noise Abatement Analysis Findings Barrier B22

Receptor	Build With No Barrier L_{eq} (1-hour) dBA	Number of Dwelling Units	26 feet High Barrier			28 feet High Barrier			30 feet High Barrier		
			Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit	Abated Level dBA	Insertion Loss (I.L.) dBA	Benefited Unit
R97n(K115)	72.7	2	70.8	1.9	0	70	2.7	0	69.3	3.4	0
R97o(K115)	73	2	72.8	0.2	0	72.5	0.5	0	71.5	1.5	0
R97P(K115)	71.1	2	65.6	5.5	2	65.6	5.5	2	65.6	5.5	2
R97Q(K115)	70.8	2	64.7	6.1	2	64.6	6.2	2	64.5	6.3	2
R97R(K115)	70.9	2	66.8	4.1	0	66.6	4.3	0	66.5	4.4	0
R97S(K115)	72.1	2	71.7	0.4	0	71.5	0.6	0	71.4	0.7	0
R97T(K115)	72.4	2	72.2	0.2	0	72.2	0.2	0	71.7	0.7	0
R97U(K115)	72.6	2	72.4	0.2	0	72.4	0.2	0	71.9	0.7	0
R97V(K115)	71.4	2	67.4	4	0	66.9	4.5	0	65.9	5.5	2
R97W(K115)	71.6	2	65.8	5.8	2	64.9	6.7	2	64.1	7.5	2
R97X(K115)	71.9	2	64.7	7.2	2	63.4	8.5	2	62.4	9.5	2
R97Y(K115)	73.5	2	69.9	3.6	0	69.6	3.9	0	69.4	4.1	0
R97Z(K115)	73.8	2	69.9	3.9	0	69.6	4.2	0	69.3	4.5	0
R97AA(K115)	73.9	2	72.1	1.8	0	71.5	2.4	0	71.2	2.7	0

Summary - Alternative I Individual Property Noise Abatement Analysis Findings Barrier B22

Barrier B22		26 feet High Barrier		28 feet High Barrier		30 feet High Barrier	
Total Number of Dwelling Units behind Barrier	183	**Total Number of Benefited Dwelling Units**	10	**Total Number of Benefited Dwelling Units**	10	**Total Number of Benefited Dwelling Units**	12
Total Number of Impacted Dwelling Units	125	**Total Number of Benefited Impacted Dwelling Units**	10	**Total Number of Benefited Impacted Dwelling Units**	10	**Total Number of Benefited Impacted Dwelling Units**	12
Barrier Length (feet)	1,992	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	40.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	40.0%	**% of Benefited Dwelling Units That Receive 7 dB(A) or more Noise Reduction**	50.0%
		% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction	8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	8%	**% of Impacted Dwelling Units That Receive 5 dB(A) or more Noise Reduction**	9.6%
		Maximum Noise Reduction dB(A)	8.3	**Maximum Noise Reduction dB(A)**	9.2	**Maximum Noise Reduction dB(A)**	9.8
		Estimated Total Barrier Cost ($)	$1,553,760	**Estimated Total Barrier Cost ($)**	$1,638,774	**Estimated Total Barrier Cost ($)**	$1,722,960
		Cost/Benefit Dwelling Unit	$155,376	**Cost/Benefit Dwelling Unit**	$163,877	**Cost/Benefit Dwelling Unit**	$143,580