



DRAFT TRAFFIC NOISE ANALYSIS REPORT

I-94 Reconstruction and Rehabilitation Project
Wayne Road to East of Greenfield Road
Romulus, Taylor, Allen Park, Dearborn Heights, and Dearborn
Wayne County, Michigan

**JN 208609, JN 211957, JN 211426, JN 205354,
JN 217336, JN 218689, JN 201225, JN 215038,
JN 212999, JN 202486, JN 214929**

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GLOSSARY

Common Noise Environment (CNE) - A group of receptors within the same Activity Category (Table 1) that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features. Generally, common noise environments occur between two secondary noise sources such as interchanges, intersections, and crossroads.

Sensitive noise receptors – Areas where the occupants are more susceptible to the adverse effects of exposure to noise. Sensitive receptors include, but are not limited to, residential homes, medical buildings, restaurants, hotels, etc.

Noise Impact - A substantial noise increase or a predicted design year noise level that is 1 dB(A) less, equal to, or greater than the Noise Abatement Criteria (NAC) level.

Noise Abatement - Strategies or techniques used to reduce annoying or harmful noise in an environment (e.g., berms, noise wall, etc.)

Substantial Noise Increase - A 10 dB(A) or greater increase between the existing noise level and the design year predicted noise level.

Feasible Noise Barrier - A barrier that has no construction impediments, meets safety requirements for the traveling public, and provides at least 5 dB(A) noise reduction at 75% of the impacted receptors.

Reasonable Noise Barrier - A barrier that is cost effective, favorable to benefitting receptors, and achieves noise reduction design goals by meeting or exceeding the reasonableness factor.

Cost Effective Noise Barrier - A noise barrier analyzed for environmental clearance with a preliminary construction cost that is not more than 3% above the allowable cost per benefited unit (CPBU) of \$56,428.00 (year 2024), assuming a \$45.00 per square foot noise barrier construction cost. This allowable CPBU is only applicable during a project in the Early Preliminary Engineering (EPE) phase.

Benefited Receptor - A receptor that receives a 5 dB(A) or greater insertion loss as a result of a proposed noise barrier.

Permitted Development - Any presently undeveloped lands that have received a building permit from the local township or municipality.

EXECUTIVE SUMMARY

A Traffic Noise Study and Abatement Analysis was completed for the I-94: Wayne Road to East of Greenfield Road Reconstruction and Rehabilitation Project (I-94 Project) based on the existing condition (2019) and the design year build condition (2051) traffic data and engineering designs for the project. The I-94 Project is a transportation improvement project sponsored by MDOT along a 12.7-mile stretch of I-94 from Wayne Road to east of Greenfield Road in the cities of Romulus, Taylor, Allen Park, Dearborn Heights, and Dearborn in Wayne County, Michigan (**Figure 1**). The I-94 Project consists of the eleven (11) Michigan Department of Transportation (MDOT) project numbers. Since portions of the I-94 Project, as described in **Section 2.0**, meet the Type I Project criteria set forth in Title 23 Code of Federal Regulations, Part 772 (23 CFR 772), the entire I-94 Project is deemed a Type I Project by the Federal Highway Administration (FHWA) and MDOT.

All analyses were performed in accordance with 23 Code of Federal Regulations Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (23 CFR 772) and the Michigan Department of Transportation *Highway Noise Analysis and Abatement Handbook* (MDOT Noise Handbook, 2011). This Traffic Noise Study and Abatement Analysis was conducted during the Preliminary Engineering (PE) Phase.

The Project Study Area was divided into twenty-eight (28) Common Noise Environments containing a total of 1,220 modeled receptor sites representing 1,326 dwelling units. The Project Study Area extended a minimum of 500 feet from the proposed outside shoulder for the I-94 travel lanes, interchange ramps, and cross-roads with design year build condition (2051) improvements. The Project Study Area was extended beyond the 500-foot buffer in areas where it was necessary to identify the extent of the traffic noise impacts.

Predicted noise levels at the modeled receptor sites for the existing year condition (2019) and the design year build condition (2051) were generated using the FHWA TNM™ Version 2.5 (TNM) based on the AM peak hour and the PM peak hour traffic volumes. A noise impact analysis was performed in accordance with the MDOT Noise Handbook (2011), which identified that sixteen (16) of the CNEs contained noise sensitive receptors with design year build condition (2051) predicted noise levels that approach or exceed the Noise Abatement Criteria (NAC).

CNE B contained one (1) existing noise wall and CNE L contained three (3) existing noise walls with noise sensitive receptors located behind the existing noise walls with design year build condition (2051) predicted noise levels that approach or exceed the NAC. Based on the results of the evaluation of the existing noise walls in accordance with FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*, the existing noise wall located in CNE B (ENB B-1) and two (2) of the existing noise walls located within CNE L (ENB L-1 and ENB L-3) met the MDOT feasibility and reasonableness criteria as built. As a result, no additional modification of the existing noise walls is recommended. Existing noise wall ENB L-2 did not meet the MDOT feasibility criteria. Therefore, additional noise abatement analysis at this location was performed.

A noise abatement analysis was performed for noise sensitive receptors with design year build condition (2051) predicted noise levels that approach or exceed the NAC. Noise abatement was considered in the form of fifteen (15) noise walls and one (1) earthen berm. Fourteen (14) of the noise walls failed to meet the MDOT feasibility and reasonableness criteria. One (1) noise wall (NB L-4), which evaluated impacted receptors located behind existing noise wall ENB L-2 located in CNE L, met the MDOT feasibility and reasonableness criteria. Noise wall NB L-4 consisted of a new noise wall to replace the existing noise wall

ENB L-2. Noise abatement at this location is recommended. Further evaluation of the design elements will be required prior to the noise wall being advanced to the public participation phase. Benefited residents will have the opportunity to vote for or against the noise wall replacement before it moves into the construction phase.

Noise abatement for CNE N in the form of an earthen berm (NB N-1) met the MDOT feasibility and reasonableness criteria and is recommended to be advanced to the public participation phase to determine the viewpoints of the benefited dwelling units for final determination for inclusion in the Project.

A detailed discussion of findings of the noise abatement analysis and the evaluation of noise abatement measures is presented in the body of this report.

1.0 PURPOSE OF THE REPORT

This report evaluates the potential traffic noise impacts and analyzes potential traffic noise abatement measures for the I-94: Wayne Road to East of Greenfield Road Reconstruction and Rehabilitation Project (I-94 Project) based on the existing condition (2019) and the design year build condition (2051) traffic data and engineering designs for the project. The I-94 Project consists of the eleven (11) Michigan Department of Transportation (MDOT) project numbers. Since portions of the I-94 Project, as described in **Section 2.0**, meet the Type I Project criteria set forth in Title 23 Code of Federal Regulations, Part 772 (23 CFR 772), the entire I-94 Project is deemed a Type I Project by the Federal Highway Administration (FHWA) and MDOT.

The identification of traffic noise impacts and the evaluation of traffic noise abatement measures was conducted in accordance with 23 CFR 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* and the MDOT *Highway Noise Analysis and Abatement Handbook*, (MDOT Noise Handbook, 2011). This Traffic Noise Study and Abatement Analysis was conducted during the Preliminary Engineering (PE) Phase.

2.0 PROJECT DESCRIPTION

The I-94 Project is a transportation improvement project sponsored by MDOT along a 12.7-mile stretch of I-94 from Wayne Road to east of Greenfield Road in the cities of Romulus, Taylor, Allen Park, Dearborn Heights, and Dearborn in Wayne County, Michigan (**Figure 1**). Based on the length of the of the I-94 Project corridor and the numerous MDOT project numbers assigned to this project, the I-94 Project was divided into five different segments based on the proposed improvements. A description of the proposed I-94 Project improvements per segment is described as follows:

Segment 1: I-94 from Wayne Road to Middlebelt Road (MDOT Project Nos. 208609 and 211957): Full reconstruction of the I-94 roadway on the same alignment along with the extension of several auxiliary lanes to improve traffic congestion. Partial reconstruction of the Wayne Road eastern ramps and the full reconstruction of the Vining Road, Merriman Road, and Middlebelt Road ramps on the same alignment. Additional improvements include drainage modifications, sign modernization, traffic signal modernization, Intelligent Transportation Systems (ITS), and lighting improvements/replacements.

Segment 2: I-94 from Middlebelt Road to Beech Daly Road (MDOT Project Nos. 211426 and 205354): Full reconstruction of the I-94 roadway on a new alignment along with a new signalized diamond interchange at Ecorse Road and the reconstruction of Ecorse Road within the new interchange configuration with new turn lanes. New eastbound and westbound I-94 bridges over Inkster Road and Ecorse Road along with the replacement and widening of the eastbound I-94 bridge over Beech Daly Road. Additional improvements include drainage modifications, sign modernization, ITS, and lighting improvements/replacements.

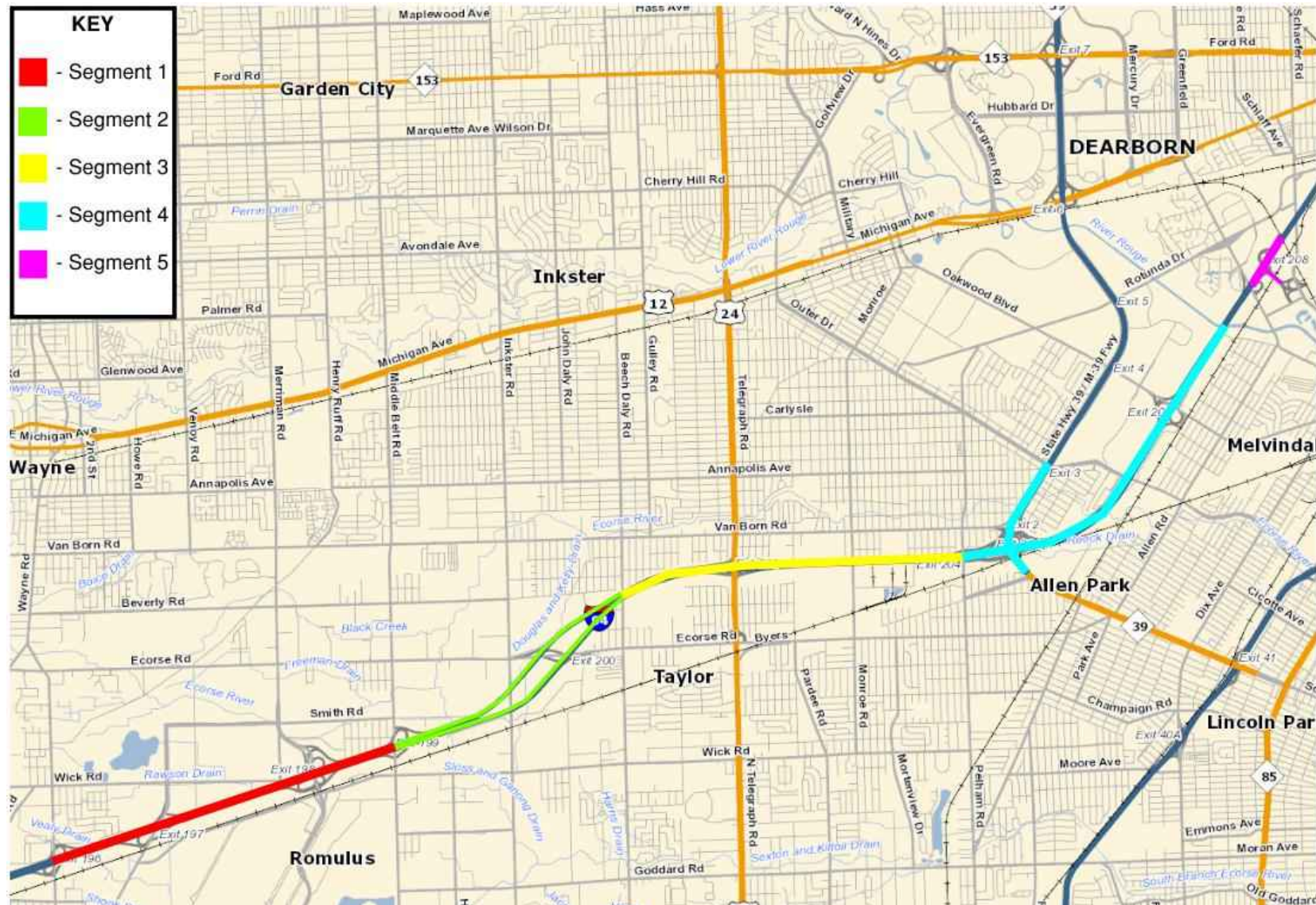
Segment 3: I-94 from Beech Daly Road to Pelham Road (MDOT Project Nos. 217336 and 218689): Concrete pavement repairs and/or patching of the I-94 roadway and the US-24 ramps and median cable barrier installation.

Segment 4: I-94 from Pelham Road to Oakwood Boulevard (MDOT Project Nos. 201225, 215038, 212999, and 218689): Reconstruction and/or repair of pavement along portions of the I-94 roadway and the I-94/M-39 connecting ramps on the same alignment along with drainage improvements. Reconstruction and/or repair for the Pelham Road and Van Born Road ramps and Van Born Road on the same alignment along with drainage improvements. Reconstruction and drainage improvements for three of the Oakwood Boulevard ramps and concrete inlay of the westbound I-94 roadway from the east of M-39 to the Rouge River, all on the same alignment. Additional improvements include rehabilitation of seventeen (17) bridges along I-94/M-39 and the interchange ramps and median cable barrier installation along with ITS improvements/replacements.

Segment 5: I-94 at Ford Plant Gate 10 Entrance (MDOT Project Nos. 202486 and 214929): Replacement and widening of I-94 bridge superstructure (deck and beams) over the Ford Plant Gate 10 ramp along with the full reconstruction and widening of the I-94 roadway on either side of the Ford Plant Gate 10 bridge. Additional improvements include the repair of two railroad bridges over the Ford Plant Gate 10 access roadway, located just east of the I-94/Gate 10 interchange, and ITS improvements/replacements.

For the purposes of this study, the traffic noise analysis was prepared for the entire I-94 Project corridor and was not sub-divided into segments since common noise environments and potential noise abatement measures overlapped the various segments and corresponding MDOT project numbers.

Figure 1. Project Limits



3.0 BASIC TRAFFIC NOISE CONCEPTS

3.1 Noise

Noise is generally defined as unwanted or annoying sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB). The decibel scale is logarithmic and expresses the ratio of the sound pressure unit being measured to a standard reference level. Noise levels associated with common activities are depicted on **Figure 2**. Most sounds heard in the environment do not consist of a single frequency, but rather a broad band of frequencies. The intensities of each frequency add to generate sound. Because the human ear does not respond to all frequencies equally, the method commonly used to quantify environmental noise consists of evaluating all of the frequencies of a sound according to a weighting system. It has been found that the A-weighted filter on a sound level meter, which includes circuits to differentially measure selected audible frequencies, best approximates the frequency response of the human ear.

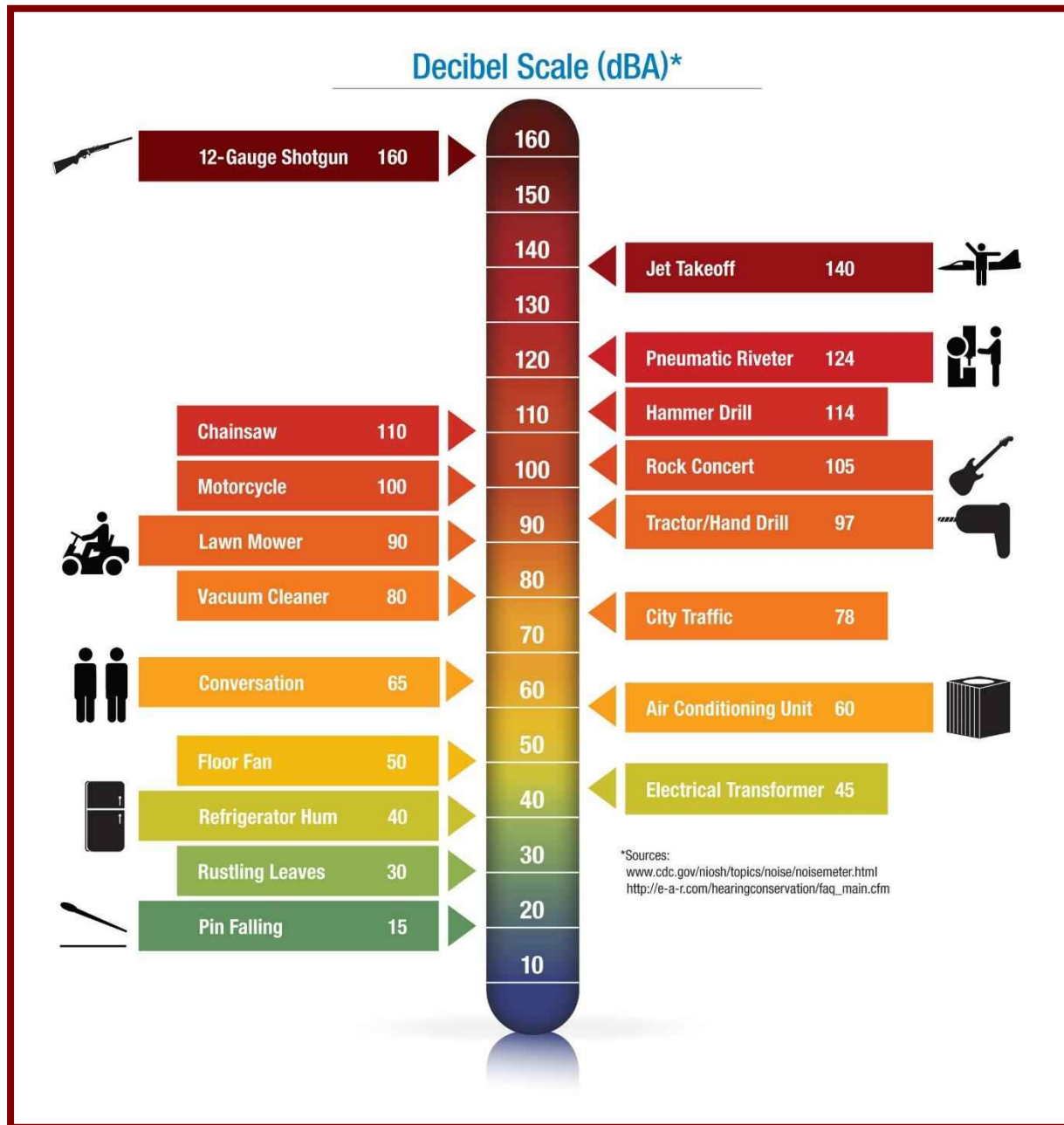
Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from various sources, including relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of traffic noise, a statistical noise descriptor called the equivalent hourly sound level ($L_{eq}(h)$) is commonly used. $L_{eq}(h)$ describes a noise sensitive receptor's cumulative exposure from all noise-producing events over a one-hour period.

Because decibels are logarithmic units, sound levels cannot be added by ordinary arithmetic means. The following general relationships provide a basic understanding of sound generation and propagation:

- An increase, or decrease, of 10 dB(A) will be perceived by a receptor to be a doubling, or halving, of the sound level
- Doubling the distance between a highway and a receptor will typically produce a 3 dB(A) sound level decrease
- A 3 dB(A) sound level increase is barely detectable by the human ear

Noise-sensitive receptors are locations that may be subject to interference from noise.

Figure 2. Common Activity Noise Levels



3.2 Federal Guidelines

Effective control of undesirable traffic noise focuses upon three areas of responsibility. These are the control of land uses adjacent to a highway, regulation of vehicle noise emission levels, and mitigating noise impacts resulting from certain types of highway improvement projects.

The authority to implement planning and land use control in the state of Michigan is under the jurisdiction of local governments. Both FHWA and MDOT encourage local governments to regulate land uses in such a manner that noise sensitive developments are either prohibited from being located

adjacent to major transportation facilities, or that developments are planned, designed, and built in such a manner that potential noise impacts can be avoided or minimized.

The National Environmental Policy Act (NEPA) of 1969 gives broad authority and responsibility to federal agencies to evaluate and mitigate adverse environmental impacts caused by federal actions. FHWA is required to comply with NEPA including mitigating adverse highway traffic noise effects. The Federal-Aid Highway Act of 1970 mandates FHWA to develop standards for mitigating highway traffic noise. It also requires FHWA to establish traffic noise level criteria for various types of land uses. The act prohibits FHWA approval of federal-aid highway projects unless adequate consideration has been made for noise abatement measures to comply with the standards.

The Noise Control Act of 1972 gives the US Environmental Protection Agency (US EPA) the authority to establish noise regulations to control major noise sources, including motor vehicles and construction equipment. Furthermore, the US EPA is required to set noise emission standards for motor vehicles used for interstate commerce and the FHWA is required to enforce the US EPA noise emission standards through the office of motor carrier safety.

FHWA regulations for highway traffic noise for federal-aid highway projects are contained in 23 CFR 772, July 13, 2010. These regulations contain noise abatement criteria, which represent the maximum acceptable level of highway traffic noise for specific types of land uses (see Table 1 below). The regulations do not mandate that the abatement criteria be met in all situations, but rather require that reasonable and feasible efforts be made to provide noise mitigation when the abatement criteria are approached or exceeded.

3.3 State Guidelines

Traffic noise studies for road projects in Michigan are performed in accordance with 23 CFR 772 and the MDOT Highway Noise and Abatement Handbook. There are five main steps that typically comprise traffic noise studies, as outlined in this document:

1. Identify noise sensitive receptors
2. Determine existing ambient peak hour noise levels
3. Predict future peak hour noise levels
4. Identify traffic noise impacts
5. Evaluate mitigation measures for receptors where traffic noise impacts occur

3.4 Activity Categories and Noise Abatement Criteria

MDOT has adopted activity categories and Noise Abatement Criteria (NAC) developed by FHWA (23 CFR 772) for determining noise impacts for a variety of land uses. The land use Activity Categories along with the criteria are presented in **Table 1**. These are the absolute values where abatement must be considered. The NAC sound levels are only to be used to determine a roadway noise impact. A traffic noise impact occurs when either of two conditions is met:

- The predicted traffic noise level approaches or exceeds the NAC for an activity category. MDOT defines “approaching” the NAC as being within one (1) dB of the NAC levels listed in **Table 1**.
- The predicted future noise level substantially exceeds the existing noise level (defined as an increase of 10 dB(A) or more).

Table 1: FHWA Noise Abatement Criteria (NAC)

Activity Category	Activity Criteria $L_{eq}(h)$	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	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 not profit institutional structures, radio studios, recording studios, recreation areas, Section (4F) 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 and not profit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (Exterior)-	Hotels, motels, offices, restaurant/bars and other developed lands, properties, or activities not included in A-D or F
F	-	Agriculture, airports, bus yards, emergency services, industrial logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	-	Undeveloped lands that are not permitted

Source: FHWA *Highway Noise Control Standards and Procedures*, 23 CFR Part 772

A traffic noise impact occurs when either of two conditions is met: 1) The predicted traffic noise level approaches or exceeds the NAC for an activity category. MDOT defines “approaching” the NAC as being within one dB of the NAC levels listed in Table 1) The predicted future noise level substantially exceeds the existing noise level (defined as an increase of 10 dB(A) or more).

MDOT does not use L10 as a criterion to determine impacts.

4.0 METHODS USED TO ANALYZE PROJECT

4.1 FHWA Traffic Noise Model (TNM)

The traffic noise analysis for this study was performed using the FHWA TNM™ Version 2.5 (TNM). The TNM estimates vehicle noise emissions and resulting noise levels based on reference energy mean emission levels. The existing and proposed alignments (horizontal and vertical), as well as the traffic volumes, vehicle type, average vehicle speeds, pavement type and traffic control devices are input into the model. TNM uses its acoustic algorithms to predict noise levels at the selected receptor locations by taking into account sound propagation variables such as, atmospheric absorption, divergence, intervening ground, barriers, building rows, and heavy vegetation. In accordance with MDOT guidance, all predicted noise levels were rounded to the nearest whole number.

TNM input features for ground zones, building rows, and tree zones were not included in the TNM model.

4.1.1 Traffic Information

Existing condition (2019) and design year build condition (2051) peak hour traffic volumes for I-94 and the associated interchange ramps located between Wayne Road and Oakwood Boulevard and for M-39 were obtained from the *I-94 Corridor Analysis: I-275 to M-39 (WSP, June 2022)*. Since the design year build condition for the I-94 Project was established as 2051, an annual growth rate of 0.3%, which is consistent with the annual growth rate provided in the *I-94 Corridor Analysis: I-275 to M-39* report was applied to the design year build condition (2045) traffic volumes to generate the peak hour design year build condition 2051 traffic volumes. Supplemental existing condition peak hour traffic data was obtained from the *MDOT Traffic Count Data System (TCDS)* for the remaining sections of I-94 and the cross-roads that were not included in the *I-94 Corridor Analysis: I-275 to M-39* report. The design year build condition 2051 peak hour traffic volumes were generated using an annual growth rate of 0.3%. The AM peak hour was identified as 7:00 AM – 8:00 AM and the PM peak hour was identified as 5:00 PM – 6:00 PM.

The existing condition (2019) and the design year build condition (2051) AM and PM peak hour traffic volumes and traffic speeds that were used to generate the predicted noise levels is summarized in **Appendix D**.

4.1.2 Road Alignments

The travel lane and shoulder roadway alignment and profile information for I-94 and the interchange ramps was based on the engineering design models for the existing condition and the design build scenario. The roadway alignment and elevation data for the cross-roads that were not included in the engineering design model were generated in ArcGIS using the USGS 2020 aerial imagery (<http://earthexplorer.usgs.gov>) and the digital elevation model that was generated using the USGS 2017 LiDAR data (<http://apps.nationalmap.gov/lidar-explorer/#/>). Each travel lane and shoulder were modeled separately. The travel lanes and shoulder widths were based on the roadway typical sections.

4.1.3 Modeled Receptor Sites

A receptor is defined as a discrete or representative location of a noise sensitive area(s) for the land uses listed in **Table 1**. Land uses with an Activity Category E classification that did not contain exterior areas of frequent human use, and land uses with an Activity Category F and G classification were not

evaluated as part of this traffic noise study. Based on an evaluation of the Project Study Area, a total of 1,220 modeled receptor sites representing 1,326 dwelling units were identified. There were 1,172 receptors classified as Activity Category B, 30 receptors were classified as Activity Category C, 7 receptors were classified as Activity Category D, and 11 receptors were classified as Activity Category E with an exterior area of frequent human use. The Project Study Area extended a minimum of 500 feet from the proposed outside shoulder for the I-94 travel lanes, interchange ramps, and cross-roads with design year build condition (2051) improvements. The Project Study Area was extended beyond the 500-foot buffer in areas where it was necessary to identify the extent of the traffic noise impacts.

Specific receptor placement in the noise model is generally based on exterior areas where normal human occupation is expected to occur on the property (i.e., outdoor areas with evidence of frequent human use). The ground elevation for the receptor location was based on the digital elevation model that was generated using the Michigan Wayne County 2017 Lidar Point Cloud Data. A default height of 4.9 feet above the base ground elevation was used for all receptors. The Activity Category classification and description of the land use for the modeled receptors is summarized in **Appendix E** and the location of the receptors is depicted on **Figure A-3.1 – A-3.17, Appendix A**.

4.1.4 Terrain Lines

Terrain lines were used in the TNM model to represent where a significant grade differential and/or ground obstruction that could result in natural shielding is present between the receptor location and the roadway elevation. The terrain lines were based on the ground elevation data obtained from the existing and design year build engineering design model and the digital elevation model that was generated using the USGS 2017 LiDAR data.

4.1.5 Barriers

Fixed height noise barriers were modeled to represent the existing noise walls within the Project Study Area. The alignment and height of the existing noise walls were based on the information provided in the existing condition engineering design model and was supplemented using information obtained from a review of the original noise wall design plans that were provided by MDOT.

4.2 Common Noise Environments

Land use in the project area is a mixture of residential, commercial (retail, restaurants, hotels, etc.), churches, schools, medical facilities, industrial/manufacturing, and undeveloped lands. An evaluation of the current construction activities, maintenance of traffic scheme, topography, level of service of the existing local roadway and highways, and the density and proximity of the receptors to the local roadways and highways was performed so as to establish groupings of receptors that represent the Common Noise Environments (CNE). A description of each CNE within the Project Study Area is provided in **Table 2** and the location of each CNE is depicted on **Figure A-2.1 and A-2.2, Appendix A**.

Table 2: Common Noise Environments

CNE Number	CNE Activity	Number of Dwelling Units
CNE A	Residential	3
CNE B	Residential	97
CNE C	Undeveloped	0
CNE D	Hotel	12
CNE E	Undeveloped	0

CNE Number	CNE Activity	Number of Dwelling Units
CNE F	Residential/Hotel	13
CNE G	Industrial	0
CNE H	Residential	4
CNE I	Residential/Office	45
CNE J	Residential/School/Cemetery	189
CNE K	Residential/Golf Course	85
CNE L	Residential/Playground	246
CNE M	Vacant	0
CNE N	Residential	73
CNE O	Park	7
CNE P	Residential	121
CNE Q	Residential	66
CNE R	Residential	35
CNE S	Commercial	3
CNE T	Residential/School/Church/Preschool	79
CNE U	Residential/Park/Church	171
CNE V	School	1
CNE W	Residential/Hotel	14
CNE X	Commercial	0
CNE Y	Residential	62
CNE Z	Industrial	0
CNE AA	Industrial	0
CNE BB	Industrial	0
Total Number of Dwelling Units		1,326

CNE A

CNE A was located in the northwest quadrant of the I-94 and Wayne Road interchange. This CNE contained three (3) modeled receptors, each representing one (1) dwelling unit, with an Activity Category B land-use classification. The modeled receptor locations were located to the west, beyond the limits of the proposed I-94 improvements but were located within the Project Study Area 500-foot buffer zone.

CNE B

CNE B was located north of I-94, between Wayne Road and Vining Road, and consisted of mainly residential and agricultural land-uses. This CNE contained a total of ninety-seven (97) modeled receptors, each representing one (1) dwelling unit, with an Activity Category B land-use classification. An existing noise barrier (ENB B-1) was located within this CNE at the existing right-of-way (ROW). The existing noise barrier was approximately 3,200 feet in length and ranged in height from 6 to 12 feet.

CNE C

CNE C was located south of I-94, between Wayne Road and Vining Road, and was comprised of existing ROW. There were no noise sensitive land-uses identified within this CNE.

CNE D

CNE D was located north of I-94, between Vining Road and Merriman Road, and consisted of mainly agricultural/undeveloped land and commercial properties, including three (3) hotels that contain outdoor pool areas. This CNE contained a total of three (3) modeled receptors with an Activity Category E land-use classification representing a total of twelve (12) dwelling unit equivalents (DUEs). A total of three (3) DUEs were used to represent the outdoor pool area associated with the Delta Hotels by Marriott Detroit Metro Airport (receptor D-1). A total of five (5) DUEs were used to represent the outdoor pool area associated with the Wyndham Garden Romulus Detroit Metro Airport (receptor D-2). A total of four (4) DUEs were used to represent the outdoor pool area associated with the Clarion Hotel Detroit Metro Airport (receptor D-3). The DUEs were determined by utilizing the equation outlined in the MDOT Highway Noise Analysis and Abatement Handbook. Additional information pertaining to DUE calculations is contained in **Appendix F**. There were no exterior areas of frequent human use identified at the remaining commercial properties located within this CNE; therefore, these commercial properties were not considered noise sensitive land-uses.

CNE E

CNE E was located south of I-94, between Vining Road and Merriman Road, and consisted of undeveloped land associated with the Detroit Metropolitan Wayne County Airport with an Activity Category F land-use classification. There were no noise sensitive land-uses located within this CNE.

CNE F

CNE F was located north of I-94, between Merriman Road and Middlebelt Road, and consisted mainly of commercial properties, vacant parcels owned by the Detroit Metropolitan Wayne County Airport, and one (1) single family residence. This CNE contained a total of five (5) modeled receptors, representing a total of thirteen (13) dwelling units.

One (1) of the modeled receptors consisted of an Activity Category B land-use classification representing one (1) dwelling unit. Four (4) of the receptors represent twelve (12) DUEs associated with four (4) hotels with outdoor pool areas and/or patio areas with an Activity Category E land-use classification. A total of three (3) DUEs were used to represent the outdoor pool area associated with the Howard Johnson by Wyndham Romulus Detroit Metro Airport (receptor F-1). A total of four (4) DUEs were used to represent the outdoor pool area associated with the La Quinta Inn & Suites by Wyndham Romulus Detroit Metro Airport (receptor F-2). One (1) DUE was used to represent the outdoor patio area associated with the Courtyard Detroit Metro Airport Romulus (receptor F-3). A total of four (4) DUEs were used to represent the outdoor patio area associated with the Detroit Metro Airport Marriott (receptor F-4). The DUEs were determined by utilizing the equation outlined in the MDOT Noise Handbook (2011). Additional information pertaining to DUE calculations is contained in **Appendix F**. There were no exterior areas of frequent human use identified at the remaining commercial properties located within this CNE; therefore, these commercial properties were not considered noise sensitive land-uses.

CNE G

CNE G was located south of I-94, between Merriman Road and Middlebelt Road, and consisted of industrial properties with an Activity Category F land-use classification. There were no noise sensitive land-uses located within this CNE.

CNE H

CNE H was located north of I-94, between Middlebelt Road and Ecorse Road, and consisted of mainly industrial land-use and four (4) single family residences. This CNE contained four (4) modeled receptors, each representing one (1) dwelling unit, with an Activity Category B land-use classification. The industrial properties represented an Activity Category F land-use classification and therefore not considered a noise sensitive land-use.

CNE I

CNE I was located south of I-94, between Middlebelt Road and Ecorse Road, and consisted mainly of commercial, industrial, and residential land-uses. This CNE contained a total of twenty-seven (27) modeled receptors, representing forty-five dwelling units (45) dwelling units. Twenty-six (26) of the modeled receptors represented forty-four (44) single-family residences with an Activity Category B land-use classification. One (1) modeled receptor, representing one (1) DUE, was used to represent the MASCO Corporation Research & Development Center (receptor I-2), which was identified with an Activity Category D land-use classification. The industrial properties represented an Activity Category F land-use classification and there were no exterior areas of frequent human use associated with the remaining commercial properties; therefore, these industrial and commercial properties were not considered noise sensitive land-uses.

CNE J

CNE J was located north of I-94, between Ecorse Road and Telegraph Road and consisted of mainly residential land-uses, the Quest Charter Academy school, and the Oak Grove Burying Ground cemetery. This CNE contained a total of one-hundred and eighty-nine (189) modeled receptors, each representing an individual dwelling unit. One-hundred and eighty-five (185) of the modeled receptors represented single-family residences with an Activity Category B land-use classification. The playground associated with the Quest Charter Academy school (receptor J-124) was identified as an Activity Category C land-use classification and one (1) modeled receptor, representing one (1) DUE, was placed in the center portion of the playground area to represent this land-use area. The Oak Grove Burying Ground cemetery (receptors J-186 through J-188) was identified as an Activity Category C land-use classification and three (3) modeled receptors, each representing one (1) DUE, were used to represent this land-use area. Based on the size of the cemetery, the cemetery was divided into three areas, from north to south, with each area represented by a modeled receptor.

Two (2) existing noise barriers were located within this CNE. An existing noise barrier (ENB J-1) was located east of Beech Daly Road and was approximately 1,500 feet in length and ranged in height from 4 to 20 feet. An existing noise barrier (ENB J-2) was located at the northwest quadrant of the I-94 and Telegraph Road interchange and was approximately 2,100 feet in length and ranged in height from 1 foot to 22 feet. An earthen berm infilled the area located between the two existing noise walls.

CNE K

CNE K was located south of I-94, between Ecorse Road and Telegraph Road, and consisted of mainly residential land-use, the Taylor Meadows Golf Course, and MDOT Taylor Transportation Service Center Office. This CNE contained a total of eighty-five (85) modeled receptors, each representing an individual single dwelling unit. Seventy-four (74) of the modeled receptors represented single family residences with an Activity Category B land-use classification. A total of eight (8) modeled receptors, each representing one (1) DUE, were used to represent the Taylor Meadows Golf Course (receptors K-41 through K-48), which was identified as an Activity Category C land-use classification. A modeled receptor was used to represent each green and tee box located within the Project Study Limits.

One (1) modeled receptor, representing one (1) DUE, was used to represent the outdoor patio area associated with the MDOT Taylor Transportation Service Center Office (receptor K-49), which was identified with an Activity Category E land-use classification.

CNE L

CNE L was located north of I-94, between Telegraph Road and Pelham Road, and consisted mainly of residential, industrial, and commercial land-uses and the Lucinda Burns Park. This CNE contained a total of two-hundred and forty-six (246) modeled receptors, each representing an individual dwelling unit. Two-hundred and forty-two (242) of the modeled receptors represented single family residences with an Activity Category B land-use classification. A total of four (4) modeled receptors, each representing one (1) DUE, were used to represent the Lucinda Burns Park (receptors L-136, L-207, L-208, & L-209), which was identified with as an Activity Category C land-use classification. A modeled receptor was used to represent each of the four playground equipment areas located at Lucinda Burns Park. The industrial properties represented an Activity Category F land-use classification and there were no exterior areas of frequent human use associated with the commercial properties; therefore, these industrial and commercial properties were not considered noise sensitive land-uses.

Three existing noise barriers were located within this CNE. An existing noise barrier (EBN L-1) was located at the northeast quadrant of the I-94 and Telegraph Road interchange and was approximately 2,200 feet in length and ranged in height from 13 to 21 feet. An existing noise barrier (ENB L-2) was located in the center portion of this CNE, which extended from west of Roosevelt Blvd. to east of Clippert St. and was approximately 2,700 feet in length and ranged in height from 6 to 14 feet. An existing noise barrier (ENB L-3) was located in the northwest quadrant of the I-94 and Pelham Road interchange and was approximately 2,700 feet in length and ranged in height from 10 to 14 feet.

CNE M

CNE M was located south of I-94, between Telegraph Road and Pelham Road and consisted of industrial and commercial properties. The industrial properties represented an Activity Category F land-use classification and there were no exterior areas of frequent human use associated with the commercial properties; therefore, there were no noise sensitive land-uses identified within this CNE.

CNE N

CNE N was located north of I-94, between Pelham Road and the M-39/I-94 interchange, and consisted of mainly residential and commercial properties. This CNE contained a total of seventy-three (73) modeled receptors, each representing an individual dwelling unit, with an Activity Category B land-use classification. There were no exterior areas of frequent human use associated with the commercial properties; therefore, these commercial properties were not considered noise sensitive land-uses.

CNE O

CNE O was located south of I-94, between Pelham Road and the M-39/I-94 interchange, and consisted of an industrial property and the Cunningham Park, which was identified with an Activity Category C land-use classification. A total of seven (7) modeled receptors, each representing one (1) DUE, were used to represent the Cunningham Park. A modeled receptor was used to represent each individual outdoor area associated with the Cunningham Park, which consisted of a fire pit area, two (2) gazebos, two (2) playground areas, a baseball field, and a football field. The industrial property represented an Activity Category F land-use classification and was not considered a noise sensitive land-use.

CNE P

CNE P was located in the northwest quadrant of the M-39 and Van Born Road Interchange and consisted of residential and commercial properties. This CNE contained a total of one hundred and twenty-one (121) modeled receptors, each representing one (1) dwelling unit with an Activity Category B land-use classification. There were no exterior areas of frequent human use associated with the commercial properties; therefore, these commercial properties were not considered noise sensitive land-uses.

An existing noise barrier (ENB P-1) was located within this CNE along the north side of the Southfield Road merge lane onto westbound Van Born Road. The noise barrier was approximately 900 feet in length and ranged in height from 10 to 14 feet.

CNE Q

CNE Q was located at the southwest quadrant of the M-39 and Outer Drive interchange and consisted of mainly residential and commercial properties. This CNE contained a total of sixty-six (66) modeled receptors, each representing one (1) dwelling unit with an Activity Category B land-use classification. There were no exterior areas of frequent human use associated with the commercial properties; therefore, these commercial properties were not considered noise sensitive land-uses.

CNE R

CNE R was located at the northwest quadrant of the M-39 and Outer Drive interchange and consisted of residential and commercial properties. This CNE contained a total of thirty-five (35) modeled receptors, each representing one (1) dwelling unit with an Activity Category B land-use classification. There were no exterior areas of frequent human use associated with the commercial properties; therefore, these commercial properties were not considered noise sensitive land-uses.

CNE S

CNE S was located at the northeast quadrant of the M-39 and Outer Drive interchange and consisted of commercial properties, including three restaurants located in the Independence Marketplace retail center that had outdoor seating areas. This CNE contained a total of one (1) modeled receptor, which represented three (3) DUEs associated with the three outdoor seating areas located at Cold Stone Creamery, Five Guys, and Starbucks. There were no exterior areas of frequent human use associated with the remaining commercial properties located within this CNE; therefore, these commercial properties were not considered noise sensitive land-uses.

CNE T

CNE T was located at the southeast quadrant of the M-39 and Outer Drive Interchange and consisted of residential and commercial properties, the Mt. Hope Church and school, Little Jungle Preschool, and Peterson Playground. This CNE contained a total of sixty-nine (69) modeled receptors representing seventy-nine (79) dwelling units. Sixty-five (65) modeled receptors represented one (1) dwelling unit with an Activity Category B land-use classification. Two (2) modeled receptors, each representing one (1) DUE, were used to represent the Mt. Hope Church and School (receptors T-1 & T-2), which was identified with an Activity Category D land-use classification. One (1) modeled receptor, representing one (1) DUE, was used to represent the Peterson Playground (receptor T-6), which was identified with an Activity Category C land-use Classification. One (1) modeled receptor, representing eleven (11) DUEs, was used to represent the Little Jungle Preschool playground area (receptor T-19), which was identified with an Activity Category C land-use classification. The DUEs were determined by utilizing the equation outlined in the MDOT Noise Handbook (2011). Additional information pertaining to DUE calculations is contained in **Appendix F**.

There were no exterior areas of frequent human use associated with the commercial properties located within this CNE; therefore, these commercial properties were not considered noise sensitive land-uses.

CNE U

CNE U was located north of I-94, between the M-39/I-94 interchange and Outer Drive, and consisted of single-family residential properties, the Cove at Allen Park apartment complex, the John F. Kennedy Memorial Park trail and baseball field, the Allen Park Church of Christ, and the Hope City Church. This CNE contained a total of one hundred and forty-four (144) modeled receptors representing one hundred and seventy-one (171) dwelling units. One hundred and six (106) of the modeled receptors represented single family residences with an Activity Category B land-use classification. Two (2) of the modeled receptors, each representing one (1) DUE, were each used to represent the John F. Kennedy Memorial Park trail and baseball field, which were identified with an Activity Category C land-use classification.

A total of thirty-three (33) modeled receptors, representing fifty-six (56) dwelling units, were used to evaluate the outdoor patio and balconies representing the exterior use areas associated with the individual apartment units located within the Cove at Allen Park apartment complex, which was identified with an Activity Category B land-use classification. One (1) modeled receptor, representing five (5) DUEs, was used to represent the Cove at Allen Park apartment complex outdoor pool area, which was classified with an Activity Category C land-use classification. The DUEs were determined by utilizing the equation outlined in the MDOT Noise Handbook (2011). Additional information pertaining to DUE calculations is contained in **Appendix F**.

One (1) modeled receptor, representing one (1) DUE, was used to represent the Allen Park Church of Christ, which was identified with an Activity Category D land-use classification. One (1) modeled receptor representing one (1) DUE was used to represent the Mt. Hope Church, which was identified with an Activity Category D land-use classification.

Three existing noise walls were located within this CNE. An existing noise wall (ENB U-1) was located along the back side of the M-39/I-94 interchange Van Born/M-39 Service Road ramp connecting to northbound M-39. This noise barrier is approximately 800 feet in length and ranged in height from 12 to 22 feet.

An existing noise wall (ENB U-2) and retaining wall were located along the north side of the I-94 exit ramp connecting to north bound M-39. This noise barrier is approximately 500 feet in length and ranged in height from 2 to 21 feet.

An existing noise wall (ENB U-3) was located along the north side of I-94 extending from John F. Kennedy Memorial Park eastward to the western edge of the Cove at Allen Park apartment complex. This noise barrier is approximately 1,900 feet in length and ranged in height from 4 to 14 feet. An existing berm was present between existing noise walls ENB U-2 and ENB U-3.

CNE V

CNE V was located south of I-94 between the M-39/I-94 interchange and Outer Drive and consisted of industrial properties and the Melvindale High School. This CNE contained one (1) modeled receptor representing one (1) DUE associated with the Melvindale High School, which was identified with an Activity Category D land-use classification. The industrial properties represented an Activity Category F

land-use classification; therefore, these industrial properties were not considered noise sensitive land-uses.

CNE W

CNE W was located east of I-94, between West Outer Drive and Oakwood Boulevard, and consisted of residential, commercial, and industrial properties. This CNE contains a total of fourteen (14) modeled receptors representing fourteen (14) dwelling units. Twelve (12) of the modeled receptors represent single family residences with an Activity Category B land-use classification. Two (2) of the commercial properties included the Comfort Inn & Suites Allen Park – Dearborn and Best Western Greenfield Inn hotels, which have outdoor patio areas that were representative of exterior areas of frequent human use. As a result, these two hotels were identified with an Activity Category E land-use classification. One (1) modeled receptor, each representing one (1) DUE, was used to represent each hotel outdoor patio area.

The industrial properties represented an Activity Category F land-use classification and there were no exterior areas of frequent human use associated with the remaining commercial properties; therefore, these industrial and remaining commercial properties were not considered noise sensitive land-uses.

CNE X

CNE X was located on the west side of I-94, between West Outer Drive and Oakwood Boulevard, and consisted of commercial properties. There were no exterior areas of frequent human use associated with the commercial properties. As a result, there were no noise sensitive land-uses identified within this CNE.

CNE Y

CNE Y was located west of I-94, between Oakwood Boulevard and Greenfield Road, and consisted of industrial properties and the Lake Village of Fairlane apartment complex. This CNE contained a total of thirty (30) modeled receptors representing sixty-two (62) dwelling units. Twenty-eight (28) modeled receptors representing fifty-six (56) dwelling units were used to evaluate the outdoor patio and balconies representing the exterior use areas associated with the individual apartment units located within the Lake Village of Fairlane apartment complex, which was identified with an Activity Category B land-use classification. One (1) modeled receptor representing one (1) DUE was used to represent the Lake Village of Fairlane apartment complex tennis court, which was classified with an Activity Category C land-use classification. One (1) modeled receptor representing five (5) DUEs was used to represent the Lake Village of Fairlane apartment complex outdoor pool. The DUEs associated with the outdoor pool area were determined by utilizing the equation outlined in the MDOT Noise Handbook (2011). Additional information pertaining to DUE calculations is contained in **Appendix F**.

CNE Z

CNE Z was located east of I-94, between Oakwood Boulevard and Road 4, and consisted of industrial properties with an Activity Category F land-use classification. There were no noise sensitive land-uses located within this CNE.

CNE AA

CNE AA was located east of I-94, between Road 4 and Schaefer Road, and consisted of industrial properties with an Activity Category F land-use classification. There were no noise sensitive land-uses located within this CNE.

CNE BB

CNE BB was located west of I-94, between Greenfield Road and Schaefer Road, and consisted of industrial properties with an Activity Category F land-use classification. There were no noise sensitive land-uses located within this CNE.

4.3 Field Measurement

Field ambient noise measurements with concurrent traffic counts were collected to provide information for noise model validation. The collection of ambient noise measurements was conducted in accordance with the MDOT Handbook and FHWA *Noise Measurement Handbook* (FHWA-HEP-18-065). Measurement of the existing noise levels at the representative sites was conducted on December 12 and 13, 2022 and November 6 and 7, 2023 using a SoundPro DL noise meter. Existing noise measurements were recorded for a 15-minute duration under meteorologically acceptable conditions when the pavement was dry, and winds were calm or light. The sound level meter was calibrated at 114 decibels using a Quest QC-10 before and after each reading. All of the existing noise level measurements were recorded at approximately 5 feet above grade at locations representative of the predominant ambient noise source.

A total of eighteen (18) existing noise level measurements were collected at representative locations throughout the Project Study Area (**Figures A-2.1 and A-2.2, Appendix A**). A summary of the existing noise level measurements and the existing traffic recorded is summarized in **Table 3**, and copies of the Ambient Noise Measurement Logs are included in **Appendix G**.

Table 3: Field Measurement Summary

Site ID#	Site Description	Date	Start Time	End Time	Traffic Information						Measured Noise Level (dBA)
					Roadway	Auto	Med. Truck	Heavy Truck	Bus	MC	
A-1	34224 McBride St. (CNE B)	12/12/22	3:33 PM	3:48 PM	EB I-94	899	33	74	0	0	65.2
					WB I-94	969	17	72	1	0	
					EB McBride	3	0	0	0	0	
A-2	88' S EB I-94 66' N Exit 197 (CNE C)	12/12/22	4:03 PM	4:18 PM	EB I-94	945	35	69	0	0	74.9
					WB I-94	1021	33	65	2	1	
					Exit 197	20	3	7	0	0	
A-3	31555 Wick Rd. (CNE D)	12/13/22	8:50 AM	9:05 AM	EB I-94	724	34	103	0	0	79.4
					WB I-94	552	41	137	0	0	
A-4	28200 Smith Rd. (CNE F)	12/13/22	9:18 AM	9:32 AM	EB I-94	680	37	128	3	0	73.8
					WB I-94	609	36	110	2	0	
A-5	6597 McGuire St. (CNE K)	12/13/22	9:55 AM	10:10 AM	EB I-94	596	34	128	0	0	70.1
					WB I-94	583	30	108	0	0	
A-6	6365 Oldham St. (CNE J)	12/13/22	10:28 AM	10:43 AM	EB I-94	642	33	124	3	0	65.9
					WB I-94	624	27	119	0	0	
A-7	4475 Willow Cove Blvd. (CNE U)	12/13/22	11:16 AM	11:31 AM	EB I-94	437	25	91	0	0	77.4
					WB I-94	533	34	101	1	0	
A-8	15403 Commerce Dr. S (CNE BB)	12/13/22	11:51 AM	12:06 PM	EB I-94	511	33	83	0	0	68.0
					WB I-94	501	31	90	0	0	
					NW Greenfield	69	3	4	0	0	
					SE Greenfield	89	4	5	0	0	
A-9	6196 Vivian St. (CNE J)	11/07/23	8:30 AM	8:45 AM	EB I-94	945	51	139	0	0	59.5
					WB I-94	889	25	98	1	0	
A-10	6090 Burr Street (CNE J)	11/07/23	8:58 AM	9:13 AM	EB I-94	875	39	100	1	0	63.5
					WB I-94	821	39	104	2	0	
					NB Telegraph	60	0	11	0	0	
					SB Telegraph	85	0	2	0	0	
A-11	24799 Beverly Rd. (CNE K)	11/07/23	9:30 AM	9:45 AM	EB I-94	815	41	145	2	0	64.2
					WB I-94	696	34	97	0	0	

Site ID#	Site Description	Date	Start Time	End Time	Traffic Information						Measured Noise Level (dBA)
					Roadway	Auto	Med. Truck	Heavy Truck	Bus	MC	
A-12	6041 Pine Street (CNE L)	11/07/23	10:15 AM	10:30 AM	EB I-94	849	43	142	2	0	66.2
					WB I-94	803	28	87	0	0	
					NB Telegraph	60	3	2	0	0	
					SB Telegraph	95	1	10	0	0	
A-13	6092 Roosevelt St. (CNE L)	11/07/23	10:43 AM	10:58 AM	EB I-94	845	32	114	2	1	65.7
					WB I-94	801	44	119	0	0	
A-14	6065 Williams St. (CNE L)	11/07/23	11:06 AM	11:21 AM	EB I-94	1004	34	118	2	0	65.6
					WB I-94	787	37	87	0	0	
A-15	6199 Hipp Street (CNE L)	11/07/23	11:28 AM	11:43 AM	EB I-94	908	23	109	1	0	67.2
					WB I-94	790	31	98	0	0	
A-16	17499 Anne Ave. (CNE U)	11/06/23	4:15 PM	4:30 PM	NB Southfield	314	8	6	0	0	74.6
					SB Southfield	551	5	2	2	0	
					NB Southfield Ramp	375	0	4	0	0	
					SB Southfield Ramp	311	10	10	0	0	
					NB Van Born	80	0	1	1	0	
					SB Van Born	60	1	1	0	0	
A-17	4800 Parkside Blvd. (CNE U)	11/07/23	12:03 PM	12:18 PM	EB I-94	510	40	96	0	0	59.8
					WB I-94	560	32	88	0	1	
A-18	Buckingham Ave. dead end (CNE N)	11/07/23	12:48 PM	1:03 PM	WB I-94	561	34	73	0	0	63.3
					WB I-94 On-Ramp	244	11	15	0	0	
					Pelham Off-Ramp	41	2	5	0	0	

4.4 Model Comparison

Model validation is a process for testing a predictive model to ensure that it produces reliable results and to confirm that traffic noise is the predominant noise source at the receptor locations. In general, validation involves comparing actual noise measurements obtained with the sound level meter to the noise levels predicted by the model for existing conditions at the same location. The model is considered to be validated if the model results are within ± 3 dB(A) of the field measurements recorded at the site, for the same conditions.

Eighteen receptor sites representing the existing noise measurement locations were modeled using TNM 2.5 with the same traffic volumes observed during the noise measurements. This was done by converting the traffic volumes observed during each of the actual ambient measurements to an equivalent hourly rate. These adjusted traffic volumes were then input into the TNM, and the modeled results were compared to the original ambient measurements. A comparison of the existing ambient measured sound levels to the predicted sound levels for each site is summarized in **Table 4**.

Table 4: TNM Model Validation

Site ID#	Location	Measured Noise Level Leq (h) dB(A)	Modeled Noise Level Leq (h) dB(A)	Difference
A-1	34224 McBride St. (CNE B)	65.2	63.0	-2.2
A-2	88' S EB I-94 66' N Exit 197 (CNE C)	74.9	75.6	+0.7
A-3	31555 Wick Rd. (CNE D)	79.4	78.3	-1.1
A-4	28200 Smith Rd. (CNE F)	73.8	72.4	-1.5
A-5	6597 McGuire St. (CNE K)	70.1	71.9	+1.8
A-6	6365 Oldham St. (CNE J)	65.9	63.4	-2.5
A-7	4475 Willow Cove Blvd. (CNE U)	77.4	75.6	-1.8
A-8	15403 Commerce Dr. S (CNE BB)	68.0	69.4	+1.4
A-9	6196 Vivian St. (CNE J)	59.5	60.5	+1.0
A-10	6090 Burr Street (CNE J)	63.5	60.6	-2.9
A-11	24799 Beverly Rd. (CNE K)	63.2	60.6	-2.6
A-12	6041 Pine Street (CNE L)	66.2	61.1	-5.1
A-13	6092 Roosevelt St. (CNE L)	65.7	65.6	-0.1
A-14	6065 Williams St. (CNE L)	65.6	65.8	+0.2
A-15	6199 Hipp Street (CNE L)	67.2	64.4	-2.8
A-16	17499 Anne Ave. (CNE U)	74.6	75.6	+1.0
A-17	4800 Parkside Blvd. (CNE U)	59.8	62.0	+2.2
A-18	Buckingham Ave. dead end (CNE N)	63.3	64.9	+1.6

The results of the noise modeling indicate that the predicted noise levels generated using TNM are within ± 3 dB(A) of the corresponding ambient noise measurements recorded at each of the ambient measurement locations except for ambient noise measurement collected at A-12. During the collection of the A-12 ambient noise level measurement, thirteen (13) airplanes flew overhead within the span of time recorded, which represented non-highway traffic related ambient noise that was not able accounted for in noise validation model. As a result, the ambient noise measurement location A-12 is omitted from the noise model validation comparison. Since the predicted noise levels at the remaining seventeen (17) ambient noise measurement locations are within levels are within ± 3 dB(A) of the corresponding ambient noise measurements recorded, the noise model is considered validated.

5.0 NOISE IMPACT ANALYSIS

The predicted noise levels for the existing year condition (2019) and the design year build condition (2051) were generated based on the AM peak hour and the PM peak hour traffic volumes. A noise impact analysis was performed in accordance with the MDOT Noise Handbook (2011), which defines a noise impact occurs if one of the following criteria is met:

- A design year predicted noise level that is 1 dB(A) less than the NAC levels, as shown in **Table 1**.
- A 10 dB(A) increase between the existing noise level to the design year predicted noise level.

The design year build condition (2051) AM peak hour predicted noise levels ranged from 40 dB(A) to 78 dB(A). Based on the noise impact analysis, 237 modeled receptors, representing 252 dwelling units, were identified with design year build condition (2051) predicted noise levels approaching or exceeding the NAC. There were no receptors identified with a design year build condition (2051) predicted noise level that equaled or exceeded a 10 dB(A) increase when compared to its corresponding existing year condition (2019) noise level.

The design year build condition (2051) PM peak hour predicted noise levels ranged from 40 dB(A) to 78 dB(A). Based on the noise impact analysis, 212 modeled receptors, representing 225 dwelling units, were identified with design year build condition (2051) predicted noise levels approaching or exceeding the NAC. There were no receptors identified with a design year build condition (2051) predicted noise level that equaled or exceeded a 10 dB(A) increase when compared to its corresponding existing year condition (2019) noise level.

A summary of the predicted design year build condition (2051) traffic noise impacts identified in each CNE is contained in **Table 5**. A detailed summary of the predicted noise levels at each modeled receptor location within each CNE is contained in **Appendix B**. The location of each modeled receptor location in each CNE is depicted on **Figures A-3.1 through A-3.17, Appendix A**.

Table 5. Summary of Design Year Build (2051) Predicted Noise Impacts by CNE

CNE	Total Dwelling Units	AM Peak Hour			PM Peak Hour		
		Approach or Exceed NAC	Substantial Increase	Total Impacted Dwelling Units	Approach or Exceed NAC	Substantial Increase	Total Impacted Dwelling Units
CNE A	3	3	0	3	3	0	3
CNE B	97	2	0	2	2	0	2
CNE C	0	-	-	-	-	-	-
CNE D	12	0	0	0	0	0	0
CNE E	0	-	-	-	-	-	-
CNE F	13	1	0	1	1	0	1
CNE G	0	-	-	-	-	-	-
CNE H	4	4	0	4	4	0	4
CNE I	45	2	0	2	2	0	2
CNE J	189	28	0	28	19	0	19
CNE K	85	33	0	33	29	0	29
CNE L	246	84	0	84	69	0	69
CNE M	0	-	-	-	-	-	-
CNE N	73	18	0	18	20	0	20
CNE O	7	2	0	2	2	0	2
CNE P	121	4	0	4	6	0	6
CNE Q	66	16	0	16	19	0	19
CNE R	35	13	0	13	11	0	11
CNE S	3	0	0	0	0	0	0
CNE T	79	28	0	28	27	0	27
CNE U	171	4	0	4	4	0	4
CNE V	1	0	0	0	0	0	0
CNE W	14	0	0	0	0	0	0
CNE X	0	-	-	-	-	-	-
CNE Y	62	11	0	11	7	0	7
CNE Z	0	-	-	-	-	-	-
CNE AA	0	-	-	-	-	-	-
CNE BB	0	-	-	-	-	-	-

6.0 NOISE ABATEMENT EVALUATION

6.1 Federal and State Noise Abatement Guidance

The MDOT and FHWA noise abatement policies require that when design year build condition noise impacts are identified, noise barriers (at a minimum) shall be considered and evaluated for feasibility and reasonableness. Additional noise abatement alternatives can be considered where applicable and include construction of earthen berms, traffic management measures, alteration of horizontal and vertical alignments, acquisition of property to create buffer zones, and noise insulation of facilities that meet the Activity Category D land-use classification.

The noise barrier feasibility and reasonableness criteria are established in the MDOT Noise Handbook (2011). In order for a noise barrier to be considered feasible and reasonable, the following criteria must be met:

Noise Barrier Feasibility:

- Reduces noise levels by 5 dB(A) at 75% or more of the impacted receptors
- Can be designed and physically constructed at the proposed location(s)
- Will not cause a safety problem
- Will not restrict vehicular or pedestrian access for the travelling public
- Will not substantially impact utilities or be impacted by utilities
- Will not substantially impact drainage or be impacted by drainage

Noise Barrier Reasonableness:

- Is cost effective. The cost effectiveness calculation is based on the cost of noise abatement divided by the number of benefiting units. The cost per square foot for a noise barrier used in the calculation is \$45 per square foot. The minimum allowable cost per benefited unit (CPBU) is \$56,428. Since this Traffic Noise Study and Abatement Analysis was conducted during the PE Phase, the 3% allotment above the CPBU was not allowable.
- Meets the Design Year Attenuation Requirement. Reduces noise levels by 10 dB(A) at a least one benefited noise receptor and by at least 7dB(A) at 50% or more of the benefited receptors.
- Is acceptable to the majority of benefiting property owners and residents. The viewpoints of the benefited property owners and residents are not part of this noise analysis and will be evaluated as part of the public involvement process conducted during the Preliminary Engineering Phase.
- This Traffic Noise Study and Abatement Analysis was conducted during the Preliminary Engineering (PE) Phase.

6.2 Noise Abatement Analysis

Noise abatement was evaluated for impacted receptors located within each CNE. Noise barriers were evaluated based on the feasibility and reasonableness criteria established in the MDOT Noise Handbook (2011). The implementation of alternative noise abatement measures was considered and determined not to be applicable for this Project. Noise abatement was not considered for CNEs C, E, G, M, X, Z, AA, and BB since there were no noise sensitive land-uses identified and/or no noise impacted receptors identified within the CNE.

As part of the initial feasibility determination, the following items were taken into consideration: location of impacted receptors along with the topographic conditions, surrounding land uses, feasibility criteria in the MDOT Noise Handbook (2011), AASHTO Guidelines, the roadway design, and existing utilities. Based on the findings of this initial evaluation, a preliminary noise barrier analysis using TNM was conducted for noise impacted receptors in order to evaluate the feasibility criteria. If noise abatement was determined to meet the feasibility criteria, additional evaluation of the noise barrier was performed to evaluate the reasonableness criteria.

As part of the noise abatement analysis, noise impacts identified behind an existing noise barrier were evaluated to determine if the existing noise barrier meets the feasibility and reasonableness criteria. Analysis of these noise impacts were performed in accordance with the guidance outlines in FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*. As part of this analysis, the existing noise barrier were re-analyzed at its existing height and then compared to the “no barrier” scenario to determine the barrier insertion loss, which was then compared to the feasibility criteria and the reasonableness – design year attenuation requirement criteria.

A summary of the evaluation of the noise barrier feasibility criteria is provided in **Table 6**. An evaluation of the reasonableness criteria for noise barriers determined to satisfy the feasibility criteria is summarized in **Table 7**. A detailed evaluation of the feasibility and reasonableness criteria for each noise barrier evaluated is included in **Appendix C**. The location of each noise barrier evaluated is depicted on **Figure A-4.1 – A-4.18, Appendix A**.

A discussion of the noise abatement evaluations for each impacted CNE is summarized in the subsequent sub-sections.

Table 6. Noise Barrier Feasibility Evaluation Results

Barrier ID	Barrier Description			Impacted Dwelling Units	Benefited Impacted Dwelling Units	% of Benefiting Impacted Dwelling Units	Feasibility Criteria Met
	Length	Average Height	Total Square Footage				
ENB B-1	3,171	12	37,154	2	2	100%	Yes
NB F-1	1,049	27	27,986	1	1	100%	Yes
NB H-1	1,200	16	18,100	4	4	100%	Yes
NB I-1	1,183	29	34,412	1	1	100%	Yes
ENB J-1	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}
ENB J-2	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}
NB J-3A	2,165	30	64,562	20	17	85%	Yes
NB J-3B	2,254	30	67,606	20	11	55%	No
NB K-1A	1,627	24	38,955	24	22	92%	Yes
NB K-1B	2,135	30	64,060	24	21	88%	Yes
NB K-2	862	18	15,516	3	3	100%	Yes
NB K-3	749	19	13,973	1	1	100%	Yes
ENB L-1	2,210	17	36,981	1	1	100%	Yes
ENB L-2	2,656	12	32,785	57	25	44%	No

Barrier ID	Barrier Description			Impacted Dwelling Units	Benefited Impacted Dwelling Units	% of Benefiting Impacted Dwelling Units	Feasibility Criteria Met
	Length	Average Height	Total Square Footage				
ENB L-3	2,693	12	32,927	26	20	77%	Yes
NB L-4	2,521	15	37,671	83	78	94%	Yes
NB N-1	1,127	15	25,353 ^{*(2)}	19	17	90%	Yes
NB O-1	473	30	14,602	2	2	100%	Yes
ENB P-1	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}
NB P-2	802	30	24,069	6	6	100%	Yes
NB Q-1	1,250	30	37,513	16	15	94%	Yes
ENB U-1	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}
ENB U-2	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}
ENB U-3	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}	NA ^{*(1)}
NB U-4	1,419	30	42,568	2	2	100%	Yes
NB Y-1	1,250	23	28,796	11	11	100%	Yes

Notes:

NA^{*(1)} Existing noise wall not analyzed since no design year build condition (2051) predicted noise impacts identified and/or existing noise wall was determined to meet feasibility and reasonableness criteria based on alternate evaluation.

*⁽²⁾ Volume for NB N-1 reported in cubic yards

Table 7. Barrier Reasonableness Evaluation Results

Barrier ID	Benefited Units (≥ 5 dB(A))	Design Year Attenuation Goal				Cost	Cost per Benefited Unit	Reasonable Criteria Met
		≥ 7 dB(A)		10 dB(A)	Criteria Met			
		#	%					
ENB B-1	64	33	53%	19	Yes	\$1,671,930	\$26,124	Yes
NB F-1	1	1	100%	1	Yes	\$1,422,929	\$1,422,929	No
NB H-1	4	3	75%	1	Yes	\$859,509	\$214,877	No
NB I-1	5	3	60%	0	No	NA ^{*(1)}	NA ^{*(1)}	No
ENB J-1	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}
ENB J-2	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}
NB J-3A	28	19	68%	4	Yes	\$2,905,290	\$103,760	No
NB J-3B	NA ^{*(3)}	NA ^{*(3)}	NA ^{*(3)}	NA ^{*(3)}	NA ^{*(3)}	NA ^{*(3)}	NA ^{*(3)}	NA ^{*(3)}
NB K-1A	25	13	52%	5	Yes	\$1,752,975	\$70,119	No
NB K-1B	46	16	35%	0	No	NA ^{*(1)}	NA ^{*(1)}	No
NB K-2	3	2	67%	1	Yes	\$698,220	\$232,740	No
NB K-3	1	1	100%	1	Yes	\$628,785	\$628,785	No
ENB L-1	38	19	50%	1	Yes	\$1,664,145	\$43,793	Yes
ENB L-2	25	13	52%	1	Yes	\$1,475,325	\$59,013	No
ENB L-3	62	33	53%	13	Yes	\$1,481,715	\$23,899	Yes
NB L-4	85	46	54%	15	Yes	\$1,927,215	\$22,673	Yes

Barrier ID	Benefited Units (≥ 5 dB(A))	Design Year Attenuation Goal				Cost	Cost per Benefited Unit	Reasonable Criteria Met
		≥ 7 dB(A)		10 dB(A)	Criteria Met			
		#	%					
NB N-1	28	18	64%	4	Yes	\$700,646	\$25,023	Yes
NB O-1	2	1	50%	0	No	NA ^{*(1)}	NA ^{*(1)}	No
ENB P-1	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)	*(1)
NB P-2	20	12	60%	0	No	NA ^{*(1)}	NA ^{*(1)}	No
NB Q-1	35	14	40%	0	No	NA ^{*(1)}	NA ^{*(1)}	No
ENB U-1	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}
ENB U-2	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}
ENB U-3	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}	NA ^{*(2)}
NB U-4	14	5	36%	1	No	NA ^{*(1)}	NA ^{*(1)}	No
NB Y-1	17	9	53%	1	Yes	\$1,295,820	\$76,225	No

Notes:

NA^{*(1)} Not analyzed since reasonableness – design year attenuation requirement criteria was not met

NA^{*(2)} Existing noise wall not analyzed since no design year build condition (2051) predicted noise impacts identified and/or existing noise wall was determined to meet feasibility and reasonableness criteria based on alternate evaluation.

NA^{*(3)} Not analyzed since feasibility criteria was not met

CNE A

CNE A contained a total of three (3) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification. The impacted receptor locations were located on the west side of the west-bound I-94 Wayne Road on-ramp, which was located within the 500-foot buffer area included within the Project Study Limits. However, the west bound I-94 Wayne Road on-ramp is located outside of the Project construction limits. Based on the traffic volume associated with the I-94 Wayne Road on-ramp and the portion of west-bound I-94 located outside of the Project construction limits, noise abatement for the portion of I-94 located within the Project construction limits would not adequately reduce noise levels at the impacted receptor locations. Therefore, a noise barrier analysis was not performed, and noise abatement is not recommended for CNE A. The location of CNE A and the impacted receptor locations are depicted on **Figure A-3.1, Appendix A**.

CNE B

CNE B contained a total of two (2) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification. The impacted receptors were located behind an existing noise wall (ENB B-1). In accordance with FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*, the existing noise wall was re-analyzed utilizing its existing height and then compared to the “no-barrier” scenario to determine if the existing noise wall meets the MDOT feasibility criteria and reasonableness – design year attenuation requirement criteria. At its existing height, 100% of the impacted receptors achieved a 5 dB(A) noise reduction, 53% of the benefited receptors achieved a 7 dB(A) noise reduction, and 19 of the benefited receptors achieved a 10 dB(A) noise reduction. Based on the barrier analysis, existing noise wall ENB B-1 met the feasibility criteria and reasonableness – design year attenuation requirement criteria. The estimated cost per benefited unit (\$26,124) was less than the allowable cost per benefited unit (\$56,428 in 2024 dollars). Therefore, existing noise wall ENB B-1

meets the feasibility and reasonableness criteria as built and no further modification of this wall is recommended. A detailed summary of the existing noise wall abatement analysis is contained in **Appendix C**. The location of the impacted receptors and the existing noise wall is depicted on **Figure A-4.1, Appendix A**.

CNE F

CNE F contained one (1) receptor with a design year build condition (2051) noise impact. The impacted receptor represented a single-family residence with an Activity Category B land-use classification. A noise wall (NB F-1) was analyzed at the ROW and determined to meet the feasibility criteria. The reasonableness – design year attenuation requirement criteria was met with a cost per benefited unit of \$1,422,929. The cost per benefited unit exceeded the reasonableness cost effectiveness criteria of \$56,428 per benefited unit. Therefore, noise all NB F-1 did not meet the reasonableness criteria, and noise abatement within CNE F is not recommended. A detailed summary of the noise wall abatement analysis is contained in **Appendix C**. The location of the impacted receptor and noise wall is depicted on **Figure A-4.2, Appendix A**.

CNE H

CNE H contained four (4) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification. A noise wall (NB H-1) was analyzed at the ROW and determined to meet the feasibility criteria. The reasonableness – design year attenuation goal criteria was met with a cost per benefited unit of \$214,877. The cost per benefited unit exceeds the reasonableness – cost effectiveness criteria of \$56,428 per benefited unit. Therefore, noise wall NB H-1 did not meet the reasonableness criteria, and noise abatement within CNE H is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted noise receptors and the noise wall is depicted on **Figure A-4.3, Appendix A**.

CNE I

CNE I contained two (2) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification. One (1) of the impacted receptors (I-1) was located along the east side Inkster Road, south of I-94, and it was determined that the noise impact was due in part to the traffic located on Inkster Road. As a result, noise abatement along I-94 would not adequately reduce noise levels at the impacted receptor and noise abatement along Inkster Road would not be considered feasible since a noise barrier could not be constructed without limiting vehicular access to this property. Therefore, a noise barrier analysis was not analyzed for this impacted receptor.

One (1) impacted receptor (I-6) was located in the southwest quadrant of the I-94/Ecorse Road interchange. It was determined that the noise impact was due to the traffic on Ecorse Road. As a result, a noise wall (NB I-1) was analyzed at the shoulder along the west side of Ecorse Road and determined to meet the feasibility criteria. However, the reasonableness – design year attenuation goal criteria was unable to be achieved. Since noise wall I-1 did not meet reasonableness criteria, noise abatement is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted receptors and the noise wall is depicted on **Figure A-4.4, Appendix A**.

CNE J

CNE J contained twenty-eight (28) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification.

One (1) of the impacted receptors (J-55) identified was located behind existing noise wall ENB J-1, which extended from Beech Daly Road to the east and then tied into an existing berm. The existing berm extended to the east and tied into the existing noise wall ENB J-2 located at the northwest quadrant of the I-94/Telegraph Road interchange. Based on the existing survey and the height of the berm, it appeared that the existing noise berm located between existing noise wall ENB J-1 and existing noise wall ENB J-2 was providing noise abatement to the receptors located behind the berm. Due to the presence of the berm acting as a noise barrier in conjunction with the existing noise wall ENB J-1, the re-analysis of the existing noise wall and berm “no barrier” scenario was unable to be performed since the ground elevations for the footprint of the berm were not available for the “no barrier” scenario. However, the predicted noise level for the impacted receptor (J-55) was calculated in the “no-barrier” scenario, which identified that the impacted receptor (J-55) received a 6 dB(A) noise reduction as a result of the existing barrier. As a result, the existing noise wall ENB J-1 met the feasibility criteria. Therefore, no further modification of this wall or berm is recommended. The location of the impacted receptor and the existing noise wall is depicted on **Figure A-3.7, Appendix A**.

There was no design year build condition (2051) predicted noise impacts behind existing noise wall ENB J-2, which was located at the northwest quadrant of the I-94/Telegraph Road interchange. Therefore, no further evaluation of existing noise wall ENB J-2 was warranted.

To evaluate noise abatement for the twenty (20) impacted receptors located west of Beech Daly Road, a noise wall was evaluated at the ROW along I-94 (NB J-3A), and a noise wall was evaluated at the shoulder along I-94 (NB J-3B). The noise wall located along the shoulder was terminated prior to the bridge structure carrying I-94 over Beech Daly Road due to engineering design and constructability issues associated with the construction of a noise wall on a bridge structure. Based on the barrier design analysis, the noise wall located at the ROW (NB J-3A) met the feasibility criteria and the reasonableness – design year attenuation requirement criteria at a cost per benefited unit of \$103,760. The cost per benefited unit exceeded the reasonableness cost effectiveness criteria of \$56,428 per benefited unit. As a result, noise wall NB J-3A did not meet the reasonableness criteria. The noise wall analyzed at the shoulder (NB J-3B) did not meet the feasibility criteria. As a result, since neither noise wall evaluated met the feasibility and reasonableness criteria, noise abatement for the impacted receptors located west of Beech Daly Road is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted receptors and the noise walls are depicted on **Figures A-4.7 & A-4.8, Appendix A**.

Four (4) impacted receptors were located along the west side of Beech Daly Road and three (3) impacted receptors were located along the east side of Beech Daly Road. All seven (7) of the impacted receptors had driveway connections to Beech Daly Road. Noise impacts at these receptor locations were determined to be in part due to the traffic located on Beech Daly Road. As a result, noise abatement along I-94 would not adequately reduce noise levels at the impacted receptors and noise abatement along Beech Daly Road would not be considered feasible since a noise barrier could not be constructed without cutting off street access to these properties. Therefore, a noise barrier was not analyzed for these impacted receptors. The location of the impacted receptors is depicted on **Figure A-3.7, Appendix A**.

Based on the barrier analysis and evaluation of the noise impacts identified in CNE J, noise abatement for this CNE is not recommended.

CNE K

CNE K contained thirty-three (33) receptors with a design year build condition (2051) noise impact. Twenty-nine (29) of the impacted receptors represented a single-family residence with an Activity Category B land-use classification, three (3) of the impacted receptors, each representing one (1) DUE associated with the Taylor Meadows Golf Course, were classified with an Activity Category C land-use classification, and one (1) of the impacted receptors, representing one (1) DUE associated with the outdoor patio area located at the MDOT TSC Center, was classified with an Activity Category E land-use classification.

Five (5) of the impacted receptors (K-02, K-03, K-04, K-05, K-19), each representing a single-family residence with an Activity Category B land-use classification, were located along the east side of Ecorse Road, south of I-94. Noise impacts at these receptor locations were determined to be in part due to the traffic located on Ecorse Road. As a result, noise abatement along I-94 would not adequately reduce noise levels at the impacted receptors and noise abatement along Ecorse Road would not be considered feasible since a noise barrier could not be constructed without cutting off street access to these properties. Therefore, a noise barrier was not analyzed for these impacted receptors.

Twenty-four (24) of the impacted receptors, each representing a single-family residence with an Activity Category B land-use classification, were located west of Beech Daly Road. To evaluate noise abatement for these impacted receptors, a noise wall was evaluated at the ROW along I-94 (NB K-1A) and a noise wall was also evaluated at the shoulder along I-94 (NB K-1B). The noise wall located along the shoulder was terminated prior to the bridge structure carrying I-94 over Beech Daly Road due to engineering design and constructability issues associated with the construction of a noise wall on a bridge structure. Based on the barrier design analysis, the noise wall located at the ROW (NB K-1A) met the feasibility criteria and the reasonableness – design year attenuation requirement criteria at a cost per benefited unit of \$70,119. The cost per benefited unit exceeded the reasonableness cost effectiveness criteria of \$56,428 per benefited unit. As a result, noise wall NB K-1A did not meet the reasonableness criteria. The noise wall analyzed at the shoulder (NB K-1B) met the MDOT feasibility criteria but did not meet the reasonableness – design year attenuation requirement criteria. As a result, since neither noise wall evaluated met the feasibility and reasonableness criteria, noise abatement for the impacted receptors located west of Beech Daly Road is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted receptors and the noise walls are depicted on **Figures A-4.5 & A-4.6, Appendix A**.

Three (3) of the impacted receptors, each representing one (1) DUE with an Activity Category C land-use classification, were associated with the Taylor Meadows Golf Course, which was located to the east of Beech Daly Road. To evaluate noise abatement for these impacted receptor locations, a noise wall was evaluated at the shoulder along I-94 (NB K-2). The noise wall located along the shoulder was terminated prior to the bridge structure carrying I-94 over Beech Daly Road due to engineering design and constructability issues associated with the construction of a noise wall on a bridge structure. Based on the barrier analysis, noise wall NB K-2 met the MDOT feasibility criteria. The reasonableness – design year attenuation requirement criteria was met with a cost per benefited unit of \$232,740. The cost per benefited unit exceeds the reasonableness cost effectiveness criteria of \$56,428 per benefited unit. As a result, noise wall NB K-2 did not meet the MDOT reasonableness criteria. Therefore, noise abatement is not

recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted noise receptors and the noise wall is depicted on **Figure A-4.9, Appendix A**.

One (1) of the impacted receptors, representing one (1) DUE with an Activity Category E land-use classification, was associated with the outdoor patio at the MDOT TSC building, which was located at the southwest quadrant of the I-94 and Telegraph Road interchange. A noise wall (NB K-3) was evaluated at this location and was determined to meet the MDOT feasibility criteria. The reasonableness – design year attenuation goal criteria was met with a cost per benefited unit of \$628,785. The cost per benefited unit exceeds the reasonableness – cost effective criteria of \$56,428 per benefited unit. As a result, since noise wall NB K-3 did not meet the MDOT reasonableness criteria, noise abatement is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted receptor and the noise wall is depicted on **Figure A-4.10, Appendix A**.

CNE L

CNE L contained a total of eighty-four (84) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification.

One (1) of the impacted receptors (L-39) was located behind the existing noise wall located at the northeast quadrant of the I-94/Telegraph Road interchange (ENB L-1). In accordance with FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*, the existing noise wall was re-analyzed utilizing its existing height and then compared to the “no-barrier” scenario to determine if the existing noise wall meets the MDOT feasibility criteria and reasonableness – design year attenuation requirement criteria. Based on this evaluation, the impacted receptor achieved a 5 dB(A) noise reduction (100%) and 50% of the benefited receptors achieved a 7 dB(A) noise reduction with 1 of the benefited receptors achieving a 10 dB(A) noise reduction. Based on the barrier analysis, existing noise wall ENB L-1 met the MDOT feasibility criteria and reasonableness – design year attenuation requirement criteria. The estimated cost per benefited unit (\$43,793) was less than the allowable cost per benefited unit (\$56,428 in 2024 dollars). Therefore, existing noise wall ENB L-1 meets the feasibility and reasonableness criteria as built and no further modification of this wall is recommended. A detailed summary of the existing noise wall abatement analysis is contained in **Appendix C**. The location of the impacted receptors and the existing noise wall is depicted on **Figure A-4.11, Appendix A**.

Fifty-seven (57) of the impacted receptors were located behind the existing noise wall that extended from west of Roosevelt Blvd. to east of Clippert St. (ENB L-2). In accordance with FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*, the existing noise wall was re-analyzed utilizing its existing height and then compared to the “no-barrier” scenario to determine if the existing noise wall meets the MDOT feasibility criteria and reasonableness – design year attenuation requirement criteria. Based on this evaluation, 44% of the impacted receptors met the feasibility criteria, 52% of the benefited receptors achieved a 7 dB(A) noise reduction, and 1 of the benefited receptors achieved a 10 dB(A) noise reduction. Based on the barrier analysis, existing noise wall ENB L-2 did not meet the feasibility criteria. A detailed summary of the existing noise wall abatement analysis is contained in **Appendix C**. The location of the impacted receptors and the existing noise wall is depicted on **Figures A-3.8 & A-3.9, Appendix A**.

Since the existing noise wall ENB L-2 did not meet the MDOT feasibility criteria, noise abatement was evaluated for the fifty-seven (57) impacted receptors located behind existing noise wall ENB L-2. To

evaluate noise abatement, modifications involving increasing the height of the existing noise wall (ENB L-2) and a new noise wall (NB L-4) to replace the existing noise wall (NB L-2) were evaluated.

Based on geotechnical limitations, it was determined that modifications to the existing noise wall ENB L-2 did not meet engineering feasibility criteria.

Based on the barrier analysis, noise wall NB L-4, which evaluated a new noise wall to replace the existing noise wall ENB L-2, met the MDOT feasibility criteria and the reasonableness – design year attenuation requirement criteria at a cost per benefited unit of \$22,673. The cost per benefited unit for noise wall NB L-4 is less than the reasonableness – cost effective criteria of \$56,428 per benefited unit. As a result, noise abatement at this location is recommended. However, based on guidance provided by MDOT, further evaluation of the engineering and constructability considerations will be required prior to the noise wall being selected and advanced to the public participation phase.

Twenty-six (26) of the impacted receptors were located behind the existing noise wall located at the northwest quadrant of the I-94/Pelham Road interchange (ENB L-3). In accordance with FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*, the existing noise wall was re-analyzed utilizing its existing height and then compared to the “no-barrier” scenario to determine if the existing noise wall meets the MDOT feasibility criteria and reasonableness – design year attenuation requirement criteria. At its existing height, 77% of the impacted receptors met the feasibility criteria, 53% of the benefited receptors achieved a 7 dB(A) noise reduction, and 13 of the benefited receptors achieved a 10 dB(A) noise reduction. Based on the barrier analysis, existing noise wall ENB L-3 met the MDOT feasibility criteria and reasonableness – design year attenuation requirement criteria. The estimated cost per benefited unit (\$23,899) was less than the allowable cost per benefited unit (\$56,428 in 2024 dollars). Therefore, existing noise wall ENB L-3 meets the feasibility and reasonableness criteria as built and no further modification of this wall is recommended. A detailed summary of the existing noise wall abatement analysis is contained in **Appendix C**. The location of the impacted receptors and the existing noise wall is depicted on **Figure A-4.12, Appendix A**.

CNE N

CNE N contained twenty (20) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification. The impacted receptors were located at the northeast quadrant of the WB I-94 off-ramp and Pelham Road intersection, just west of the I-94/M-39 interchange. Based on the available land located within the existing ROW at this location and direction from MDOT, noise abatement utilizing an earthen berm (NB N-1) was evaluated at this location. The proposed footprint and geometry for the berm was provided by the roadway design engineer (DLZ). Based on the noise abatement analysis, the berm (NB N-1) met the feasibility criteria and the reasonableness – design year attenuation requirement. The MDOT Noise Handbook (2011) does not provide a cost per cubic yard of soil to be used as part of the cost per benefited unit calculation. Based on guidance provided from MDOT, the cost of the berm was based on the MDOT weighted Average Item Report for “Excavation, Earth”, “Embankment, CIP”, and “Turf Establishment”. Based on the berm volume and cost calculation, the cost per benefited unit was estimated at \$25,023, which is less than the allowable cost per benefited unit (\$56,428). Therefore, the earthen berm NB N-1 meets the MDOT feasibility and reasonableness criteria, and noise abatement is recommended. A detailed summary of the proposed berm abatement analysis is contained in **Appendix C**. The location of the impacted noise receptors and the noise berm is depicted on **Figure A-4.13, Appendix A**.

CNE O

CNE O contained two (2) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented one (1) DUE associated with an Activity Category C land-use classification associated with the outdoor activity area (playground and gazebo) located at Cunningham Park. The impacted receptors were located on the west side of M-39, south of the I-94/M-39 interchange. A noise wall (NB O-1) was evaluated along the west side of M-39, from the south end of the existing retaining wall located along the west side of the southbound M-39 exit ramp. Based on the barrier analysis, noise wall NB O-1 met the MDOT feasibility criteria but did not meet the reasonableness – design year attenuation requirement criteria. Therefore, noise abatement for CNE O is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted noise receptors and the noise wall is depicted on **Figure A-4.14, Appendix A**.

CNE P

CNE P contained six (6) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification.

There was no design year build condition (2051) predicted noise impacts behind existing noise wall ENB P-1, which was located along north side of the Southfield Road merge lane onto westbound Van Born Road, the northwest quadrant of the I-94/Telegraph Road interchange. Therefore, no further evaluation of existing noise wall ENB P-1 was warranted.

Six (6) of the impacted receptors were located along the northwest side of Southfield Road, north of Hanover Street. Due to impacted receptors having driveway connections to Southfield Road, construction of a noise wall along the west side of Southfield Road was not considered feasible. As a result, a noise wall (NB P-2) was evaluated between Southfield Road and M-39 at the back of the crash barrier located along the west side of M-39. Based on the barrier analysis, noise wall NB P-2 met the feasibility criteria but did not meet the reasonableness – design year attenuation requirement criteria. Therefore, noise abatement for CNE P is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted noise receptors and the noise wall is depicted on **Figure A-4.16, Appendix A**.

CNE Q

CNE Q contained nineteen (19) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification. Three (3) of the impacted receptors were located along the south side of Outer Drive, west of M-39. Noise impacts at these receptor locations were determined to be in part due to the traffic located on Outer Drive. As a result, noise abatement along M-39 would not adequately reduce noise levels at the impacted receptors and noise abatement along Outer Drive would not be considered feasible since a noise barrier could not be constructed without eliminating street access to these properties. Therefore, noise abatement was not considered for these impacted receptors.

Sixteen (16) of the impacted receptors were located along the west side of M-39, beyond Southfield Road. A noise wall (NB Q-1) was evaluated in the narrow grass strip located behind the crash wall along the west side of the Southfield Road ramp to southbound M-39 and Southfield Road since a noise wall was not able to be evaluated along the west side of Southfield Road without cutting off street access to these homes. Based on the barrier analysis, noise wall NB Q-1 met the feasibility criteria but did not meet the reasonableness – design year attenuation requirement criteria. Therefore, noise abatement

for CNE Q is not recommended. A detailed summary of the existing wall abatement analysis is contained in **Appendix C**. The location of the impacted noise receptors and the noise wall is depicted on **Figure A-4.16, Appendix A**.

CNE R

CNE R contained thirteen (13) receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification. The impacted receptors were located along the west side of Southfield Road, which was west of M-39 and the M-39/Southfield Road exit ramp/merge lane and have direct driveway access to Southfield Road. Due to the orientation of the M-39/Southfield exit ramp and merge lane in relation to the impacted receptor locations and sight distance, clear zone, and access restrictions, the construction of uninterrupted segments of a noise barrier at this location would not be feasible. As a result, noise abatement was not considered for these impacted receptors. The location of the impacted noise receptors is depicted on **Figure A-3.11, Appendix A**.

CNE T

CNE T contained seventeen (17) receptors, representing a total of twenty-eight (28) dwelling units, with a design year build condition (2051) noise impact. Seventeen (17) of the impacted receptors represented a single-family residence with an Activity Category B land-use classification. Receptor (T-19) represented eleven (11) DUEs associated with the Little Jungle Preschool outdoor playground area, which was identified with an Activity Category C land-use classification. The impacted receptors were located along the east side of Southfield Road, which was east of M-39 and the M-39/Southfield Road exit ramp/merge lane and have direct driveway access to Southfield Road. Due to the orientation of the M-39/Southfield exit ramp and merge lane in relation to the impacted receptor locations and sight distance, clear zone, and access restrictions, the construction of uninterrupted segments of a noise barrier would not be feasible. As a result, noise abatement was not considered for these impacted receptors. The location of the impacted noise receptors is depicted on **Figure A-3.10, Appendix A**.

CNE U

CNE U contained four (4) impacted receptors with a design year build condition (2051) noise impact. Each impacted receptor represented a single-family residence with an Activity Category B land-use classification.

Two (2) of the impacted receptors were located at the intersection of the Van Born N/M-39 Service Drive and Anne Ave., which was situated in the northeast quadrant of the I-94/M-39 interchange. Existing noise wall ENB U-1 is located behind along the backside (east side) of the Van Born N/M-39 Service Drive ramp and terminates approximately 30 feet to the south of the intersection of Van Born N/M-39 Service Drive and Anne Ave. One of the impacted receptors (J-50) was located at the southeast corner of this intersection, parallel with the end of the existing noise wall, and the other impacted receptor (U-60) was located at the northeast corner of the intersection. Using the basic assumption that a noise wall would need to extend at least four (4) times the distance from the wall to the receptor, a barrier analysis of existing noise wall ENB U-1 to evaluate the “no-barrier” scenario was not performed since a large portion of the noise is diffracting around the edge of the wall and the length of the wall cannot be extended due to an existing cross street (Anne Ave.), which cannot be cut off. As a result, noise abatement is not considered feasible and is not recommended. The location of the impacted noise receptors is depicted on **Figure A-3.10, Appendix A**.

There was no design year build condition (2051) predicted noise impacts behind existing noise wall ENB U-2, ENB U-3, or the berm area located between these two (2) existing noise walls. Therefore, no further evaluation of existing noise wall ENB U-2, ENB U-3, or the berm area located between the two (2) existing noise walls was warranted.

Two (2) of the impacted receptors, each representing a single-family residence with an Activity Category B land-use classification, were located along the east side of the Cove at Allen Park apartment complex. A noise wall (NB U-4) was analyzed at the ROW and determined to meet the feasibility criteria but did not meet the reasonableness – design year attenuation requirement criteria. Therefore, noise abatement for CNE U is not recommended. A detailed summary of the noise wall abatement analysis is contained in **Appendix C**. The location of the impacted receptor and noise wall is depicted on **Figure A-4.17, Appendix A**.

CNE Y

CNE Y contained six (6) impacted receptors with a design year build condition (2051) noise impact. Five (5) impacted receptors represented two balconies at the Lake Village of Fairlane apartment complex with an Activity Category B land-use classification. One (1) impacted receptor represented the tennis court at the Lake Village of Fairlane apartment complex. The Lake Village of Fairlane apartment complex is located northwest of the I-94/Greenfield interchange. A noise wall (NB Y-1) was evaluated along the north ROW of the southbound Greenfield on-ramp to I-94. NB Y-1 was determined to meet the feasibility and reasonableness – design year attenuation requirement criteria; however, the cost per benefited unit exceeds the reasonableness – cost effective criteria of \$56,428 per benefited unit. As a result, since noise wall NB Y-1 did not meet the MDOT reasonableness criteria, noise abatement is not recommended. A detailed summary of the proposed wall analysis is contained in **Appendix C**. The location of the impacted receptors and the noise wall is depicted on **Figure A-4.18, Appendix A**.

7.0 NOISE COMPATIBLE LAND USE PLANNING

Noise compatible land use planning along this corridor should be considered by local officials to avoid future highway noise impacts. The land uses which fall under the NAC Activity Categories B and C will be impacted by noise levels that exceed 66 dB(A). The land uses which fall under the NAC Activity Category E will be impacted by noise levels that exceed 71 dB(A). To denote areas of future (2051) impacts, predicted 66 dB(A) and 71 dB(A) noise level offsets from the outer edge of the shoulder along west bound I-94 were calculated using TNM. Based on the TNM modeling, predicted noise levels exceeding 66 dB(A) extend approximately 400 feet from the outer edge of the main-line west bound I-94 shoulder and predicted noise levels exceeding 71 dB(A) extend approximately 225 feet from the outer edge of the main-line west bound I-94 shoulder.

8.0 CONSTRUCTION IMPACTS

Construction of the proposed project will result in a temporary increase in the ambient noise level in the vicinity of the roadway. Equipment associated with construction generally includes backhoes, graders, pavers, concrete trucks, compressors, and other miscellaneous heavy equipment. Construction noise on this project should be controlled by measures including but not limited to the following:

- The construction contract specifications should require that the contractor adhere with all Federal, state, and local noise abatement and control requirements.

- Construction activities should follow all local ordinances.
- A responsive communication process should be established with local residents. A telephone number should be posted at the construction site for inquiries concerning project activity.
- Construction equipment should be in good repair and fitted with “manufacturer recommended” mufflers.
- Equipment such as generators, which may be used during the nighttime hours, should be enclosed. Staging of equipment to be operated during nighttime hours should be avoided near residential areas, if possible.

9.0 CONCLUSION AND RECOMMENDATIONS

A traffic noise analysis was performed for the I-94 Project to identify potential noise impacts associated with the design year build condition (2051) and to evaluate potential measures to mitigate noise impacts, as necessary. The Project Study Area was divided into twenty-eight (28) CNEs containing a total of 1,220 modeled receptor sites representing 1,376 dwelling units. Eighteen (18) existing noise level measurements were recorded within the Project Study, which were used to verify and calibrate the noise model.

Sixteen (16) of the CNEs contained noise sensitive receptors with design year build condition (2051) predicted noise levels that approach or exceed the NAC. CNE B contained one (1) existing noise wall and CNE L contained three (3) existing noise walls with noise sensitive receptors located behind the existing noise wall with design year build condition (2051) predicted noise levels that approach or exceed the NAC. Based on the results of the evaluation of the existing noise walls in accordance with FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*, the existing noise wall located in CNE B (ENB B-1) and two (2) of the existing noise walls located within CNE L (ENB L-1 and ENB L-3) met the MDOT feasibility and reasonableness criteria as built. As a result, no additional modification of the existing noise wall is recommended. Existing noise wall ENB L-2 did not meet the MDOT feasibility criteria. Therefore, additional noise abatement analysis was performed at this location.

A noise abatement analysis was performed for noise sensitive receptors with design year build condition (2051) predicted noise levels that approach or exceed the NAC. Noise abatement was considered in the form of fifteen (15) noise walls and one (1) earthen berm.

Fourteen (14) of the noise walls failed to meet the MDOT feasibility and reasonableness criteria. One (1) noise wall (NB L-4), which evaluated impacted receptors located behind existing noise wall ENB L-2 located in CNE L, met the MDOT feasibility and reasonableness criteria. Noise wall NB L-4 consisted of a new noise wall to replace the existing noise wall ENB L-2. Noise abatement at this location is recommended. Further evaluation of the design elements will be required prior to the noise wall being advanced to the public participation phase. Benefited residents will have the opportunity to vote for or against the noise wall replacement before it moves into the construction phase.

Noise abatement in CNE N in the form of an earthen berm (NB N-1) met the MDOT feasibility and reasonableness criteria and is recommended to be advanced to the public participation phase to determine the viewpoints of the benefited dwelling units for final determination for inclusion in the Project.

10.0 STATEMENT OF LIKELIHOOD

Based on the studies thus far accomplished, MDOT intends to install highway traffic noise abatement in CNE L, in the form of a sound barrier, to replace the existing noise wall ENB L-2 and in CNE N, in the form of an earthen berm, based on the feasibility and reasonableness assessment summarized in Table 6 and Table 7. If it subsequently develops during the final design that these conditions have substantially changed, the abatement measures might not be provided. A final decision of the installation and aesthetics of the abatement measure(s) will be made upon completion of the Project's final design and Context Sensitive Design process.

11.0 REFERENCES

Michigan Department of Transportation, *Highway Noise Analysis and Abatement Handbook*, July 13, 2011.

23 CFR Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, July 13, 2010.

FHWA-HEP-18-065, *Noise Measurement Handbook -Final Report*, June 1, 2018

FHWA-HEP-18-066, *Noise Measurement Field Guide – Final Report*, June 1, 2018.

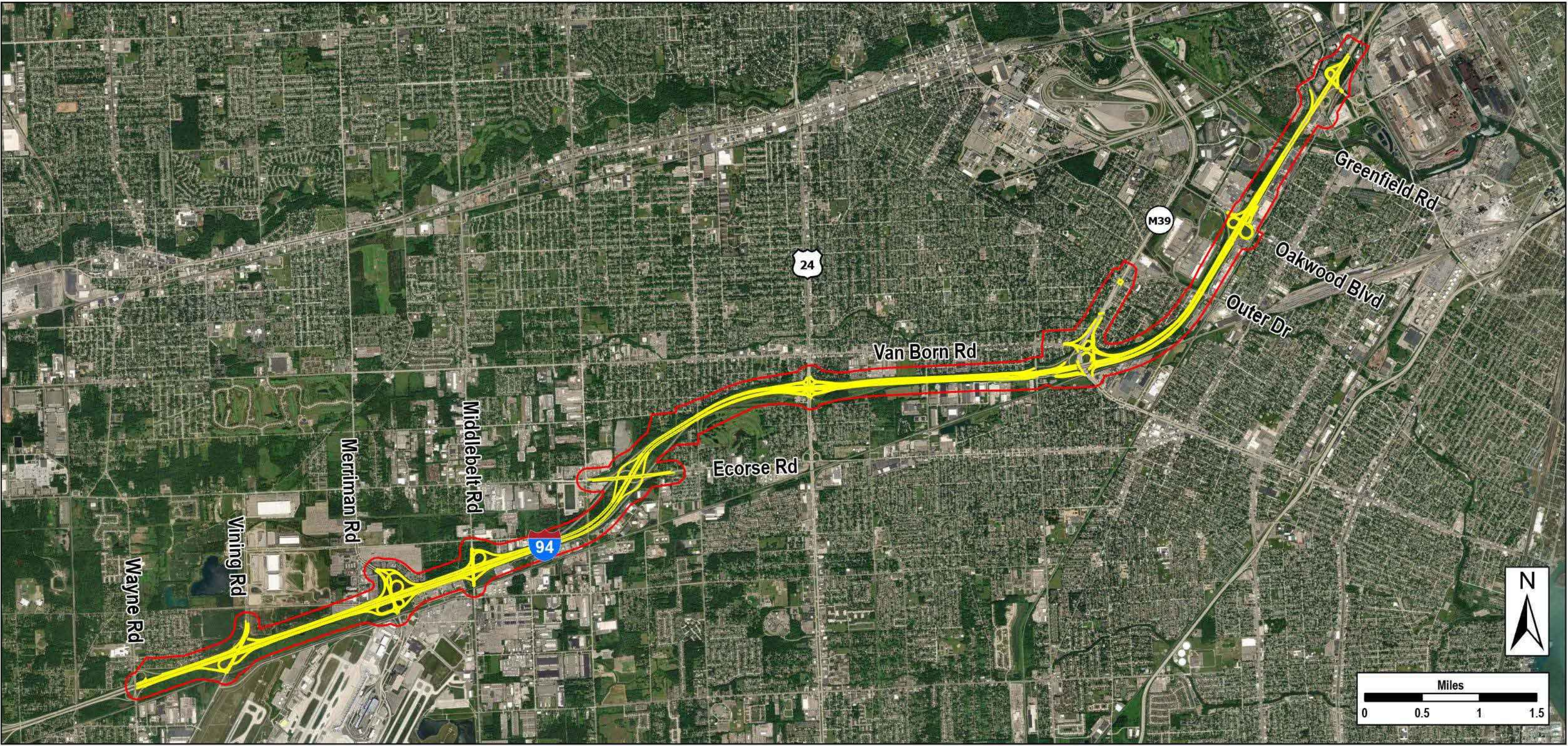
FHWA-HEP-17-059, *Calculating and Placing Non-Residential Receptors (NRRs)*, May 2017

FHWA-HEP-12-051, *Consideration of Existing Noise Barrier in a Type I Noise Analysis*, 2012

FHWA-HEP-10-025, *Highway Traffic Noise: Analysis and Abatement Guidance*, December 2011

FHWA-HEP-06-015 *Construction Noise Handbook*, August 2006.

APPENDIX A
NOISE ANALYSIS MAPS



Project Study Limits

Proposed Build I-94 Improvements


Figure A-1

Project Study Limits

I-94 Traffic Noise Analysis

Wayne Road to East of Greenfield Road

Wayne County, Michigan



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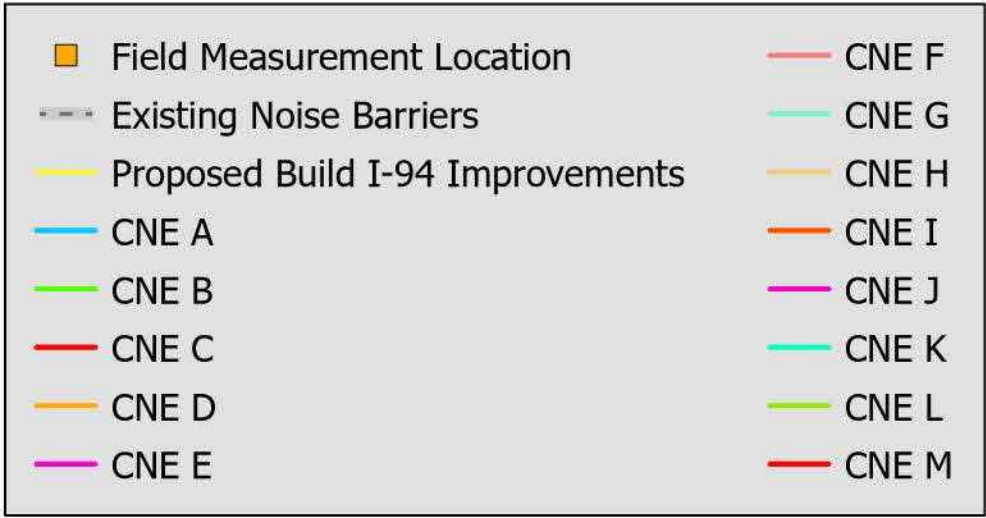
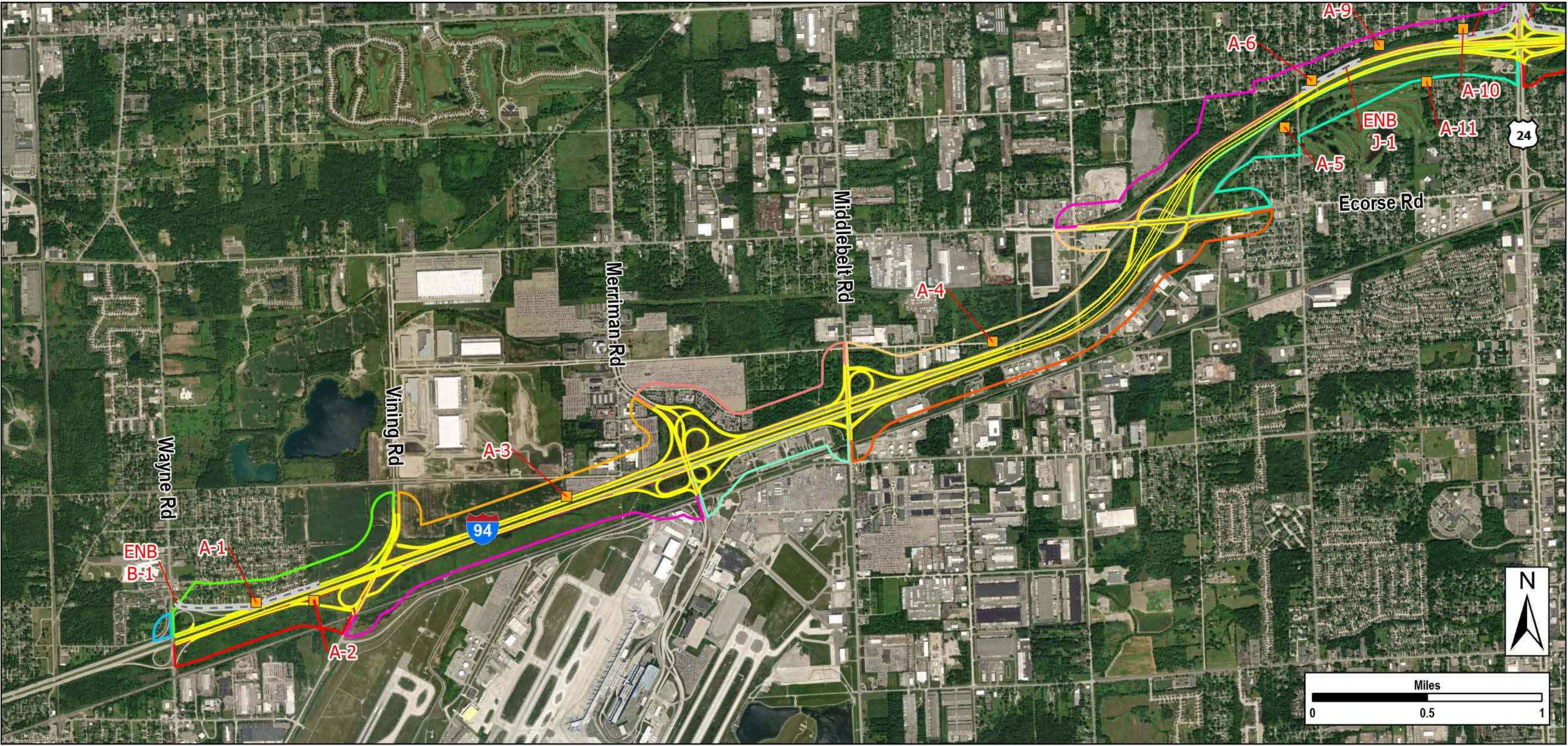


Figure A-2.1
Common Noise Environment Plan
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

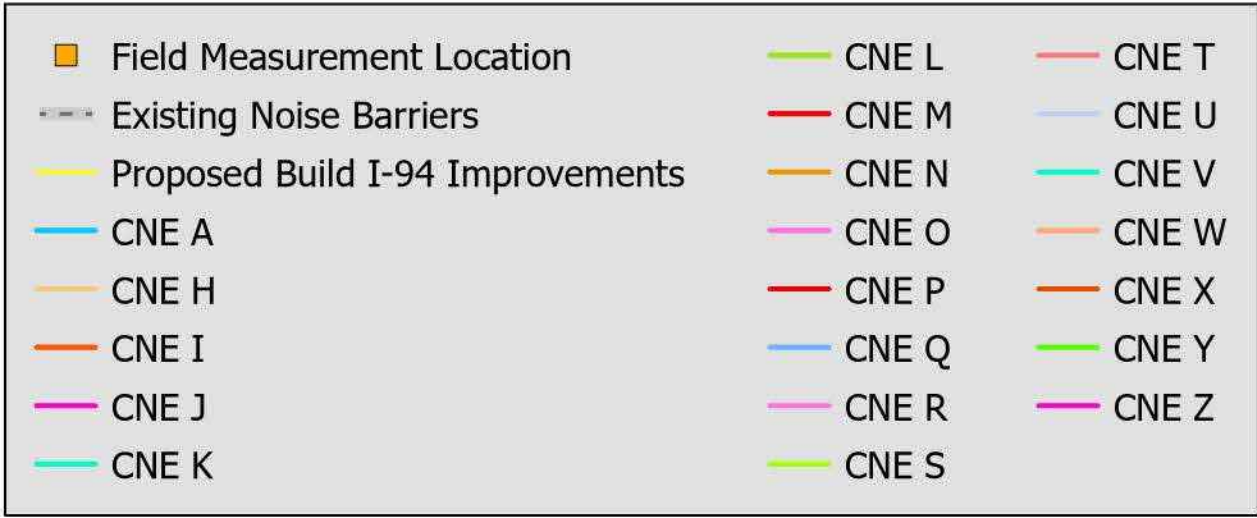
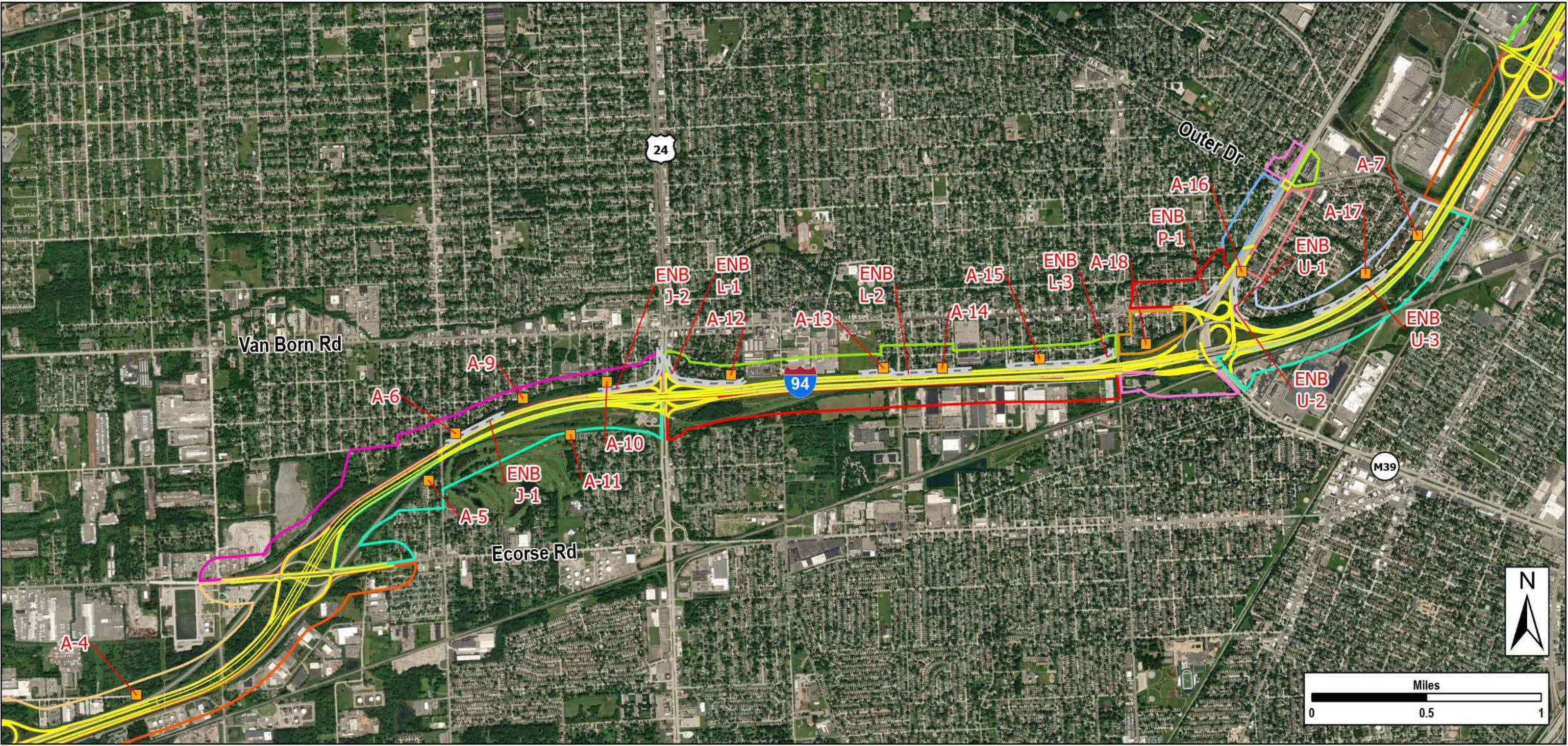



Figure A-2.2
Common Noise Environment Plan
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

January 2025

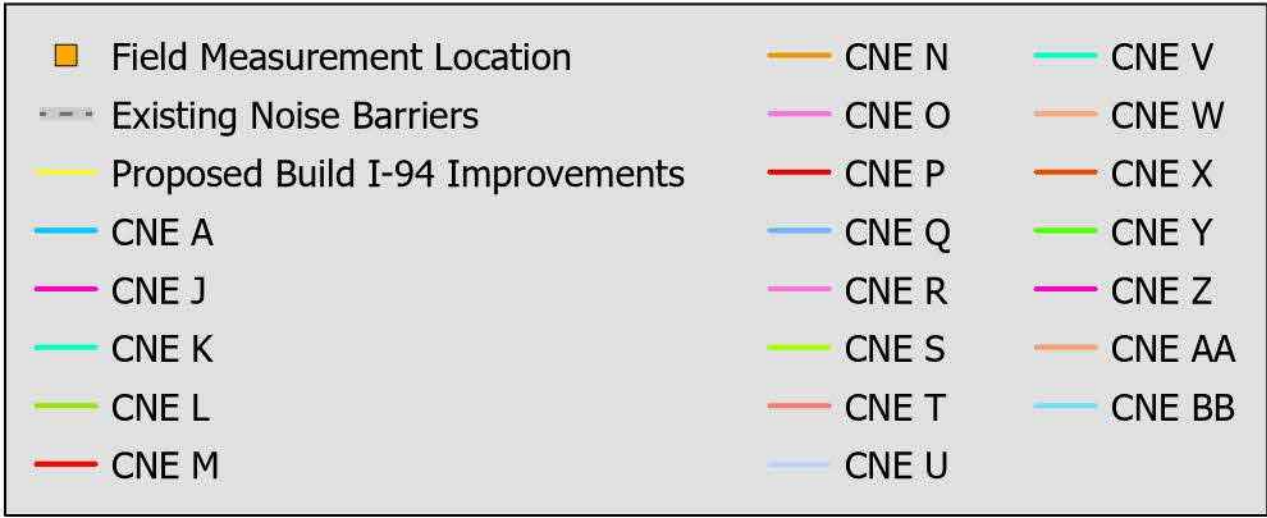
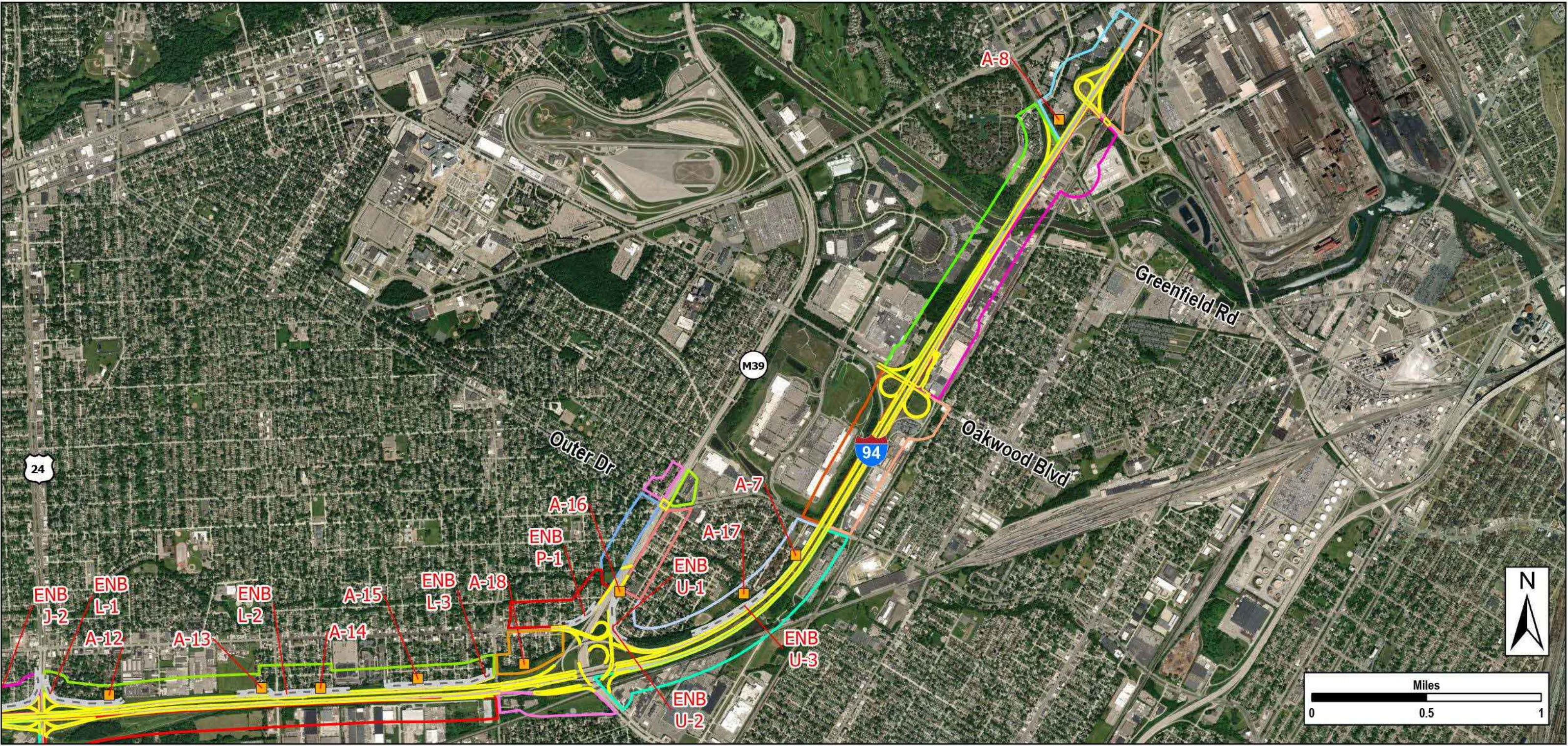


Figure A-2.3
Common Noise Environment Plan
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

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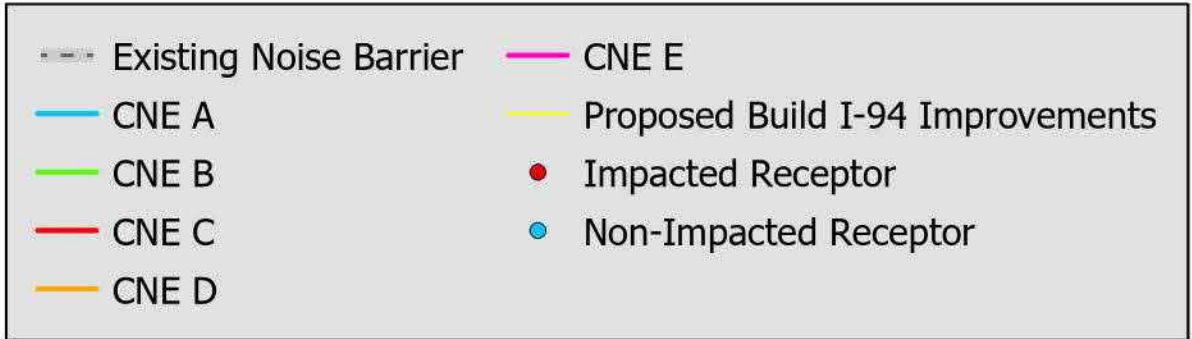
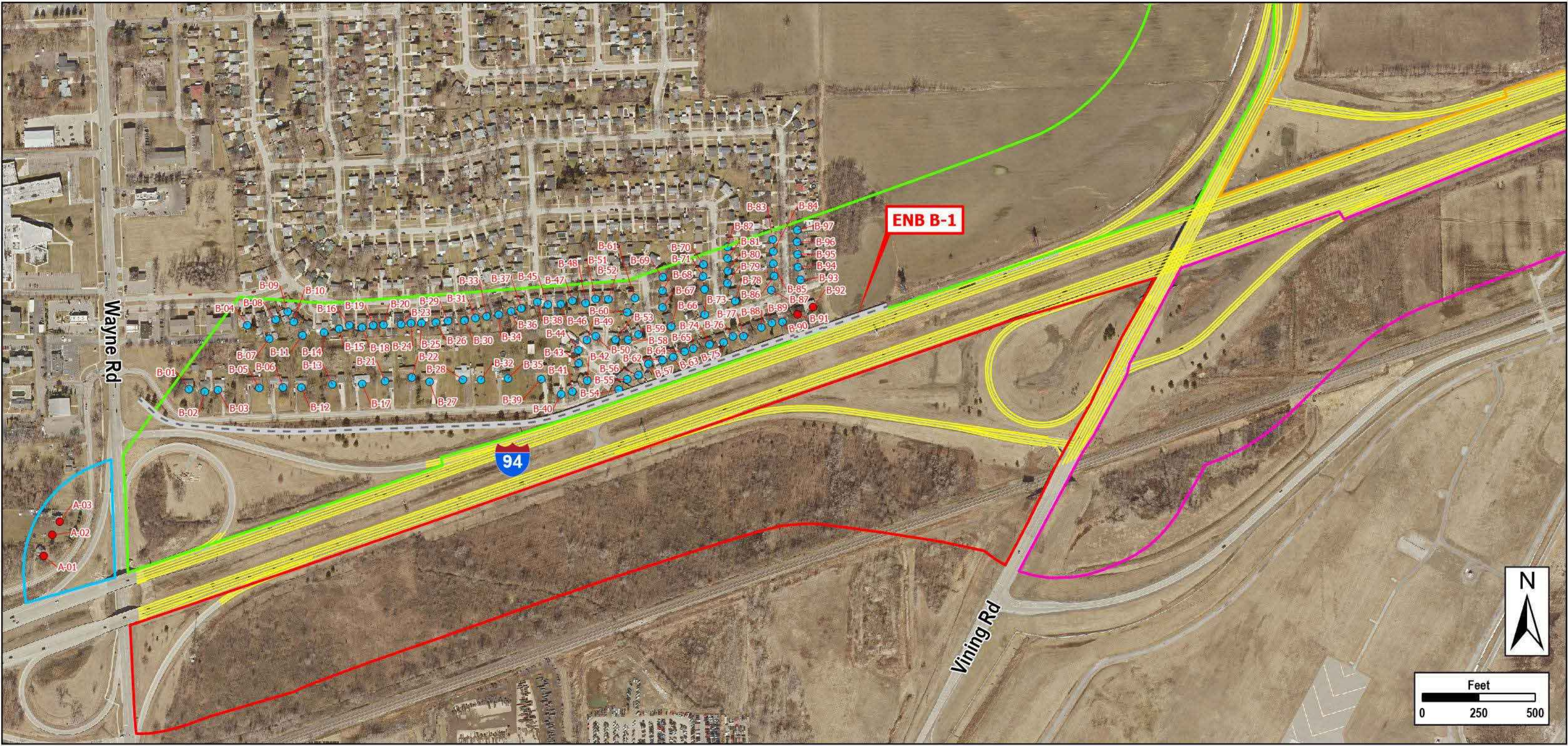
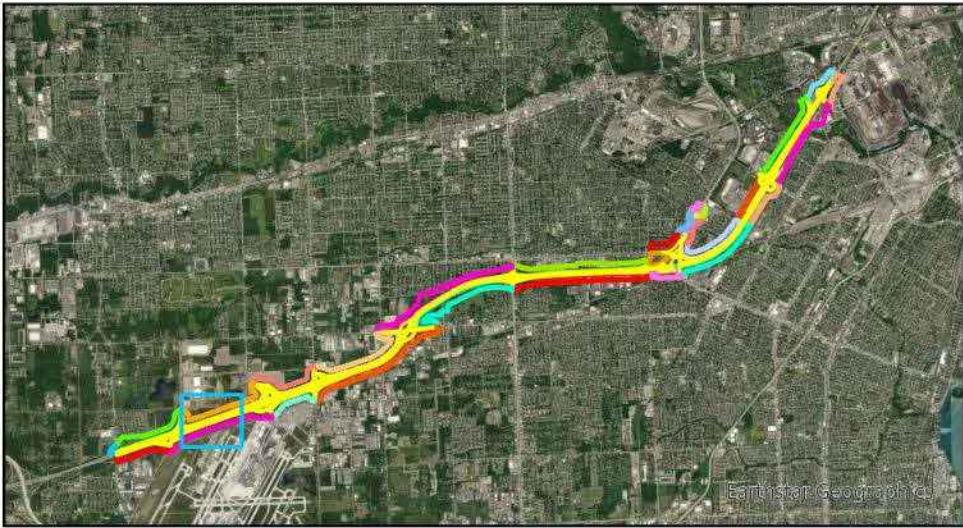
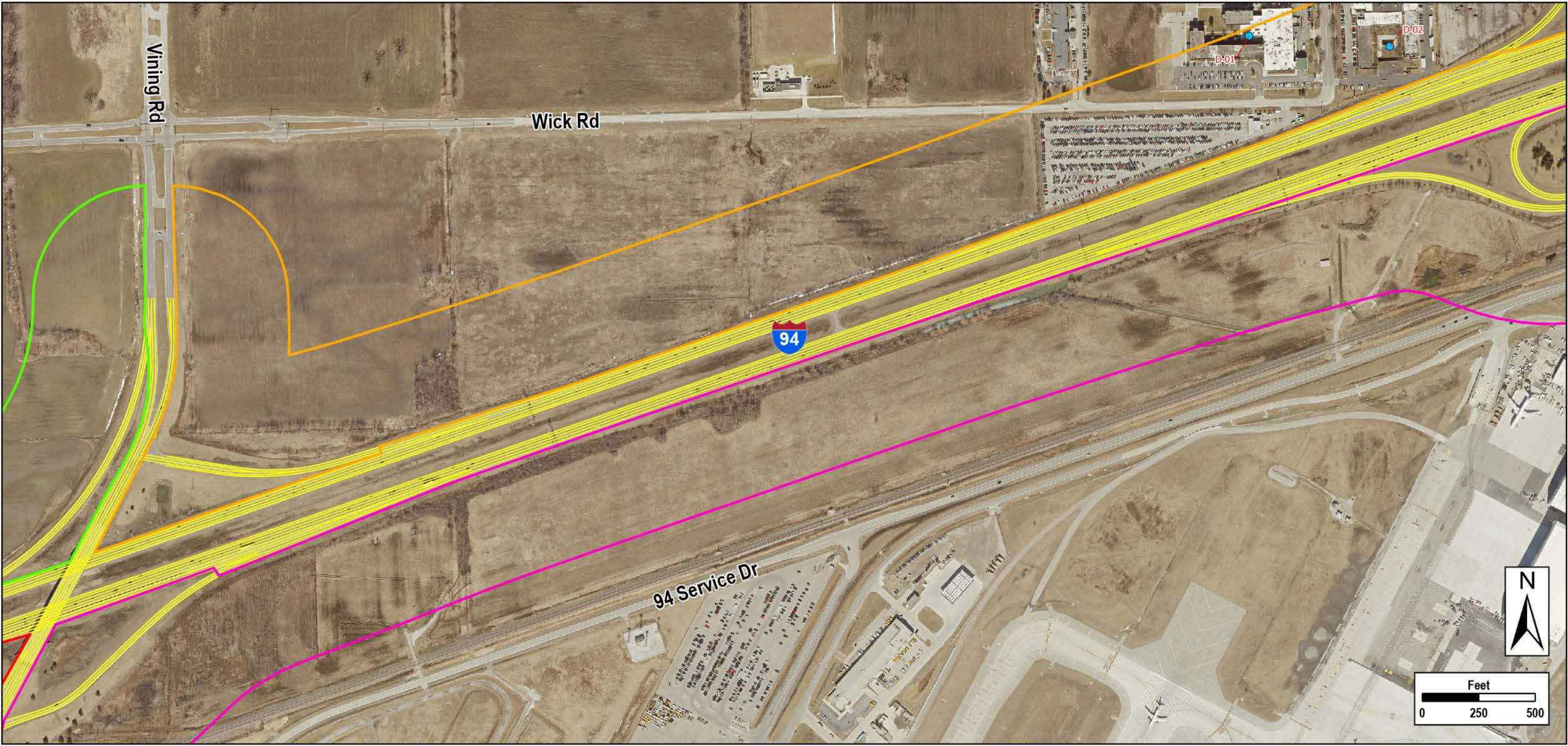


Figure A-3.1
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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- CNE B
- CNE C
- CNE D
- CNE E
- Proposed Build I-94 Improvements
- Non-Impacted Receptor

Figure A-3.2
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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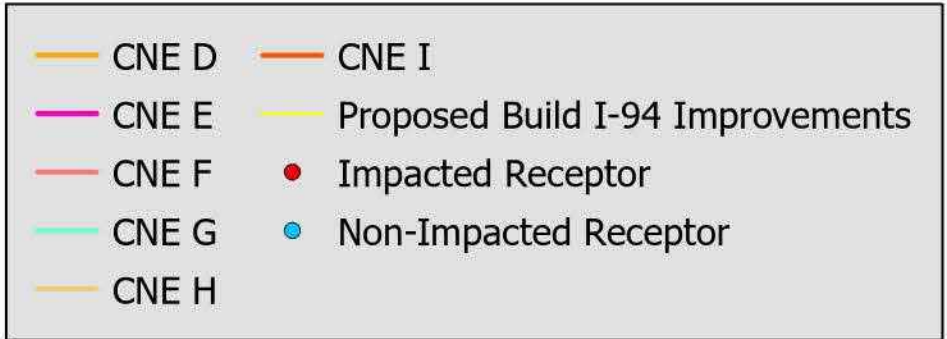
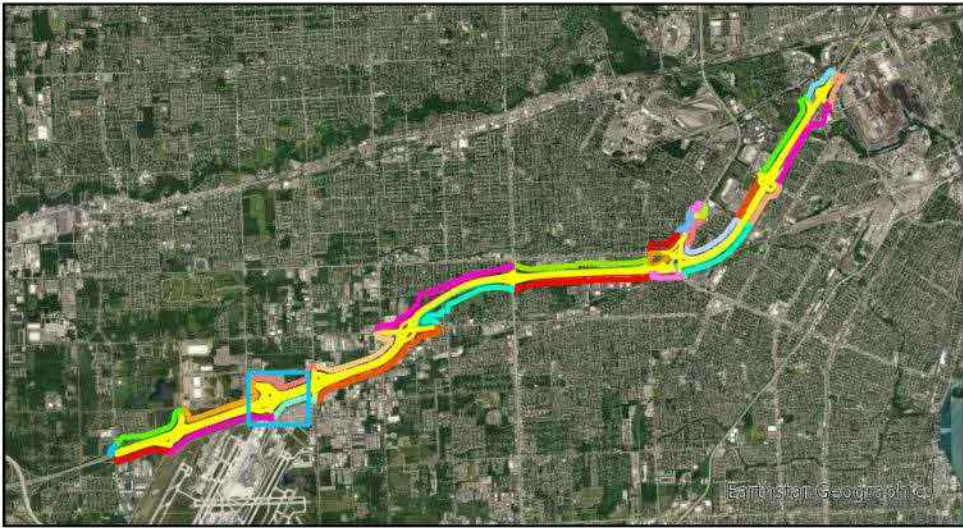
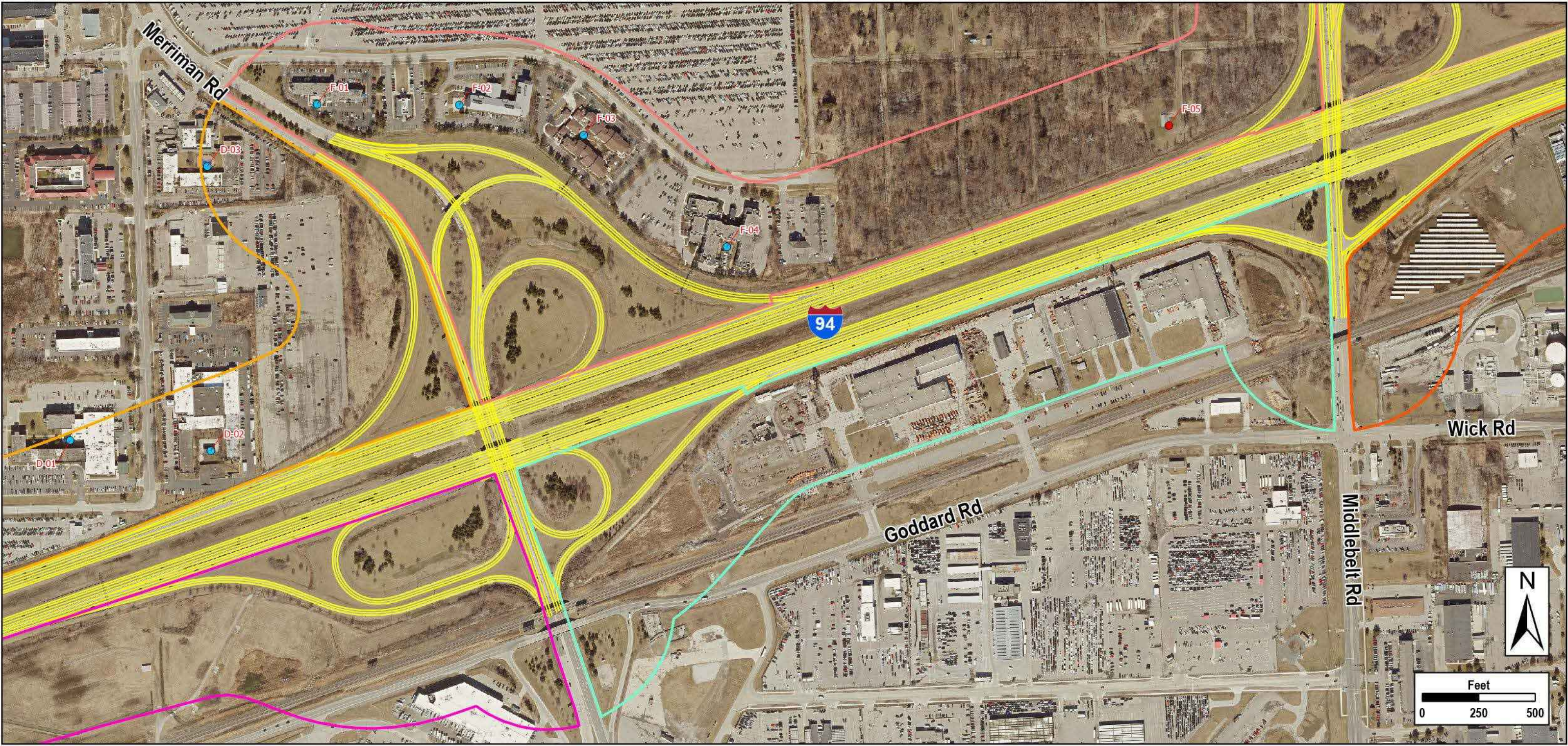
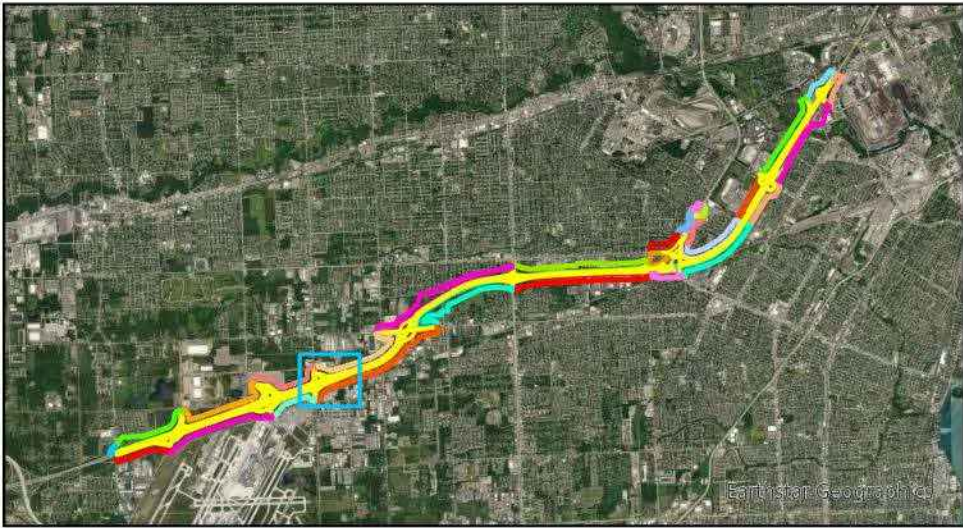


Figure A-3.3
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

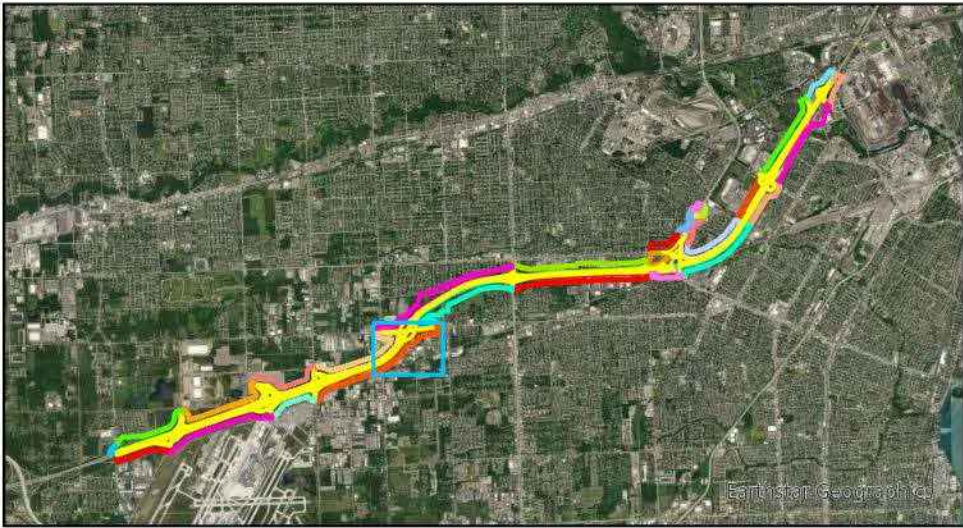
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- CNE F
- CNE G
- CNE H
- CNE I
- Proposed Build I-94 Improvements
- Impacted Receptor

Figure A-3.4
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

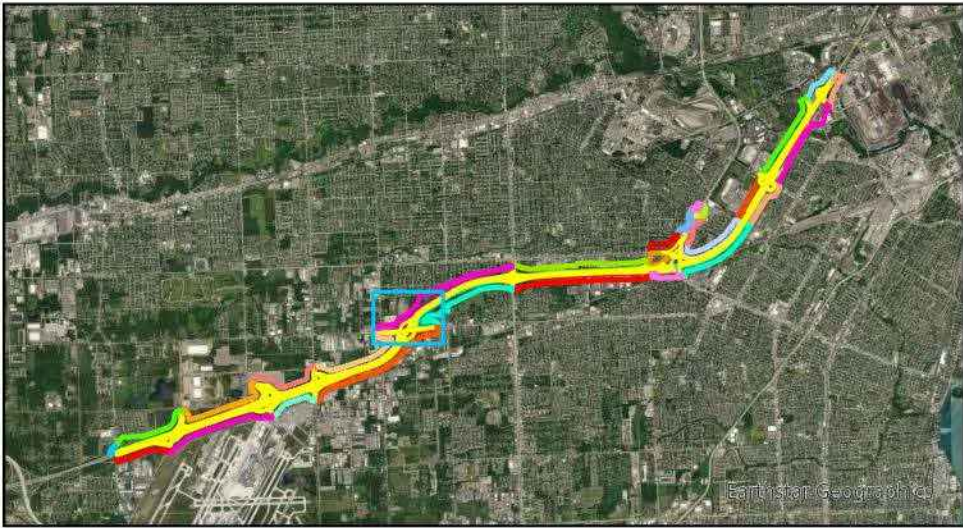
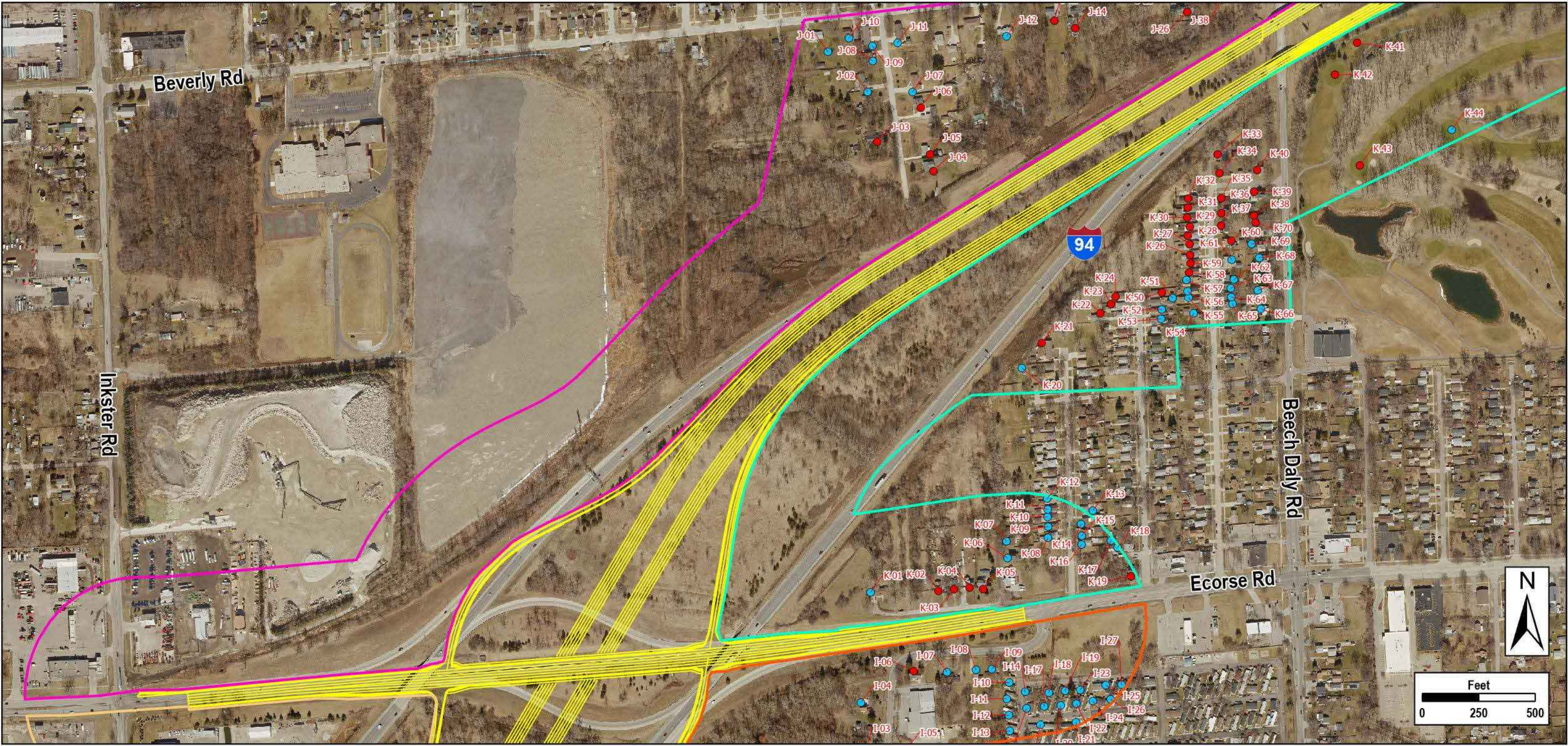
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January 2025



- CNE H
- CNE I
- CNE J
- CNE K
- Proposed Build I-94 Improvements
- Impacted Receptor
- Non-Impacted Receptor

Figure A-3.5
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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- CNE H
- CNE I
- CNE J
- CNE K
- Proposed Build I-94 Improvements
- Impacted Receptor
- Non-Impacted Receptor

Figure A-3.6
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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 January 2025

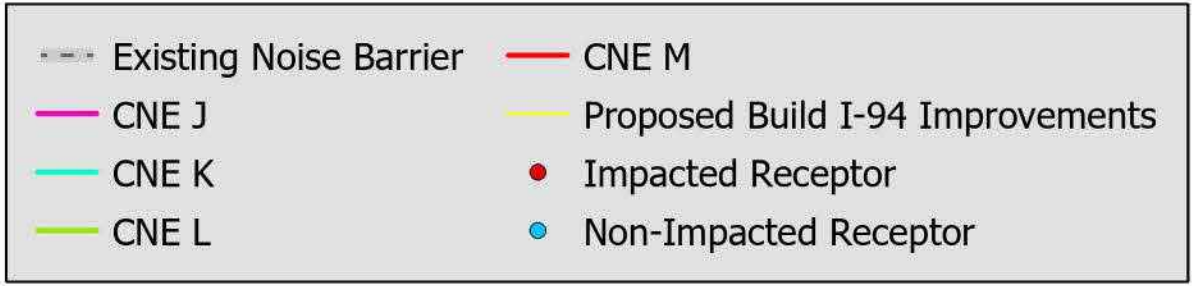
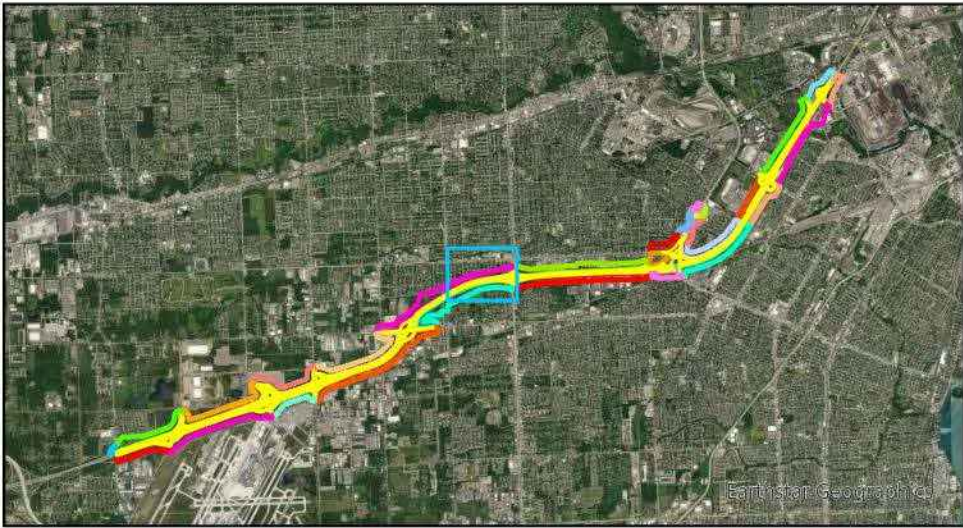
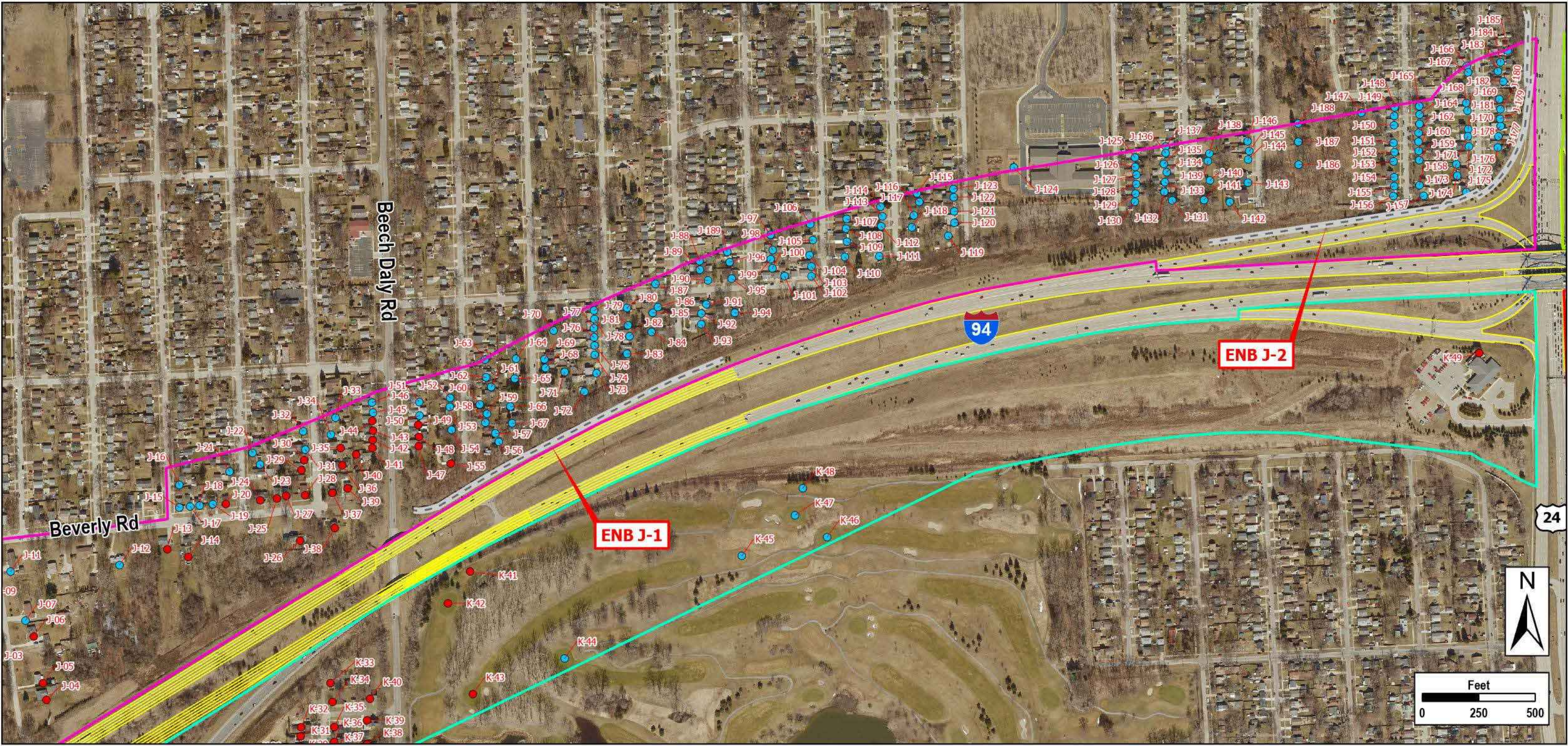
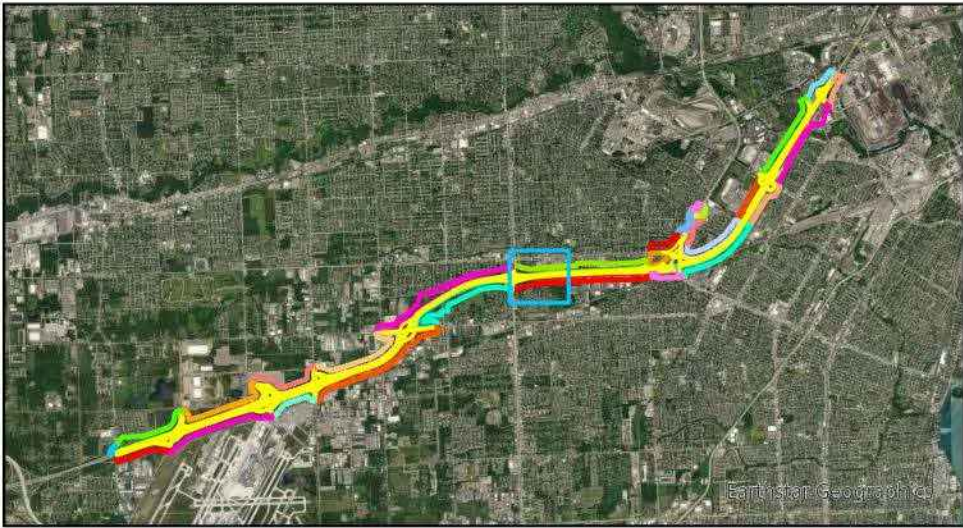
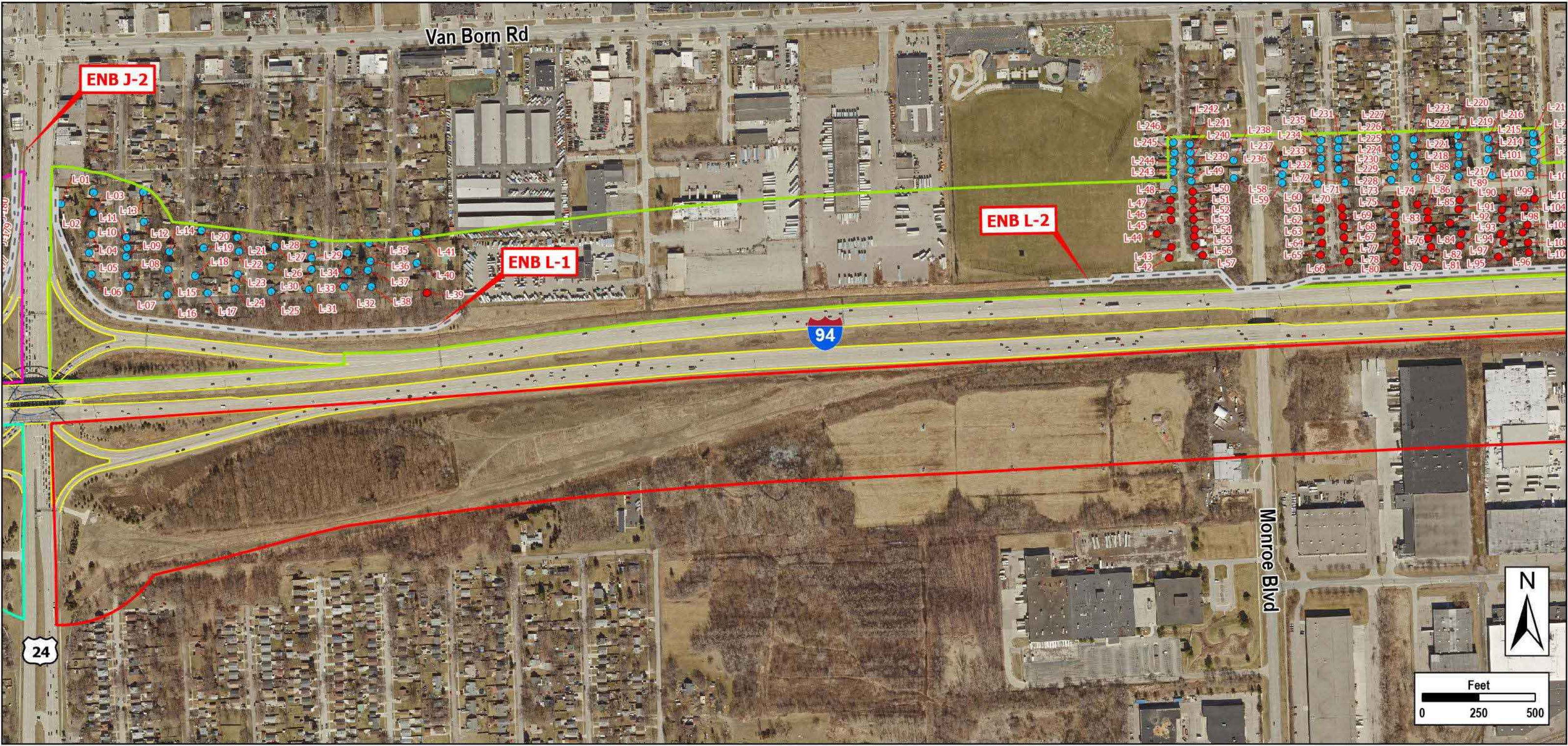


Figure A-3.7
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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Existing Noise Barrier	CNE M
CNE J	Proposed Build I-94 Improvements
CNE K	Impacted Receptor
CNE L	Non-Impacted Receptor

Figure A-3.8
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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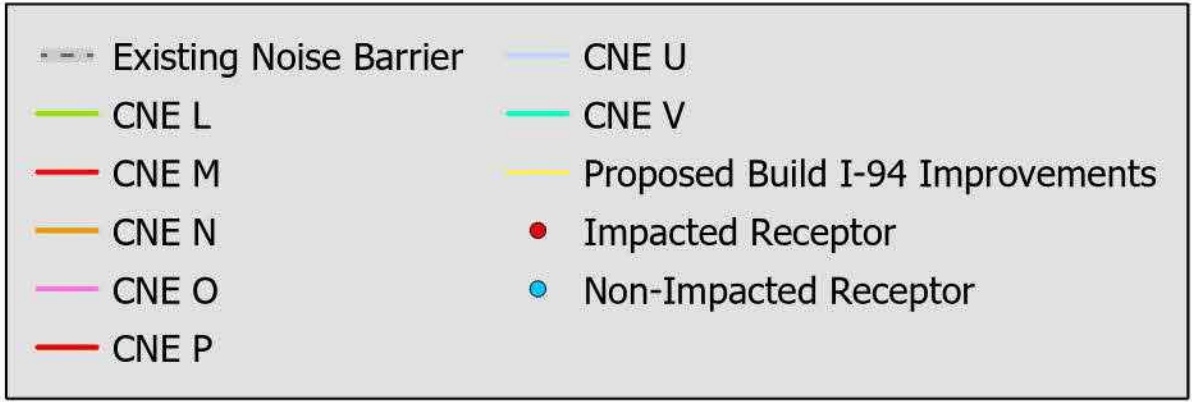
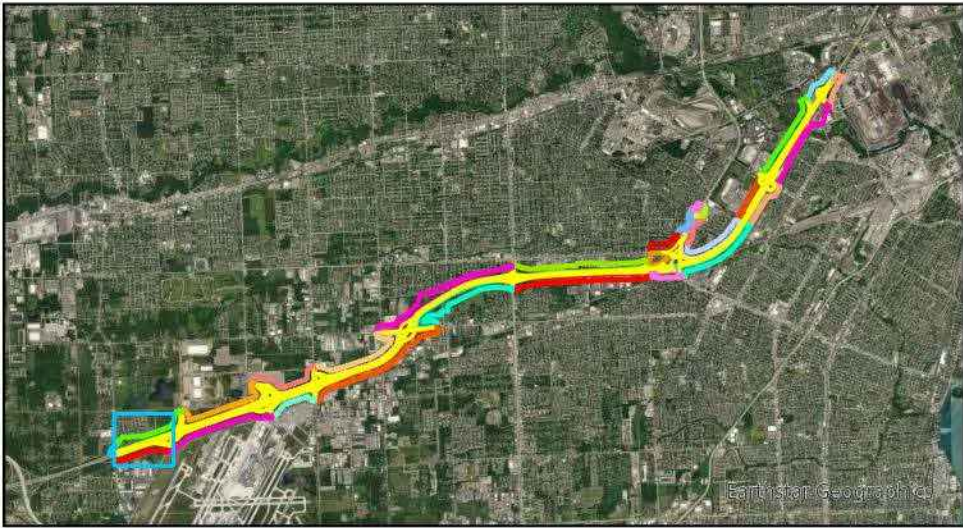


Figure A-3.9
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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January 2025

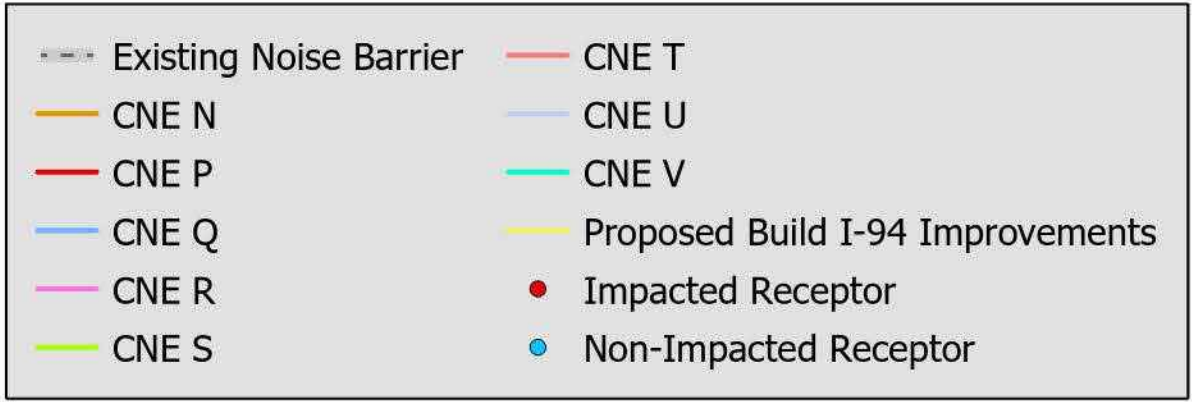
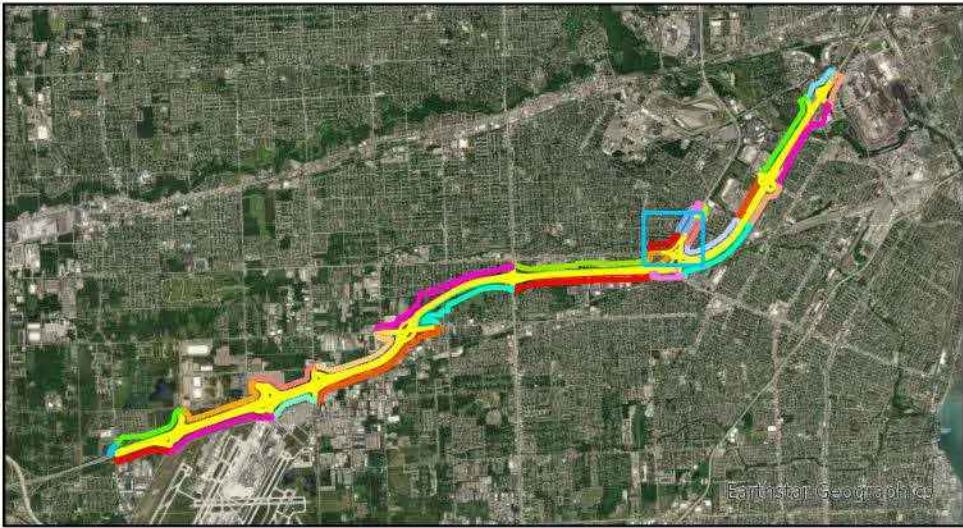
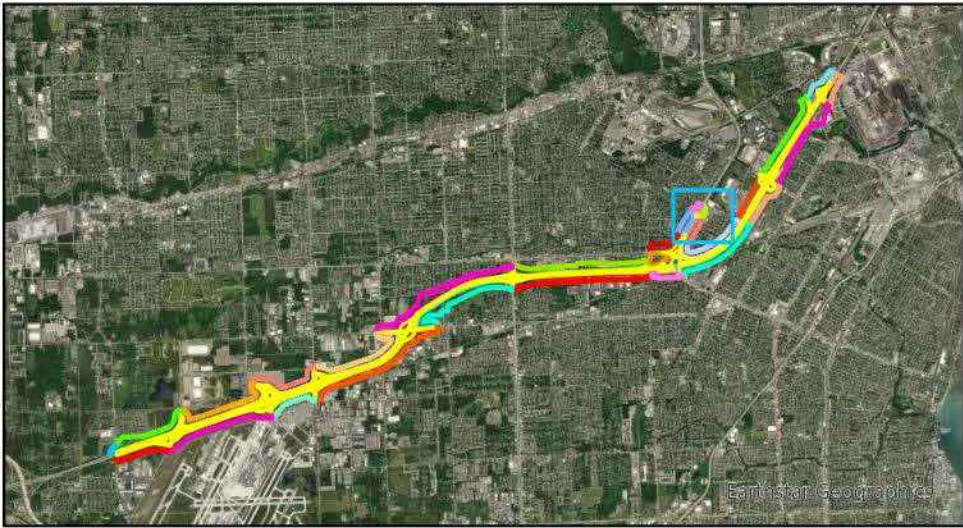


Figure A-3.10
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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January 2025



CNE Q	CNE V
CNE R	CNE X
CNE S	Proposed Build I-94 Improvements
CNE T	Impacted Receptor
CNE U	Non-Impacted Receptor

Figure A-3.11
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

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January 2025

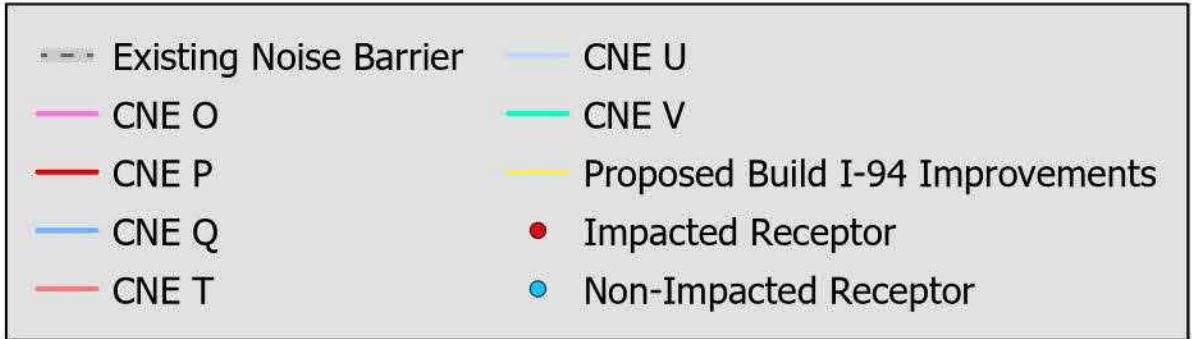
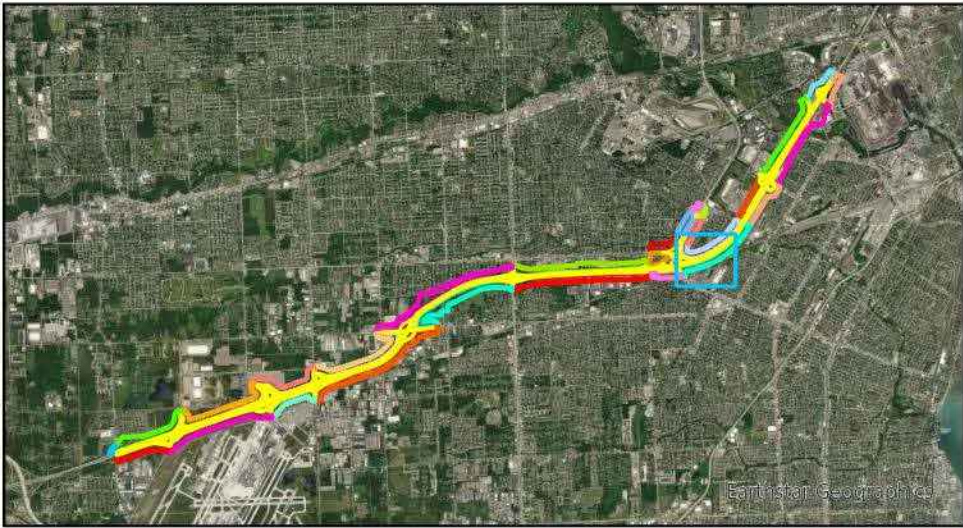
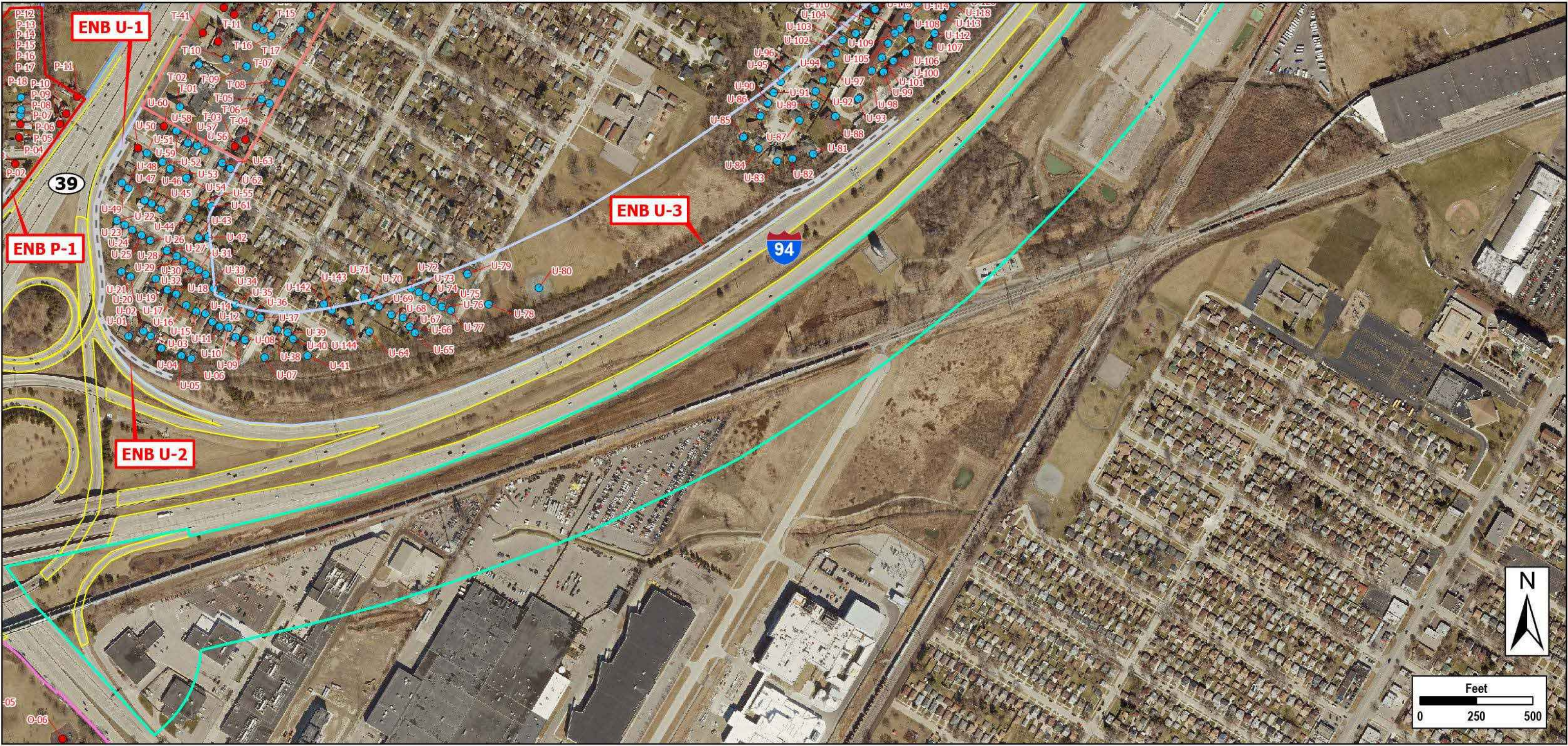


Figure A-3.12
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

DLZ
 January 2025

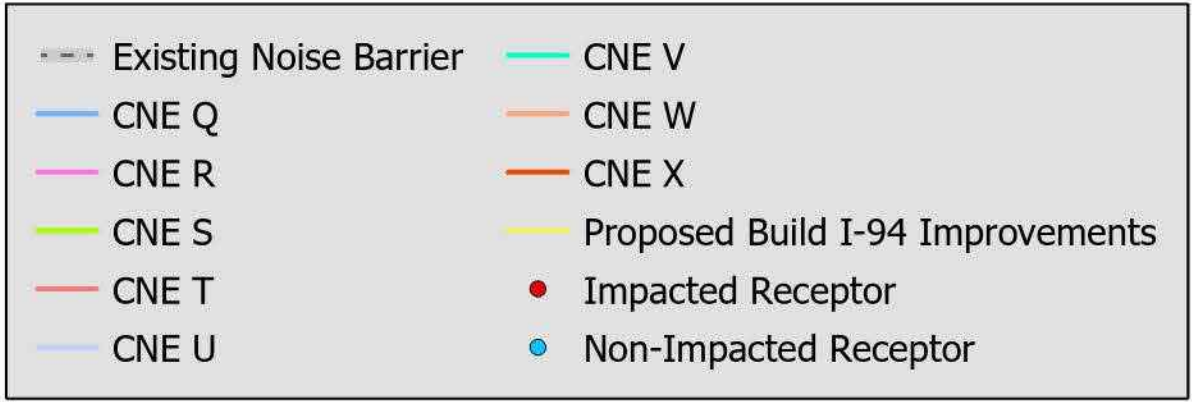
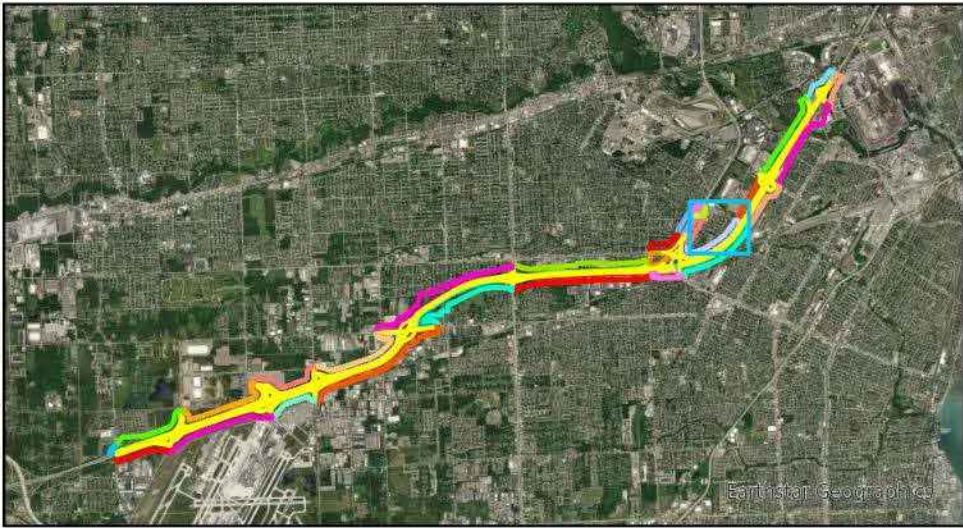
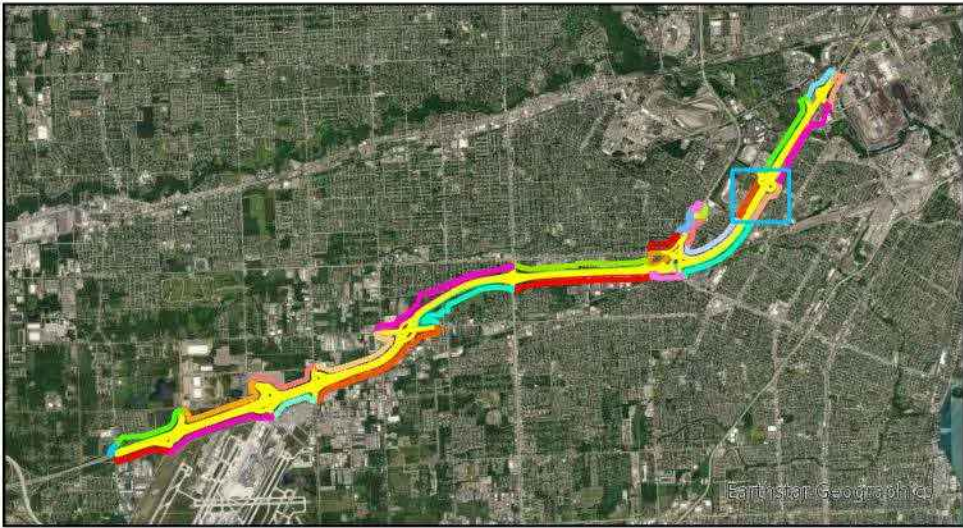
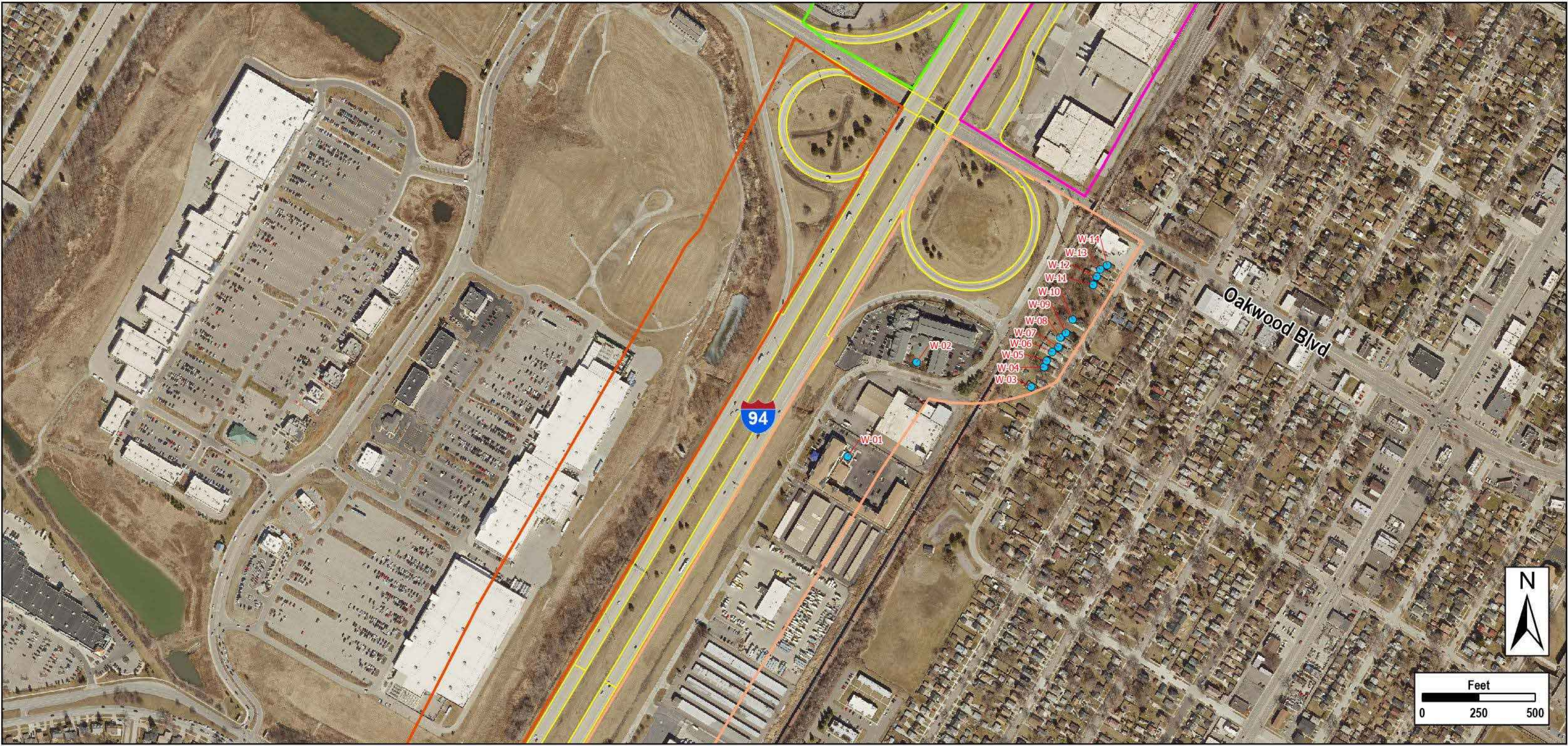


Figure A-3.13
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

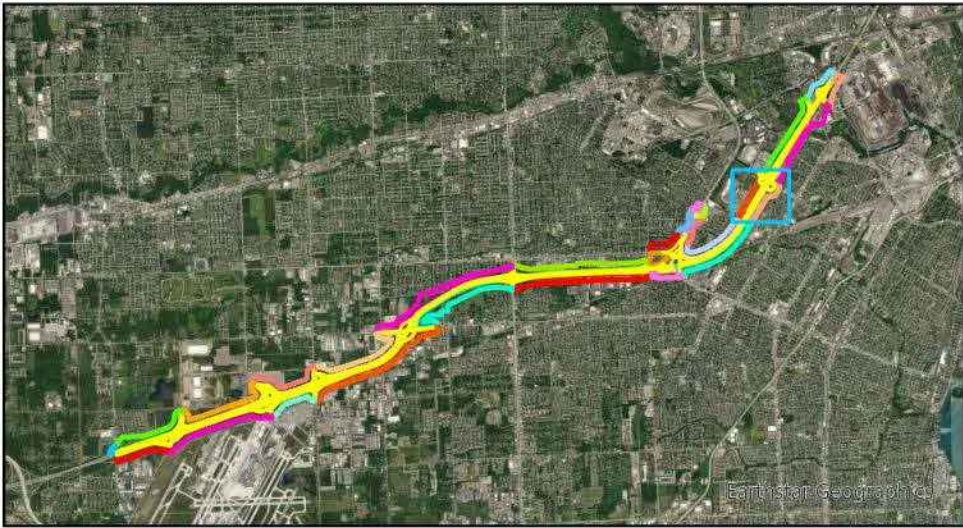
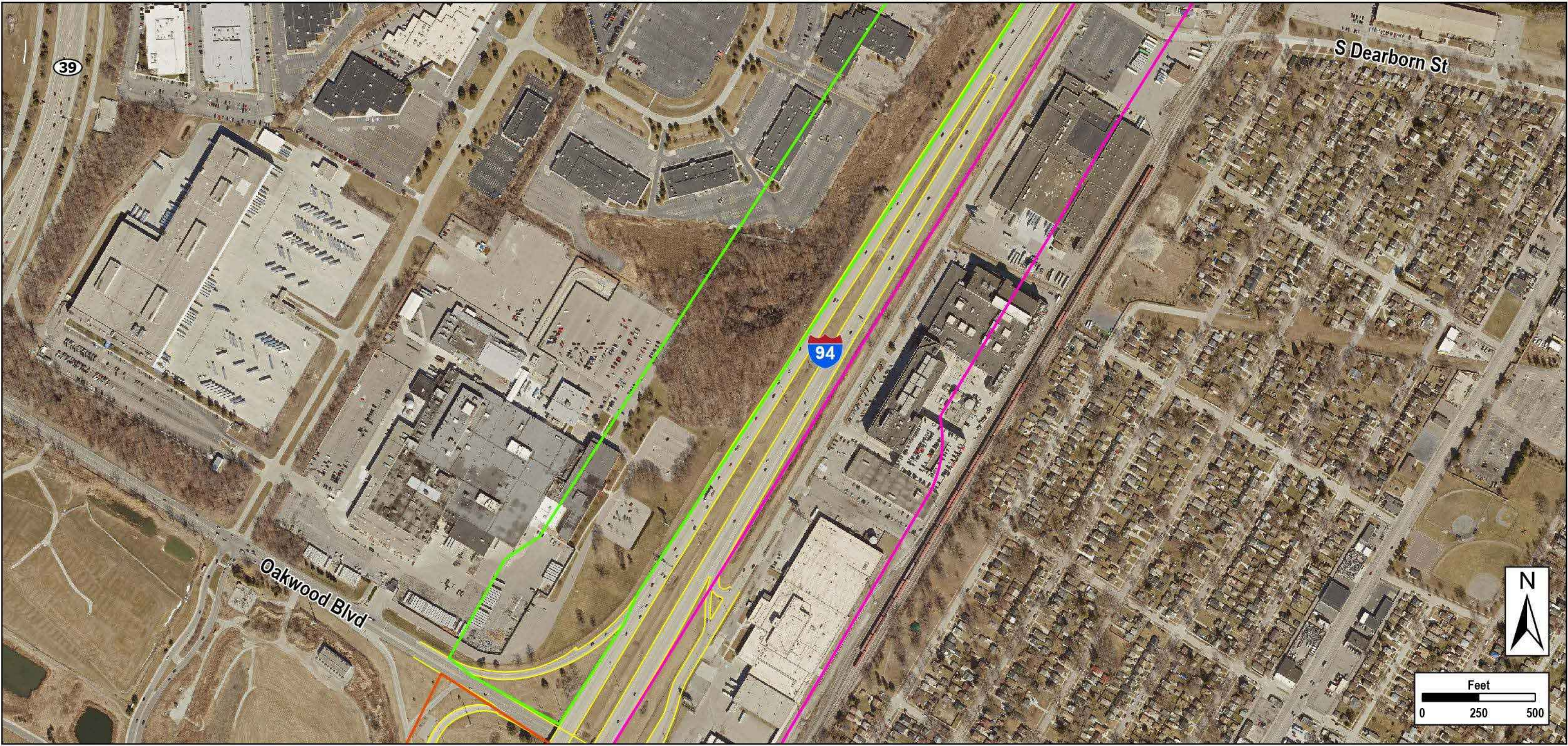
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 January 2025



- CNE W
- CNE X
- CNE Y
- CNE Z
- Proposed Build I-94 Improvements
- Non-Impacted Receptor

Figure A-3.14
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

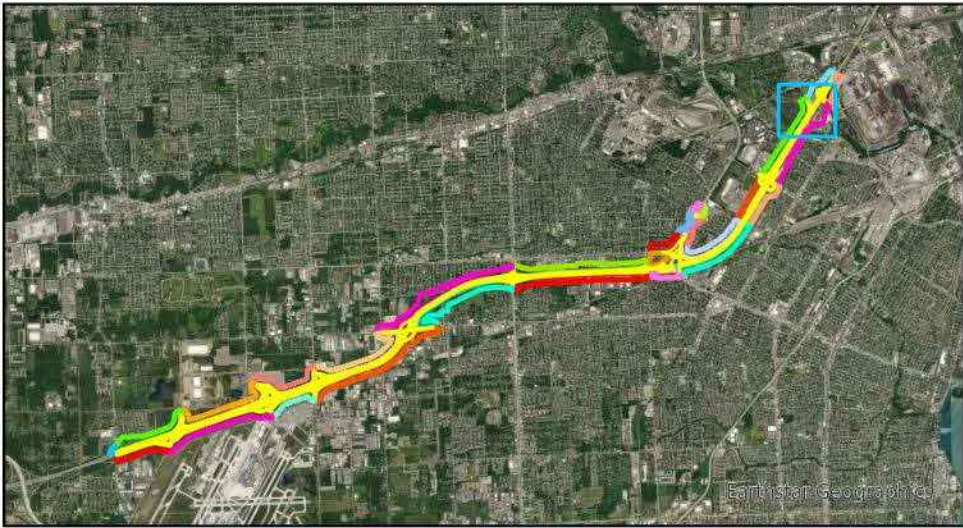
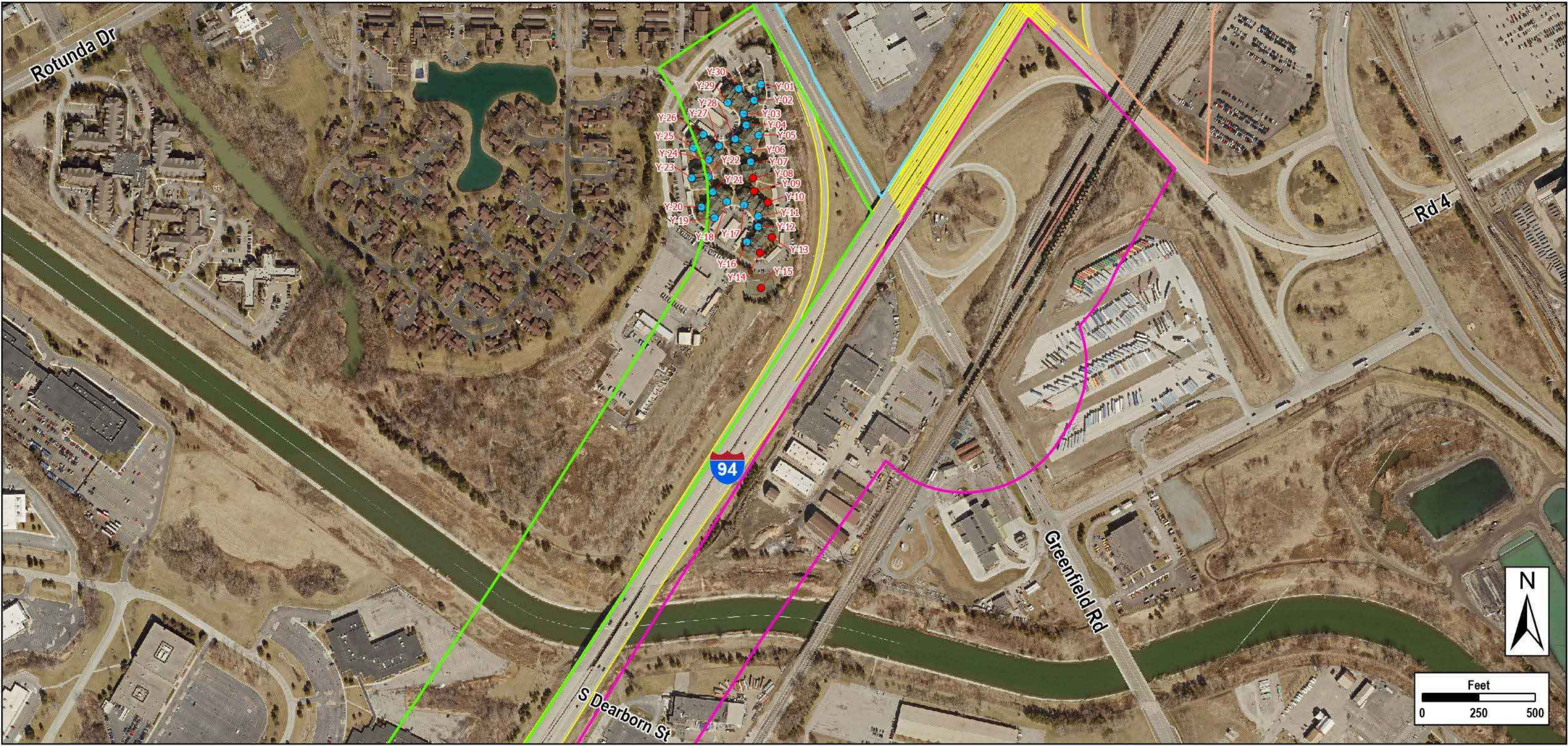
EDLZ
January 2025



- CNE X
- CNE Y
- CNE Z
- Proposed Build I-94 Improvements

Figure A-3.15
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

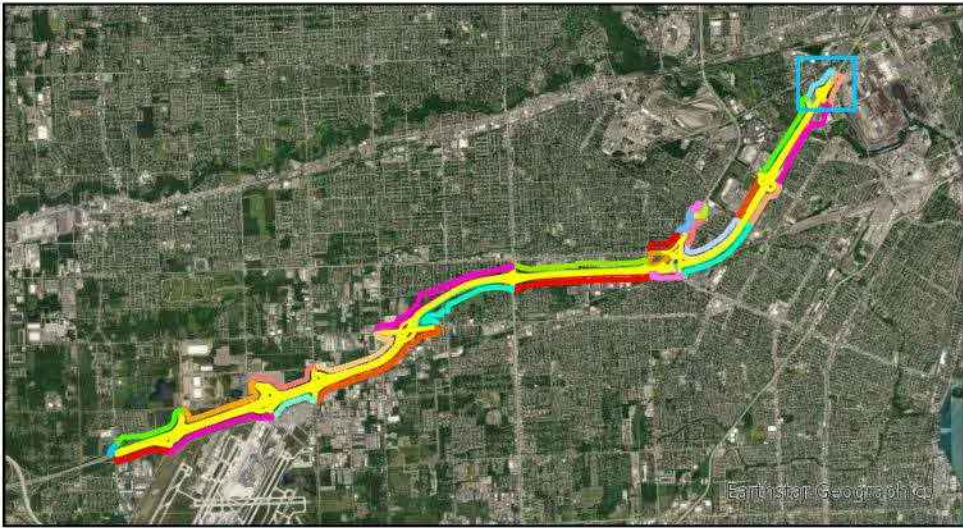
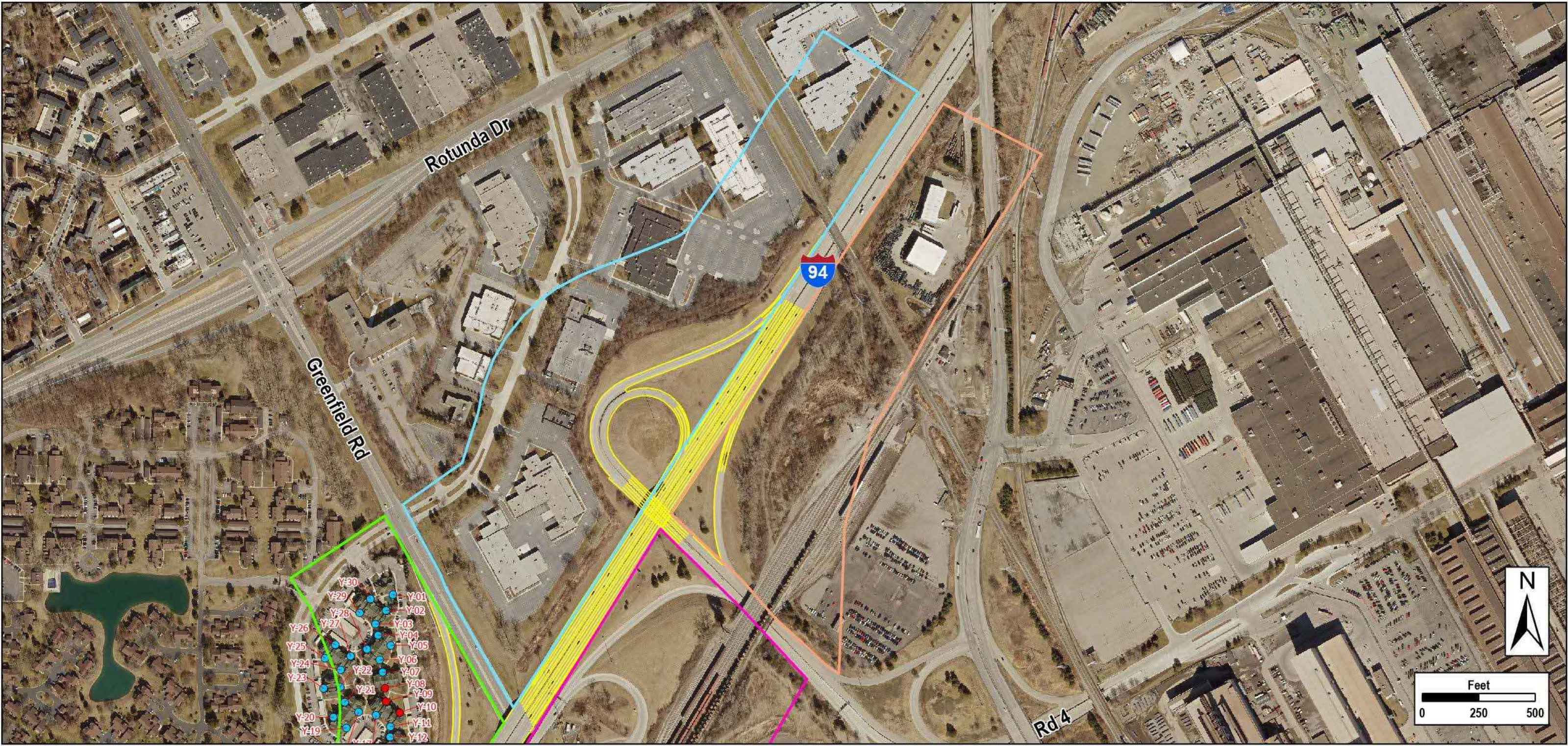
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January 2025



- CNE Y
- CNE Z
- CNE AA
- CNE BB
- Proposed Build I-94 Improvements
- Impacted Receptor
- Non-Impacted Receptor

Figure A-3.16
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

DLZ
January 2025



- CNE Y
- CNE Z
- CNE AA
- CNE BB
- Proposed Build I-94 Improvements
- Impacted Receptor
- Non-Impacted Receptor

Figure A-3.17
Design Year 2051 Build Condition
Noise Impact Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

DLZ
January 2025

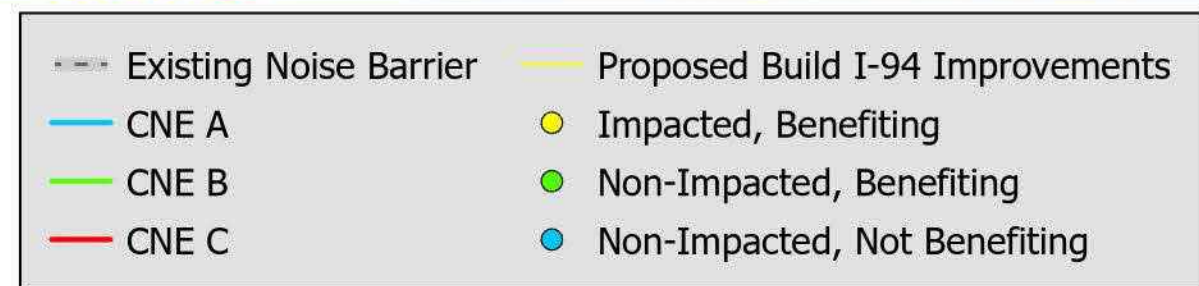
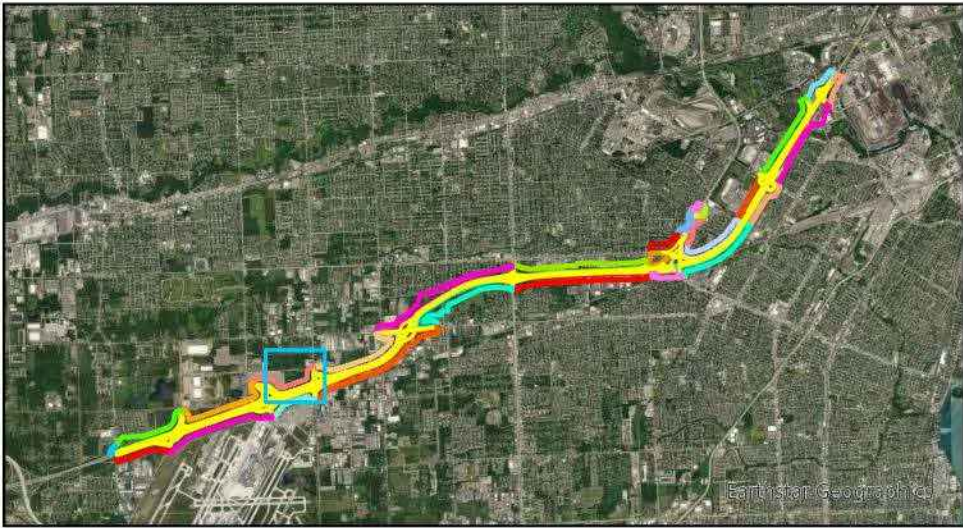


Figure A-4.1
ENB B-1 Barrier Analysis

I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

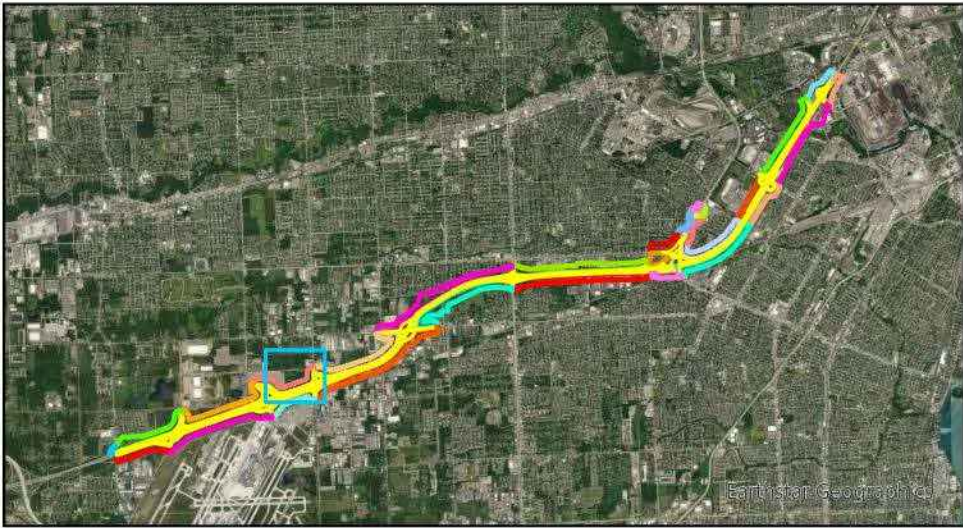


January 2025



- Noise Barrier Does Not Meet Criteria
- CNE F
- CNE G
- CNE H
- Proposed Build I-94 Improvements
- Impacted, Benefiting

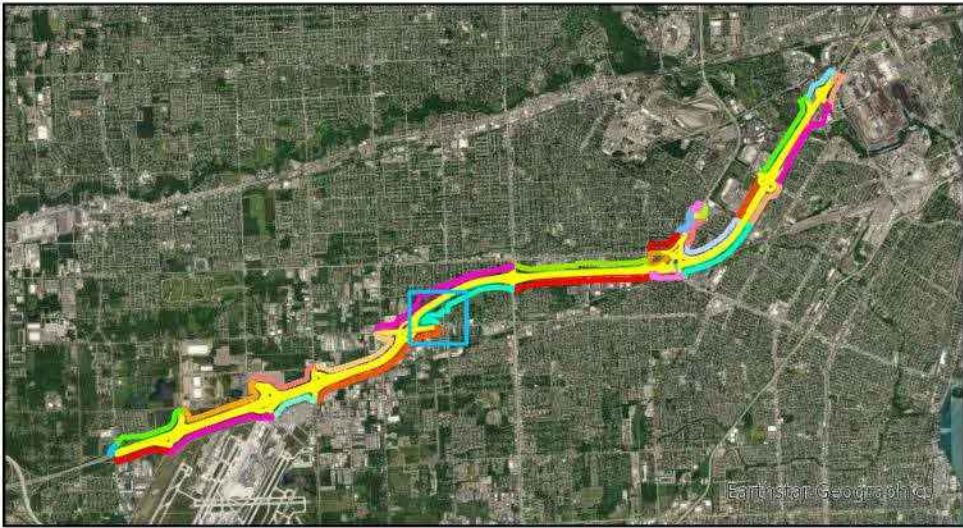
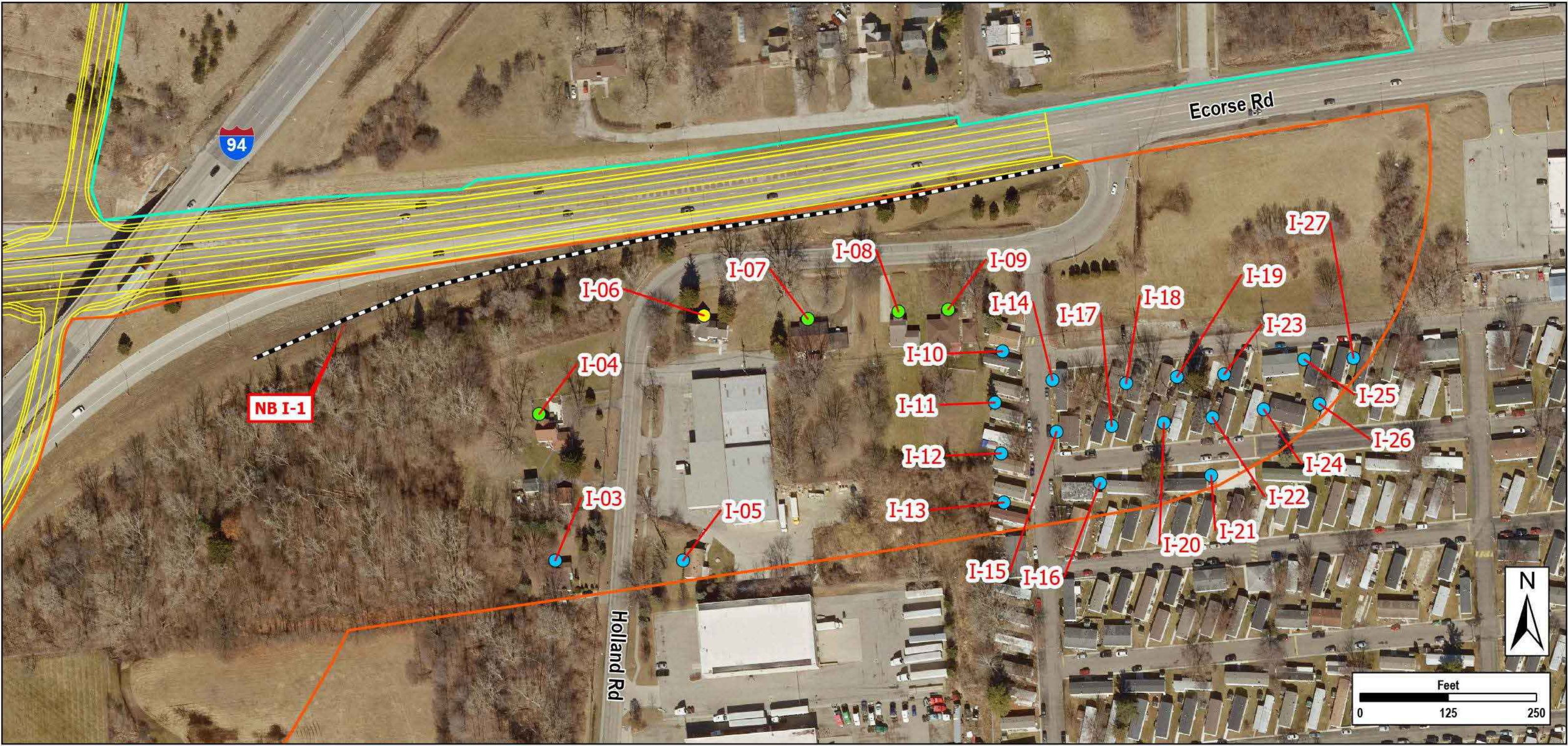
Figure A-4.2
NB F-1 Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan
EDLZ
January 2025



- Noise Barrier Does Not Meet Criteria
- CNE H
- CNE I
- Proposed Build I-94 Improvements
- Impacted, Benefiting

Figure A-4.3
NB H-1 Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

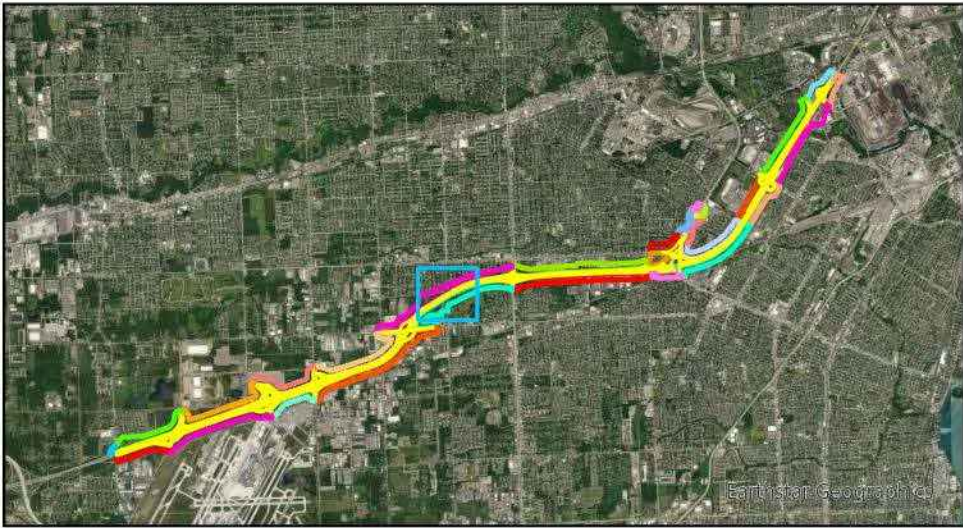
EDLZ
January 2025



- Noise Barrier Does Not Meet Criteria
- CNE I
- CNE K
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Non-Impacted, Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.4
NB I-1 Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

DLZ
 January 2025



- Noise Barrier Does Not Meet Criteria
- CNE J
- CNE K
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Impacted, Not Benefiting
- Non-Impacted, Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.5
NB K-1A Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

EDLZ
 January 2025

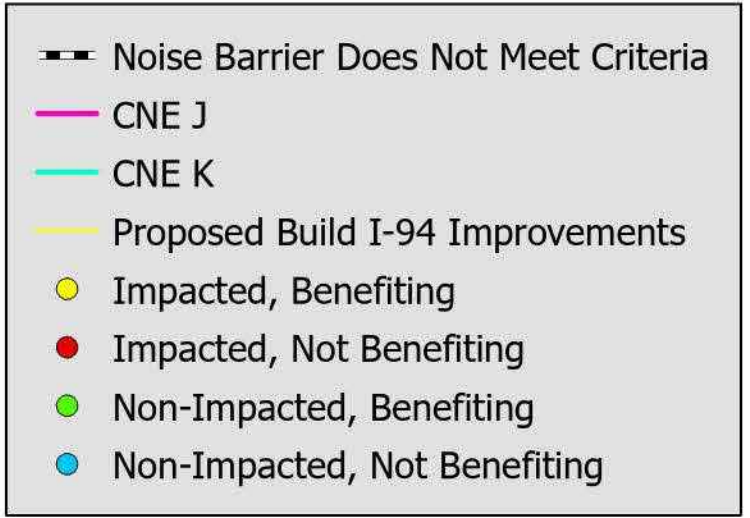
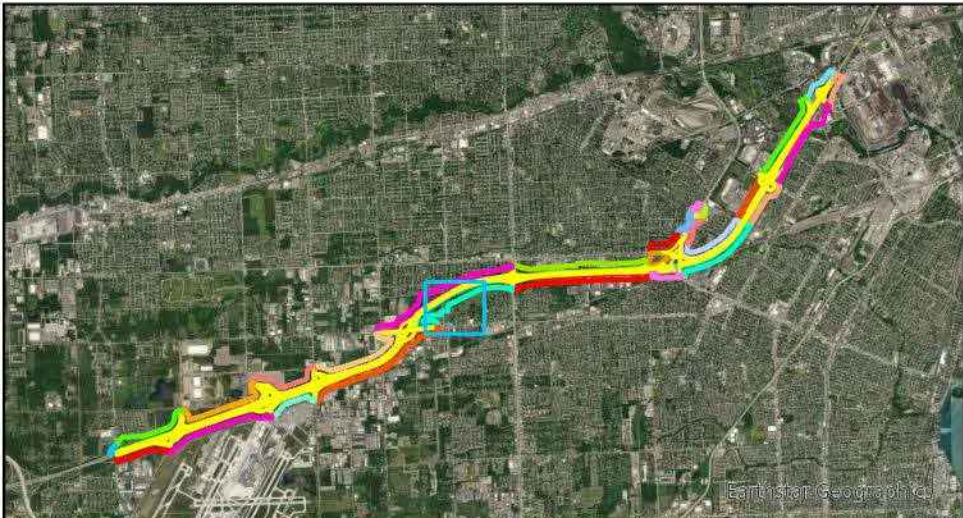
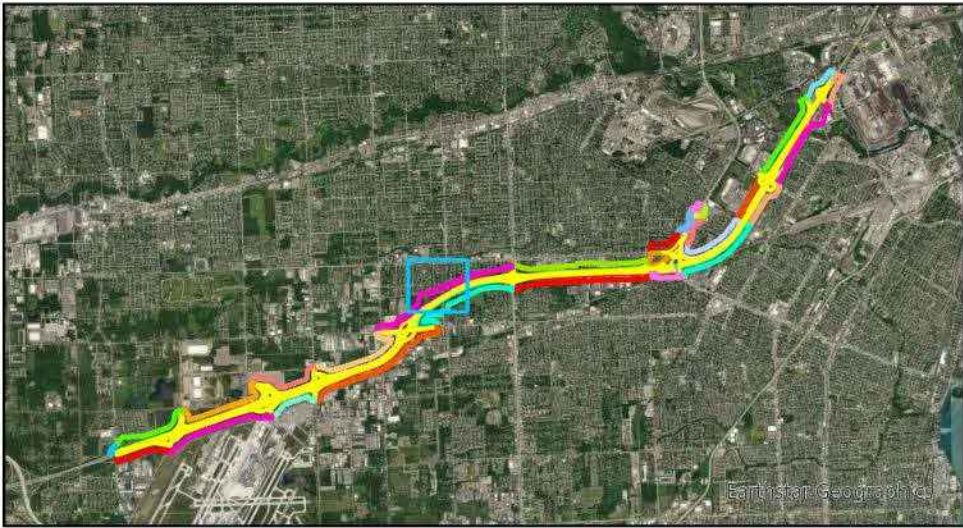
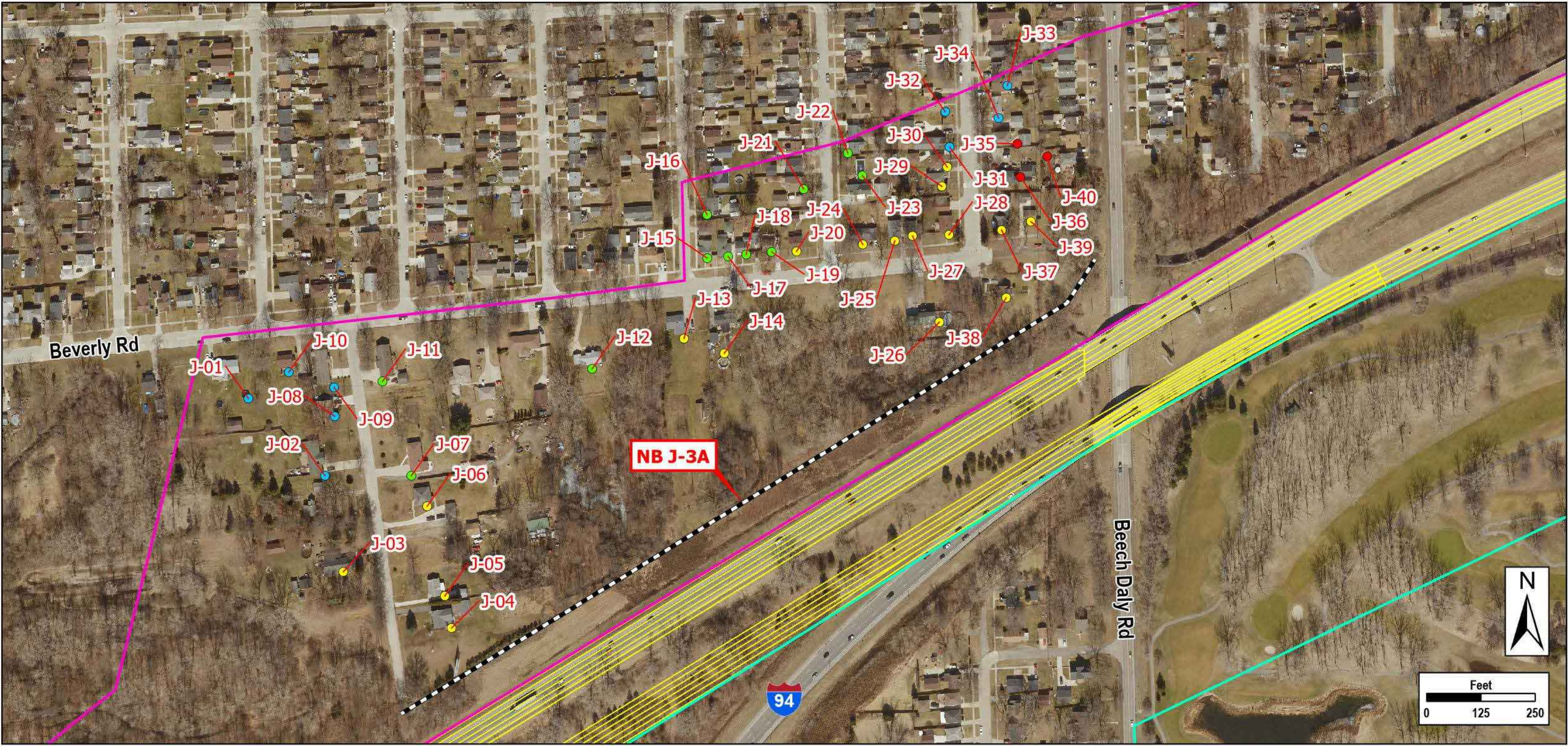


Figure A-4.6
NB K-1B Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

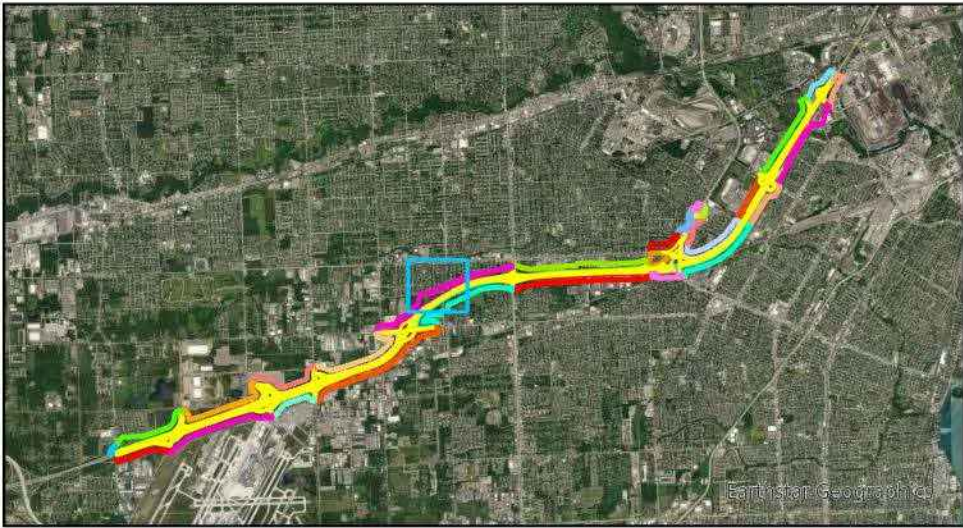
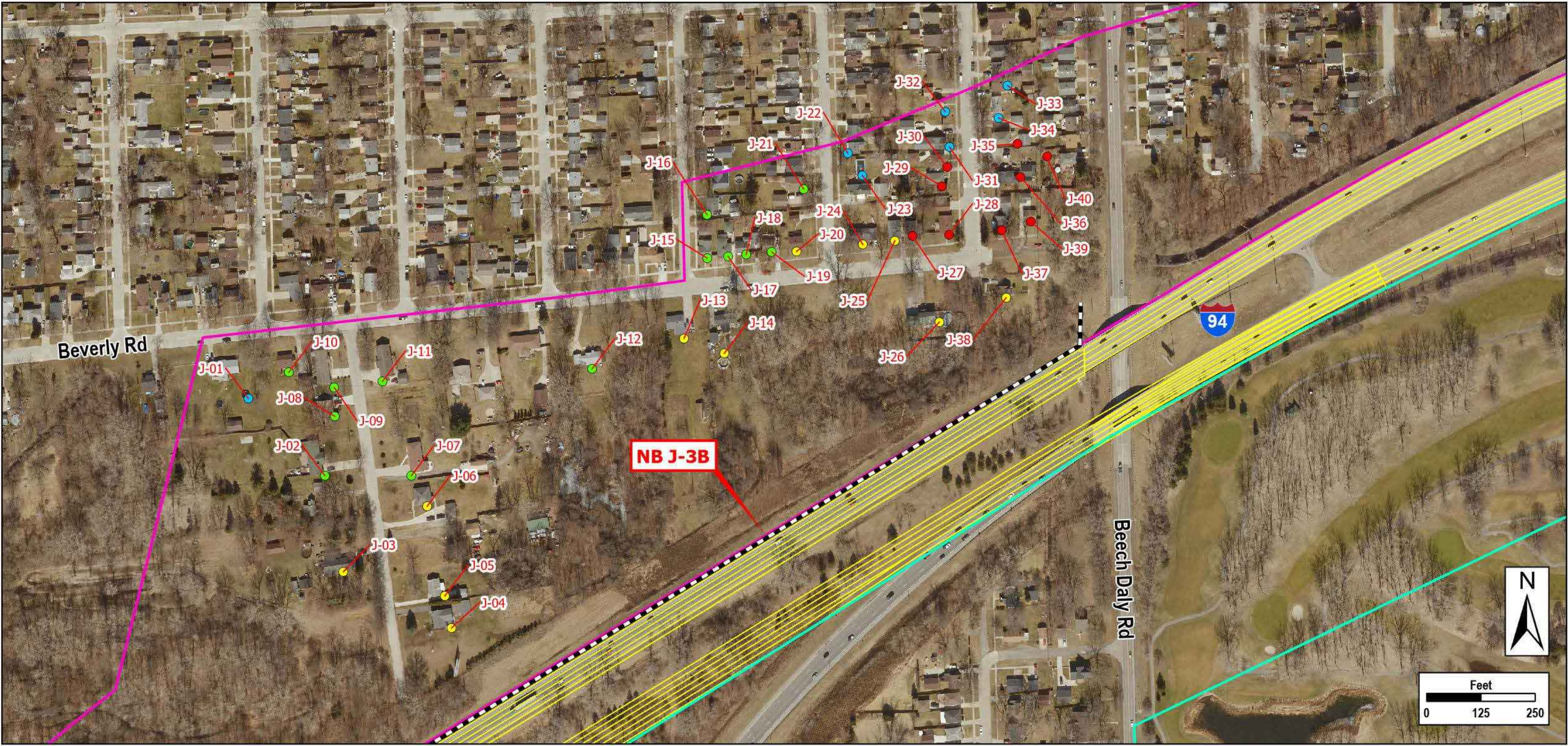
EDLZ
January 2025



- Noise Barrier Does Not Meet Criteria
- CNE J
- CNE K
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Impacted, Not Benefiting
- Non-Impacted, Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.7
NB J-3A Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

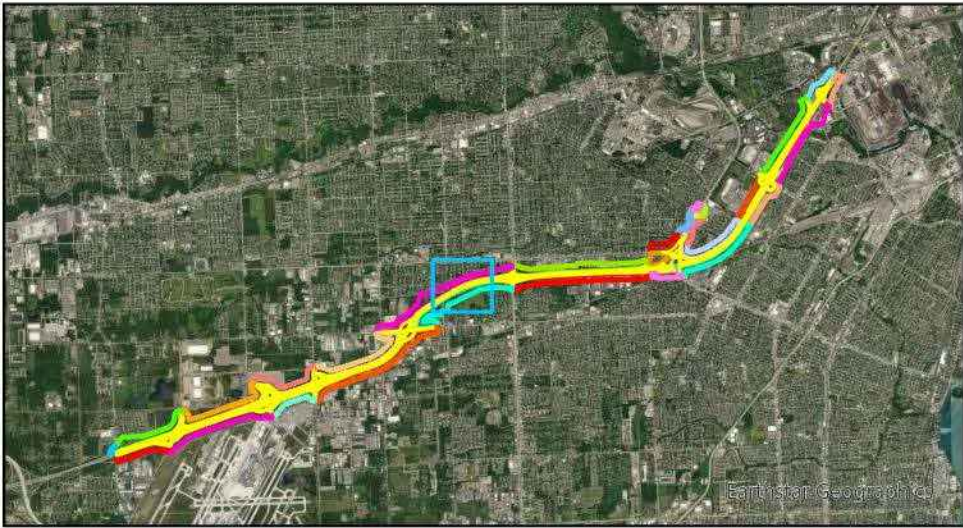
EDLZ
 January 2025



- Noise Barrier Does Not Meet Criteria
- CNE J
- CNE K
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Impacted, Not Benefiting
- Non-Impacted, Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.8
NB J-3B Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

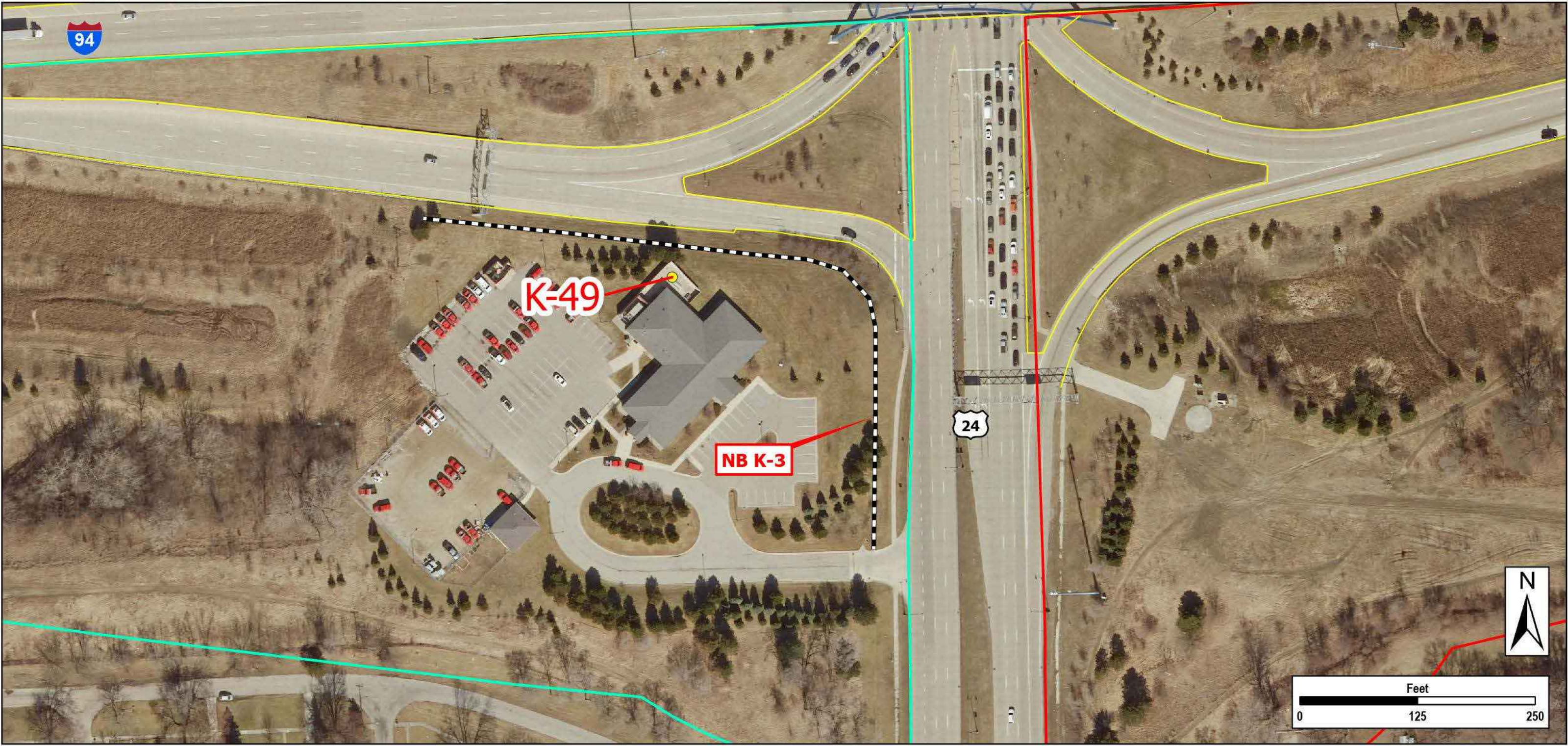
EDLZ
January 2025



- Noise Barrier Does Not Meet Criteria
- CNE J
- CNE K
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.9
NB K-2 Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

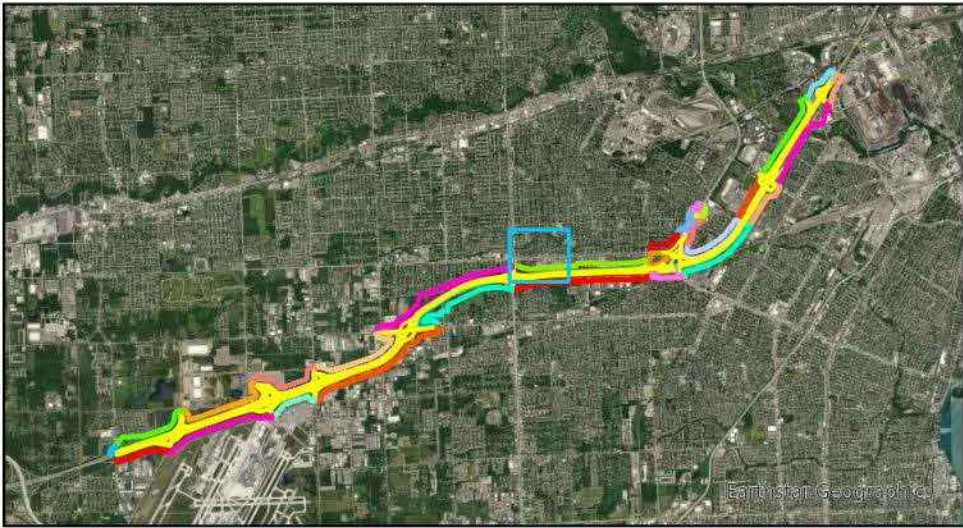
EDLZ
 January 2025



- Noise Barrier Does Not Meet Criteria
- CNE K
- CNE M
- Proposed Build I-94 Improvements
- Impacted, Benefiting

Figure A-4.10
NB K-3 Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

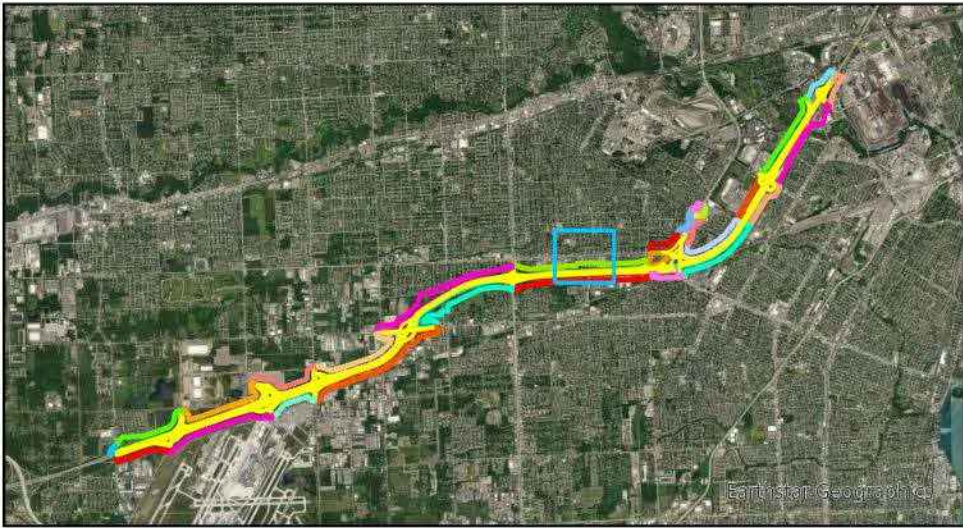
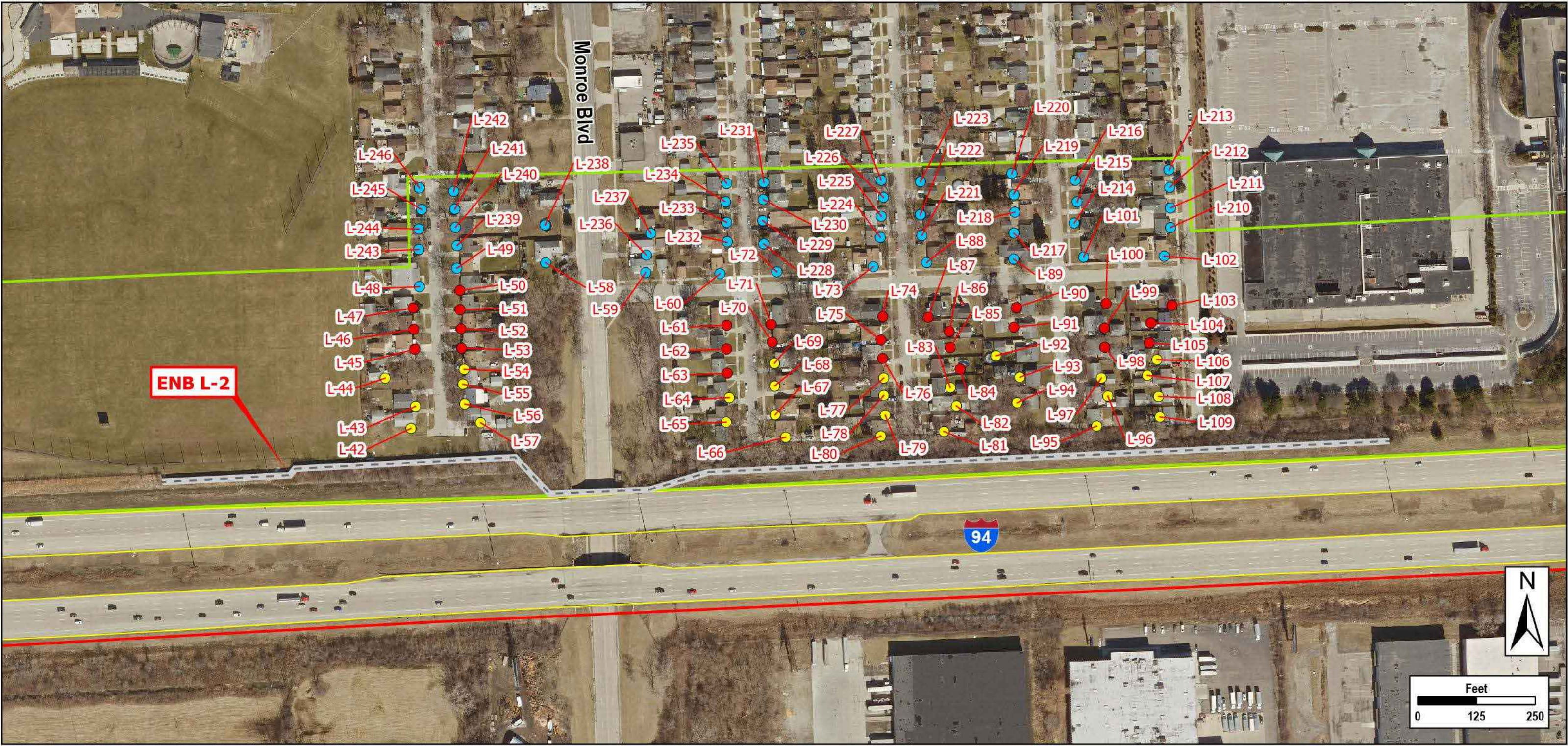
EDLZ
January 2025



Existing Noise Barrier	Proposed Build I-94 Improvements
CNE J	Impacted, Benefiting
CNE L	Non-Impacted, Benefiting
CNE M	Non-Impacted, Not Benefiting

Figure A-4.11
ENB L-1 Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

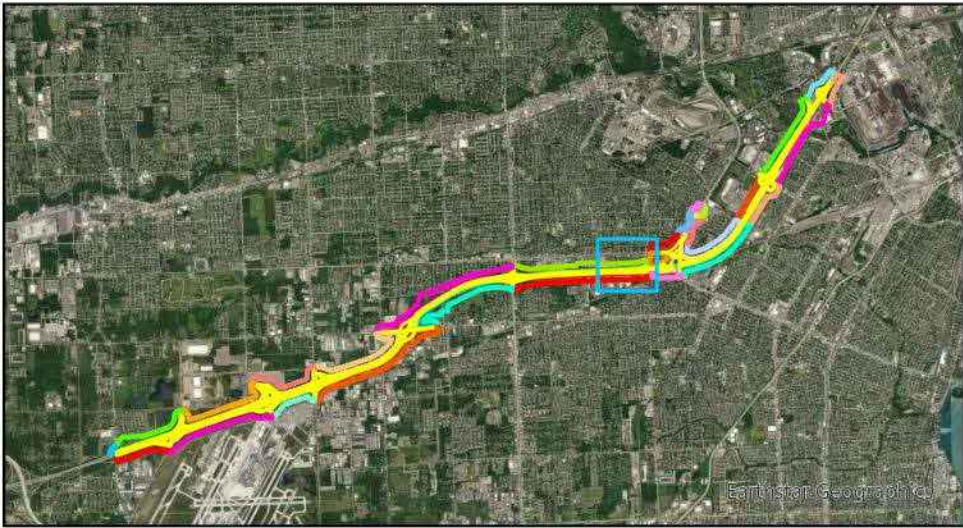
DLZ
 January 2025



- Existing Noise Barrier
- CNE L
- CNE M
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Impacted, Not Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.12
ENB L-2 Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

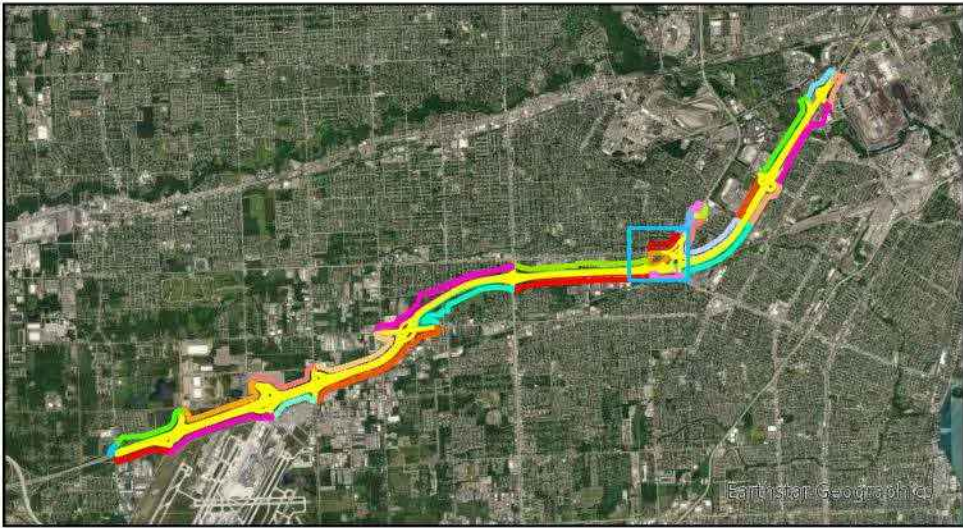
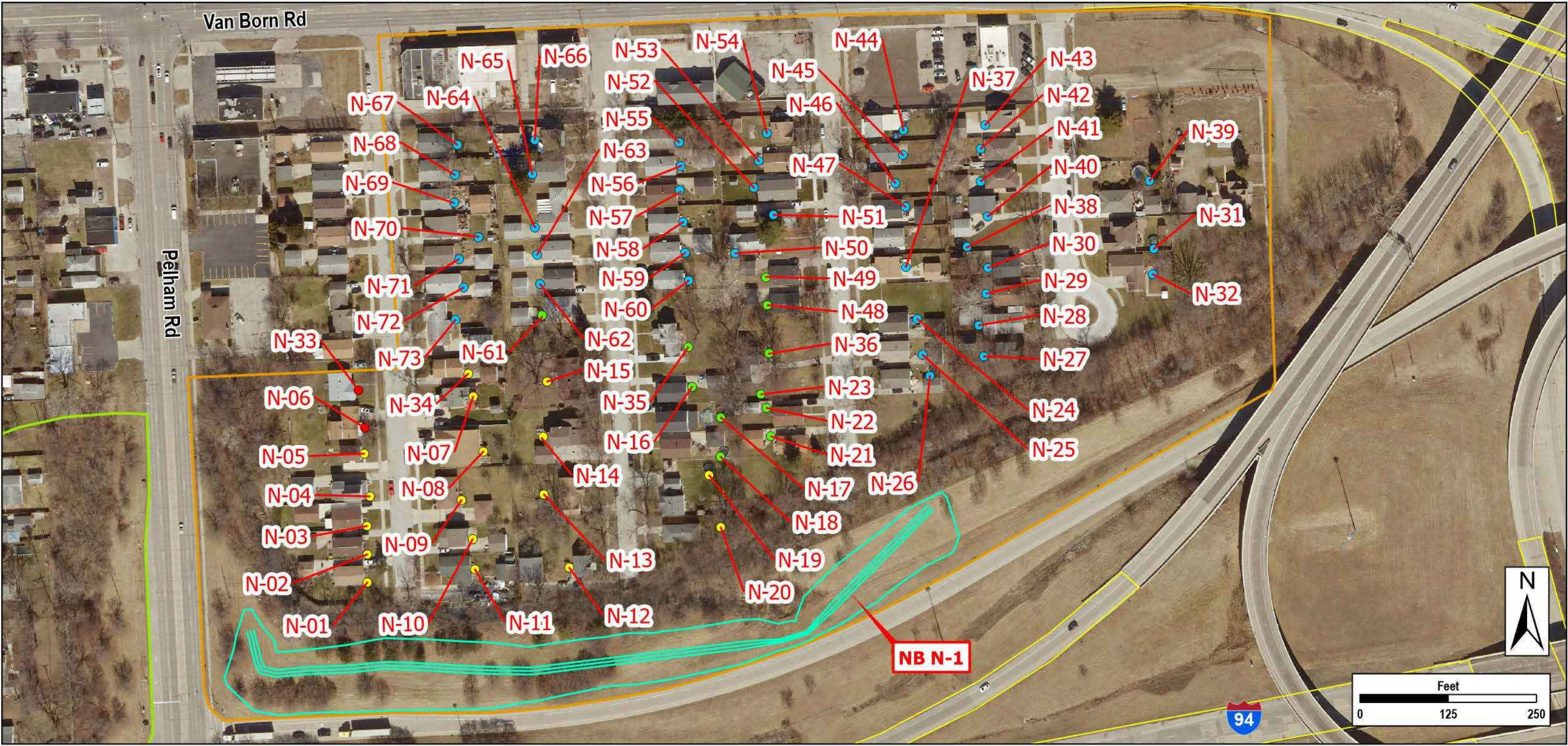
DLZ
 January 2025



Existing Noise Barrier	Proposed Build I-94 Improvements
CNE L	Impacted, Benefiting
CNE M	Impacted, Not Benefiting
CNE N	Non-Impacted, Benefiting
CNE O	Non-Impacted, Not Benefiting

Figure A-4.13
ENB L-3 Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

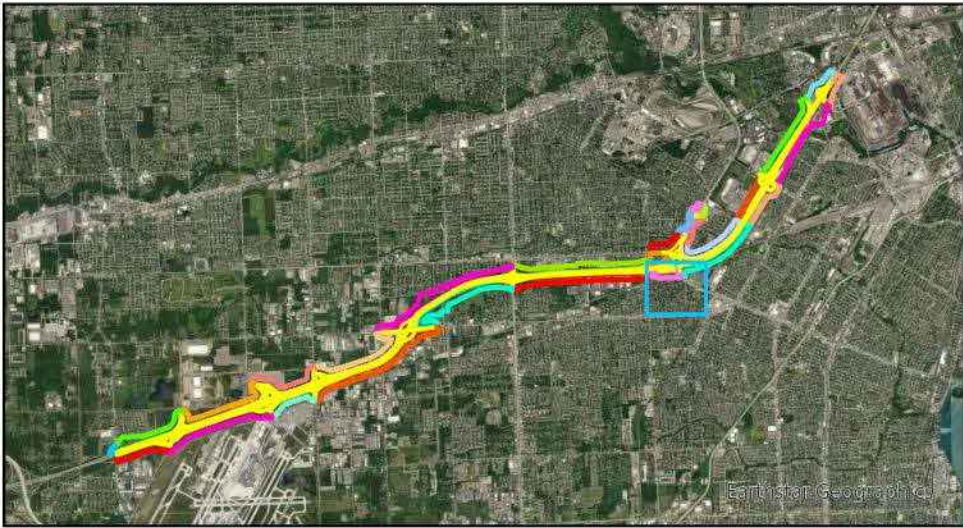
DLZ
 January 2025



- Noise Barrier Does Not Meet Criteria
- CNE L
- CNE N
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Impacted, Not Benefiting
- Non-Impacted, Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.14
NB N-1 Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

CDLZ
 January 2025



- Noise Barrier Does Not Meet Criteria
- CNE O
- CNE V
- Proposed Build I-94 Improvements
- Impacted, Benefiting
- Non-Impacted, Not Benefiting

Figure A-4.15
NB O-1 Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan
EDLZ
January 2025

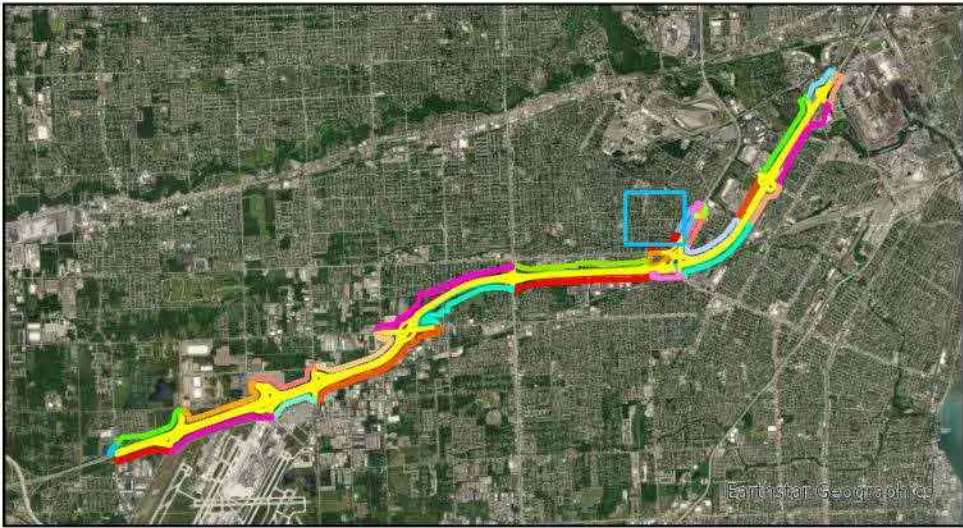


Figure A-4.16
NB P-2 Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan

DLZ
January 2025

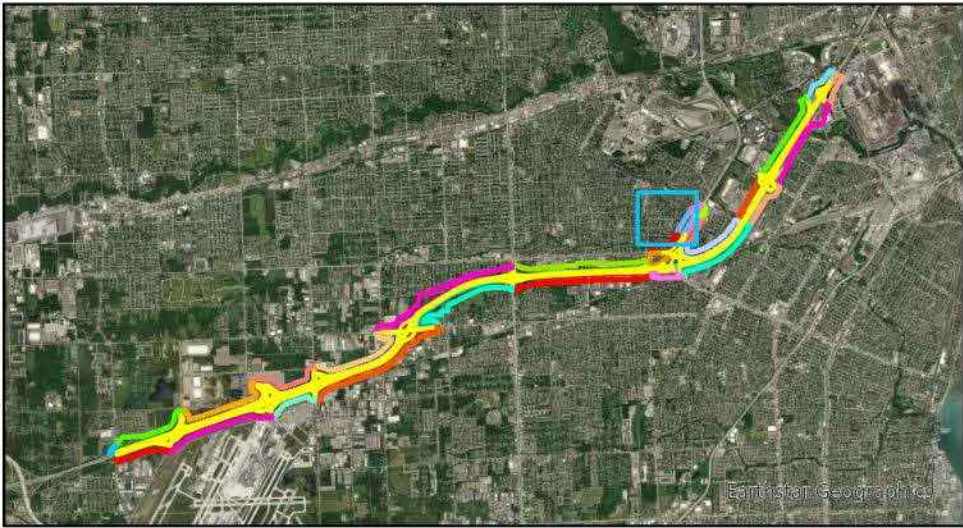
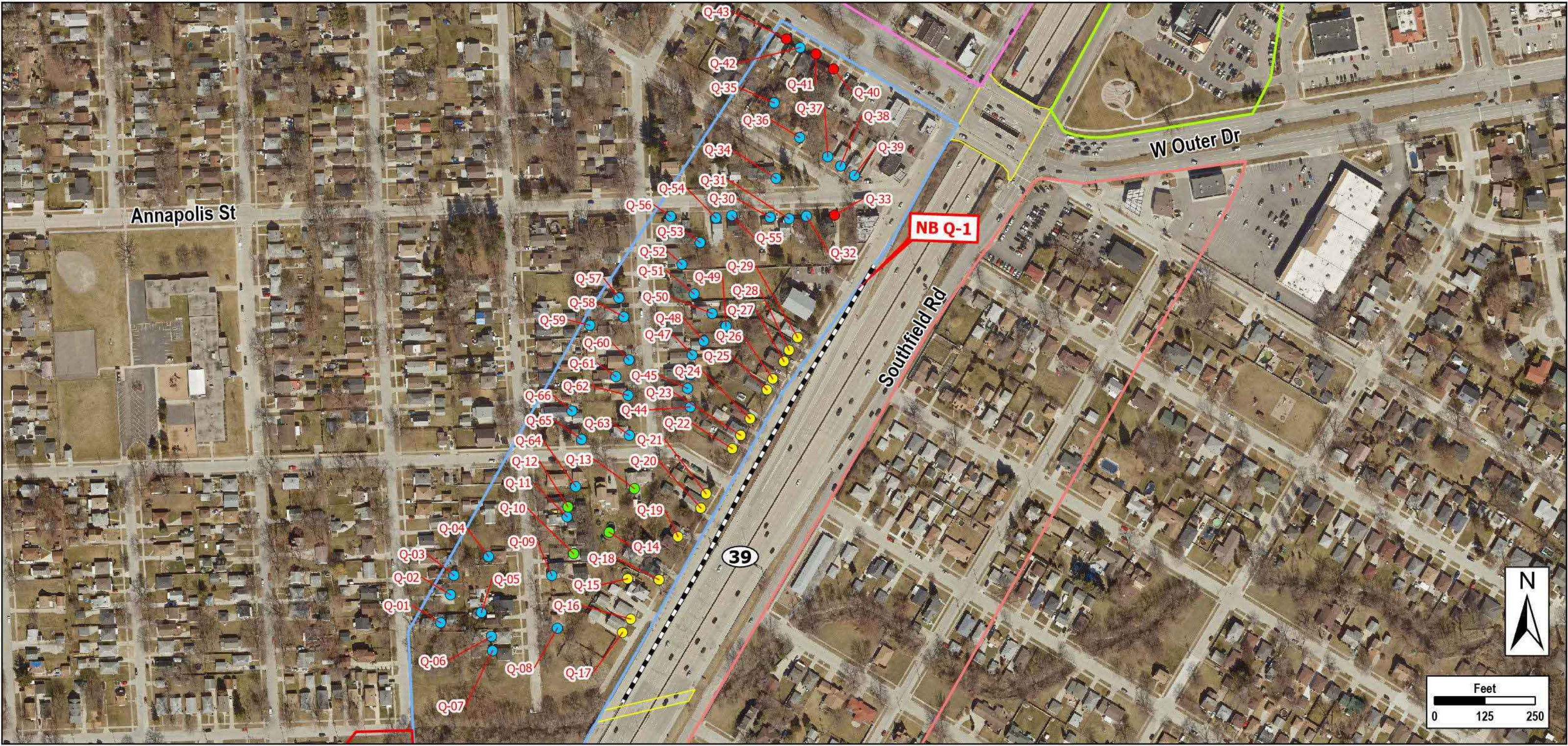


Figure A-4.17
NB Q-1 Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan
DLZ
January 2025

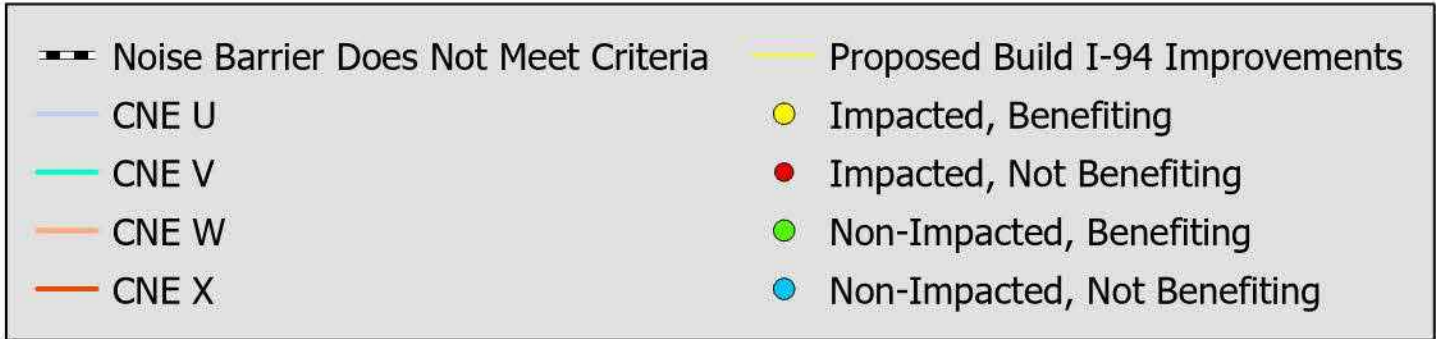
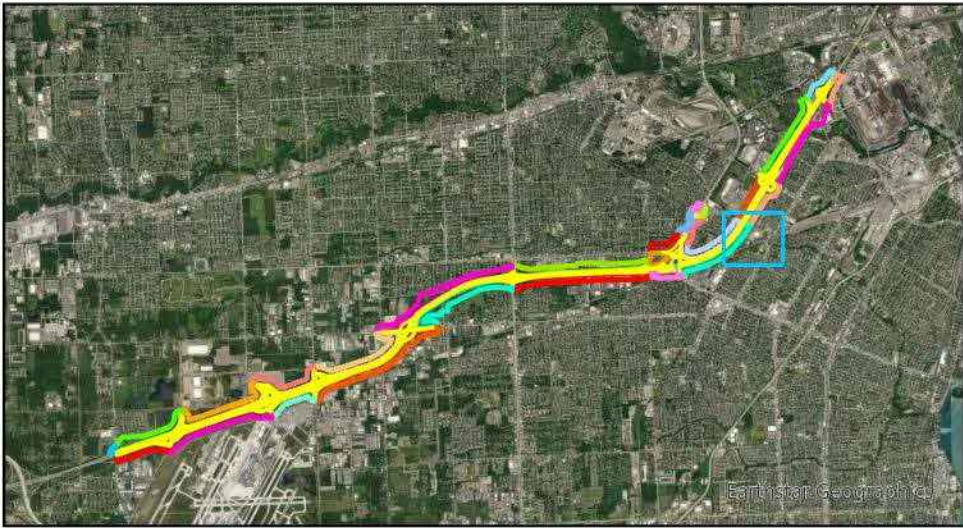
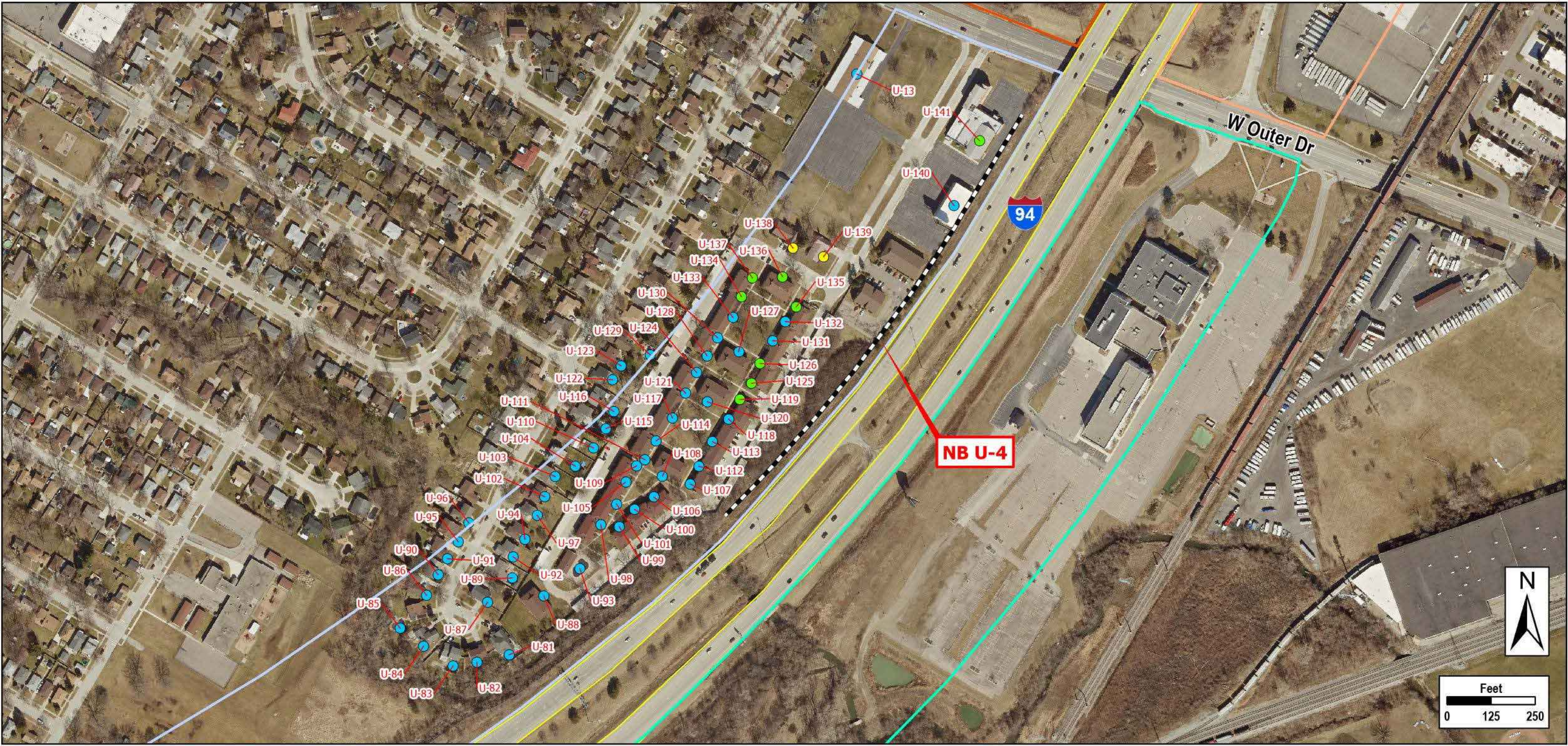


Figure A-4.18
NB U-4 Barrier Analysis
 I-94 Traffic Noise Analysis
 Wayne Road to East of Greenfield Road
 Wayne County, Michigan

DLZ
 January 2025

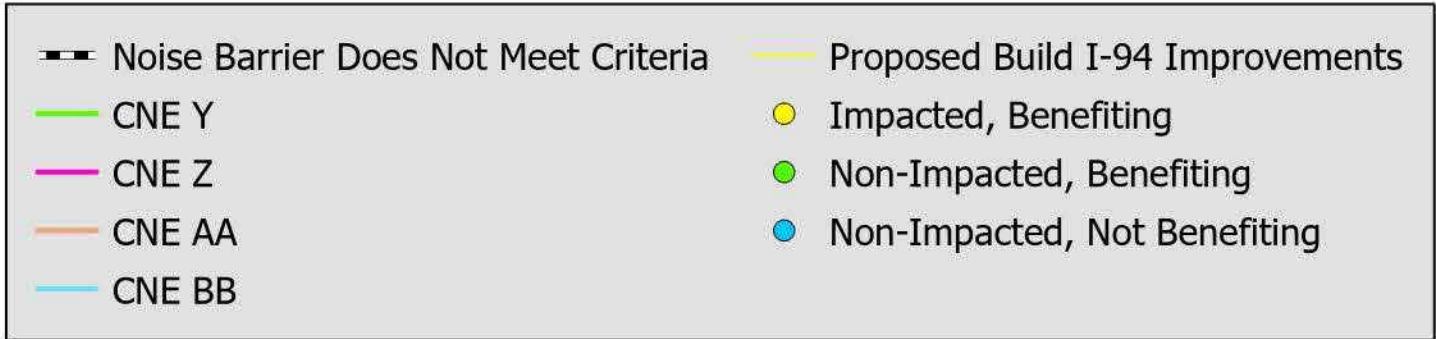
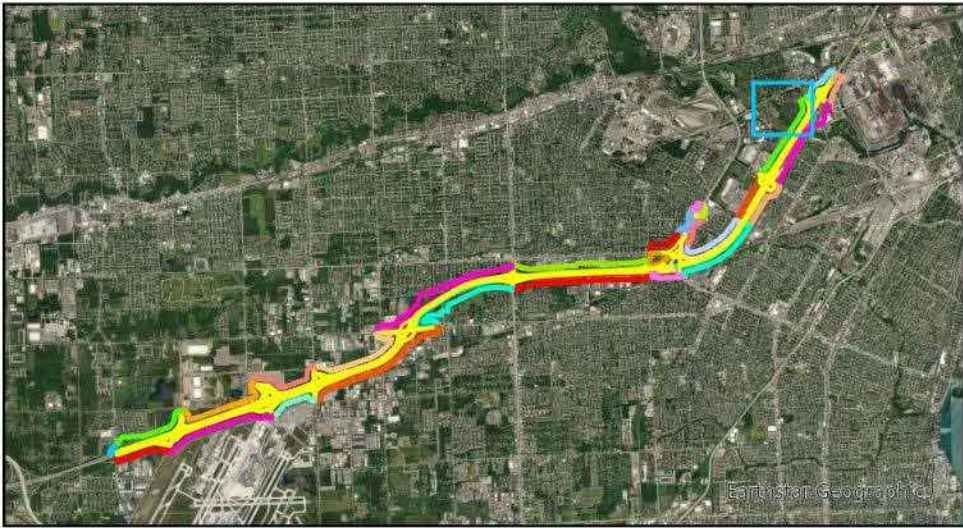
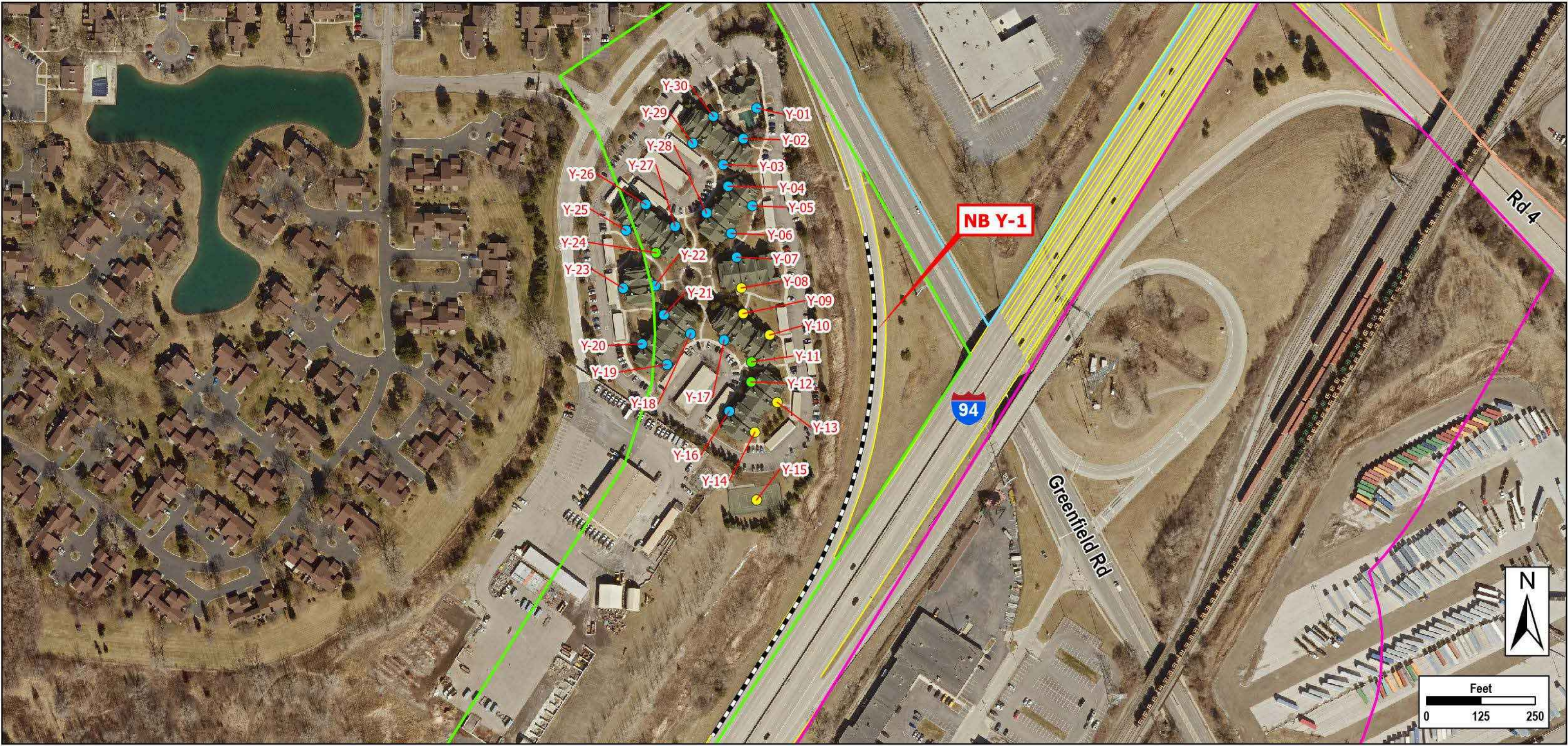



Figure A-4.19
NB Y-1 Barrier Analysis
I-94 Traffic Noise Analysis
Wayne Road to East of Greenfield Road
Wayne County, Michigan



January 2025

APPENDIX B

PREDICTED NOISE LEVELS AND IMPACT ANALYSIS

Appendix B - Predicted Noise Levels and Impact Analysis
CNE A - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE A Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
A-01	1	B	Residential	66	72~	72*	0	72~	72*	0
A-02	1	B	Residential	66	70~	71*	1	70~	71*	1
A-03	1	B	Residential	66	69~	70*	1	69~	70*	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

⁽¹⁾ Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE B - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE B Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
B-01	1	B	Residential	66	61	62	1	62	62	0
B-02	1	B	Residential	66	61	62	1	62	62	0
B-03	1	B	Residential	66	62	62	0	62	62	0
B-04	1	B	Residential	66	58	59	1	58	59	1
B-05	1	B	Residential	66	61	62	1	61	61	0
B-06	1	B	Residential	66	60	61	1	60	60	0
B-07	1	B	Residential	66	58	59	1	58	59	1
B-08	1	B	Residential	66	58	59	1	58	58	0
B-09	1	B	Residential	66	57	58	1	57	58	1
B-10	1	B	Residential	66	58	59	1	58	58	0
B-11	1	B	Residential	66	58	59	1	58	58	0
B-12	1	B	Residential	66	60	61	1	60	60	0
B-13	1	B	Residential	66	60	61	1	60	61	1
B-14	1	B	Residential	66	58	59	1	58	59	1
B-15	1	B	Residential	66	57	58	1	57	58	1
B-16	1	B	Residential	66	57	58	1	57	58	1
B-17	1	B	Residential	66	60	61	1	60	61	1
B-18	1	B	Residential	66	57	58	1	57	58	1
B-19	1	B	Residential	66	57	58	1	57	58	1
B-20	1	B	Residential	66	57	58	1	57	58	1
B-21	1	B	Residential	66	60	61	1	60	61	1
B-22	1	B	Residential	66	60	61	1	60	61	1
B-23	1	B	Residential	66	57	58	1	57	58	1
B-24	1	B	Residential	66	57	58	1	57	58	1
B-25	1	B	Residential	66	57	58	1	57	58	1
B-26	1	B	Residential	66	57	58	1	57	58	1
B-27	1	B	Residential	66	60	61	1	60	61	1
B-28	1	B	Residential	66	61	62	1	61	62	1
B-29	1	B	Residential	66	57	58	1	57	58	1
B-30	1	B	Residential	66	57	58	1	57	58	1
B-31	1	B	Residential	66	57	58	1	57	58	1
B-32	1	B	Residential	66	61	62	1	61	62	1
B-33	1	B	Residential	66	58	58	0	58	58	0
B-34	1	B	Residential	66	58	58	0	58	58	0
B-35	1	B	Residential	66	61	62	1	61	62	1
B-36	1	B	Residential	66	58	58	0	58	59	1
B-37	1	B	Residential	66	58	58	0	58	59	1
B-38	1	B	Residential	66	58	59	1	58	59	1
B-39	1	B	Residential	66	62	63	1	62	63	1
B-40	1	B	Residential	66	64	64	0	64	64	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE B - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE B Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
B-41	1	B	Residential	66	64	64	0	64	64	0
B-42	1	B	Residential	66	63	64	1	63	64	1
B-43	1	B	Residential	66	62	63	1	62	63	1
B-44	1	B	Residential	66	61	62	1	61	62	1
B-45	1	B	Residential	66	58	59	1	58	59	1
B-46	1	B	Residential	66	58	59	1	58	59	1
B-47	1	B	Residential	66	58	59	1	58	59	1
B-48	1	B	Residential	66	59	59	0	59	60	1
B-49	1	B	Residential	66	61	61	0	61	62	1
B-50	1	B	Residential	66	61	61	0	61	62	1
B-51	1	B	Residential	66	59	59	0	59	60	1
B-52	1	B	Residential	66	59	60	1	59	60	1
B-53	1	B	Residential	66	61	62	1	61	62	1
B-54	1	B	Residential	66	64	64	0	64	64	0
B-55	1	B	Residential	66	64	64	0	64	64	0
B-56	1	B	Residential	66	64	64	0	64	64	0
B-57	1	B	Residential	66	64	64	0	64	64	0
B-58	1	B	Residential	66	62	62	0	62	62	0
B-59	1	B	Residential	66	62	62	0	61	63	2
B-60	1	B	Residential	66	60	61	1	60	61	1
B-61	1	B	Residential	66	60	60	0	59	60	1
B-62	1	B	Residential	66	64	64	0	64	64	0
B-63	1	B	Residential	66	64	64	0	64	64	0
B-64	1	B	Residential	66	64	64	0	64	65	1
B-65	1	B	Residential	66	64	64	0	64	65	1
B-66	1	B	Residential	66	62	62	0	62	63	1
B-67	1	B	Residential	66	61	61	0	61	62	1
B-68	1	B	Residential	66	60	61	1	60	61	1
B-69	1	B	Residential	66	59	60	1	59	60	1
B-70	1	B	Residential	66	59	60	1	59	60	1
B-71	1	B	Residential	66	60	61	1	60	61	1
B-72	1	B	Residential	66	61	61	0	61	62	1
B-73	1	B	Residential	66	62	63	1	62	63	1
B-74	1	B	Residential	66	64	64	0	64	65	1
B-75	1	B	Residential	66	64	65	1	64	65	1
B-76	1	B	Residential	66	64	65	1	64	65	1
B-77	1	B	Residential	66	64	65	1	64	65	1
B-78	1	B	Residential	66	62	63	1	62	63	1
B-79	1	B	Residential	66	61	62	1	61	62	1
B-80	1	B	Residential	66	60	61	1	60	61	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE B - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE B Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
B-81	1	B	Residential	66	60	60	0	60	61	1
B-82	1	B	Residential	66	59	60	1	59	60	1
B-83	1	B	Residential	66	60	61	1	60	61	1
B-84	1	B	Residential	66	61	62	1	61	62	1
B-85	1	B	Residential	66	62	62	0	61	63	2
B-86	1	B	Residential	66	62	63	1	62	63	1
B-87	1	B	Residential	66	63	64	1	63	64	1
B-88	1	B	Residential	66	64	65	1	64	65	1
B-89	1	B	Residential	66	64	65	1	64	65	1
B-90	1	B	Residential	66	65	65	0	65	65	0
B-91	1	B	Residential	66	66~	68*	2	66~	68*	2
B-92	1	B	Residential	66	66~	68*	0	65	68*	1
B-93	1	B	Residential	66	64	64	0	64	65	1
B-94	1	B	Residential	66	63	64	1	63	64	1
B-95	1	B	Residential	66	62	63	1	62	63	1
B-96	1	B	Residential	66	62	62	0	61	63	2
B-97	1	B	Residential	66	61	62	1	61	62	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE D - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE D Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
D-01	3	E	Delta Hotels by Marriott Detroit Metro Airport - Outdoor Pool	71	55	55	0	55	55	0
D-02	5	E	Wyndham Garden Romulus Detroit Metro Airport - Outdoor Pool	71	64	64	0	64	64	0
D-03	4	E	Clarion Hotel Detroit Metro Airport - Outdoor Pool	71	53	54	1	54	54	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE F - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE F Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
F-01	3	E	Howard Johnson by Wyndham Romulus Detroit Metro Airport - Outdoor Pool	71	65	65	0	66	65	-1
F-02	4	E	La Quinta Inn & Suites by Wyndham Romulus Detroit Metro Airport - Outdoor Pool	71	56	57	1	57	57	0
F-03	1	E	Courtyard Detroit Metro Airport Romulus - Courtyard	71	52	52	0	52	52	0
F-04	4	E	Detroit Metro Airport Marriott - Courtyard	71	55	56	1	54	55	1
F-05	1	B	Residential	66	69~	70*	1	69~	69*	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE H - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE H Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
H-01	1	B	Residential	66	72~	70*	-2	72~	72*	0
H-02	1	B	Residential	66	74~	71*	-3	74~	73*	-1
H-03	1	B	Residential	66	74~	71*	-3	74~	73*	-1
H-04	1	B	Residential	66	76~	72*	-4	76~	74*	-2

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE I - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE I Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
I-01	1	B	Residential	66	70~	70*	0	70~	70*	0
I-02	1	D**	Masco Corporation Research & Development Center	51	47	41	-6	47	41	-6
I-03	1	B	Residential	66	64	63	-1	63	63	0
I-04	1	B	Residential	66	66~	64	-2	67~	64	-3
I-05	1	B	Residential	66	63	62	-1	63	62	-1
I-06	1	B	Residential	66	67~	66*	-1	68~	66*	-2
I-07	1	B	Residential	66	65	64	-1	66~	64	-2
I-08	1	B	Residential	66	64	64	0	65	64	-1
I-09	1	B	Residential	66	64	63	-1	65	63	-2
I-10	2	B	Residential	66	62	62	0	63	62	-1
I-11	2	B	Residential	66	61	61	0	61	61	0
I-12	2	B	Residential	66	60	60	0	60	60	0
I-13	2	B	Residential	66	59	59	0	60	59	-1
I-14	2	B	Residential	66	60	61	1	61	61	0
I-15	2	B	Residential	66	59	60	1	60	60	0
I-16	2	B	Residential	66	58	59	1	59	59	0
I-17	2	B	Residential	66	59	60	1	60	59	-1
I-18	2	B	Residential	66	60	60	0	60	60	0
I-19	2	B	Residential	66	59	60	1	60	60	0
I-20	2	B	Residential	66	58	59	1	59	59	0
I-21	2	B	Residential	66	57	58	1	58	58	0
I-22	2	B	Residential	66	58	59	1	59	59	0
I-23	2	B	Residential	66	59	60	1	60	60	0
I-24	2	B	Residential	66	58	59	1	59	59	0
I-25	2	B	Residential	66	59	60	1	60	59	-1
I-26	2	B	Residential	66	57	59	2	58	58	0
I-27	2	B	Residential	66	58	59	1	59	59	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

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Appendix B - Predicted Noise Levels and Impact Analysis
CNE J - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE J Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
J-01	1	B	Residential	66	58	59	1	58	59	1
J-02	1	B	Residential	66	61	62	1	61	62	1
J-03	1	B	Residential	66	66~	66*	0	65	66*	1
J-04	1	B	Residential	66	72~	72*	0	72~	72*	0
J-05	1	B	Residential	66	70~	70*	0	69~	70*	1
J-06	1	B	Residential	66	65	66*	1	64	65	1
J-07	1	B	Residential	66	63	64	1	63	64	1
J-08	1	B	Residential	66	60	61	1	60	60	0
J-09	1	B	Residential	66	59	60	1	59	60	1
J-10	1	B	Residential	66	58	59	1	58	59	1
J-11	1	B	Residential	66	60	61	1	60	60	0
J-12	1	B	Residential	66	64	65	1	63	64	1
J-13	1	B	Residential	66	65	66*	1	65	65	0
J-14	1	B	Residential	66	67~	67*	0	66~	67*	1
J-15	1	B	Residential	66	63	64	1	63	63	0
J-16	1	B	Residential	66	62	63	1	61	62	1
J-17	1	B	Residential	66	64	64	0	63	64	1
J-18	1	B	Residential	66	64	65	1	64	64	0
J-19	1	B	Residential	66	64	65	1	64	65	1
J-20	1	B	Residential	66	65	66*	1	65	65	0
J-21	1	B	Residential	66	63	64	1	63	63	0
J-22	1	B	Residential	66	63	64	1	62	63	1
J-23	1	B	Residential	66	64	65	1	64	64	0
J-24	1	B	Residential	66	67~	67*	0	66~	67*	1
J-25	1	B	Residential	66	67~	68*	1	67~	67*	0
J-26	1	B	Residential	66	72~	73*	1	71~	72*	1
J-27	1	B	Residential	66	67~	68*	1	67~	67*	0
J-28	1	B	Residential	66	68~	69*	1	68~	68*	0
J-29	1	B	Residential	66	66~	66*	0	65	66*	1
J-30	1	B	Residential	66	65	66*	1	65	65	0
J-31	1	B	Residential	66	64	65	1	64	65	1
J-32	1	B	Residential	66	63	64	1	63	64	1
J-33	1	B	Residential	66	63	64	1	63	64	1
J-34	1	B	Residential	66	64	65	1	64	65	1
J-35	1	B	Residential	66	66~	66*	0	65	66*	1
J-36	1	B	Residential	66	67~	68*	1	67~	67*	0
J-37	1	B	Residential	66	69~	70*	1	69~	69*	0
J-38	1	B	Residential	66	73~	74*	1	73~	73*	0
J-39	1	B	Residential	66	69~	70*	1	69~	70*	1
J-40	1	B	Residential	66	66~	67*	1	66~	67*	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE J - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE J Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
J-41	1	B	Residential	66	67~	67*	0	67~	67*	0
J-42	1	B	Residential	66	67~	67*	0	67~	67*	0
J-43	1	B	Residential	66	66~	66*	0	66~	66*	0
J-44	1	B	Residential	66	65	66*	1	66~	65	-1
J-45	1	B	Residential	66	65	65	0	66~	65	-1
J-46	1	B	Residential	66	65	65	0	65	65	0
J-47	1	B	Residential	66	66~	67*	1	66~	65	-1
J-48	1	B	Residential	66	66~	66*	0	66~	65	-1
J-49	1	B	Residential	66	65	66*	1	65	64	-1
J-50	1	B	Residential	66	65	65	0	65	64	-1
J-51	1	B	Residential	66	64	64	0	64	63	-1
J-52	1	B	Residential	66	62	63	1	63	62	-1
J-53	1	B	Residential	66	63	64	1	63	63	0
J-54	1	B	Residential	66	64	65	1	64	63	-1
J-55	1	B	Residential	66	65	67*	2	66~	65	-1
J-56	1	B	Residential	66	63	64	1	63	62	-1
J-57	1	B	Residential	66	63	64	1	63	62	-1
J-58	1	B	Residential	66	63	64	1	63	62	-1
J-59	1	B	Residential	66	63	64	1	63	62	-1
J-60	1	B	Residential	66	62	63	1	62	62	0
J-61	1	B	Residential	66	61	63	2	62	61	-1
J-62	1	B	Residential	66	61	62	1	61	61	0
J-63	1	B	Residential	66	60	61	1	60	60	0
J-64	1	B	Residential	66	60	61	1	60	60	0
J-65	1	B	Residential	66	61	62	1	61	61	0
J-66	1	B	Residential	66	62	63	1	62	62	0
J-67	1	B	Residential	66	63	64	1	63	62	-1
J-68	1	B	Residential	66	61	62	1	61	60	-1
J-69	1	B	Residential	66	60	61	1	60	60	0
J-70	1	B	Residential	66	59	60	1	59	59	0
J-71	1	B	Residential	66	61	62	1	61	61	0
J-72	1	B	Residential	66	62	63	1	62	61	-1
J-73	1	B	Residential	66	62	62	0	62	61	-1
J-74	1	B	Residential	66	61	61	0	61	60	-1
J-75	1	B	Residential	66	60	61	1	60	60	0
J-76	1	B	Residential	66	60	61	1	60	59	-1
J-77	1	B	Residential	66	59	60	1	59	59	0
J-78	1	B	Residential	66	59	60	1	59	59	0
J-79	1	B	Residential	66	59	60	1	59	58	-1
J-80	1	B	Residential	66	59	60	1	59	59	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE J - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE J Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
J-81	1	B	Residential	66	60	61	1	60	59	-1
J-82	1	B	Residential	66	61	61	0	61	60	-1
J-83	1	B	Residential	66	61	62	1	61	61	0
J-84	1	B	Residential	66	60	61	1	61	60	-1
J-85	1	B	Residential	66	60	61	1	60	59	-1
J-86	1	B	Residential	66	59	60	1	60	59	-1
J-87	1	B	Residential	66	58	59	1	58	58	0
J-88	1	B	Residential	66	58	59	1	58	57	-1
J-89	1	B	Residential	66	58	59	1	58	58	0
J-90	1	B	Residential	66	59	60	1	59	58	-1
J-91	1	B	Residential	66	60	61	1	60	60	0
J-92	1	B	Residential	66	61	61	0	61	60	-1
J-93	1	B	Residential	66	61	62	1	61	60	-1
J-94	1	B	Residential	66	61	62	1	61	60	-1
J-95	1	B	Residential	66	59	60	1	59	59	0
J-96	1	B	Residential	66	59	59	0	59	58	-1
J-97	1	B	Residential	66	57	58	1	57	57	0
J-98	1	B	Residential	66	58	59	1	58	58	0
J-99	1	B	Residential	66	59	60	1	59	58	-1
J-100	1	B	Residential	66	59	60	1	59	59	0
J-101	1	B	Residential	66	60	61	1	60	59	-1
J-102	1	B	Residential	66	60	61	1	60	60	0
J-103	1	B	Residential	66	60	61	1	60	59	-1
J-104	1	B	Residential	66	59	60	1	59	59	0
J-105	1	B	Residential	66	59	59	0	58	58	0
J-106	1	B	Residential	66	58	58	0	58	57	-1
J-107	1	B	Residential	66	58	58	0	58	57	-1
J-108	1	B	Residential	66	58	59	1	58	58	0
J-109	1	B	Residential	66	59	59	0	59	58	-1
J-110	1	B	Residential	66	60	60	0	59	59	0
J-111	1	B	Residential	66	60	60	0	59	59	0
J-112	1	B	Residential	66	58	59	1	58	57	-1
J-113	1	B	Residential	66	58	58	0	58	57	-1
J-114	1	B	Residential	66	57	58	1	57	57	0
J-115	1	B	Residential	66	57	57	0	57	56	-1
J-116	1	B	Residential	66	57	58	1	57	57	0
J-117	1	B	Residential	66	58	59	1	58	57	-1
J-118	1	B	Residential	66	59	59	0	58	58	0
J-119	1	B	Residential	66	59	60	1	59	58	-1
J-120	1	B	Residential	66	59	59	0	58	58	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE J - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE J Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
J-121	1	B	Residential	66	58	59	1	58	57	-1
J-122	1	B	Residential	66	58	58	0	57	57	0
J-123	1	B	Residential	66	57	58	1	57	56	-1
J-124	1	C	Quest Charter Academy - Playground	66	57	57	0	57	56	-1
J-125	1	B	Residential	66	58	58	0	57	57	0
J-126	1	B	Residential	66	58	59	1	58	57	-1
J-127	1	B	Residential	66	58	59	1	58	57	-1
J-128	1	B	Residential	66	59	59	0	58	58	0
J-129	1	B	Residential	66	59	60	1	59	58	-1
J-130	1	B	Residential	66	59	59	0	59	58	-1
J-131	1	B	Residential	66	60	60	0	59	59	0
J-132	1	B	Residential	66	60	60	0	59	59	0
J-133	1	B	Residential	66	59	60	1	59	58	-1
J-134	1	B	Residential	66	59	59	0	59	58	-1
J-135	1	B	Residential	66	59	59	0	58	58	0
J-136	1	B	Residential	66	58	58	0	58	57	-1
J-137	1	B	Residential	66	58	58	0	58	57	-1
J-138	1	B	Residential	66	59	59	0	59	58	-1
J-139	1	B	Residential	66	59	59	0	59	58	-1
J-140	1	B	Residential	66	60	60	0	59	59	0
J-141	1	B	Residential	66	60	61	1	60	59	-1
J-142	1	B	Residential	66	61	61	0	60	60	0
J-143	1	B	Residential	66	60	61	1	60	59	-1
J-144	1	B	Residential	66	60	60	0	59	59	0
J-145	1	B	Residential	66	59	60	1	59	58	-1
J-146	1	B	Residential	66	59	59	0	58	58	0
J-147	1	B	Residential	66	60	60	0	59	59	0
J-148	1	B	Residential	66	60	61	1	60	59	-1
J-149	1	B	Residential	66	60	61	1	60	59	-1
J-150	1	B	Residential	66	60	61	1	60	60	0
J-151	1	B	Residential	66	60	61	1	60	60	0
J-152	1	B	Residential	66	61	61	0	60	60	0
J-153	1	B	Residential	66	61	61	0	60	60	0
J-154	1	B	Residential	66	60	61	1	60	60	0
J-155	1	B	Residential	66	60	61	1	60	60	0
J-156	1	B	Residential	66	60	60	0	60	59	-1
J-157	1	B	Residential	66	60	60	0	60	59	-1
J-158	1	B	Residential	66	60	61	1	60	60	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE J - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE J Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
J-159	1	B	Residential	66	61	61	0	61	60	-1
J-160	1	B	Residential	66	61	62	1	61	60	-1
J-161	1	B	Residential	66	61	61	0	61	60	-1
J-162	1	B	Residential	66	61	61	0	61	60	-1
J-163	1	B	Residential	66	61	61	0	61	60	-1
J-164	1	B	Residential	66	61	61	0	60	60	0
J-165	1	B	Residential	66	61	61	0	60	60	0
J-166	1	B	Residential	66	61	62	1	60	60	0
J-167	1	B	Residential	66	61	62	1	60	60	0
J-168	1	B	Residential	66	61	62	1	61	61	0
J-169	1	B	Residential	66	61	62	1	61	61	0
J-170	1	B	Residential	66	62	62	0	61	61	0
J-171	1	B	Residential	66	61	62	1	61	61	0
J-172	1	B	Residential	66	62	62	0	61	61	0
J-173	1	B	Residential	66	62	62	0	61	61	0
J-174	1	B	Residential	66	61	61	0	61	60	0
J-175	1	B	Residential	66	58	59	1	58	58	1
J-176	1	B	Residential	66	61	62	1	61	61	1
J-177	1	B	Residential	66	61	62	1	61	61	1
J-178	1	B	Residential	66	62	62	0	61	61	0
J-179	1	B	Residential	66	62	63	1	62	61	1
J-180	1	B	Residential	66	62	62	0	61	61	0
J-181	1	B	Residential	66	61	62	1	61	61	1
J-182	1	B	Residential	66	61	62	1	61	61	1
J-183	1	B	Residential	66	61	62	1	61	61	1
J-184	1	B	Residential	66	61	62	1	61	61	1
J-185	1	B	Residential	66	61	62	1	61	61	1
J-186	1	C	Oak Grove Burying Ground - South	66	63	63	0	62	62	0
J-187	1	C	Oak Grove Burying Ground - Center	66	62	62	0	61	61	0
J-188	1	C	Oak Grove Burying Ground - North	66	61	62	1	61	60	1
J-189	1	B	Residential	66	58	59	1	58	58	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE K - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE K Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
K-01	1	B	Residential	66	70~	65	-5	70~	65	-5
K-02	1	B	Residential	66	66	66	-1	67	65	-2
K-03	1	B	Residential	66	66~	66*	0	67~	66*	-1
K-04	1	B	Residential	66	66~	66*	0	67~	66*	-1
K-05	1	B	Residential	66	67~	67*	1	68~	67*	-1
K-06	1	B	Residential	66	64	64	0	64	63	-1
K-07	1	B	Residential	66	63	62	-1	64	62	-2
K-08	1	B	Residential	66	62	62	0	63	62	-1
K-09	1	B	Residential	66	62	62	0	62	61	-1
K-10	1	B	Residential	66	62	61	-1	62	61	-2
K-11	1	B	Residential	66	62	61	-1	62	61	-2
K-12	1	B	Residential	66	62	61	-2	63	60	-2
K-13	1	B	Residential	66	60	61	0	61	60	-1
K-14	1	B	Residential	66	61	61	1	62	61	-1
K-15	1	B	Residential	66	61	62	1	62	62	0
K-16	1	B	Residential	66	62	63	1	63	63	0
K-17	1	B	Residential	66	61	63	1	63	63	0
K-18	1	B	Residential	66	62	63	1	64	63	0
K-19	1	B	Residential	66	69~	69*	0	70~	69*	-1
K-20	1	B	Residential	66	73~	64	-9	74~	64	-10
K-21	1	B	Residential	66	74~	66*	-9	75~	65	-10
K-22	1	B	Residential	66	70~	66*	-4	70~	66*	-4
K-23	1	B	Residential	66	70~	66*	-3	70~	66*	-4
K-24	1	B	Residential	66	70~	67*	-3	70~	66*	-4
K-26	1	B	Residential	66	67~	66*	0	67~	66*	-1
K-27	1	B	Residential	66	68~	67*	0	68~	67*	-1
K-28	1	B	Residential	66	69~	68*	-1	69~	68*	-1
K-29	1	B	Residential	66	69	69	-1	70	68	-1
K-30	1	B	Residential	66	71	70	-1	71	69	-1
K-31	1	B	Residential	66	71	71	-1	72	70	-1
K-32	1	B	Residential	66	72	71	-2	72	70	-2
K-33	1	B	Residential	66	74	74	-1	75	73	-1
K-34	1	B	Residential	66	72	72	0	72	72	-1
K-35	1	B	Residential	66	70	70	0	70	69	0
K-36	1	B	Residential	66	68	68	0	68	68	0
K-37	1	B	Residential	66	67	68	1	67	67	1
K-38	1	B	Residential	66	66	67	1	66	67	1
K-39	1	B	Residential	66	68	69	1	68	69	1
K-40	1	B	Residential	66	70	70	1	70	70	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE K - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE K Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
K-41	1	C	Taylor Meadows Golf Club - Hole 13 - Tee Box	66	78	78	1	78	78	1
K-42	1	C	Taylor Meadows Golf Club - Hole 12 - Hole	66	74	75	1	75	75	1
K-43	1	C	Taylor Meadows Golf Club - Hole 16 - Hole	66	66	66	1	66	66	1
K-44	1	C	Taylor Meadows Golf Club - Hole 2 - Hole	66	64	65	1	64	65	1
K-45	1	C	Taylor Meadows Golf Club - Hole 16 - Tee Box	66	64	65	1	64	65	1
K-46	1	C	Taylor Meadows Golf Club - Hole 15 - Hole	66	62	64	1	62	63	1
K-47	1	C	Taylor Meadows Golf Club - Hole 13 - Hole	66	64	65	1	64	65	1
K-48	1	C	Taylor Meadows Golf Club - Hole 14 - Tee Box	66	64	64	0	64	64	1
K-49	1	E	Michigan Department of Transportation - Taylor Transportation Service Center Office	71	72	73	1	73	73	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE K - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE K Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
K-50	1	B	Residential	66	66	66	0	66	65	-1
K-51	1	B	Residential	66	65	64	-1	65	64	-1
K-52	1	B	Residential	66	65	64	-1	65	64	-1
K-53	1	B	Residential	66	64	64	0	64	63	-1
K-54	1	B	Residential	66	63	63	0	63	63	0
K-55	1	B	Residential	66	64	64	0	64	64	0
K-56	1	B	Residential	66	64	64	0	64	64	0
K-57	1	B	Residential	66	65	65	0	65	65	0
K-58	1	B	Residential	66	66	66	0	66	65	-1
K-59	1	B	Residential	66	66	66	0	66	66	0
K-60	1	B	Residential	66	65	66	1	66	66	0
K-61	1	B	Residential	66	64	65	1	64	64	0
K-62	1	B	Residential	66	63	64	1	63	63	0
K-63	1	B	Residential	66	63	64	1	63	63	0
K-64	1	B	Residential	66	62	63	1	62	62	0
K-65	1	B	Residential	66	62	63	1	62	62	0
K-66	1	B	Residential	66	63	63	0	64	63	-1
K-67	1	B	Residential	66	63	64	1	64	63	-1
K-68	1	B	Residential	66	64	64	0	64	64	0
K-69	1	B	Residential	66	65	65	0	65	65	0
K-70	1	B	Residential	66	66	66	0	66	66	0
K-71	1	B	Residential	66	64	63	-1	64	63	0
K-72	1	B	Residential	66	63	62	-1	63	62	0
K-73	1	B	Residential	66	63	62	-1	63	62	0
K-74	1	B	Residential	66	62	62	0	62	61	0
K-75	1	B	Residential	66	62	61	-1	62	61	0
K-76	1	B	Residential	66	68	65	-3	68	65	-1
K-77	1	B	Residential	66	67	65	-2	67	65	-1
K-78	1	B	Residential	66	66	64	-2	66	64	0
K-79	1	B	Residential	66	66	64	-2	66	63	0
K-80	1	B	Residential	66	65	63	-2	65	63	0
K-81	1	B	Residential	66	64	62	-2	64	62	0
K-82	1	B	Residential	66	67	64	-3	67	64	0
K-83	1	B	Residential	66	66	63	-3	66	63	0
K-84	1	B	Residential	66	65	63	-2	66	62	0
K-85	1	B	Residential	66	71	65	-6	71	64	0
K-86	1	B	Residential	66	71	64	-7	71	64	-1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE L - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE L Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
L-01	1	B	Residential	66	61	63	2	61	62	1
L-02	1	B	Residential	66	62	64	2	62	63	1
L-03	1	B	Residential	66	62	63	1	62	62	0
L-04	1	B	Residential	66	62	63	1	62	62	0
L-05	1	B	Residential	66	62	63	1	62	62	0
L-06	1	B	Residential	66	62	63	1	62	62	0
L-07	1	B	Residential	66	64	64	0	63	63	0
L-08	1	B	Residential	66	63	64	1	63	62	-1
L-09	1	B	Residential	66	63	63	0	63	62	-1
L-10	1	B	Residential	66	62	63	1	62	62	0
L-11	1	B	Residential	66	62	63	1	62	62	0
L-12	1	B	Residential	66	62	63	1	62	61	-1
L-13	1	B	Residential	66	61	62	1	61	61	0
L-14	1	B	Residential	66	62	63	1	62	62	0
L-15	1	B	Residential	66	63	63	0	63	62	-1
L-16	1	B	Residential	66	63	63	0	63	62	-1
L-17	1	B	Residential	66	63	63	0	62	62	0
L-18	1	B	Residential	66	63	63	0	62	62	0
L-19	1	B	Residential	66	62	62	0	62	61	-1
L-20	1	B	Residential	66	62	63	1	62	62	0
L-21	1	B	Residential	66	62	62	0	61	61	0
L-22	1	B	Residential	66	62	63	1	62	62	0
L-23	1	B	Residential	66	63	63	0	63	62	-1
L-24	1	B	Residential	66	63	64	1	63	62	-1
L-25	1	B	Residential	66	63	64	1	63	63	0
L-26	1	B	Residential	66	63	63	0	63	62	-1
L-27	1	B	Residential	66	62	63	1	62	62	0
L-28	1	B	Residential	66	62	63	1	62	62	0
L-29	1	B	Residential	66	63	63	0	63	62	-1
L-30	1	B	Residential	66	63	64	1	63	63	0
L-31	1	B	Residential	66	64	64	0	64	63	-1
L-32	1	B	Residential	66	64	64	0	64	63	-1
L-33	1	B	Residential	66	63	64	1	63	63	0
L-34	1	B	Residential	66	63	64	1	63	63	0
L-35	1	B	Residential	66	63	63	0	63	63	0
L-36	1	B	Residential	66	63	64	1	63	63	0
L-37	1	B	Residential	66	64	64	0	63	63	0
L-38	1	B	Residential	66	64	64	0	64	64	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE L - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE L Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
L-39	1	B	Residential	66	66~	66*	0	65	66*	1
L-40	1	B	Residential	66	65	65	0	65	65	0
L-41	1	B	Residential	66	64	64	0	63	64	1
L-42	1	B	Residential	66	66~	66*	0	65	66*	1
L-43	1	B	Residential	66	66~	67*	1	66~	67*	1
L-44	1	B	Residential	66	66~	67*	1	66~	66*	0
L-45	1	B	Residential	66	66~	67*	1	66~	67*	1
L-46	1	B	Residential	66	66~	67*	1	65	66*	1
L-47	1	B	Residential	66	65	66*	1	65	65	0
L-48	1	B	Residential	66	64	65	1	64	64	0
L-49	1	B	Residential	66	64	65	1	63	64	1
L-50	1	B	Residential	66	64	66*	2	64	65	1
L-51	1	B	Residential	66	65	66*	1	65	65	0
L-52	1	B	Residential	66	66~	67*	1	65	66*	1
L-53	1	B	Residential	66	66~	67*	1	66~	66*	0
L-54	1	B	Residential	66	67~	68*	1	66~	67*	1
L-55	1	B	Residential	66	66~	67*	1	66~	66*	0
L-56	1	B	Residential	66	66~	67*	1	66~	67*	1
L-57	1	B	Residential	66	66~	68*	2	66~	67*	1
L-58	1	B	Residential	66	63	65	2	63	63	0
L-59	1	B	Residential	66	64	65	1	63	64	1
L-60	1	B	Residential	66	64	65	1	63	64	1
L-61	1	B	Residential	66	65	67*	2	65	65	0
L-62	1	B	Residential	66	66~	67*	1	66~	66*	0
L-63	1	B	Residential	66	67~	68*	1	66~	67*	1
L-64	1	B	Residential	66	68~	69*	1	67~	68*	1
L-65	1	B	Residential	66	68~	69*	1	67~	68*	1
L-66	1	B	Residential	66	67~	68*	1	67~	67*	0
L-67	1	B	Residential	66	67~	68*	1	67~	67*	0
L-68	1	B	Residential	66	68~	68*	0	67~	67*	0
L-69	1	B	Residential	66	67~	68*	1	66~	67*	1
L-70	1	B	Residential	66	66~	67*	1	65	66*	1
L-71	1	B	Residential	66	65	66*	1	65	65	0
L-72	1	B	Residential	66	64	65	1	63	63	0
L-73	1	B	Residential	66	64	65	1	63	63	0
L-74	1	B	Residential	66	65	64	-1	65	65	0
L-75	1	B	Residential	66	66~	67*	1	65	66*	1
L-76	1	B	Residential	66	67~	68*	1	66~	67*	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE L - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE L Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
L-77	1	B	Residential	66	67~	68*	1	67~	67*	0
L-78	1	B	Residential	66	67~	68*	1	67~	67*	0
L-79	1	B	Residential	66	67~	67*	0	66~	67*	1
L-80	1	B	Residential	66	70~	71*	1	70~	71*	1
L-81	1	B	Residential	66	67~	68*	1	67~	67*	0
L-82	1	B	Residential	66	67~	67*	0	66~	67*	1
L-83	1	B	Residential	66	67~	68*	1	67~	67*	0
L-84	1	B	Residential	66	67~	68*	1	66~	67*	1
L-85	1	B	Residential	66	67~	67*	0	66~	67*	1
L-86	1	B	Residential	66	66~	67*	1	65	66*	1
L-87	1	B	Residential	66	65	66*	1	65	65	0
L-88	1	B	Residential	66	64	64	0	63	63	0
L-89	1	B	Residential	66	64	64	0	63	63	0
L-90	1	B	Residential	66	65	66*	1	65	65	0
L-91	1	B	Residential	66	66~	67*	1	65	66*	1
L-92	1	B	Residential	66	67~	68*	1	66~	67*	1
L-93	1	B	Residential	66	67~	68*	1	67~	67*	0
L-94	1	B	Residential	66	67~	67*	0	66~	67*	1
L-95	1	B	Residential	66	67~	68*	1	67~	67*	0
L-96	1	B	Residential	66	68~	68*	0	67~	68*	1
L-97	1	B	Residential	66	68~	68*	0	67~	68*	1
L-98	1	B	Residential	66	67~	68*	1	66~	67*	1
L-99	1	B	Residential	66	66~	67*	1	66~	66*	0
L-100	1	B	Residential	66	65	66*	1	65	65	0
L-101	1	B	Residential	66	64	64	0	63	64	1
L-102	1	B	Residential	66	64	65	1	63	64	1
L-103	1	B	Residential	66	66~	66*	0	65	66*	1
L-104	1	B	Residential	66	66~	67*	1	66~	66*	0
L-105	1	B	Residential	66	67~	68*	1	66~	67*	1
L-106	1	B	Residential	66	68~	68*	0	67~	68*	1
L-107	1	B	Residential	66	68~	69*	1	67~	68*	1
L-108	1	B	Residential	66	68~	69*	1	68~	68*	0
L-109	1	B	Residential	66	68~	68*	0	67~	68*	1
L-110	1	B	Residential	66	65	65	0	65	65	0
L-111	1	B	Residential	66	64	65	1	64	65	1
L-112	1	B	Residential	66	64	64	0	64	64	0
L-113	1	B	Residential	66	64	65	1	64	65	1
L-114	1	B	Residential	66	64	65	1	64	65	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE L - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE L Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
L-115	1	B	Residential	66	65	65	0	64	65	1
L-116	1	B	Residential	66	63	63	0	63	63	0
L-117	1	B	Residential	66	64	64	0	63	64	1
L-118	1	B	Residential	66	64	64	0	63	64	1
L-119	1	B	Residential	66	64	64	0	64	64	0
L-120	1	B	Residential	66	65	65	0	64	65	1
L-121	1	B	Residential	66	65	65	0	64	65	1
L-122	1	B	Residential	66	65	65	0	65	65	0
L-123	1	B	Residential	66	65	65	0	65	65	0
L-124	1	B	Residential	66	65	65	0	64	65	1
L-125	1	B	Residential	66	65	65	0	65	65	0
L-126	1	B	Residential	66	65	65	0	64	65	1
L-127	1	B	Residential	66	64	65	1	64	64	0
L-128	1	B	Residential	66	64	64	0	64	64	0
L-129	1	B	Residential	66	64	64	0	63	64	1
L-130	1	B	Residential	66	63	64	1	63	63	0
L-131	1	B	Residential	66	63	63	0	62	63	1
L-132	1	B	Residential	66	64	64	0	63	63	0
L-133	1	B	Residential	66	64	64	0	63	64	1
L-134	1	B	Residential	66	64	65	1	64	64	0
L-135	1	B	Residential	66	65	65	0	64	65	1
L-136	1	C	Lucinda Burns Park - Center Play Structure	66	64	65	1	64	65	1
L-137	1	B	Residential	66	64	64	0	63	63	0
L-138	1	B	Residential	66	63	63	0	62	63	1
L-139	1	B	Residential	66	64	64	0	63	63	0
L-140	1	B	Residential	66	64	64	0	64	64	0
L-141	1	B	Residential	66	64	65	1	64	64	0
L-142	1	B	Residential	66	65	65	0	64	65	1
L-143	1	B	Residential	66	65	66*	1	65	65	0
L-144	1	B	Residential	66	65	66*	1	65	66*	1
L-145	1	B	Residential	66	65	65	0	65	65	0
L-146	1	B	Residential	66	65	65	0	65	65	0
L-147	1	B	Residential	66	66~	66*	0	65	66*	1
L-148	1	B	Residential	66	65	65	0	65	65	0
L-149	1	B	Residential	66	65	65	0	65	65	0
L-150	1	B	Residential	66	65	65	0	64	65	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE L - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE L Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
L-151	1	B	Residential	66	65	65	0	64	65	1
L-152	1	B	Residential	66	64	64	0	63	63	0
L-153	1	B	Residential	66	63	63	0	62	63	1
L-154	1	B	Residential	66	62	63	1	62	62	0
L-155	1	B	Residential	66	63	63	0	62	63	1
L-156	1	B	Residential	66	63	64	1	63	63	0
L-157	1	B	Residential	66	64	64	0	63	64	1
L-158	1	B	Residential	66	65	66*	1	65	65	0
L-159	1	B	Residential	66	65	65	0	65	65	0
L-160	1	B	Residential	66	65	66*	1	65	66*	1
L-161	1	B	Residential	66	64	65	1	64	65	1
L-162	1	B	Residential	66	66~	66*	0	65	66*	1
L-163	1	B	Residential	66	65	66*	1	65	66*	1
L-164	1	B	Residential	66	65	66*	1	65	65	0
L-165	1	B	Residential	66	65	65	0	65	65	0
L-166	1	B	Residential	66	65	66*	1	65	65	0
L-167	1	B	Residential	66	64	64	0	63	64	1
L-168	1	B	Residential	66	63	63	0	63	63	0
L-169	1	B	Residential	66	63	64	1	63	63	0
L-170	1	B	Residential	66	65	66*	1	65	65	0
L-171	1	B	Residential	66	66~	67*	1	66~	67*	1
L-172	1	B	Residential	66	66~	67*	1	66~	67*	1
L-173	1	B	Residential	66	65	65	0	65	65	0
L-174	1	B	Residential	66	65	66*	1	65	66*	1
L-175	1	B	Residential	66	67~	67*	0	67~	67*	0
L-176	1	B	Residential	66	66~	67*	1	66~	67*	1
L-177	1	B	Residential	66	66~	67*	1	66~	67*	1
L-178	1	B	Residential	66	67~	67*	0	66~	67*	1
L-179	1	B	Residential	66	64	65	1	64	64	0
L-180	1	B	Residential	66	64	64	0	63	63	0
L-181	1	B	Residential	66	63	64	1	63	63	0
L-182	1	B	Residential	66	63	64	1	63	63	0
L-183	1	B	Residential	66	65	65	0	64	65	1
L-184	1	B	Residential	66	66~	67*	1	66~	66*	0
L-185	1	B	Residential	66	67~	67*	0	66~	67*	1
L-186	1	B	Residential	66	66~	67*	1	66~	66*	0
L-187	1	B	Residential	66	66~	66*	0	66~	66*	0
L-188	1	B	Residential	66	66~	66*	0	66~	66*	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE L - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE L Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
L-189	1	B	Residential	66	65	66*	1	65	66*	1
L-190	1	B	Residential	66	65	66*	1	65	66*	1
L-191	1	B	Residential	66	66~	66*	0	65	66*	1
L-192	1	B	Residential	66	65	65	0	64	65	1
L-193	1	B	Residential	66	64	65	1	64	64	0
L-194	1	B	Residential	66	64	64	0	63	64	1
L-195	1	B	Residential	66	63	64	1	63	63	0
L-196	1	B	Residential	66	64	65	1	64	64	0
L-197	1	B	Residential	66	64	65	1	64	64	0
L-198	1	B	Residential	66	64	65	1	64	64	0
L-199	1	B	Residential	66	65	65	0	64	65	1
L-200	1	B	Residential	66	65	65	0	65	65	0
L-201	1	B	Residential	66	64	65	1	64	65	1
L-202	1	B	Residential	66	63	64	1	63	64	1
L-203	1	B	Residential	66	64	65	1	64	65	1
L-204	1	B	Residential	66	65	65	0	64	65	1
L-205	1	B	Residential	66	65	66*	1	65	65	0
L-206	1	B	Residential	66	65	65	0	65	65	0
L-207	1	C	Lucinda Burns Park - South Play Structure	66	65	65	0	65	65	0
L-208	1	C	Lucinda Burns Park - Northwest Play Structure	66	64	64	0	63	64	1
L-209	1	C	Lucinda Burns Park - Northeast Play Structure	66	64	64	0	64	64	0
L-210	1	B	Residential	66	63	64	1	63	63	0
L-211	1	B	Residential	66	63	63	0	62	62	1
L-212	1	B	Residential	66	62	63	1	61	62	0
L-213	1	B	Residential	66	61	62	1	61	61	1
L-214	1	B	Residential	66	63	63	0	62	62	1
L-215	1	B	Residential	66	62	63	1	61	62	1
L-216	1	B	Residential	66	62	62	0	61	61	0
L-217	1	B	Residential	66	63	64	1	62	63	0
L-218	1	B	Residential	66	62	63	1	62	62	0
L-219	1	B	Residential	66	62	62	0	61	62	0
L-220	1	B	Residential	66	61	62	1	60	61	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE L - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE L Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
L-221	1	B	Residential	66	63	63	0	62	62	0
L-222	1	B	Residential	66	62	63	1	61	62	1
L-223	1	B	Residential	66	61	62	1	61	61	0
L-224	1	B	Residential	66	63	64	1	62	63	0
L-225	1	B	Residential	66	62	63	1	61	62	0
L-226	1	B	Residential	66	61	62	1	61	61	1
L-227	1	B	Residential	66	61	62	1	60	61	1
L-228	1	B	Residential	66	63	64	1	62	63	1
L-229	1	B	Residential	66	62	63	1	61	62	1
L-230	1	B	Residential	66	62	63	1	61	61	0
L-231	1	B	Residential	66	61	62	1	60	61	1
L-232	1	B	Residential	66	63	64	1	62	63	0
L-233	1	B	Residential	66	62	63	1	62	62	0
L-234	1	B	Residential	66	62	63	1	61	61	0
L-235	1	B	Residential	66	61	62	1	60	61	0
L-236	1	B	Residential	66	63	64	1	63	63	1
L-237	1	B	Residential	66	63	64	1	62	62	0
L-238	1	B	Residential	66	62	64	2	62	62	1
L-239	1	B	Residential	66	63	64	1	63	63	1
L-240	1	B	Residential	66	62	64	2	62	63	1
L-241	1	B	Residential	66	62	63	1	61	62	1
L-242	1	B	Residential	66	61	63	2	61	61	0
L-243	1	B	Residential	66	63	64	1	63	63	1
L-244	1	B	Residential	66	62	64	2	62	63	0
L-245	1	B	Residential	66	62	63	1	62	62	0
L-246	1	B	Residential	66	61	63	2	61	62	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE N - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE N Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
N-01	1	B	Residential	66	70~	70*	0	70~	71*	1
N-02	1	B	Residential	66	69~	69*	0	69~	70*	1
N-03	1	B	Residential	66	69~	69*	0	69~	69*	0
N-04	1	B	Residential	66	68~	68*	0	68~	69*	1
N-05	1	B	Residential	66	67~	67*	0	67~	68*	1
N-06	1	B	Residential	66	67~	67*	0	67~	67*	0
N-07	1	B	Residential	66	66~	66*	0	66~	66*	0
N-08	1	B	Residential	66	67~	67*	0	67~	68*	1
N-09	1	B	Residential	66	68~	68*	0	68~	69*	1
N-10	1	B	Residential	66	69~	69*	0	69~	70*	1
N-11	1	B	Residential	66	70~	70*	0	70~	70*	0
N-12	1	B	Residential	66	69~	69*	0	69~	70*	1
N-13	1	B	Residential	66	67~	67*	0	67~	68*	1
N-14	1	B	Residential	66	66~	66*	0	66~	67*	1
N-15	1	B	Residential	66	65	65	0	65	66*	1
N-16	1	B	Residential	66	64	64	0	64	65	1
N-17	1	B	Residential	66	64	64	0	64	65	1
N-18	1	B	Residential	66	65	65	0	65	65	0
N-19	1	B	Residential	66	65	65	0	65	66*	1
N-20	1	B	Residential	66	66~	66*	0	66~	67*	1
N-21	1	B	Residential	66	63	64	1	63	64	1
N-22	1	B	Residential	66	63	63	0	63	64	1
N-23	1	B	Residential	66	63	63	0	63	64	1
N-24	1	B	Residential	66	61	61	0	61	61	0
N-25	1	B	Residential	66	61	61	0	61	61	0
N-26	1	B	Residential	66	60	60	0	60	61	1
N-27	1	B	Residential	66	60	60	0	60	61	1
N-28	1	B	Residential	66	60	60	0	60	61	1
N-29	1	B	Residential	66	60	60	0	60	61	1
N-30	1	B	Residential	66	60	60	0	60	61	1
N-31	1	B	Residential	66	60	61	1	60	61	1
N-32	1	B	Residential	66	60	60	0	60	61	1
N-33	1	B	Residential	66	66~	66*	0	66~	67*	1
N-34	1	B	Residential	66	65	66*	1	65	66*	1
N-35	1	B	Residential	66	64	64	0	64	64	0
N-36	1	B	Residential	66	63	63	0	63	63	0
N-37	1	B	Residential	66	61	61	0	61	61	0
N-38	1	B	Residential	66	60	60	0	60	61	1
N-39	1	B	Residential	66	61	61	0	61	62	1
N-40	1	B	Residential	66	60	60	0	60	61	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE N - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE N Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
N-41	1	B	Residential	66	60	61	1	60	61	1
N-42	1	B	Residential	66	61	61	0	61	61	0
N-43	1	B	Residential	66	61	61	0	61	62	1
N-44	1	B	Residential	66	61	61	0	61	62	1
N-45	1	B	Residential	66	61	61	0	61	61	0
N-46	1	B	Residential	66	61	61	0	61	61	0
N-47	1	B	Residential	66	61	61	0	61	61	0
N-48	1	B	Residential	66	62	62	0	62	63	1
N-49	1	B	Residential	66	62	62	0	62	63	1
N-50	1	B	Residential	66	62	62	0	62	62	0
N-51	1	B	Residential	66	61	62	1	61	62	1
N-52	1	B	Residential	66	61	62	1	61	62	1
N-53	1	B	Residential	66	62	62	0	62	62	0
N-54	1	B	Residential	66	62	62	0	62	62	0
N-55	1	B	Residential	66	62	62	0	62	63	1
N-56	1	B	Residential	66	62	62	0	62	63	1
N-57	1	B	Residential	66	62	62	0	62	63	1
N-58	1	B	Residential	66	62	62	0	62	63	1
N-59	1	B	Residential	66	62	62	0	62	63	1
N-60	1	B	Residential	66	63	63	0	63	63	0
N-61	1	B	Residential	66	64	64	0	64	65	1
N-62	1	B	Residential	66	64	64	0	64	64	0
N-63	1	B	Residential	66	63	63	0	63	64	1
N-64	1	B	Residential	66	63	63	0	63	64	1
N-65	1	B	Residential	66	63	63	0	63	63	0
N-66	1	B	Residential	66	63	63	0	63	63	0
N-67	1	B	Residential	66	63	63	0	63	64	1
N-68	1	B	Residential	66	63	63	0	63	64	1
N-69	1	B	Residential	66	63	63	0	63	64	1
N-70	1	B	Residential	66	63	63	0	63	64	1
N-71	1	B	Residential	66	64	64	0	64	64	0
N-72	1	B	Residential	66	64	64	0	64	65	1
N-73	1	B	Residential	66	65	65	0	65	65	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE O - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE O Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
O-01	1	C	Cunningham Park - Fire Pit	66	59	60	1	59	60	1
O-02	1	C	Cunningham Park - West Playground	66	59	59	0	59	59	0
O-03	1	C	Cunningham Park - West Gazebo	66	58	59	1	58	59	1
O-04	1	C	Cunningham Park - Baseball Field	66	59	60	1	59	60	1
O-05	1	C	Cunningham Park - Football Field	66	62	63	1	62	63	1
O-06	1	C	Cunningham Park - East Playground	66	65	66*	1	66~	68*	2
O-07	1	C	Cunningham Park - East Gazebo	66	66~	67*	1	67~	69*	2

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE P - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE P Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
P-01	1	B	Residential	66	61	61	0	62	63	1
P-02	1	B	Residential	66	62	63	1	63	64	1
P-03	1	B	Residential	66	67~	67*	0	67~	69*	2
P-04	1	B	Residential	66	65	65	0	66~	67*	1
P-05	1	B	Residential	66	64	64	0	65	66*	1
P-06	1	B	Residential	66	64	64	0	64	65	1
P-07	1	B	Residential	66	64	64	0	64	65	1
P-08	1	B	Residential	66	63	63	0	63	64	1
P-09	1	B	Residential	66	71~	71*	0	72~	73*	1
P-10	1	B	Residential	66	71~	71*	0	72~	73*	1
P-11	1	B	Residential	66	71~	71*	0	72~	72*	0
P-12	1	B	Residential	66	59	59	0	59	60	1
P-13	1	B	Residential	66	59	59	0	59	60	1
P-14	1	B	Residential	66	59	59	0	59	60	1
P-15	1	B	Residential	66	59	60	1	60	60	0
P-16	1	B	Residential	66	60	60	0	60	61	1
P-17	1	B	Residential	66	60	61	1	61	62	1
P-18	1	B	Residential	66	61	61	0	61	62	1
P-19	1	B	Residential	66	61	61	0	61	63	2
P-20	1	B	Residential	66	61	61	0	62	63	1
P-21	1	B	Residential	66	62	62	0	62	63	1
P-22	1	B	Residential	66	62	62	0	62	63	1
P-23	1	B	Residential	66	62	62	0	62	64	2
P-24	1	B	Residential	66	58	58	0	58	59	1
P-25	1	B	Residential	66	58	58	0	58	59	1
P-26	1	B	Residential	66	58	59	1	59	60	1
P-27	1	B	Residential	66	58	58	0	58	60	2
P-28	1	B	Residential	66	58	59	1	59	60	1
P-29	1	B	Residential	66	58	59	1	59	60	1
P-30	1	B	Residential	66	58	59	1	59	60	1
P-31	1	B	Residential	66	58	58	0	58	60	2
P-32	1	B	Residential	66	58	58	0	58	59	1
P-33	1	B	Residential	66	58	58	0	58	59	1
P-34	1	B	Residential	66	58	58	0	58	59	1
P-35	1	B	Residential	66	56	56	0	56	57	1
P-36	1	B	Residential	66	57	57	0	57	58	1
P-37	1	B	Residential	66	57	57	0	57	58	1
P-38	1	B	Residential	66	57	57	0	57	58	1
P-39	1	B	Residential	66	57	57	0	57	58	1
P-40	1	B	Residential	66	57	57	0	57	58	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE P - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE P Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
P-41	1	B	Residential	66	57	57	0	57	58	1
P-42	1	B	Residential	66	57	57	0	57	58	1
P-43	1	B	Residential	66	57	57	0	57	59	2
P-44	1	B	Residential	66	57	57	0	57	58	1
P-45	1	B	Residential	66	57	57	0	57	58	1
P-46	1	B	Residential	66	57	57	0	57	58	1
P-47	1	B	Residential	66	56	57	1	57	58	1
P-48	1	B	Residential	66	55	55	0	55	56	1
P-49	1	B	Residential	66	55	55	0	55	56	1
P-50	1	B	Residential	66	55	56	1	56	57	1
P-51	1	B	Residential	66	55	56	1	56	57	1
P-52	1	B	Residential	66	56	56	0	56	57	1
P-53	1	B	Residential	66	56	57	1	56	57	1
P-54	1	B	Residential	66	56	56	0	56	57	1
P-55	1	B	Residential	66	56	56	0	56	57	1
P-56	1	B	Residential	66	57	58	1	58	58	0
P-57	1	B	Residential	66	57	57	0	57	57	0
P-58	1	B	Residential	66	56	57	1	56	57	1
P-59	1	B	Residential	66	56	56	0	56	57	1
P-60	1	B	Residential	66	55	56	1	55	56	1
P-61	1	B	Residential	66	55	56	1	55	56	1
P-62	1	B	Residential	66	55	55	0	55	56	1
P-63	1	B	Residential	66	54	55	1	54	55	1
P-64	1	B	Residential	66	54	54	0	54	55	1
P-65	1	B	Residential	66	54	54	0	54	55	1
P-66	1	B	Residential	66	52	53	1	52	53	1
P-67	1	B	Residential	66	53	53	0	53	54	1
P-68	1	B	Residential	66	53	53	0	53	54	1
P-69	1	B	Residential	66	53	54	1	53	54	1
P-70	1	B	Residential	66	54	55	1	54	55	1
P-71	1	B	Residential	66	55	56	1	55	56	1
P-72	1	B	Residential	66	56	56	0	56	56	0
P-73	1	B	Residential	66	58	59	1	58	58	0
P-74	1	B	Residential	66	56	57	1	57	57	0
P-75	1	B	Residential	66	56	57	1	56	56	0
P-76	1	B	Residential	66	55	56	1	55	55	0
P-77	1	B	Residential	66	54	55	1	54	55	1
P-78	1	B	Residential	66	54	55	1	54	54	0
P-79	1	B	Residential	66	53	54	1	53	54	1
P-80	1	B	Residential	66	52	53	1	52	53	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE P - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE P Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
P-81	1	B	Residential	66	52	52	0	52	53	1
P-82	1	B	Residential	66	52	52	0	52	53	1
P-83	1	B	Residential	66	51	51	0	51	51	0
P-84	1	B	Residential	66	51	52	1	51	52	1
P-85	1	B	Residential	66	53	53	0	53	53	0
P-86	1	B	Residential	66	54	55	1	54	54	0
P-87	1	B	Residential	66	55	56	1	55	55	0
P-88	1	B	Residential	66	57	58	1	57	57	0
P-89	1	B	Residential	66	55	56	1	55	56	1
P-90	1	B	Residential	66	54	55	1	55	55	0
P-91	1	B	Residential	66	52	53	1	52	53	1
P-92	1	B	Residential	66	52	52	0	52	52	0
P-93	1	B	Residential	66	51	52	1	51	52	1
P-94	1	B	Residential	66	51	51	0	51	51	0
P-95	1	B	Residential	66	50	51	1	50	51	1
P-96	1	B	Residential	66	51	51	0	51	51	0
P-97	1	B	Residential	66	51	52	1	51	52	1
P-98	1	B	Residential	66	52	53	1	52	53	1
P-99	1	B	Residential	66	53	54	1	53	54	1
P-100	1	B	Residential	66	54	55	1	54	55	1
P-101	1	B	Residential	66	63	63	0	63	64	1
P-102	1	B	Residential	66	57	57	0	57	57	0
P-103	1	B	Residential	66	56	56	0	56	56	0
P-104	1	B	Residential	66	54	55	1	54	55	1
P-105	1	B	Residential	66	53	54	1	53	54	1
P-106	1	B	Residential	66	53	53	0	53	53	0
P-107	1	B	Residential	66	52	52	0	52	52	0
P-108	1	B	Residential	66	51	51	0	51	52	1
P-109	1	B	Residential	66	51	51	0	51	51	0
P-110	1	B	Residential	66	51	51	0	50	51	1
P-111	1	B	Residential	66	52	52	0	51	52	1
P-112	1	B	Residential	66	52	52	0	52	52	0
P-113	1	B	Residential	66	52	53	1	52	53	1
P-114	1	B	Residential	66	53	53	0	52	53	1
P-115	1	B	Residential	66	53	53	0	53	53	0
P-116	1	B	Residential	66	54	54	0	54	54	0
P-117	1	B	Residential	66	54	55	1	54	55	1
P-118	1	B	Residential	66	55	55	0	55	56	1
P-119	1	B	Residential	66	56	56	0	56	57	1
P-120	1	B	Residential	66	58	58	0	58	58	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE P - Summary of Predicted Noise Levels and Impacts

CNE P Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
P-121	1	B	Residential	66	56	56	0	56	57	1

Notes:
~ and Blue: Impacted Receptor - Existing Year Condition (2019)
* and Red: Impacted Receptor - Design Year Build Condition (2051)
(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE Q - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE Q Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
Q-01	1	B	Residential	66	60	60	0	60	61	1
Q-02	1	B	Residential	66	60	60	0	60	60	0
Q-03	1	B	Residential	66	60	60	0	60	60	0
Q-04	1	B	Residential	66	60	61	1	61	61	0
Q-05	1	B	Residential	66	61	62	1	61	62	1
Q-06	1	B	Residential	66	62	62	0	62	63	1
Q-07	1	B	Residential	66	62	63	1	63	63	0
Q-08	1	B	Residential	66	65	65	0	65	65	0
Q-09	1	B	Residential	66	63	63	0	63	63	0
Q-10	1	B	Residential	66	64	64	0	64	64	0
Q-11	1	B	Residential	66	62	62	0	62	63	1
Q-12	1	B	Residential	66	62	62	0	62	62	0
Q-13	1	B	Residential	66	65	65	0	65	65	0
Q-14	1	B	Residential	66	65	65	0	65	65	0
Q-15	1	B	Residential	66	68~	68*	0	68~	68*	0
Q-16	1	B	Residential	66	70~	70*	0	71~	71*	0
Q-17	1	B	Residential	66	70~	70*	0	71~	71*	0
Q-18	1	B	Residential	66	71~	71*	0	72~	72*	0
Q-19	1	B	Residential	66	70~	71*	1	71~	71*	0
Q-20	1	B	Residential	66	71~	71*	0	72~	72*	0
Q-21	1	B	Residential	66	71~	71*	0	71~	71*	0
Q-22	1	B	Residential	66	71~	71*	0	71~	71*	0
Q-23	1	B	Residential	66	71~	71*	0	72~	71*	-1
Q-24	1	B	Residential	66	71~	71*	0	71~	71*	0
Q-25	1	B	Residential	66	71~	71*	0	71~	71*	0
Q-26	1	B	Residential	66	71~	71*	0	71~	71*	0
Q-27	1	B	Residential	66	71~	71*	0	71~	71*	0
Q-28	1	B	Residential	66	70~	71*	1	71~	71*	0
Q-29	1	B	Residential	66	71~	71*	0	71~	71*	0
Q-30	1	B	Residential	66	62	62	0	62	62	0
Q-31	1	B	Residential	66	63	63	0	62	63	1
Q-32	1	B	Residential	66	64	64	0	63	64	1
Q-33	1	B	Residential	66	66~	66*	0	65	66*	1
Q-34	1	B	Residential	66	61	61	0	60	61	1
Q-35	1	B	Residential	66	59	60	1	59	60	1
Q-36	1	B	Residential	66	61	61	0	61	61	0
Q-37	1	B	Residential	66	62	63	1	62	63	1
Q-38	1	B	Residential	66	64	64	0	63	64	1
Q-39	1	B	Residential	66	65	65	0	65	65	0
Q-40	1	B	Residential	66	64	64	0	65	66*	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix B - Predicted Noise Levels and Impact Analysis
CNE Q - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE Q Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
Q-41	1	B	Residential	66	64	64	0	66~	66*	0
Q-42	1	B	Residential	66	63	64	1	65	65	1
Q-43	1	B	Residential	66	63	64	1	65	66*	1
Q-44	1	B	Residential	66	65	65	0	65	65	0
Q-45	1	B	Residential	66	64	64	0	64	64	0
Q-46	1	B	Residential	66	64	64	0	64	64	0
Q-47	1	B	Residential	66	63	64	1	63	63	0
Q-48	1	B	Residential	66	63	64	1	63	63	0
Q-49	1	B	Residential	66	64	64	0	64	64	0
Q-50	1	B	Residential	66	63	63	0	63	63	0
Q-51	1	B	Residential	66	61	62	1	61	61	0
Q-52	1	B	Residential	66	60	60	0	60	60	0
Q-53	1	B	Residential	66	60	61	1	60	60	0
Q-54	1	B	Residential	66	60	60	0	60	60	0
Q-55	1	B	Residential	66	59	59	0	58	59	1
Q-56	1	B	Residential	66	60	60	0	60	60	0
Q-57	1	B	Residential	66	59	59	0	59	59	0
Q-58	1	B	Residential	66	60	60	0	60	60	0
Q-59	1	B	Residential	66	59	59	0	59	59	0
Q-60	1	B	Residential	66	61	61	0	61	61	0
Q-61	1	B	Residential	66	61	61	0	61	61	0
Q-62	1	B	Residential	66	62	62	0	62	62	0
Q-63	1	B	Residential	66	63	63	0	63	63	0
Q-64	1	B	Residential	66	62	62	0	62	62	0
Q-65	1	B	Residential	66	61	61	0	61	61	0
Q-66	1	B	Residential	66	60	60	0	60	60	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE R - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE R Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
R-01	1	B	Residential	66	61	61	0	62	62	0
R-02	1	B	Residential	66	61	61	0	62	62	0
R-03	1	B	Residential	66	63	63	0	63	64	1
R-04	1	B	Residential	66	71~	71*	0	70~	71*	1
R-05	1	B	Residential	66	71~	71*	0	71~	71*	0
R-06	1	B	Residential	66	64	64	0	64	64	0
R-07	1	B	Residential	66	60	61	1	60	61	1
R-08	1	B	Residential	66	59	60	1	60	60	0
R-09	1	B	Residential	66	59	59	0	59	59	0
R-10	1	B	Residential	66	60	60	0	60	60	0
R-11	1	B	Residential	66	64	64	0	63	64	1
R-12	1	B	Residential	66	71~	71*	0	70~	71*	1
R-13	1	B	Residential	66	70~	70*	0	70~	70*	0
R-14	1	B	Residential	66	64	64	0	63	64	1
R-15	1	B	Residential	66	60	60	0	60	60	0
R-16	1	B	Residential	66	58	59	1	58	59	1
R-17	1	B	Residential	66	60	60	0	59	60	1
R-18	1	B	Residential	66	64	64	0	64	64	0
R-19	1	B	Residential	66	71~	71*	0	70~	71*	1
R-20	1	B	Residential	66	70~	70*	0	70~	70*	0
R-21	1	B	Residential	66	64	64	0	64	64	0
R-22	1	B	Residential	66	60	60	0	59	60	1
R-23	1	B	Residential	66	60	60	0	60	60	0
R-24	1	B	Residential	66	65	65	0	65	65	0
R-25	1	B	Residential	66	70~	70*	0	70~	70*	0
R-26	1	B	Residential	66	65	65	0	65	65	0
R-27	1	B	Residential	66	70~	70*	0	70~	70*	0
R-28	1	B	Residential	66	65	65	0	64	64	0
R-29	1	B	Residential	66	65	65	0	65	65	0
R-30	1	B	Residential	66	65	65	0	65	65	0
R-31	1	B	Residential	66	70~	71*	1	71~	70*	-1
R-32	1	B	Residential	66	70~	71*	1	71~	70*	-1
R-33	1	B	Residential	66	65	66*	1	65	65	0
R-34	1	B	Residential	66	70~	71*	1	71~	70*	-1
R-35	1	B	Residential	66	66~	66*	0	66~	65	-1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

CNE S Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
S-1	3	E	Cold Stone Creamery, Five Guys, & Starbucks	71	62	62	0	62	63	1

Notes:
~ and Blue: Impacted Receptor - Existing Year Condition (2019)
* and Red: Impacted Receptor - Design Year Build Condition (2051)
(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE T - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE T Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
T-01	1	D**	Mt. Hope Lutheran Church	51	41	42	1	42	42	0
T-02	1	D**	Mt. Hope School	51	42	43	1	43	43	0
T-03	1	B	Residential	66	60	60	0	60	61	1
T-04	1	B	Residential	66	59	60	1	60	60	0
T-05	1	B	Residential	66	60	60	0	60	61	1
T-06	1	C	Peterson Playground	66	60	60	0	60	60	0
T-07	1	B	Residential	66	60	60	0	60	60	0
T-08	1	B	Residential	66	60	60	0	60	61	1
T-09	1	B	Residential	66	63	63	0	63	63	0
T-10	1	B	Residential	66	65	65	0	65	65	0
T-11	1	B	Residential	66	67~	67*	0	67~	67*	0
T-12	1	B	Residential	66	69~	69*	0	69~	69*	0
T-13	1	B	Residential	66	67~	67*	0	67~	67*	0
T-14	1	B	Residential	66	64	64	0	64	64	0
T-15	1	B	Residential	66	63	63	0	63	63	0
T-16	1	B	Residential	66	62	62	0	62	63	1
T-17	1	B	Residential	66	60	61	1	61	61	0
T-18	1	B	Residential	66	68~	68*	0	68~	68*	0
T-19	11	C	Little Jungle Preschool	66	72~	73*	1	72~	72*	0
T-20	1	B	Residential	66	66~	66*	0	66~	66*	0
T-21	1	B	Residential	66	68~	68*	0	67~	68*	1
T-22	1	B	Residential	66	63	63	0	63	63	0
T-23	1	B	Residential	66	73~	72*	-1	71~	73*	2
T-24	1	B	Residential	66	71~	71*	0	70~	71*	1
T-25	1	B	Residential	66	67~	68*	1	66~	68*	2
T-26	1	B	Residential	66	65	65	0	64	65	1
T-27	1	B	Residential	66	60	60	0	60	60	0
T-28	1	B	Residential	66	61	62	1	61	62	1
T-29	1	B	Residential	66	62	62	0	62	62	0
T-30	1	B	Residential	66	63	63	0	63	63	0
T-31	1	B	Residential	66	65	65	0	64	65	1
T-32	1	B	Residential	66	67~	67*	0	65	67*	2
T-33	1	B	Residential	66	70~	70*	0	68~	70*	2
T-34	1	B	Residential	66	65	65	0	64	65	1
T-35	1	B	Residential	66	63	63	0	63	63	0
T-36	1	B	Residential	66	62	62	0	62	63	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE T - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE T Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
T-37	1	B	Residential	66	61	62	1	61	62	1
T-38	1	B	Residential	66	60	60	0	60	60	0
T-39	1	B	Residential	66	58	58	0	58	59	1
T-40	1	B	Residential	66	58	59	1	58	59	1
T-41	1	B	Residential	66	70~	70*	0	70~	70*	0
T-42	1	B	Residential	66	65	66*	1	65	65	0
T-43	1	B	Residential	66	62	62	0	62	62	0
T-44	1	B	Residential	66	64	64	0	64	64	0
T-45	1	B	Residential	66	72~	72*	0	71~	71*	0
T-46	1	B	Residential	66	67~	67*	0	66~	66*	0
T-47	1	B	Residential	66	68~	68*	0	67~	68*	1
T-48	1	B	Residential	66	59	59	0	59	59	0
T-49	1	B	Residential	66	59	59	0	59	59	0
T-50	1	B	Residential	66	61	61	0	61	61	0
T-51	1	B	Residential	66	62	62	0	62	62	0
T-52	1	B	Residential	66	62	62	0	62	63	1
T-53	1	B	Residential	66	59	59	0	59	59	0
T-54	1	B	Residential	66	59	59	0	59	59	0
T-55	1	B	Residential	66	61	61	0	61	61	0
T-56	1	B	Residential	66	61	62	0	61	62	1
T-57	1	B	Residential	66	62	62	0	62	63	1
T-58	1	B	Residential	66	64	64	0	64	64	0
T-59	1	B	Residential	66	64	64	0	64	65	1
T-60	1	B	Residential	66	66~	66*	0	66~	66*	0
T-61	1	B	Residential	66	65	65	0	65	65	0
T-62	1	B	Residential	66	63	63	0	63	63	0
T-63	1	B	Residential	66	63	63	0	63	63	0
T-64	1	B	Residential	66	62	62	0	62	62	0
T-65	1	B	Residential	66	60	60	0	60	60	0
T-66	1	B	Residential	66	62	62	0	62	62	0
T-67	1	B	Residential	66	62	63	1	62	63	1
T-68	1	B	Residential	66	64	64	0	64	64	0
T-69	1	B	Residential	66	60	60	0	60	61	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE U - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE U Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
U-01	1	B	Residential	66	59	59	0	59	59	0
U-02	1	B	Residential	66	60	60	0	60	60	0
U-03	1	B	Residential	66	60	61	1	60	61	1
U-04	1	B	Residential	66	60	61	1	60	61	1
U-05	1	B	Residential	66	62	62	0	62	63	1
U-06	1	B	Residential	66	61	62	1	62	62	0
U-07	1	B	Residential	66	60	61	1	60	61	1
U-08	1	B	Residential	66	61	61	0	61	61	0
U-09	1	B	Residential	66	60	61	1	61	61	0
U-10	1	B	Residential	66	61	62	1	61	62	1
U-11	1	B	Residential	66	61	62	1	61	62	1
U-12	1	B	Residential	66	61	61	0	61	61	0
U-13	1	D**	Allen Park Church of Christ	51	40	40	0	40	40	0
U-14	1	B	Residential	66	61	61	0	61	62	1
U-15	1	B	Residential	66	61	61	0	61	61	0
U-16	1	B	Residential	66	61	61	0	61	61	0
U-17	1	B	Residential	66	60	61	1	60	61	1
U-18	1	B	Residential	66	60	61	1	60	61	1
U-19	1	B	Residential	66	60	60	0	60	60	0
U-20	1	B	Residential	66	60	60	0	60	60	0
U-21	1	B	Residential	66	60	60	0	59	60	1
U-22	1	B	Residential	66	60	60	0	60	61	1
U-23	1	B	Residential	66	60	60	0	60	61	1
U-24	1	B	Residential	66	60	60	0	60	61	1
U-25	1	B	Residential	66	60	60	0	60	61	1
U-26	1	B	Residential	66	60	60	0	60	60	0
U-27	1	B	Residential	66	60	60	0	60	60	0
U-28	1	B	Residential	66	60	60	0	60	60	0
U-29	1	B	Residential	66	60	60	0	60	60	0
U-30	1	B	Residential	66	60	60	0	60	61	1
U-31	1	B	Residential	66	60	61	1	60	61	1
U-32	1	B	Residential	66	60	61	1	60	61	1
U-33	1	B	Residential	66	60	61	1	60	61	1
U-34	1	B	Residential	66	60	61	1	60	61	1
U-35	1	B	Residential	66	60	61	1	60	61	1
U-36	1	B	Residential	66	61	61	0	61	61	0
U-37	1	B	Residential	66	61	61	0	61	61	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE U - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE U Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
U-38	1	B	Residential	66	61	61	0	61	61	0
U-39	1	B	Residential	66	60	61	1	60	61	1
U-40	1	B	Residential	66	60	61	1	60	61	1
U-41	1	B	Residential	66	60	61	1	61	61	0
U-42	1	B	Residential	66	60	60	0	60	60	0
U-43	1	B	Residential	66	60	60	0	60	60	0
U-44	1	B	Residential	66	60	60	0	60	60	0
U-45	1	B	Residential	66	60	61	1	60	61	1
U-46	1	B	Residential	66	61	61	0	61	61	0
U-47	1	B	Residential	66	61	61	0	61	61	0
U-48	1	B	Residential	66	61	61	0	61	62	1
U-49	1	B	Residential	66	61	61	0	61	61	0
U-50	1	B	Residential	66	66~	66*	0	66~	67*	1
U-51	1	B	Residential	66	65	65	0	65	65	0
U-52	1	B	Residential	66	63	63	0	63	64	1
U-53	1	B	Residential	66	62	62	0	62	63	1
U-54	1	B	Residential	66	61	61	0	61	62	1
U-55	1	B	Residential	66	60	60	0	60	61	1
U-56	1	B	Residential	66	61	62	1	62	62	0
U-57	1	B	Residential	66	62	63	1	62	63	1
U-58	1	B	Residential	66	63	63	0	63	64	1
U-59	1	B	Residential	66	65	65	0	65	65	0
U-60	1	B	Residential	66	66~	67*	1	67~	67*	0
U-61	1	B	Residential	66	60	60	0	60	60	0
U-62	1	B	Residential	66	60	60	0	60	60	0
U-63	1	B	Residential	66	60	61	1	60	61	1
U-64	1	B	Residential	66	60	61	1	60	61	1
U-65	1	B	Residential	66	60	61	1	60	61	1
U-66	1	B	Residential	66	60	61	1	60	61	1
U-67	1	B	Residential	66	60	61	1	60	61	1
U-68	1	B	Residential	66	60	61	1	60	61	1
U-69	1	B	Residential	66	60	61	1	60	61	1
U-70	1	B	Residential	66	60	61	1	60	61	1
U-71	1	B	Residential	66	60	61	1	60	61	1
U-72	1	B	Residential	66	60	60	0	59	60	1
U-73	1	B	Residential	66	60	60	0	60	60	0
U-74	1	B	Residential	66	60	60	0	60	60	0
U-75	1	B	Residential	66	60	61	1	60	61	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE U - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE U Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
U-76	1	B	Residential	66	60	61	1	60	61	1
U-77	1	B	Residential	66	60	61	1	60	61	1
U-78	1	C	John F. Kennedy Memorial Park - Trail	66	60	60	0	60	60	0
U-79	1	B	Residential	66	59	60	1	59	60	1
U-80	1	C	John F. Kennedy Memorial Park - Baseball Field	66	60	61	1	60	61	1
U-81	1	B	Residential	66	62	63	1	62	63	1
U-82	1	B	Residential	66	63	64	1	63	64	1
U-83	1	B	Residential	66	62	63	1	62	63	1
U-84	1	B	Residential	66	61	61	0	61	61	0
U-85	1	B	Residential	66	60	60	0	60	60	0
U-86	1	B	Residential	66	59	60	1	59	60	1
U-87	1	B	Residential	66	62	62	0	62	62	0
U-88	2	B	The Cove at Allen Park - Balcony	66	63	64	1	63	64	1
U-89	1	B	Residential	66	62	62	0	62	63	1
U-90	1	B	Residential	66	59	60	1	59	60	1
U-91	1	B	Residential	66	59	59	0	59	59	0
U-92	1	B	Residential	66	61	62	1	61	62	1
U-93	5	C	The Cove at Allen Park - Swimming Pool	66	65	65	0	65	65	0
U-94	1	B	Residential	66	61	61	0	61	61	0
U-95	1	B	Residential	66	58	59	1	58	59	1
U-96	1	B	Residential	66	58	59	1	58	59	1
U-97	1	B	Residential	66	59	60	1	59	60	1
U-98	2	B	The Cove at Allen Park - Balcony	66	61	62	1	61	62	1
U-99	2	B	The Cove at Allen Park - Balcony	66	57	57	0	57	58	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE U - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE U Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
U-100	2	B	The Cove at Allen Park - Balcony	66	56	57	1	56	57	1
U-101	2	B	The Cove at Allen Park - Balcony	66	58	59	1	58	59	1
U-102	1	B	Residential	66	57	58	1	57	58	1
U-103	1	B	Residential	66	56	57	1	56	57	1
U-104	1	B	Residential	66	55	56	1	55	56	1
U-105	2	B	The Cove at Allen Park - Balcony	66	59	60	1	59	60	1
U-106	2	B	The Cove at Allen Park - Balcony	66	56	57	1	57	57	0
U-107	1	B	The Cove at Allen Park - Balcony	66	64	64	0	64	64	0
U-108	2	B	The Cove at Allen Park - Balcony	66	63	64	1	63	64	1
U-109	1	B	The Cove at Allen Park - Balcony	66	60	61	1	60	61	1
U-110	1	B	Residential	66	54	55	1	54	55	1
U-111	1	B	The Cove at Allen Park - Balcony	66	61	62	1	61	62	1
U-112	2	B	The Cove at Allen Park - Balcony	66	60	60	0	60	60	0
U-113	2	B	The Cove at Allen Park - Balcony	66	58	59	1	58	59	1
U-114	2	B	The Cove at Allen Park - Balcony	66	61	61	0	61	61	0
U-115	1	B	Residential	66	55	55	0	55	56	1
U-116	1	B	Residential	66	54	55	1	54	55	1

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE U - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE U Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
U-117	2	B	The Cove at Allen Park - Balcony	66	60	61	1	60	61	1
U-118	2	B	The Cove at Allen Park - Balcony	66	57	58	1	57	58	1
U-119	1	B	The Cove at Allen Park - Balcony	66	62	63	1	62	63	1
U-120	2	B	The Cove at Allen Park - Balcony	66	60	61	1	60	61	1
U-121	2	B	The Cove at Allen Park - Balcony	66	60	61	1	60	61	1
U-122	1	B	Residential	66	55	55	0	55	55	0
U-123	1	B	Residential	66	55	55	0	55	56	1
U-124	1	B	The Cove at Allen Park - Balcony	66	60	61	1	60	61	1
U-125	1	B	The Cove at Allen Park - Balcony	66	64	65	1	64	65	1
U-126	2	B	The Cove at Allen Park - Balcony	66	58	59	1	58	59	1
U-127	2	B	The Cove at Allen Park - Balcony	66	61	61	0	61	61	0
U-128	1	B	The Cove at Allen Park - Balcony	66	60	61	1	60	61	1
U-129	1	B	Residential	66	54	55	1	54	55	1
U-130	2	B	The Cove at Allen Park - Balcony	66	60	61	1	60	61	1
U-131	2	B	The Cove at Allen Park - Balcony	66	57	57	0	57	57	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE U - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE U Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
U-132	2	B	The Cove at Allen Park - Balcony	66	58	59	1	58	59	1
U-133	2	B	The Cove at Allen Park - Balcony	66	61	61	0	61	61	0
U-134	2	B	The Cove at Allen Park - Balcony	66	61	62	1	61	62	1
U-135	1	B	The Cove at Allen Park - Balcony	66	61	62	1	61	62	1
U-136	2	B	The Cove at Allen Park - Balcony	66	64	65	1	65	65	0
U-137	1	B	The Cove at Allen Park - Balcony	66	62	63	1	62	63	1
U-138	1	B	Residential	66	65	66*	1	65	66*	1
U-139	1	B	Residential	66	68~	69*	1	68~	69*	1
U-140	1	B	The Cove at Allen Park - Balcony	66	64	65	1	64	65	1
U-141	1	D**	Hope City Church	51	49	50	1	50	50	0
U-142	1	B	Residential	66	61	61	0	60	61	1
U-143	1	B	Residential	66	61	61	0	60	61	1
U-144	1	B	Residential	66	61	62	1	61	61	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

** -25 dBA

CNE V Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
V-01	1	D**	Melvindale High School	52	46	47	1	46	47	1

Notes:
~ and Blue: Impacted Receptor - Existing Year Condition (2019)
* and Red: Impacted Receptor - Design Year Build Condition (2051)
(1) Sound Levels Reported as dB(A) Leq(h)
** -25 dBA

Appendix B - Predicted Noise Levels and Impact Analysis
CNE W - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE W Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
W-01	1	E	Comfort Inn & Suites Allen Park - Dearborn	66	59	59	0	59	59	0
W-02	1	E	Best Western Greenfield Inn	66	60	61	1	60	61	1
W-03	1	B	Residential	66	56	56	0	56	56	0
W-04	1	B	Residential	66	57	57	0	57	57	0
W-05	1	B	Residential	66	57	58	1	57	58	1
W-06	1	B	Residential	66	57	57	0	57	57	0
W-07	1	B	Residential	66	57	57	0	57	57	0
W-08	1	B	Residential	66	57	58	1	57	57	0
W-09	1	B	Residential	66	57	58	1	57	58	1
W-10	1	B	Residential	66	58	59	1	58	58	0
W-11	1	B	Residential	66	60	61	1	60	61	1
W-12	1	B	Residential	66	61	61	0	61	61	0
W-13	1	B	Residential	66	61	62	1	61	62	1
W-14	1	B	Residential	66	62	62	0	62	62	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE Y - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE Y Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
Y-01	5	C	Lake Village of Fairlane - Swimming Pool	66	63	63	0	63	63	0
Y-02	2	B	Lake Village of Fairlane - Balcony	66	63	63	0	63	63	0
Y-03	2	B	Lake Village of Fairlane - Balcony	66	60	61	1	60	60	0
Y-04	2	B	Lake Village of Fairlane - Balcony	66	55	56	1	55	55	0
Y-05	2	B	Lake Village of Fairlane - Balcony	66	64	65	1	64	64	0
Y-06	2	B	Lake Village of Fairlane - Balcony	66	63	63	0	63	63	0
Y-07	2	B	Lake Village of Fairlane - Balcony	66	63	63	0	62	63	1
Y-08	2	B	Lake Village of Fairlane - Balcony	66	65	66*	1	64	65	1
Y-09	2	B	Lake Village of Fairlane - Balcony	66	65	66*	1	65	65	0
Y-10	2	B	Lake Village of Fairlane - Balcony	66	67~	68*	1	67~	67*	0
Y-11	2	B	Lake Village of Fairlane - Balcony	66	62	63	1	62	62	0
Y-12	2	B	Lake Village of Fairlane - Balcony	66	63	63	0	63	63	0
Y-13	2	B	Lake Village of Fairlane - Balcony	66	68~	69*	1	68~	68*	0
Y-14	2	B	Lake Village of Fairlane - Balcony	66	67~	68*	1	67~	67*	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE Y - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE Y Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
Y-15	1	C	Lake Village of Fairlane - Tennis Court	66	72~	73*	1	72~	72	0
Y-16	2	B	Lake Village of Fairlane - Balcony	66	58	58	0	58	58	0
Y-17	2	B	Lake Village of Fairlane - Balcony	66	59	59	0	58	59	1
Y-18	2	B	Lake Village of Fairlane - Balcony	66	58	59	1	58	58	0
Y-19	2	B	Lake Village of Fairlane - Balcony	66	59	59	0	59	59	0
Y-20	2	B	Lake Village of Fairlane - Balcony	66	55	56	1	55	56	1
Y-21	2	B	Lake Village of Fairlane - Balcony	66	56	56	0	56	56	0
Y-22	2	B	Lake Village of Fairlane - Balcony	66	61	62	1	61	61	0
Y-23	2	B	Lake Village of Fairlane - Balcony	66	54	55	1	54	55	1
Y-24	2	B	Lake Village of Fairlane - Balcony	66	57	58	1	57	58	1
Y-25	2	B	Lake Village of Fairlane - Balcony	66	55	56	1	55	56	1
Y-26	2	B	Lake Village of Fairlane - Balcony	66	53	54	1	53	53	0
Y-27	2	B	Lake Village of Fairlane - Balcony	66	53	53	0	52	53	1
Y-28	2	B	Lake Village of Fairlane - Balcony	66	52	53	1	52	52	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

Appendix B - Predicted Noise Levels and Impact Analysis
CNE Y - Summary of Predicted Noise Levels and Impacts

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

CNE Y Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria ⁽¹⁾	AM Modeling Results Existing Year Condition (2019) ⁽¹⁾	AM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	AM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾	PM Modeling Results Existing Year Condition (2019) ⁽¹⁾	PM Modeling Results Design Year Build Condition (2051) ⁽¹⁾	PM Modeling Results Design Year Build Increase Over Existing Condition ⁽¹⁾
Y-29	2	B	Lake Village of Fairlane - Balcony	66	56	57	1	56	56	0
Y-30	2	B	Lake Village of Fairlane - Balcony	66	61	62	1	61	61	0

Notes:

~ and Blue: Impacted Receptor - Existing Year Condition (2019)

* and Red: Impacted Receptor - Design Year Build Condition (2051)

(1) Sound Levels Reported as dB(A) Leq(h)

APPENDIX C

BARRIER ANALYSIS RESULTS

Appendix C - Barrier Analysis Results

CNE B - EXISTING NOISE WALL ENB B-1

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
B-01	1	B	66	63	62	1	N	-	N	-	-
B-02	1	B	66	63	62	1	N	-	N	-	-
B-03	1	B	66	63	62	1	N	-	N	-	-
B-04	1	B	66	60	59	1	N	-	N	-	-
B-05	1	B	66	64	62	2	N	-	N	-	-
B-06	1	B	66	63	61	2	N	-	N	-	-
B-07	1	B	66	61	59	2	N	-	N	-	-
B-08	1	B	66	60	59	1	N	-	N	-	-
B-09	1	B	66	60	58	2	N	-	N	-	-
B-10	1	B	66	60	59	1	N	-	N	-	-
B-11	1	B	66	61	59	2	N	-	N	-	-
B-12	1	B	66	63	61	2	N	-	N	-	-
B-13	1	B	66	64	61	3	N	-	N	-	-
B-14	1	B	66	61	59	2	N	-	N	-	-
B-15	1	B	66	61	58	3	N	-	N	-	-
B-16	1	B	66	61	58	3	N	-	N	-	-
B-17	1	B	66	64	61	3	N	-	N	-	-
B-18	1	B	66	61	58	3	N	-	N	-	-
B-19	1	B	66	61	58	3	N	-	N	-	-
B-20	1	B	66	61	58	3	N	-	N	-	-
B-21	1	B	66	64	61	3	N	-	N	-	-
B-22	1	B	66	64	61	3	N	-	N	-	-
B-23	1	B	66	61	58	3	N	-	N	-	-
B-24	1	B	66	62	58	4	N	-	N	-	-
B-25	1	B	66	61	58	3	N	-	N	-	-
B-26	1	B	66	62	58	4	N	-	N	-	-
B-27	1	B	66	65	61	4	N	-	N	-	-
B-28	1	B	66	66	62	4	N	-	N	-	-
B-29	1	B	66	62	58	4	N	-	N	-	-
B-30	1	B	66	62	58	4	N	-	N	-	-
B-31	1	B	66	63	58	5	N	-	Y	N	N
B-32	1	B	66	67	62	5	N	-	Y	N	N
B-33	1	B	66	63	58	5	N	-	Y	N	N
B-34	1	B	66	63	58	5	N	-	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE B - EXISTING NOISE WALL ENB B-1

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
B-35	1	B	66	69	62	7	N	-	Y	Y	N
B-36	1	B	66	63	58	5	N	-	Y	N	N
B-37	1	B	66	63	58	5	N	-	Y	N	N
B-38	1	B	66	64	59	5	N	-	Y	N	N
B-39	1	B	66	71	63	8	N	-	Y	Y	N
B-40	1	B	66	75	64	11	N	-	Y	Y	Y
B-41	1	B	66	75	64	11	N	-	Y	Y	Y
B-42	1	B	66	74	64	10	N	-	Y	Y	Y
B-43	1	B	66	71	63	8	N	-	Y	Y	N
B-44	1	B	66	69	62	7	N	-	Y	Y	N
B-45	1	B	66	64	59	5	N	-	Y	N	N
B-46	1	B	66	64	59	5	N	-	Y	N	N
B-47	1	B	66	64	59	5	N	-	Y	N	N
B-48	1	B	66	65	59	6	N	-	Y	N	N
B-49	1	B	66	68	61	7	N	-	Y	Y	N
B-50	1	B	66	68	61	7	N	-	Y	Y	N
B-51	1	B	66	65	59	6	N	-	Y	N	N
B-52	1	B	66	65	60	5	N	-	Y	N	N
B-53	1	B	66	70	62	8	N	-	Y	Y	N
B-54	1	B	66	78	64	14	N	-	Y	Y	Y
B-55	1	B	66	77	64	13	N	-	Y	Y	Y
B-56	1	B	66	76	64	12	N	-	Y	Y	Y
B-57	1	B	66	75	64	11	N	-	Y	Y	Y
B-58	1	B	66	70	62	8	N	-	Y	Y	N
B-59	1	B	66	70	62	8	N	-	Y	Y	N
B-60	1	B	66	67	61	6	N	-	Y	N	N
B-61	1	B	66	66	60	6	N	-	Y	N	N
B-62	1	B	66	75	64	11	N	-	Y	Y	Y
B-63	1	B	66	75	64	11	N	-	Y	Y	Y
B-64	1	B	66	75	64	11	N	-	Y	Y	Y
B-65	1	B	66	75	64	11	N	-	Y	Y	Y
B-66	1	B	66	70	62	8	N	-	Y	Y	N
B-67	1	B	66	68	61	7	N	-	Y	Y	N
B-68	1	B	66	67	61	6	N	-	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results

CNE B - EXISTING NOISE WALL ENB B-1

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
B-69	1	B	66	65	60	5	N	-	Y	N	N
B-70	1	B	66	65	60	5	N	-	Y	N	N
B-71	1	B	66	66	61	5	N	-	Y	N	N
B-72	1	B	66	68	61	7	N	-	Y	Y	N
B-73	1	B	66	70	63	7	N	-	Y	Y	N
B-74	1	B	66	76	64	12	N	-	Y	Y	Y
B-75	1	B	66	76	65	11	N	-	Y	Y	Y
B-76	1	B	66	76	65	11	N	-	Y	Y	Y
B-77	1	B	66	76	65	11	N	-	Y	Y	Y
B-78	1	B	66	70	63	7	N	-	Y	Y	N
B-79	1	B	66	68	62	6	N	-	Y	N	N
B-80	1	B	66	67	61	6	N	-	Y	N	N
B-81	1	B	66	66	60	6	N	-	Y	N	N
B-82	1	B	66	65	60	5	N	-	Y	N	N
B-83	1	B	66	65	61	4	N	-	N	-	-
B-84	1	B	66	66	62	4	N	-	N	-	-
B-85	1	B	66	68	62	6	N	-	Y	N	N
B-86	1	B	66	69	63	6	N	-	Y	N	N
B-87	1	B	66	71	64	7	N	-	Y	Y	N
B-88	1	B	66	76	65	11	N	-	Y	Y	Y
B-89	1	B	66	76	65	11	N	-	Y	Y	Y
B-90	1	B	66	76	65	11	N	-	Y	Y	Y
B-91	1	B	66	76	68	8	Y	Y	Y	Y	N
B-92	1	B	66	76	66	10	Y	Y	Y	Y	Y
B-93	1	B	66	71	64	7	N	-	Y	Y	N
B-94	1	B	66	69	64	5	N	-	Y	N	N
B-95	1	B	66	68	63	5	N	-	Y	N	N
B-96	1	B	66	67	62	5	N	-	Y	N	N
B-97	1	B	66	65	62	3	N	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results**CNE B - EXISTING NOISE WALL ENB B-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	2
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	2
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	64
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	36
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	56%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	19
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
F-05	1	B	66	70	Y	60	10	Y	Y	Y	Y

Notes:
⁽¹⁾ Sound Levels reported in dB(A) Leg (h)
- : Not Applicable

Appendix C - Barrier Analysis Results**CNE F - NOISE WALL NB F-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	1
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	1
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	1
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	1
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	100%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE H - NOISE WALL NB H-1

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
H-01	1	B	66	70	Y	65	5	Y	Y	N	N
H-02	1	B	66	71	Y	64	7	Y	Y	Y	N
H-03	1	B	66	71	Y	64	7	Y	Y	Y	N
H-04	1	B	66	72	Y	62	10	Y	Y	Y	Y

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE H - NOISE WALL NB H-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	4
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	4
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	4
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	3
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	75%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE I - NOISE WALL NB I-1

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
I-03	1	B	66	62	N	61	1	-	N	-	-
I-04	1	B	66	64	N	59	5	-	Y	N	N
I-05	1	B	66	62	N	59	3	-	N	-	-
I-06	1	B	66	66	Y	57	9	Y	Y	Y	N
I-07	1	B	66	64	N	57	7	-	Y	Y	N
I-08	1	B	66	64	N	57	7	-	Y	Y	N
I-09	1	B	66	63	N	58	5	-	Y	N	N
I-10	1	B	66	61	N	58	3	-	N	-	-
I-11	1	B	66	60	N	57	3	-	N	-	-
I-12	1	B	66	60	N	56	4	-	N	-	-
I-13	1	B	66	59	N	56	3	-	N	-	-
I-14	1	B	66	60	N	57	3	-	N	-	-
I-15	1	B	66	59	N	56	3	-	N	-	-
I-16	1	B	66	58	N	56	2	-	N	-	-
I-17	1	B	66	59	N	57	2	-	N	-	-
I-18	1	B	66	60	N	58	2	-	N	-	-
I-19	1	B	66	60	N	58	2	-	N	-	-
I-20	1	B	66	59	N	57	2	-	N	-	-
I-21	1	B	66	58	N	56	2	-	N	-	-
I-22	1	B	66	59	N	57	2	-	N	-	-
I-23	1	B	66	59	N	58	1	-	N	-	-
I-24	1	B	66	58	N	57	1	-	N	-	-
I-25	1	B	66	59	N	58	1	-	N	-	-
I-26	1	B	66	58	N	57	1	-	N	-	-
I-27	1	B	66	59	N	58	1	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results**CNE I - NOISE WALL NB I-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	1
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	1
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	5
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	3
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	60%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	0
Reasonableness Criteria - Design Goal Attenuation Requirement Met	No

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE J - NOISE WALL NB J-3A

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
J-01	1	B	66	59	N	56	3	-	N	-	-
J-02	1	B	66	62	N	58	4	-	N	-	-
J-03	1	B	66	66	Y	60	6	Y	Y	N	N
J-04	1	B	66	73	Y	60	13	Y	Y	Y	Y
J-05	1	B	66	70	Y	60	10	Y	Y	Y	Y
J-06	1	B	66	66	Y	59	7	Y	Y	Y	N
J-07	1	B	66	65	N	58	7	-	Y	Y	N
J-08	1	B	66	61	N	57	4	-	N	-	-
J-09	1	B	66	60	N	56	4	-	N	-	-
J-10	1	B	66	59	N	56	3	-	N	-	-
J-11	1	B	66	61	N	56	5	-	Y	N	N
J-12	1	B	66	65	N	58	7	-	Y	Y	N
J-13	1	B	66	66	Y	58	8	Y	Y	Y	N
J-14	1	B	66	68	Y	59	9	Y	Y	Y	N
J-15	1	B	66	64	N	57	7	-	Y	Y	N
J-16	1	B	66	63	N	57	6	-	Y	N	N
J-17	1	B	66	64	N	57	7	-	Y	Y	N
J-18	1	B	66	65	N	58	7	-	Y	Y	N
J-19	1	B	66	65	N	58	7	-	Y	Y	N
J-20	1	B	66	66	Y	58	8	Y	Y	Y	N
J-21	1	B	66	64	N	58	6	-	Y	N	N
J-22	1	B	66	63	N	58	5	-	Y	N	N
J-23	1	B	66	65	N	59	6	-	Y	N	N
J-24	1	B	66	67	Y	59	8	Y	Y	Y	N
J-25	1	B	66	67	Y	59	8	Y	Y	Y	N
J-26	1	B	66	72	Y	59	13	Y	Y	Y	Y
J-27	1	B	66	67	Y	59	8	Y	Y	Y	N
J-28	1	B	66	68	Y	61	7	Y	Y	Y	N
J-29	1	B	66	66	Y	61	5	Y	Y	N	N
J-30	1	B	66	66	Y	61	5	Y	Y	N	N
J-31	1	B	66	65	N	61	4	-	N	-	-
J-32	1	B	66	64	N	61	3	-	N	-	-
J-33	1	B	66	64	N	62	2	-	N	-	-
J-34	1	B	66	65	N	62	3	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE J - NOISE WALL NB J-3A

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
J-35	1	B	66	66	Y	63	3	N	N	-	-
J-36	1	B	66	68	Y	64	4	N	N	-	-
J-37	1	B	66	69	Y	62	7	Y	Y	Y	N
J-38	1	B	66	73	Y	59	14	Y	Y	Y	Y
J-39	1	B	66	70	Y	64	6	Y	Y	N	N
J-40	1	B	66	67	Y	65	2	N	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE J - NOISE WALL NB J-3A****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	20
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	17
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	85%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	28
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	19
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	68%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	4
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE J - NOISE WALL NB J-3B

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
J-01	1	B	66	59	N	55	4	-	N	-	-
J-02	1	B	66	62	N	56	6	-	Y	N	N
J-03	1	B	66	66	Y	58	8	Y	Y	Y	N
J-04	1	B	66	72	Y	59	13	Y	Y	Y	Y
J-05	1	B	66	70	Y	58	12	Y	Y	Y	Y
J-06	1	B	66	66	Y	57	9	Y	Y	Y	N
J-07	1	B	66	64	N	57	7	-	Y	Y	N
J-08	1	B	66	61	N	55	6	-	Y	N	N
J-09	1	B	66	60	N	55	5	-	Y	N	N
J-10	1	B	66	59	N	54	5	-	Y	N	N
J-11	1	B	66	61	N	55	6	-	Y	N	N
J-12	1	B	66	64	N	56	8	-	Y	Y	N
J-13	1	B	66	66	Y	58	8	Y	Y	Y	N
J-14	1	B	66	67	Y	58	9	Y	Y	Y	N
J-15	1	B	66	64	N	58	6	-	Y	N	N
J-16	1	B	66	62	N	57	5	-	Y	N	N
J-17	1	B	66	64	N	58	6	-	Y	N	N
J-18	1	B	66	65	N	58	7	-	Y	Y	N
J-19	1	B	66	65	N	59	6	-	Y	N	N
J-20	1	B	66	66	Y	59	7	Y	Y	Y	N
J-21	1	B	66	64	N	59	5	-	Y	N	N
J-22	1	B	66	63	N	60	3	-	N	-	-
J-23	1	B	66	64	N	60	4	-	N	-	-
J-24	1	B	66	67	Y	61	6	Y	Y	N	N
J-25	1	B	66	67	Y	62	5	Y	Y	N	N
J-26	1	B	66	72	Y	62	10	Y	Y	Y	Y
J-27	1	B	66	67	Y	63	4	N	N	-	-
J-28	1	B	66	68	Y	64	4	N	N	-	-
J-29	1	B	66	66	Y	63	3	N	N	-	-
J-30	1	B	66	66	Y	63	3	N	N	-	-
J-31	1	B	66	65	N	62	3	-	N	-	-
J-32	1	B	66	64	N	61	3	-	N	-	-
J-33	1	B	66	64	N	62	2	-	N	-	-
J-34	1	B	66	65	N	63	2	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results

CNE J - NOISE WALL NB J-3B

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
J-35	1	B	66	66	Y	64	2	N	N	-	-
J-36	1	B	66	68	Y	65	3	N	N	-	-
J-37	1	B	66	69	Y	66	3	N	N	-	-
J-38	1	B	66	74	Y	66	8	Y	Y	Y	N
J-39	1	B	66	70	Y	67	3	N	N	-	-
J-40	1	B	66	67	Y	65	2	N	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE J - NOISE WALL NB J-3B****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	20
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	11
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	55%
Feasibility Criteria Met	No
Reasonableness Criteria - Benefited Dwelling Units	24
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	12
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	50%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	3
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE K - NOISE WALL NB K-1A

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
K-20	1	B	66	64	N	64	0	-	N	-	-
K-21	1	B	66	66	Y	58	8	Y	Y	Y	N
K-22	1	B	66	66	Y	60	6	Y	Y	N	N
K-23	1	B	66	66	Y	60	6	Y	Y	N	N
K-24	1	B	66	67	Y	60	7	Y	Y	Y	N
K-26	1	B	66	66	Y	60	6	Y	Y	N	N
K-27	1	B	66	67	Y	60	7	Y	Y	Y	N
K-28	1	B	66	68	Y	60	8	Y	Y	Y	N
K-29	1	B	66	69	Y	60	9	Y	Y	Y	N
K-30	1	B	66	70	Y	60	10	Y	Y	Y	Y
K-31	1	B	66	71	Y	60	11	Y	Y	Y	Y
K-32	1	B	66	71	Y	60	11	Y	Y	Y	Y
K-33	1	B	66	74	Y	59	15	Y	Y	Y	Y
K-34	1	B	66	72	Y	61	11	Y	Y	Y	Y
K-35	1	B	66	70	Y	61	9	Y	Y	Y	N
K-36	1	B	66	69	Y	62	7	Y	Y	Y	N
K-37	1	B	66	68	Y	61	7	Y	Y	Y	N
K-38	1	B	66	67	Y	63	4	N	N	-	-
K-39	1	B	66	69	Y	64	5	Y	Y	N	N
K-40	1	B	66	70	Y	65	5	Y	Y	N	N
K-50	1	B	66	66	Y	60	6	Y	Y	N	N
K-51	1	B	66	64	N	60	4	-	N	-	-
K-52	1	B	66	64	N	60	4	-	N	-	-
K-53	1	B	66	64	N	60	4	-	N	-	-
K-54	1	B	66	63	N	60	3	-	N	-	-
K-55	1	B	66	64	N	60	4	-	N	-	-
K-56	1	B	66	64	N	60	4	-	N	-	-
K-57	1	B	66	65	N	60	5	-	Y	N	N
K-58	1	B	66	66	Y	60	6	Y	Y	N	N
K-59	1	B	66	66	Y	60	6	Y	Y	N	N
K-60	1	B	66	66	Y	61	5	Y	Y	N	N
K-61	1	B	66	65	N	61	4	-	N	-	-
K-62	1	B	66	64	N	60	4	-	N	-	-
K-63	1	B	66	64	N	60	4	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE K - NOISE WALL NB K-1A

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
K-64	1	B	66	63	N	60	3	-	N	-	-
K-65	1	B	66	63	N	60	3	-	N	-	-
K-66	1	B	66	63	N	62	1	-	N	-	-
K-67	1	B	66	64	N	62	2	-	N	-	-
K-68	1	B	66	65	N	62	3	-	N	-	-
K-69	1	B	66	65	N	62	3	-	N	-	-
K-70	1	B	66	67	Y	63	4	N	N	-	-
K-71	1	B	66	63	N	60	3	-	N	-	-
K-72	1	B	66	62	N	59	3	-	N	-	-
K-73	1	B	66	62	N	59	3	-	N	-	-
K-74	1	B	66	62	N	59	3	-	N	-	-
K-75	1	B	66	61	N	59	2	-	N	-	-
K-76	1	B	66	65	N	60	5	-	Y	N	N
K-77	1	B	66	65	N	60	5	-	Y	N	N
K-78	1	B	66	64	N	60	4	-	N	-	-
K-79	1	B	66	64	N	60	4	-	N	-	-
K-80	1	B	66	63	N	60	3	-	N	-	-
K-81	1	B	66	62	N	60	2	-	N	-	-
K-82	1	B	66	64	N	60	4	-	N	-	-
K-83	1	B	66	63	N	61	2	-	N	-	-
K-84	1	B	66	63	N	60	3	-	N	-	-
K-85	1	B	66	65	N	62	3	-	N	-	-
K-86	1	B	66	64	N	63	1	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results**CNE K - NOISE WALL NB K-1A****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	24
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	22
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	92%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	25
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	13
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	52%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	5
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE K - NOISE WALL NB K-1B

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
K-20	1	B	66	65	N	59	6	-	Y	N	N
K-21	1	B	66	66	Y	59	7	Y	Y	Y	N
K-22	1	B	66	66	Y	59	7	Y	Y	Y	N
K-23	1	B	66	66	Y	59	7	Y	Y	Y	N
K-24	1	B	66	67	Y	59	8	Y	Y	Y	N
K-26	1	B	66	67	Y	60	7	Y	Y	Y	N
K-27	1	B	66	67	Y	61	6	Y	Y	N	N
K-28	1	B	66	68	Y	61	7	Y	Y	Y	N
K-29	1	B	66	69	Y	61	8	Y	Y	Y	N
K-30	1	B	66	70	Y	62	8	Y	Y	Y	N
K-31	1	B	66	71	Y	62	9	Y	Y	Y	N
K-32	1	B	66	71	Y	63	8	Y	Y	Y	N
K-33	1	B	66	74	Y	66	8	Y	Y	Y	N
K-34	1	B	66	72	Y	64	8	Y	Y	Y	N
K-35	1	B	66	70	Y	63	7	Y	Y	Y	N
K-36	1	B	66	69	Y	62	7	Y	Y	Y	N
K-37	1	B	66	68	Y	62	6	Y	Y	N	N
K-38	1	B	66	67	Y	63	4	N	N	-	-
K-39	1	B	66	69	Y	64	5	Y	Y	N	N
K-40	1	B	66	70	Y	66	4	N	N	-	-
K-50	1	B	66	66	Y	59	7	Y	Y	Y	N
K-51	1	B	66	64	N	59	5	-	Y	N	N
K-52	1	B	66	64	N	59	5	-	Y	N	N
K-53	1	B	66	64	N	58	6	-	Y	N	N
K-54	1	B	66	63	N	58	5	-	Y	N	N
K-55	1	B	66	64	N	59	5	-	Y	N	N
K-56	1	B	66	64	N	59	5	-	Y	N	N
K-57	1	B	66	65	N	59	6	-	Y	N	N
K-58	1	B	66	66	Y	59	7	Y	Y	Y	N
K-59	1	B	66	66	Y	60	6	Y	Y	N	N
K-60	1	B	66	66	Y	61	5	Y	Y	N	N
K-61	1	B	66	65	N	60	5	-	Y	N	N
K-62	1	B	66	64	N	59	5	-	Y	N	N
K-63	1	B	66	64	N	59	5	-	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE K - NOISE WALL NB K-1B

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
K-64	1	B	66	63	N	59	4	-	N	-	-
K-65	1	B	66	63	N	59	4	-	N	-	-
K-66	1	B	66	63	N	61	2	-	N	-	-
K-67	1	B	66	64	N	61	3	-	N	-	-
K-68	1	B	66	64	N	61	3	-	N	-	-
K-69	1	B	66	65	N	61	4	-	N	-	-
K-70	1	B	66	66	Y	62	4	N	N	-	-
K-71	1	B	66	63	N	58	5	-	Y	N	N
K-72	1	B	66	62	N	58	4	-	N	-	-
K-73	1	B	66	62	N	57	5	-	Y	N	N
K-74	1	B	66	62	N	57	5	-	Y	N	N
K-75	1	B	66	61	N	57	4	-	N	-	-
K-76	1	B	66	65	N	59	6	-	Y	N	N
K-77	1	B	66	65	N	59	6	-	Y	N	N
K-78	1	B	66	64	N	58	6	-	Y	N	N
K-79	1	B	66	64	N	58	6	-	Y	N	N
K-80	1	B	66	63	N	58	5	-	Y	N	N
K-81	1	B	66	63	N	58	5	-	Y	N	N
K-82	1	B	66	64	N	58	6	-	Y	N	N
K-83	1	B	66	63	N	58	5	-	Y	N	N
K-84	1	B	66	63	N	58	5	-	Y	N	N
K-85	1	B	66	65	N	59	6	-	Y	N	N
K-86	1	B	66	64	N	59	5	-	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results**CNE K - NOISE WALL NB K-1B****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	24
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	21
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	88%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	46
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	16
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	35%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	0
Reasonableness Criteria - Design Goal Attenuation Requirement Met	No

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE K - NOISE WALL NB K-2

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
K-41	1	B	66	79	Y	68	11	Y	Y	Y	Y
K-42	1	B	66	75	Y	66	9	Y	Y	Y	N
K-43	1	B	66	66	Y	61	5	Y	Y	N	N
K-44	1	B	66	65	N	62	3	-	N	-	-
K-45	1	B	66	65	N	64	1	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE K - NOISE WALL NB K-2****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	3
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	3
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	3
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	2
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	67%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
K-49	1	E	72	73	Y	63	10	Y	Y	Y	Y

Notes:
⁽¹⁾ Sound Levels reported in dB(A) Leg (h)
- : Not Applicable

Appendix C - Barrier Analysis Results**CNE K - NOISE WALL NB K-3****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	1
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	1
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	1
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	1
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	100%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-1

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-01	1	B	66	72	62	10	N	-	Y	Y	Y
L-02	1	B	66	68	64	4	N	-	N	-	-
L-03	1	B	66	69	64	5	N	-	Y	N	N
L-04	1	B	66	70	63	7	N	-	Y	Y	N
L-05	1	B	66	70	63	7	N	-	Y	Y	N
L-06	1	B	66	71	63	8	N	-	Y	Y	N
L-07	1	B	66	72	64	8	N	-	Y	Y	N
L-08	1	B	66	71	64	7	N	-	Y	Y	N
L-09	1	B	66	70	63	7	N	-	Y	Y	N
L-10	1	B	66	69	63	6	N	-	Y	N	N
L-11	1	B	66	69	63	6	N	-	Y	N	N
L-12	1	B	66	68	63	5	N	-	Y	N	N
L-13	1	B	66	67	62	5	N	-	Y	N	N
L-14	1	B	66	69	63	6	N	-	Y	N	N
L-15	1	B	66	70	63	7	N	-	Y	Y	N
L-16	1	B	66	72	63	9	N	-	Y	Y	N
L-17	1	B	66	71	63	8	N	-	Y	Y	N
L-18	1	B	66	70	63	7	N	-	Y	Y	N
L-19	1	B	66	69	62	7	N	-	Y	Y	N
L-20	1	B	66	68	63	5	N	-	Y	N	N
L-21	1	B	66	68	62	6	N	-	Y	N	N
L-22	1	B	66	69	63	6	N	-	Y	N	N
L-23	1	B	66	70	63	7	N	-	Y	Y	N
L-24	1	B	66	71	64	7	N	-	Y	Y	N
L-25	1	B	66	71	64	7	N	-	Y	Y	N
L-26	1	B	66	70	63	7	N	-	Y	Y	N
L-27	1	B	66	68	63	5	N	-	Y	N	N
L-28	1	B	66	68	63	5	N	-	Y	N	N
L-29	1	B	66	69	63	6	N	-	Y	N	N
L-30	1	B	66	70	64	6	N	-	Y	N	N
L-31	1	B	66	71	64	7	N	-	Y	Y	N
L-32	1	B	66	71	64	7	N	-	Y	Y	N
L-33	1	B	66	70	64	6	N	-	Y	N	N
L-34	1	B	66	68	64	4	N	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-1

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-35	1	B	66	68	63	5	N	-	Y	N	N
L-36	1	B	66	69	64	5	N	-	Y	N	N
L-37	1	B	66	70	64	6	N	-	Y	N	N
L-38	1	B	66	71	64	7	N	-	Y	Y	N
L-39	1	B	66	72	66	6	Y	Y	Y	N	N
L-40	1	B	66	70	65	5	N	-	Y	N	N
L-41	1	B	66	67	64	3	N	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE L - EXISTING NOISE WALL ENB L-1****DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	1
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	1
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	38
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	19
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	50%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-2

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-42	1	B	66	75	66	9	Y	Y	Y	Y	N
L-43	1	B	66	74	67	7	Y	Y	Y	Y	N
L-44	1	B	66	72	67	5	Y	Y	Y	N	N
L-45	1	B	66	71	67	4	Y	N	N	-	-
L-46	1	B	66	70	67	3	Y	N	N	-	-
L-47	1	B	66	69	66	3	Y	N	N	-	-
L-48	1	B	66	68	65	3	N	-	N	-	-
L-49	1	B	66	67	65	2	N	-	N	-	-
L-50	1	B	66	68	66	2	Y	N	N	-	-
L-51	1	B	66	69	66	3	Y	N	N	-	-
L-52	1	B	66	70	67	3	Y	N	N	-	-
L-53	1	B	66	71	67	4	Y	N	N	-	-
L-54	1	B	66	72	68	4	Y	N	N	-	-
L-55	1	B	66	73	67	6	Y	Y	Y	N	N
L-56	1	B	66	74	67	7	Y	Y	Y	Y	N
L-57	1	B	66	75	68	7	Y	Y	Y	Y	N
L-58	1	B	66	67	65	2	N	-	N	-	-
L-59	1	B	66	68	65	3	N	-	N	-	-
L-60	1	B	66	67	65	2	N	-	N	-	-
L-61	1	B	66	70	67	3	Y	N	N	-	-
L-62	1	B	66	71	67	4	Y	N	N	-	-
L-63	1	B	66	72	68	4	Y	N	N	-	-
L-64	1	B	66	73	69	4	Y	N	N	-	-
L-65	1	B	66	75	69	6	Y	Y	Y	N	N
L-66	1	B	66	76	68	8	Y	Y	Y	Y	N
L-67	1	B	66	74	68	6	Y	Y	Y	N	N
L-68	1	B	66	73	69	4	Y	N	N	-	-
L-69	1	B	66	72	68	4	Y	N	N	-	-
L-70	1	B	66	70	67	3	Y	N	N	-	-
L-71	1	B	66	69	66	3	Y	N	N	-	-
L-72	1	B	66	67	65	2	N	-	N	-	-
L-73	1	B	66	67	65	2	N	-	N	-	-
L-74	1	B	66	69	66	3	Y	N	N	-	-
L-75	1	B	66	70	67	3	Y	N	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-2

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-76	1	B	66	71	68	3	Y	N	N	-	-
L-77	1	B	66	73	68	5	Y	Y	Y	N	N
L-78	1	B	66	74	68	6	Y	Y	Y	N	N
L-79	1	B	66	75	67	8	Y	Y	Y	Y	N
L-80	1	B	66	76	71	5	Y	Y	Y	N	N
L-81	1	B	66	76	68	8	Y	Y	Y	Y	N
L-82	1	B	66	75	68	7	Y	Y	Y	Y	N
L-83	1	B	66	74	68	6	Y	Y	Y	N	N
L-84	1	B	66	72	68	4	Y	N	N	-	-
L-85	1	B	66	71	67	4	Y	N	N	-	-
L-86	1	B	66	70	67	3	Y	N	N	-	-
L-87	1	B	66	70	66	4	Y	N	N	-	-
L-88	1	B	66	67	64	3	N	-	N	-	-
L-89	1	B	66	67	64	3	N	-	N	-	-
L-90	1	B	66	69	66	3	Y	N	N	-	-
L-91	1	B	66	70	67	3	Y	N	N	-	-
L-92	1	B	66	72	68	4	Y	N	N	-	-
L-93	1	B	66	73	68	5	Y	Y	Y	N	N
L-94	1	B	66	75	67	8	Y	Y	Y	Y	N
L-95	1	B	66	78	68	10	Y	Y	Y	Y	Y
L-96	1	B	66	75	68	7	Y	Y	Y	Y	N
L-97	1	B	66	74	69	5	Y	Y	Y	N	N
L-98	1	B	66	72	68	4	Y	N	N	-	-
L-99	1	B	66	71	67	4	Y	N	N	-	-
L-100	1	B	66	69	66	3	Y	N	N	-	-
L-101	1	B	66	67	65	2	N	-	N	-	-
L-102	1	B	66	67	65	2	N	-	N	-	-
L-103	1	B	66	70	66	4	Y	N	N	-	-
L-104	1	B	66	70	67	3	Y	N	N	-	-
L-105	1	B	66	72	68	4	Y	N	N	-	-
L-106	1	B	66	73	68	5	Y	Y	Y	N	N
L-107	1	B	66	74	69	5	Y	Y	Y	N	N
L-108	1	B	66	76	69	7	Y	Y	Y	Y	N
L-109	1	B	66	77	68	9	Y	Y	Y	Y	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-2

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-210	1	B	66	66	64	2	N	-	N	-	-
L-211	1	B	66	65	63	2	N	-	N	-	-
L-212	1	B	66	64	63	1	N	-	N	-	-
L-213	1	B	66	64	62	2	N	-	N	-	-
L-214	1	B	66	66	63	3	N	-	N	-	-
L-215	1	B	66	65	63	2	N	-	N	-	-
L-216	1	B	66	64	62	2	N	-	N	-	-
L-217	1	B	66	66	64	2	N	-	N	-	-
L-218	1	B	66	65	63	2	N	-	N	-	-
L-219	1	B	66	64	63	1	N	-	N	-	-
L-220	1	B	66	64	62	2	N	-	N	-	-
L-221	1	B	66	66	64	2	N	-	N	-	-
L-222	1	B	66	65	63	2	N	-	N	-	-
L-223	1	B	66	64	62	2	N	-	N	-	-
L-224	1	B	66	66	64	2	N	-	N	-	-
L-225	1	B	66	65	63	2	N	-	N	-	-
L-226	1	B	66	64	63	1	N	-	N	-	-
L-227	1	B	66	64	62	2	N	-	N	-	-
L-228	1	B	66	66	64	2	N	-	N	-	-
L-229	1	B	66	65	63	2	N	-	N	-	-
L-230	1	B	66	65	63	2	N	-	N	-	-
L-231	1	B	66	64	62	2	N	-	N	-	-
L-232	1	B	66	66	64	2	N	-	N	-	-
L-233	1	B	66	66	63	3	N	-	N	-	-
L-234	1	B	66	65	63	2	N	-	N	-	-
L-235	1	B	66	64	62	2	N	-	N	-	-
L-236	1	B	66	67	65	2	N	-	N	-	-
L-237	1	B	66	66	64	2	N	-	N	-	-
L-238	1	B	66	66	64	2	N	-	N	-	-
L-239	1	B	66	67	64	3	N	-	N	-	-
L-240	1	B	66	66	64	2	N	-	N	-	-
L-241	1	B	66	65	63	2	N	-	N	-	-
L-242	1	B	66	65	63	2	N	-	N	-	-
L-243	1	B	66	67	64	3	N	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-2

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-244	1	B	66	66	64	2	N	-	N	-	-
L-245	1	B	66	65	63	2	N	-	N	-	-
L-246	1	B	66	64	62	2	N	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE L - EXISTING NOISE WALL ENB L-2****DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	57
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	25
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	44%
Feasibility Criteria Met	No
Reasonableness Criteria - Benefited Dwelling Units	25
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	13
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	52%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-3

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-110	1	B	66	75	65	10	N	-	Y	Y	Y
L-111	1	B	66	73	65	8	N	-	Y	Y	N
L-112	1	B	66	71	65	6	N	-	Y	N	N
L-113	1	B	66	70	65	5	N	-	Y	N	N
L-114	1	B	66	69	65	4	N	-	N	-	-
L-115	1	B	66	67	65	2	N	-	N	-	-
L-116	1	B	66	67	64	3	N	-	N	-	-
L-117	1	B	66	67	64	3	N	-	N	-	-
L-118	1	B	66	69	64	5	N	-	Y	N	N
L-119	1	B	66	70	64	6	N	-	Y	N	N
L-120	1	B	66	71	65	6	N	-	Y	N	N
L-121	1	B	66	72	65	7	N	-	Y	Y	N
L-122	1	B	66	74	65	9	N	-	Y	Y	N
L-123	1	B	66	75	65	10	N	-	Y	Y	Y
L-124	1	B	66	75	65	10	N	-	Y	Y	Y
L-125	1	B	66	73	65	8	N	-	Y	Y	N
L-126	1	B	66	72	65	7	N	-	Y	Y	N
L-127	1	B	66	71	65	6	N	-	Y	N	N
L-128	1	B	66	70	64	6	N	-	Y	N	N
L-129	1	B	66	69	64	5	N	-	Y	N	N
L-130	1	B	66	67	64	3	N	-	N	-	-
L-131	1	B	66	67	63	4	N	-	N	-	-
L-132	1	B	66	68	64	4	N	-	N	-	-
L-133	1	B	66	70	64	6	N	-	Y	N	N
L-134	1	B	66	71	65	6	N	-	Y	N	N
L-135	1	B	66	76	65	11	N	-	Y	Y	Y
L-136	1	B	66	71	65	6	N	-	Y	N	N
L-137	1	B	66	68	64	4	N	-	N	-	-
L-138	1	B	66	67	63	4	N	-	N	-	-
L-139	1	B	66	68	64	4	N	-	N	-	-
L-140	1	B	66	70	64	6	N	-	Y	N	N
L-141	1	B	66	70	65	5	N	-	Y	N	N
L-142	1	B	66	71	65	6	N	-	Y	N	N
L-143	1	B	66	72	66	6	Y	Y	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-3

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-144	1	B	66	73	66	7	Y	Y	Y	Y	N
L-145	1	B	66	75	65	10	N	-	Y	Y	Y
L-146	1	B	66	75	65	10	N	-	Y	Y	Y
L-147	1	B	66	74	66	8	Y	Y	Y	Y	N
L-148	1	B	66	72	65	7	N	-	Y	Y	N
L-149	1	B	66	71	65	6	N	-	Y	N	N
L-150	1	B	66	70	65	5	N	-	Y	N	N
L-151	1	B	66	70	65	5	N	-	Y	N	N
L-152	1	B	66	68	64	4	N	-	N	-	-
L-153	1	B	66	67	63	4	N	-	N	-	-
L-154	1	B	66	66	63	3	N	-	N	-	-
L-155	1	B	66	67	63	4	N	-	N	-	-
L-156	1	B	66	67	64	3	N	-	N	-	-
L-157	1	B	66	68	64	4	N	-	N	-	-
L-158	1	B	66	70	66	4	Y	N	N	-	-
L-159	1	B	66	71	65	6	N	-	Y	N	N
L-160	1	B	66	74	66	8	Y	Y	Y	Y	N
L-161	1	B	66	76	65	11	N	-	Y	Y	Y
L-162	1	B	66	75	66	9	Y	Y	Y	Y	N
L-163	1	B	66	73	66	7	Y	Y	Y	Y	N
L-164	1	B	66	72	66	6	Y	Y	Y	N	N
L-165	1	B	66	71	65	6	N	-	Y	N	N
L-166	1	B	66	70	66	4	Y	N	N	-	-
L-167	1	B	66	68	64	4	N	-	N	-	-
L-168	1	B	66	67	64	3	N	-	N	-	-
L-169	1	B	66	68	64	4	N	-	N	-	-
L-170	1	B	66	70	66	4	Y	N	N	-	-
L-171	1	B	66	75	67	8	Y	Y	Y	Y	N
L-172	1	B	66	75	67	8	Y	Y	Y	Y	N
L-173	1	B	66	77	65	12	N	-	Y	Y	Y
L-174	1	B	66	77	66	11	Y	Y	Y	Y	Y
L-175	1	B	66	76	67	9	Y	Y	Y	Y	N
L-176	1	B	66	74	67	7	Y	Y	Y	Y	N
L-177	1	B	66	73	67	6	Y	Y	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - EXISTING NOISE WALL ENB L-3

DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Noise Level ⁽¹⁾	Existing Barrier Condition (2051) Barrier Insertion Loss	Existing Barrier Condition (2051) Noise Impact (Y/N)	Existing Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) Benefited Receptor (Y/N)	Existing Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Existing Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-178	1	B	66	71	67	4	Y	N	N	-	-
L-179	1	B	66	69	65	4	N	-	N	-	-
L-180	1	B	66	68	64	4	N	-	N	-	-
L-181	1	B	66	68	64	4	N	-	N	-	-
L-182	1	B	66	68	64	4	N	-	N	-	-
L-183	1	B	66	69	65	4	N	-	N	-	-
L-184	1	B	66	71	67	4	Y	N	N	-	-
L-185	1	B	66	72	67	5	Y	Y	Y	N	N
L-186	1	B	66	73	67	6	Y	Y	Y	N	N
L-187	1	B	66	74	66	8	Y	Y	Y	Y	N
L-188	1	B	66	76	66	10	Y	Y	Y	Y	Y
L-189	1	B	66	74	66	8	Y	Y	Y	Y	N
L-190	1	B	66	73	66	7	Y	Y	Y	Y	N
L-191	1	B	66	71	66	5	Y	Y	Y	N	N
L-192	1	B	66	69	65	4	N	-	N	-	-
L-193	1	B	66	69	65	4	N	-	N	-	-
L-194	1	B	66	68	64	4	N	-	N	-	-
L-195	1	B	66	68	64	4	N	-	N	-	-
L-196	1	B	66	68	65	3	N	-	N	-	-
L-197	1	B	66	68	65	3	N	-	N	-	-
L-198	1	B	66	69	65	4	N	-	N	-	-
L-199	1	B	66	70	65	5	N	-	Y	N	N
L-200	1	B	66	72	65	7	N	-	Y	Y	N
L-201	1	B	66	75	65	10	N	-	Y	Y	Y
L-202	1	B	66	75	64	11	N	-	Y	Y	Y
L-203	1	B	66	72	65	7	N	-	Y	Y	N
L-204	1	B	66	70	65	5	N	-	Y	N	N
L-205	1	B	66	69	66	3	Y	N	N	-	-
L-206	1	B	66	68	65	3	N	-	N	-	-
L-207	1	B	66	75	65	10	N	-	Y	Y	Y
L-208	1	B	66	69	64	5	N	-	Y	N	N
L-209	1	B	66	69	64	5	N	-	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results**CNE L - EXISTING NOISE WALL ENB L-3****DESIGN YEAR BUILD CONDITION (2051) EXISTING BARRIER ANALYSIS RESULTS**

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	26
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	20
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	77%
Feasibility Criteria Met	No
Reasonableness Criteria - Benefited Dwelling Units	62
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	33
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	53%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	13
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - NOISE WALL NB L-4

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-42	1	B	66	75	Y	64	11	Y	Y	Y	Y
L-43	1	B	66	74	Y	65	9	Y	Y	Y	N
L-44	1	B	66	72	Y	65	7	Y	Y	Y	N
L-45	1	B	66	71	Y	65	6	Y	Y	N	N
L-46	1	B	66	70	Y	64	6	Y	Y	N	N
L-47	1	B	66	69	Y	64	5	Y	Y	N	N
L-48	1	B	66	68	Y	63	5	Y	Y	N	N
L-49	1	B	66	67	Y	63	4	N	N	-	-
L-50	1	B	66	68	Y	63	5	Y	Y	N	N
L-51	1	B	66	69	Y	64	5	Y	Y	N	N
L-52	1	B	66	70	Y	64	6	Y	Y	N	N
L-53	1	B	66	71	Y	65	6	Y	Y	N	N
L-54	1	B	66	72	Y	65	7	Y	Y	Y	N
L-55	1	B	66	73	Y	65	8	Y	Y	Y	N
L-56	1	B	66	74	Y	65	9	Y	Y	Y	N
L-57	1	B	66	75	Y	66	9	Y	Y	Y	N
L-58	1	B	66	67	Y	63	4	N	N	-	-
L-59	1	B	66	68	Y	63	5	Y	Y	N	N
L-60	1	B	66	67	Y	62	5	Y	Y	N	N
L-61	1	B	66	70	Y	63	7	Y	Y	Y	N
L-62	1	B	66	71	Y	64	7	Y	Y	Y	N
L-63	1	B	66	72	Y	65	7	Y	Y	Y	N
L-64	1	B	66	73	Y	65	8	Y	Y	Y	N
L-65	1	B	66	75	Y	65	10	Y	Y	Y	Y
L-66	1	B	66	76	Y	65	11	Y	Y	Y	Y
L-67	1	B	66	74	Y	65	9	Y	Y	Y	N
L-68	1	B	66	73	Y	64	9	Y	Y	Y	N
L-69	1	B	66	72	Y	64	8	Y	Y	Y	N
L-70	1	B	66	70	Y	63	7	Y	Y	Y	N
L-71	1	B	66	69	Y	63	6	Y	Y	N	N
L-72	1	B	66	67	Y	62	5	Y	Y	N	N
L-73	1	B	66	67	Y	61	6	Y	Y	N	N
L-74	1	B	66	69	Y	62	7	Y	Y	Y	N
L-75	1	B	66	70	Y	63	7	Y	Y	Y	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - NOISE WALL NB L-4

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-76	1	B	66	71	Y	63	8	Y	Y	Y	N
L-77	1	B	66	73	Y	64	9	Y	Y	Y	N
L-78	1	B	66	74	Y	64	10	Y	Y	Y	Y
L-79	1	B	66	75	Y	64	11	Y	Y	Y	Y
L-80	1	B	66	76	Y	70	6	Y	Y	N	N
L-81	1	B	66	76	Y	65	11	Y	Y	Y	Y
L-82	1	B	66	75	Y	64	11	Y	Y	Y	Y
L-83	1	B	66	74	Y	64	10	Y	Y	Y	Y
L-84	1	B	66	72	Y	64	8	Y	Y	Y	N
L-85	1	B	66	71	Y	64	7	Y	Y	Y	N
L-86	1	B	66	70	Y	63	7	Y	Y	Y	N
L-87	1	B	66	70	Y	63	7	Y	Y	Y	N
L-88	1	B	66	67	Y	61	6	Y	Y	N	N
L-89	1	B	66	67	Y	61	6	Y	Y	N	N
L-90	1	B	66	69	Y	63	6	Y	Y	N	N
L-91	1	B	66	70	Y	63	7	Y	Y	Y	N
L-92	1	B	66	72	Y	63	9	Y	Y	Y	N
L-93	1	B	66	73	Y	64	9	Y	Y	Y	N
L-94	1	B	66	75	Y	64	11	Y	Y	Y	Y
L-95	1	B	66	78	Y	64	14	Y	Y	Y	Y
L-96	1	B	66	75	Y	64	11	Y	Y	Y	Y
L-97	1	B	66	74	Y	64	10	Y	Y	Y	Y
L-98	1	B	66	72	Y	64	8	Y	Y	Y	N
L-99	1	B	66	71	Y	63	8	Y	Y	Y	N
L-100	1	B	66	69	Y	63	6	Y	Y	N	N
L-101	1	B	66	67	Y	62	5	Y	Y	N	N
L-102	1	B	66	67	Y	62	5	Y	Y	N	N
L-103	1	B	66	70	Y	63	7	Y	Y	Y	N
L-104	1	B	66	70	Y	63	7	Y	Y	Y	N
L-105	1	B	66	72	Y	64	8	Y	Y	Y	N
L-106	1	B	66	73	Y	64	9	Y	Y	Y	N
L-107	1	B	66	74	Y	64	10	Y	Y	Y	Y
L-108	1	B	66	76	Y	65	11	Y	Y	Y	Y
L-109	1	B	66	77	Y	65	12	Y	Y	Y	Y

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - NOISE WALL NB L-4

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-210	1	B	66	66	Y	61	5	Y	Y	N	N
L-211	1	B	66	65	N	61	4	-	N	-	-
L-212	1	B	66	64	N	61	3	-	N	-	-
L-213	1	B	66	64	N	60	4	-	N	-	-
L-214	1	B	66	66	Y	61	5	Y	Y	N	N
L-215	1	B	66	65	N	60	5	-	Y	N	N
L-216	1	B	66	64	N	60	4	-	N	-	-
L-217	1	B	66	66	Y	61	5	Y	Y	N	N
L-218	1	B	66	65	N	60	5	-	Y	N	N
L-219	1	B	66	64	N	60	4	-	N	-	-
L-220	1	B	66	64	N	60	4	-	N	-	-
L-221	1	B	66	66	Y	61	5	Y	Y	N	N
L-222	1	B	66	65	N	60	5	-	Y	N	N
L-223	1	B	66	64	N	60	4	-	N	-	-
L-224	1	B	66	66	Y	61	5	Y	Y	N	N
L-225	1	B	66	65	N	60	5	-	Y	N	N
L-226	1	B	66	64	N	60	4	-	N	-	-
L-227	1	B	66	64	N	59	5	-	Y	N	N
L-228	1	B	66	66	Y	61	5	Y	Y	N	N
L-229	1	B	66	65	N	61	4	-	N	-	-
L-230	1	B	66	65	N	60	5	-	Y	N	N
L-231	1	B	66	64	N	60	4	-	N	-	-
L-232	1	B	66	66	Y	61	5	Y	Y	N	N
L-233	1	B	66	66	Y	61	5	Y	Y	N	N
L-234	1	B	66	65	N	60	5	-	Y	N	N
L-235	1	B	66	64	N	60	4	-	N	-	-
L-236	1	B	66	67	Y	62	5	Y	Y	N	N
L-237	1	B	66	66	Y	62	4	N	N	-	-
L-238	1	B	66	66	Y	61	5	Y	Y	N	N
L-239	1	B	66	67	Y	62	5	Y	Y	N	N
L-240	1	B	66	66	Y	62	4	N	N	-	-
L-241	1	B	66	65	N	61	4	-	N	-	-
L-242	1	B	66	65	N	61	4	-	N	-	-
L-243	1	B	66	67	Y	62	5	Y	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE L - NOISE WALL NB L-4

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
L-244	1	B	66	66	Y	62	4	N	N	-	-
L-245	1	B	66	65	N	61	4	-	N	-	-
L-246	1	B	66	64	N	61	3	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE L - NOISE WALL NB L-4****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	83
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	78
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	94%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	85
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	46
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	54%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	15
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE N - NOISE WALL NB N-1

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
N-01	1	B	66	71	Y	59	12	Y	Y	Y	Y
N-02	1	B	66	70	Y	61	9	Y	Y	Y	N
N-03	1	B	66	69	Y	62	7	Y	Y	Y	N
N-04	1	B	66	69	Y	63	6	Y	Y	N	N
N-05	1	B	66	68	Y	63	5	Y	Y	N	N
N-06	1	B	66	67	Y	63	4	N	N	-	-
N-07	1	B	66	66	Y	61	5	Y	Y	N	N
N-08	1	B	66	68	Y	60	8	Y	Y	Y	N
N-09	1	B	66	69	Y	60	9	Y	Y	Y	N
N-10	1	B	66	70	Y	59	11	Y	Y	Y	Y
N-11	1	B	66	70	Y	59	11	Y	Y	Y	Y
N-12	1	B	66	70	Y	58	12	Y	Y	Y	Y
N-13	1	B	66	68	Y	58	10	Y	Y	Y	Y
N-14	1	B	66	67	Y	59	8	Y	Y	Y	N
N-15	1	B	66	66	Y	60	6	Y	Y	N	N
N-16	1	B	66	65	N	58	7	-	Y	Y	N
N-17	1	B	66	65	N	58	7	-	Y	Y	N
N-18	1	B	66	65	N	57	8	-	Y	Y	N
N-19	1	B	66	66	Y	57	9	Y	Y	Y	N
N-20	1	B	66	67	Y	58	9	Y	Y	Y	N
N-21	1	B	66	64	N	57	7	-	Y	Y	N
N-22	1	B	66	64	N	57	7	-	Y	Y	N
N-23	1	B	66	64	N	57	7	-	Y	Y	N
N-24	1	B	66	61	N	58	3	-	N	-	-
N-25	1	B	66	61	N	57	4	-	N	-	-
N-26	1	B	66	61	N	57	4	-	N	-	-
N-27	1	B	66	61	N	57	4	-	N	-	-
N-28	1	B	66	61	N	58	3	-	N	-	-
N-29	1	B	66	61	N	58	3	-	N	-	-
N-30	1	B	66	61	N	58	3	-	N	-	-
N-31	1	B	66	61	N	61	0	-	N	-	-
N-32	1	B	66	61	N	60	1	-	N	-	-
N-33	1	B	66	67	Y	63	4	N	N	-	-
N-34	1	B	66	66	Y	61	5	Y	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE N - NOISE WALL NB N-1

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
N-35	1	B	66	64	N	58	6	-	Y	N	N
N-36	1	B	66	63	N	58	5	-	Y	N	N
N-37	1	B	66	61	N	58	3	-	N	-	-
N-38	1	B	66	61	N	58	3	-	N	-	-
N-39	1	B	66	62	N	61	1	-	N	-	-
N-40	1	B	66	61	N	59	2	-	N	-	-
N-41	1	B	66	61	N	59	2	-	N	-	-
N-42	1	B	66	61	N	60	1	-	N	-	-
N-43	1	B	66	62	N	60	2	-	N	-	-
N-44	1	B	66	62	N	60	2	-	N	-	-
N-45	1	B	66	61	N	59	2	-	N	-	-
N-46	1	B	66	61	N	59	2	-	N	-	-
N-47	1	B	66	61	N	59	2	-	N	-	-
N-48	1	B	66	63	N	58	5	-	Y	N	N
N-49	1	B	66	63	N	58	5	-	Y	N	N
N-50	1	B	66	62	N	58	4	-	N	-	-
N-51	1	B	66	62	N	59	3	-	N	-	-
N-52	1	B	66	62	N	59	3	-	N	-	-
N-53	1	B	66	62	N	60	2	-	N	-	-
N-54	1	B	66	62	N	60	2	-	N	-	-
N-55	1	B	66	63	N	60	3	-	N	-	-
N-56	1	B	66	63	N	60	3	-	N	-	-
N-57	1	B	66	63	N	60	3	-	N	-	-
N-58	1	B	66	63	N	59	4	-	N	-	-
N-59	1	B	66	63	N	59	4	-	N	-	-
N-60	1	B	66	63	N	59	4	-	N	-	-
N-61	1	B	66	65	N	60	5	-	Y	N	N
N-62	1	B	66	64	N	60	4	-	N	-	-
N-63	1	B	66	64	N	60	4	-	N	-	-
N-64	1	B	66	64	N	60	4	-	N	-	-
N-65	1	B	66	63	N	61	2	-	N	-	-
N-66	1	B	66	63	N	61	2	-	N	-	-
N-67	1	B	66	64	N	62	2	-	N	-	-
N-68	1	B	66	64	N	61	3	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE N - NOISE WALL NB N-1

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
N-69	1	B	66	64	N	61	3	-	N	-	-
N-70	1	B	66	64	N	61	3	-	N	-	-
N-71	1	B	66	64	N	61	3	-	N	-	-
N-72	1	B	66	65	N	61	4	-	N	-	-
N-73	1	B	66	65	N	61	4	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE N - NOISE WALL NB N-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	19
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	17
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	89%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	28
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	18
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	64%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	5
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE O - NOISE WALL NB O-1

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
O-01	1	B	66	60	N	60	0	-	N	-	-
O-02	1	B	66	59	N	59	0	-	N	-	-
O-03	1	B	66	59	N	59	0	-	N	-	-
O-04	1	B	66	60	N	60	0	-	N	-	-
O-05	1	B	66	63	N	62	1	-	N	-	-
O-06	1	B	66	66	Y	61	5	Y	Y	N	N
O-07	1	B	66	67	Y	59	8	Y	Y	Y	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE O - NOISE WALL NB O-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	2
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	2
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	2
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	1
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	50%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	0
Reasonableness Criteria - Design Goal Attenuation Requirement Met	No

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE P - NOISE WALL NB P-2

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
P-01	1	B	66	63	N	58	5	-	Y	N	N
P-02	1	B	66	64	N	58	6	-	Y	N	N
P-03	1	B	66	69	Y	62	7	Y	Y	Y	N
P-04	1	B	66	67	Y	59	8	Y	Y	Y	N
P-05	1	B	66	66	Y	58	8	Y	Y	Y	N
P-06	1	B	66	65	N	58	7	-	Y	Y	N
P-07	1	B	66	65	N	58	7	-	Y	Y	N
P-08	1	B	66	64	N	58	6	-	Y	N	N
P-09	1	B	66	73	Y	66	7	Y	Y	Y	N
P-10	1	B	66	73	Y	65	8	Y	Y	Y	N
P-11	1	B	66	72	Y	65	7	Y	Y	Y	N
P-12	1	B	66	60	N	56	4	-	N	-	-
P-13	1	B	66	60	N	55	5	-	Y	N	N
P-14	1	B	66	60	N	56	4	-	N	-	-
P-15	1	B	66	60	N	56	4	-	N	-	-
P-16	1	B	66	61	N	56	5	-	Y	N	N
P-17	1	B	66	62	N	56	6	-	Y	N	N
P-18	1	B	66	62	N	56	6	-	Y	N	N
P-19	1	B	66	63	N	56	7	-	Y	Y	N
P-20	1	B	66	63	N	56	7	-	Y	Y	N
P-21	1	B	66	63	N	56	7	-	Y	Y	N
P-22	1	B	66	63	N	57	6	-	Y	N	N
P-23	1	B	66	64	N	57	7	-	Y	Y	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results**CNE P - NOISE WALL NB P-2****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	6
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	6
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	20
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	12
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	60%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	0
Reasonableness Criteria - Design Goal Attenuation Requirement Met	No

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE Q - NOISE WALL NB Q-1

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
Q-01	1	B	66	61	N	59	2	-	N	-	-
Q-02	1	B	66	60	N	58	2	-	N	-	-
Q-03	1	B	66	60	N	58	2	-	N	-	-
Q-04	1	B	66	61	N	58	3	-	N	-	-
Q-05	1	B	66	62	N	59	3	-	N	-	-
Q-06	1	B	66	63	N	60	3	-	N	-	-
Q-07	1	B	66	63	N	61	2	-	N	-	-
Q-08	1	B	66	65	N	61	4	-	N	-	-
Q-09	1	B	66	64	N	60	4	-	N	-	-
Q-10	1	B	66	64	N	59	5	-	Y	N	N
Q-11	1	B	66	63	N	60	3	-	N	-	-
Q-12	1	B	66	62	N	57	5	-	Y	N	N
Q-13	1	B	66	65	N	57	8	-	Y	Y	N
Q-14	1	B	66	65	N	58	7	-	Y	Y	N
Q-15	1	B	66	68	Y	61	7	Y	Y	Y	N
Q-16	1	B	66	71	Y	64	7	Y	Y	Y	N
Q-17	1	B	66	71	Y	65	6	Y	Y	N	N
Q-18	1	B	66	72	Y	64	8	Y	Y	Y	N
Q-19	1	B	66	71	Y	65	6	Y	Y	N	N
Q-20	1	B	66	72	Y	65	7	Y	Y	Y	N
Q-21	1	B	66	71	Y	64	7	Y	Y	Y	N
Q-22	1	B	66	71	Y	65	6	Y	Y	N	N
Q-23	1	B	66	71	Y	65	6	Y	Y	N	N
Q-24	1	B	66	71	Y	65	6	Y	Y	N	N
Q-25	1	B	66	71	Y	65	6	Y	Y	N	N
Q-26	1	B	66	71	Y	65	6	Y	Y	N	N
Q-27	1	B	66	71	Y	65	6	Y	Y	N	N
Q-28	1	B	66	71	Y	64	7	Y	Y	Y	N
Q-29	1	B	66	71	Y	65	6	Y	Y	N	N
Q-30	1	B	66	62	N	59	3	-	N	-	-
Q-31	1	B	66	63	N	63	0	-	N	-	-
Q-32	1	B	66	64	N	63	1	-	N	-	-
Q-33	1	B	66	66	Y	64	2	N	N	-	-
Q-34	1	B	66	61	N	60	1	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results

CNE Q - NOISE WALL NB Q-1

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
Q-35	1	B	66	60	N	59	1	-	N	-	-
Q-36	1	B	66	61	N	60	1	-	N	-	-
Q-37	1	B	66	63	N	62	1	-	N	-	-
Q-38	1	B	66	64	N	63	1	-	N	-	-
Q-39	1	B	66	65	N	64	1	-	N	-	-
Q-40	1	B	66	65	N	57	8	-	Y	Y	N
Q-41	1	B	66	64	N	57	7	-	Y	Y	N
Q-42	1	B	66	64	N	57	7	-	Y	Y	N
Q-43	1	B	66	63	N	56	7	-	Y	Y	N
Q-44	1	B	66	63	N	57	6	-	Y	N	N
Q-45	1	B	66	64	N	63	1	-	N	-	-
Q-46	1	B	66	63	N	57	6	-	Y	N	N
Q-47	1	B	66	61	N	56	5	-	Y	N	N
Q-48	1	B	66	60	N	56	4	-	N	-	-
Q-49	1	B	66	60	N	57	3	-	N	-	-
Q-50	1	B	66	60	N	56	4	-	N	-	-
Q-51	1	B	66	59	N	59	0	-	N	-	-
Q-52	1	B	66	60	N	56	4	-	N	-	-
Q-53	1	B	66	59	N	55	4	-	N	-	-
Q-58	1	B	66	60	N	55	5	-	Y	N	N
Q-59	1	B	66	59	N	54	5	-	Y	N	N
Q-60	1	B	66	61	N	55	6	-	Y	N	N
Q-61	1	B	66	61	N	55	6	-	Y	N	N
Q-62	1	B	66	62	N	55	7	-	Y	Y	N
Q-63	1	B	66	63	N	56	7	-	Y	Y	N
Q-64	1	B	66	62	N	56	6	-	Y	N	N
Q-65	1	B	66	61	N	55	6	-	Y	N	N
Q-66	1	B	66	60	N	55	5	-	Y	N	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE Q - NOISE WALL NB Q-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	16
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	15
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	94%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	35
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	14
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	40%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	0
Reasonableness Criteria - Design Goal Attenuation Requirement Met	No

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE U - NOISE WALL NB U-4

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
U-13	1	D	51	40	N	38	2	-	N	-	-
U-107	1	B	66	64	N	64	0	-	N	-	-
U-108	2	B	66	64	N	63	1	-	N	-	-
U-111	1	B	66	62	N	60	2	-	N	-	-
U-112	2	B	66	60	N	59	1	-	N	-	-
U-113	2	B	66	59	N	57	2	-	N	-	-
U-114	2	B	66	61	N	60	1	-	N	-	-
U-115	1	B	66	56	N	55	1	-	N	-	-
U-116	1	B	66	55	N	54	1	-	N	-	-
U-117	2	B	66	61	N	59	2	-	N	-	-
U-118	2	B	66	58	N	55	3	-	N	-	-
U-119	1	B	66	63	N	55	8	-	Y	Y	N
U-120	2	B	66	61	N	57	4	-	N	-	-
U-121	2	B	66	61	N	58	3	-	N	-	-
U-122	1	B	66	55	N	54	1	-	N	-	-
U-123	1	B	66	56	N	54	2	-	N	-	-
U-124	1	B	66	61	N	57	4	-	N	-	-
U-125	1	B	66	65	N	55	10	-	Y	Y	Y
U-126	2	B	66	59	N	53	6	-	Y	N	N
U-127	2	B	66	61	N	57	4	-	N	-	-
U-128	1	B	66	61	N	57	4	-	N	-	-
U-129	1	B	66	55	N	53	2	-	N	-	-
U-130	2	B	66	61	N	57	4	-	N	-	-
U-131	2	B	66	57	N	55	2	-	N	-	-
U-132	2	B	66	59	N	57	2	-	N	-	-
U-133	2	B	66	61	N	57	4	-	N	-	-
U-134	2	B	66	62	N	57	5	-	Y	N	N
U-135	1	B	66	62	N	57	5	-	Y	N	N
U-136	2	B	66	65	N	59	6	-	Y	N	N
U-137	1	B	66	63	N	58	5	-	Y	N	N
U-138	1	B	66	66	Y	59	7	Y	Y	Y	N
U-139	1	B	66	69	Y	60	9	Y	Y	Y	N
U-141	1	D	51	50	N	42	8	-	Y	Y	N

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Appendix C - Barrier Analysis Results**CNE U - NOISE WALL NB U-4****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	2
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	2
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	14
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	5
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	36%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	No

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results

CNE Y - NOISE WALL NB Y-1

DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category	NAC ⁽¹⁾	No Barrier Condition (2051) Noise Level ⁽¹⁾	No Barrier Condition (2051) Noise Impact (Y/N)	Barrier Analysis (2051) Noise Level ⁽¹⁾	Barrier Analysis (2051) Barrier Insertion Loss	Barrier Analysis (2051) Impacted Benefited Receptor (Y/N)	Barrier Analysis (2051) Benefited Receptor (Y/N)	Barrier Analysis (2051) ≥ 7dB(A) Reduction (Y/N)	Barrier Analysis (2051) ≥ 10 dB(A) Reduction (Y/N)
Y-01	1	C	66	64	N	63	1	-	N	-	-
Y-02	2	B	66	64	N	63	1	-	N	-	-
Y-03	2	B	66	61	N	60	1	-	N	-	-
Y-04	2	B	66	56	N	56	0	-	N	-	-
Y-05	2	B	66	65	N	63	2	-	N	-	-
Y-06	2	B	66	64	N	61	3	-	N	-	-
Y-07	2	B	66	63	N	61	2	-	N	-	-
Y-08	2	B	66	66	Y	59	7	Y	Y	Y	N
Y-09	2	B	66	66	Y	60	6	Y	Y	N	N
Y-10	2	B	66	68	Y	60	8	Y	Y	Y	N
Y-11	2	B	66	63	N	57	6	-	Y	N	N
Y-12	2	B	66	63	N	57	6	-	Y	N	N
Y-13	2	B	66	69	Y	60	9	Y	Y	Y	N
Y-14	2	B	66	68	Y	60	8	Y	Y	Y	N
Y-15	1	C	66	73	Y	63	10	Y	Y	Y	Y
Y-16	2	B	66	58	N	56	2	-	N	-	-
Y-17	2	B	66	60	N	56	4	-	N	-	-
Y-18	2	B	66	59	N	56	3	-	N	-	-
Y-19	2	B	66	60	N	57	3	-	N	-	-
Y-20	2	B	66	56	N	56	0	-	N	-	-
Y-21	2	B	66	57	N	55	2	-	N	-	-
Y-22	2	B	66	62	N	59	3	-	N	-	-
Y-23	2	B	66	55	N	55	0	-	N	-	-
Y-24	2	B	66	59	N	54	5	-	Y	N	N
Y-25	2	B	66	56	N	54	2	-	N	-	-
Y-26	2	B	66	55	N	53	2	-	N	-	-
Y-27	2	B	66	54	N	51	3	-	N	-	-
Y-28	2	B	66	53	N	53	0	-	N	-	-
Y-29	2	B	66	57	N	56	1	-	N	-	-
Y-30	2	B	66	62	N	62	0	-	N	-	-

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)

- : Not Applicable

Michigan Department of Transportation
DLZ Michigan, Inc.

Appendix C - Barrier Analysis Results**CNE Y - NOISE WALL NB Y-1****DESIGN YEAR BUILD CONDITION (2051) BARRIER ANALYSIS RESULTS**Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Feasibility Criteria Evaluation Criteria/Reasonableness Design Goal Attenuation Requirement Evaluation	Dwelling Units
Feasibility Criteria - Noise Impacted Dwelling Units (With Existing Barrier)	11
No. of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	11
% of Impacted Dwelling Units (With Existing Barrier) that Meet Feasibility Criteria	100%
Feasibility Criteria Met	Yes
Reasonableness Criteria - Benefited Dwelling Units	17
Reasonableness Criteria - No. of Benefited Dwelling Units With 7 dB(A) Noise Reduction	9
Reasonableness Criteria - % of Benefited Dwelling Units With 7 dB(A) Noise Reduction	53%
Reasonableness Criteria - No. of Benefited Dwelling Units With 10 dB(A) Noise Reduction	1
Reasonableness Criteria - Design Goal Attenuation Requirement Met	Yes

Notes:

⁽¹⁾ Sound Levels reported in dB(A) Leg (h)Michigan Department of Transportation
DLZ Michigan, Inc.

APPENDIX D
TRAFFIC VOLUMES

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
Wayne Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Wayne Rd - North of WB I-94 On-Ramp	45	735	684	37	15	0	7	869	834	26	9	0	9
SB Wayne Rd - Between WB I-94 On-Ramp & EB I-94 On-Ramp	45	573	533	29	11	0	6	714	685	21	7	0	7
SB Wayne Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	329	306	16	7	0	3	464	445	14	5	0	5
SB Wayne Rd - South of EB I-94 Off-Ramp	45	348	324	17	7	0	3	456	438	14	5	0	5
NB Wayne Rd - South of EB I-94 On-Ramp	45	405	377	20	8	0	4	480	461	14	5	0	0
NB Wayne Rd - Between EB I-94 On-Ramp & WB I-94 On-Ramp	45	411	382	21	8	0	4	583	560	17	6	0	0
NB Wayne Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	298	277	15	6	0	3	431	414	13	4	0	0
NB Wayne Rd - North of WB I-94 Off-Ramp	45	561	522	28	11	0	6	698	670	21	7	0	0
EB I-94 Mainline - West of Wayne Rd Off-Ramp	70	3,976	3,618	278	119	0	0	5,052	4,698	253	101	0	0
EB I-94 Mainline - Between Wayne Rd Off-Ramp & SB Wayne Rd On-Ramp	70	3,789	3,448	265	114	0	0	4,782	4,447	239	96	0	0
EB I-94 Mainline - Between SB Wayne Rd On-Ramp & NB Wayne Rd On-Ramp	70	4,033	3,670	282	121	0	0	5,032	4,680	252	101	0	0
EB I-94 Mainline - East of NB Wayne Rd On-Ramp	70	4,099	3,730	287	123	0	0	5,088	4,732	254	102	0	0
EB I-94 Ramps - Off-Ramp to Wayne Rd	45	187	183	4	0	0	0	270	265	5	0	0	0
EB I-94 Ramps - SB Wayne Rd On-Ramp	45	244	239	5	0	0	0	250	245	5	0	0	0
EB I-94 Ramps - NB Wayne Rd On-Ramp	45	66	65	1	0	0	0	56	55	1	0	0	0
WB I-94 Mainline - East of Wayne Rd Off-Ramp	70	3,897	3,390	390	117	0	0	5,014	4,663	251	100	0	0
WB I-94 Mainline - Between Wayne Rd Off-Ramp & NB Wayne Rd On-Ramp	70	3,667	3,190	367	110	0	0	4,707	4,378	235	94	0	0
WB I-94 Mainline - Between NB Wayne Rd On-Ramp & SB Wayne Rd On-Ramp	70	3,780	3,289	378	113	0	0	4,859	4,519	243	97	0	0
WB I-94 Mainline - West of SB Wayne Rd On-Ramp	70	3,926	3,416	393	118	0	0	4,979	4,630	249	100	0	0
WB I-94 Ramps - Off-Ramp to Wayne Rd	45	230	225	5	0	0	0	307	301	6	0	0	0
WB I-94 Ramps - NB Wayne Rd On-Ramp	45	113	111	2	0	0	0	152	149	3	0	0	0
WB I-94 Ramps - SB Wayne Rd On-Ramp	45	145	142	3	0	0	0	120	118	2	0	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
Wayne Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Wayne Rd - North of WB I-94 On-Ramp	45	571	531	29	11	0	6	681	654	20	7	0	7
SB Wayne Rd - Between WB I-94 On-Ramp & EB I-94 On-Ramp	45	451	419	23	9	0	5	619	594	19	6	0	6
SB Wayne Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	183	170	9	4	0	2	345	331	10	3	0	3
SB Wayne Rd - South of EB I-94 Off-Ramp	45	289	269	14	6	0	3	406	390	12	4	0	4
NB Wayne Rd - South of EB I-94 On-Ramp	45	301	280	15	6	0	3	469	451	14	5	0	0
NB Wayne Rd - Between EB I-94 On-Ramp & WB I-94 On-Ramp	45	345	321	17	7	0	3	577	554	17	6	0	0
NB Wayne Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	222	206	11	4	0	2	411	395	12	4	0	0
NB Wayne Rd - North of WB I-94 Off-Ramp	45	430	400	21	9	0	4	699	671	21	7	0	0
EB I-94 Mainline - West of Wayne Rd Off-Ramp	70	4,390	3,995	307	132	0	0	5,144	4,784	257	103	0	0
EB I-94 Mainline - Between Wayne Rd Off-Ramp & SB Wayne Rd On-Ramp	70	4,186	3,809	293	126	0	0	4,869	4,528	243	97	0	0
EB I-94 Mainline - Between SB Wayne Rd On-Ramp & NB Wayne Rd On-Ramp	70	4,453	4,053	312	134	0	0	5,123	4,765	256	102	0	0
EB I-94 Mainline - East of NB Wayne Rd On-Ramp	70	4,525	4,117	317	136	0	0	5,180	4,818	259	104	0	0
EB I-94 Ramps - Off-Ramp to Wayne Rd	45	205	201	4	0	0	0	295	289	6	0	0	0
EB I-94 Ramps - SB Wayne Rd On-Ramp	45	268	262	5	0	0	0	274	268	5	0	0	0
EB I-94 Ramps - NB Wayne Rd On-Ramp	45	72	71	1	0	0	0	61	60	1	0	0	0
WB I-94 Mainline - East of Wayne Rd Off-Ramp	70	4,303	3,743	430	129	0	0	5,526	5,140	276	111	0	0
WB I-94 Mainline - Between Wayne Rd Off-Ramp & NB Wayne Rd On-Ramp	70	4,051	3,525	405	122	0	0	5,190	4,827	260	104	0	0
WB I-94 Mainline - Between NB Wayne Rd On-Ramp & SB Wayne Rd On-Ramp	70	4,174	3,632	417	125	0	0	5,356	4,981	268	107	0	0
WB I-94 Mainline - West of SB Wayne Rd On-Ramp	70	4,334	3,771	433	130	0	0	5,489	5,105	274	110	0	0
WB I-94 Ramps - Off-Ramp to Wayne Rd	45	251	246	5	0	0	0	336	329	7	0	0	0
WB I-94 Ramps - NB Wayne Rd On-Ramp	45	123	121	2	0	0	0	166	163	3	0	0	0
WB I-94 Ramps - SB Wayne Rd On-Ramp	45	160	157	3	0	0	0	131	129	3	0	0	0

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
Vining Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Vining Rd - North of WB I-94 On-Ramp	50	231	211	13	5	1	1	300	285	9	3	0	3
SB Vining Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	179	164	10	4	1	1	222	211	7	2	0	2
SB Vining Rd - Between WB I-94 Off-Ramp & EB I-94 On-Ramp	45	400	366	23	9	1	1	454	431	14	5	0	5
SB Vining Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	323	295	19	7	1	1	369	351	11	4	0	4
SB Vining Rd - SB of EB I-94 Off-Ramp	45	455	416	26	10	1	1	490	466	15	5	0	5
NB Vining Rd - South of EB I-94 Off-Ramp	45	330	314	10	7	0	0	393	362	20	8	0	4
NB Vining Rd - Between EB I-94 Off-Ramp & EB I-94 On-Ramp	45	562	534	17	11	0	0	662	609	33	13	0	7
NB Vining Rd - Between EB I-94 On-Ramp & WB I-94 Off-Ramp	45	248	236	7	5	0	0	259	238	13	5	0	3
NB Vining Rd - North of WB I-94 Off-Ramp	45	374	355	11	7	0	0	345	317	17	7	0	3
EB I-94 Mainline - West of Vining Rd Off-Ramp	70	4,099	3,730	287	123	0	0	5,088	4,732	254	102	0	0
EB I-94 Mainline - Between Vining Rd Off-Ramp & SB Vining Rd On-Ramp	70	3,973	3,615	278	119	0	0	4,977	4,629	249	100	0	0
EB I-94 Mainline - Between SB Vining Rd On-Ramp & NB Vining Rd On-Ramp	70	4,040	3,676	283	121	0	0	5,083	4,727	254	102	0	0
EB I-94 Mainline - East of NB Vining Rd On-Ramp	70	4,124	3,753	289	124	0	0	5,252	4,884	263	105	0	0
EB I-94 Ramps - Vining Rd Off-Ramp	40	126	123	3	0	0	0	111	109	2	0	0	0
EB I-94 Ramps - SB Vining Rd On-Ramp	40	67	66	1	0	0	0	106	104	2	0	0	0
EB I-94 Ramps - NB Vining Rd On-Ramp	40	83	81	2	0	0	0	169	166	3	0	0	0
WB I-94 Mainline - East of Vining Rd Off-Ramp	70	4,102	3,569	410	123	0	0	5,157	4,796	258	103	0	0
WB I-94 Mainline - Between Vining Rd Off-Ramp & SB Vining Rd On-Ramp	70	3,809	3,314	381	114	0	0	4,915	4,571	246	98	0	0
WB I-94 Mainline - West of SB Vining Rd On-Ramp	70	3,897	3,390	390	117	0	0	5,014	4,663	251	100	0	0
WB I-94 Ramps - Vining Rd Off-Ramp	40	293	287	6	0	0	0	242	237	5	0	0	0
WB I-94 Ramps - SB Vining Rd On-Ramp	40	87	85	2	0	0	0	98	96	2	0	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
Vining Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Vining Rd - North of WB I-94 On-Ramp	50	199	181	12	4	1	1	275	261	8	3	0	3
SB Vining Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	103	94	6	2	0	0	167	159	5	2	0	2
SB Vining Rd - Between WB I-94 Off-Ramp & EB I-94 On-Ramp	45	327	299	19	7	1	1	357	339	11	4	0	4
SB Vining Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	252	231	15	6	1	1	241	229	7	2	0	2
SB Vining Rd - SB of EB I-94 Off-Ramp	45	370	338	21	8	1	1	282	268	8	3	0	3
NB Vining Rd - South of EB I-94 Off-Ramp	45	269	255	8	5	0	0	330	303	16	7	0	3
NB Vining Rd - Between EB I-94 Off-Ramp & EB I-94 On-Ramp	45	313	297	9	6	0	0	419	386	21	8	0	4
NB Vining Rd - Between EB I-94 On-Ramp & WB I-94 Off-Ramp	45	222	211	7	4	0	0	234	215	12	5	0	2
NB Vining Rd - North of WB I-94 Off-Ramp	45	320	304	10	6	0	0	330	303	16	7	0	3
EB I-94 Mainline - West of Vining Rd Off-Ramp	70	4,525	4,117	317	136	0	0	5,609	5,216	280	112	0	0
EB I-94 Mainline - Between Vining Rd Off-Ramp & SB Vining Rd On-Ramp	70	4,386	3,991	307	132	0	0	5,488	5,104	274	110	0	0
EB I-94 Mainline - Between SB Vining Rd On-Ramp & NB Vining Rd On-Ramp	70	4,460	4,059	312	134	0	0	5,604	5,212	280	112	0	0
EB I-94 Mainline - East of NB Vining Rd On-Ramp	70	4,552	4,142	319	137	0	0	5,788	5,383	289	116	0	0
EB I-94 Ramps - Vining Rd Off-Ramp	40	138	136	3	0	0	0	121	119	2	0	0	0
EB I-94 Ramps - SB Vining Rd On-Ramp	40	74	73	1	0	0	0	116	114	2	0	0	0
EB I-94 Ramps - NB Vining Rd On-Ramp	40	91	89	2	0	0	0	185	182	4	0	0	0
WB I-94 Mainline - East of Vining Rd Off-Ramp	70	4,529	3,940	453	136	0	0	5,684	5,286	284	114	0	0
WB I-94 Mainline - Between Vining Rd Off-Ramp & SB Vining Rd On-Ramp	70	4,208	3,661	421	126	0	0	5,420	5,040	271	108	0	0
WB I-94 Mainline - West of SB Vining Rd On-Ramp	70	4,303	3,743	430	129	0	0	5,526	5,140	276	111	0	0
WB I-94 Ramps - Vining Rd Off-Ramp	40	321	314	6	0	0	0	265	259	5	0	0	0
WB I-94 Ramps - SB Vining Rd On-Ramp	40	96	94	2	0	0	0	108	106	2	0	0	0

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
Merriman Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Merriman Rd - North of WB I-94 On-Ramp	45	1,022	971	0	51	0	0	1,471	1,412	0	59	0	0
SB Merriman Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	730	694	0	37	0	0	1,195	1,147	0	48	0	0
SB Merriman Rd - Between WB I-94 Off-Ramp & EB I-94 On-Ramp	45	1,238	1,176	0	62	0	0	1,701	1,633	0	68	0	0
SB Merriman Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	921	875	0	46	0	0	1,384	1,329	0	55	0	0
SB Merriman Rd - SB of EB I-94 Off-Ramp	40	1,169	1,111	0	58	0	0	1,719	1,650	0	69	0	0
NB Merriman Rd - South of EB I-94 On-Ramp	40	1,219	1,151	3	64	0	0	2,215	2,126	0	89	0	0
NB Merriman Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	841	794	2	44	0	0	1,512	1,452	0	60	0	0
NB Merriman Rd - Between EB I-94 Off-Ramp & WB I-94 On-Ramp	45	1,119	1,057	3	59	0	0	1,799	1,727	0	72	0	0
NB Merriman Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	996	941	3	52	0	0	1,435	1,378	0	57	0	0
NB Merriman Rd - North of WB I-94 Off-Ramp	45	1,404	1,326	4	74	0	0	1,908	1,832	0	76	0	0
EB I-94 Mainline - West of SB Merriman Rd Off-Ramp	70	4,124	3,753	289	124	0	0	5,252	4,884	263	105	0	0
EB I-94 Mainline - Between SB Merriman Rd Off-Ramp & SB Merriman Rd On-Ramp	70	2,934	2,670	205	88	0	0	3,813	3,546	191	76	0	0
EB I-94 Mainline - Between SB Merriman Rd On-Ramp & NB Merriman Off-Ramp	70	2,934	2,670	205	88	0	0	3,813	3,546	191	76	0	0
EB I-94 Mainline - Between NB Merriman Off-Ramp & NB Merriman On-Ramp	70	2,934	2,670	205	88	0	0	3,813	3,546	191	76	0	0
EB I-94 Mainline - East of NB Merriman Rd On-Ramp	70	2,934	2,670	205	88	0	0	3,813	3,546	191	76	0	0
EB I-94 Collector Distributor Lane - C-D Lane West of SB Merriman Rd Off-Ramp	40	1,190	1,166	24	0	0	0	1,439	1,410	29	0	0	0
EB I-94 C-D Lane - C-D Lane Between SB Merriman Off-Ramp & SB Merriman On-Ramp	40	942	923	19	0	0	0	1,104	1,082	22	0	0	0
EB I-94 C-D Lane - C-D Lane Between SB Merriman On-Ramp & NB Merriman Off-Ramp	40	1,259	1,234	25	0	0	0	1,421	1,393	28	0	0	0
EB I-94 C-D Lane - C-D Lane Between NB Merriman Off-Ramp & NB Merriman On-Ramp	40	981	961	20	0	0	0	1,134	1,111	23	0	0	0
EB I-94 Collector Distributor Lane - C-D Lane East of NB Merriman On-Ramp	40	1,359	1,332	27	0	0	0	1,837	1,800	37	0	0	0
EB I-94 Ramps - SB Merriman Rd Off-Ramp	40	248	243	5	0	0	0	335	328	7	0	0	0
EB I-94 Ramps - SB Merriman Rd On-Ramp	40	317	311	6	0	0	0	317	311	6	0	0	0
EB I-94 Ramps - NB Merriman Rd Off-Ramp	40	278	272	6	0	0	0	287	281	6	0	0	0
EB I-94 Ramps - NB Merriman Rd On-Ramp	40	378	370	8	0	0	0	703	689	14	0	0	0
WB I-94 Mainline - East of Merriman Rd Off-Ramp	70	2,993	2,604	299	90	0	0	3,681	3,423	184	74	0	0
WB I-94 Mainline - Between Merriman Rd Off-Ramp & NB Merriman On-Ramp	70	2,993	2,604	299	90	0	0	3,681	3,423	184	74	0	0
WB I-94 Mainline - Between NB Merriman Rd On-Ramp & SB Merriman Rd On-Ramp	70	2,993	2,604	299	90	0	0	3,681	3,423	184	74	0	0
WB I-94 Mainline - West of SB Merriman Rd On-Ramp	70	4,102	3,569	410	123	0	0	5,157	4,796	258	103	0	0
WB I-94 Collector-Distributor Lane - C-D Lane East of Merriman Off-Ramp Split	40	1,610	1,578	32	0	0	0	1,815	1,779	36	0	0	0
WB I-94 C-D Lane - C-D Lane Between Off-Ramp Split & NB Merriman On-Ramp	40	694	680	14	0	0	0	836	819	17	0	0	0
WB I-94 C-D Lane - CD Lane Between NB Merriman On-Ramp & SB Merriman On-Ramp	40	817	801	16	0	0	0	1,200	1,176	24	0	0	0
WB I-94 Collector-Distributor Lane - C-D Lane West of SB Merriman On-Ramp	40	1,109	1,087	22	0	0	0	1,476	1,446	30	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - Merriman Off-Ramp Split	40	916	898	18	0	0	0	979	959	20	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - Merriman Off-Ramp Split- NB Ramp	40	408	400	8	0	0	0	473	464	9	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - Merriman Off-Ramp Split- SB Ramp	40	508	498	10	0	0	0	506	496	10	0	0	0
NB Merriman On-Ramp	40	123	121	2	0	0	0	364	357	7	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - SB Merriman On-Ramp	40	292	286	6	0	0	0	276	270	6	0	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
Merriman Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Merriman Rd - North of WB I-94 On-Ramp	45	1,138	1,081	0	57	0	0	1,638	1,573	0	66	0	0
SB Merriman Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	813	772	0	41	0	0	1,331	1,278	0	53	0	0
SB Merriman Rd - Between WB I-94 Off-Ramp & EB I-94 On-Ramp	45	1,379	1,310	0	69	0	0	1,895	1,819	0	76	0	0
SB Merriman Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	1,026	975	0	51	0	0	1,542	1,480	0	62	0	0
SB Merriman Rd - SB of EB I-94 Off-Ramp	40	1,302	1,237	0	65	0	0	1,915	1,838	0	77	0	0
NB Merriman Rd - South of EB I-94 On-Ramp	40	1,358	1,283	4	72	0	0	2,467	2,369	0	99	0	0
NB Merriman Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	45	937	885	3	49	0	0	1,684	1,617	0	67	0	0
NB Merriman Rd - Between EB I-94 Off-Ramp & WB I-94 On-Ramp	45	1,246	1,177	3	66	0	0	2,004	1,924	0	80	0	0
NB Merriman Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	1,109	1,048	3	58	0	0	1,598	1,534	0	64	0	0
NB Merriman Rd - North of WB I-94 Off-Ramp	45	1,564	1,477	4	82	0	0	2,125	2,040	0	85	0	0
EB I-94 Mainline - West of SB Merriman Rd Off-Ramp	70	4,552	4,142	319	137	0	0	5,788	5,383	289	116	0	0
EB I-94 Mainline - Between SB Merriman Rd Off-Ramp & SB Merriman Rd On-Ramp	70	3,247	2,955	227	97	0	0	4,210	3,915	210	84	0	0
EB I-94 Mainline - Between SB Merriman Rd On-Ramp & NB Merriman Off-Ramp	70	3,247	2,955	227	97	0	0	4,210	3,915	210	84	0	0
EB I-94 Mainline - Between NB Merriman Off-Ramp & NB Merriman On-Ramp	70	3,247	2,955	227	97	0	0	4,210	3,915	210	84	0	0
EB I-94 Mainline - East of NB Merriman Rd On-Ramp	70	3,247	2,955	227	97	0	0	4,210	3,915	210	84	0	0
EB I-94 Collector Distributor Lane - C-D Lane West of SB Merriman Rd Off-Ramp	40	1,305	1,279	26	0	0	0	1,578	1,547	32	0	0	0
EB I-94 C-D Lane - C-D Lane Between SB Merriman Off-Ramp & SB Merriman On-Ramp	40	1,033	1,013	21	0	0	0	1,211	1,186	24	0	0	0
EB I-94 C-D Lane - C-D Lane Between SB Merriman On-Ramp & NB Merriman Off-Ramp	40	1,381	1,353	28	0	0	0	1,558	1,527	31	0	0	0
EB I-94 C-D Lane - C-D Lane Between NB Merriman Off-Ramp & NB Merriman On-Ramp	40	1,076	1,055	22	0	0	0	1,872	1,835	37	0	0	0
EB I-94 Collector Distributor Lane - C-D Lane East of NB Merriman On-Ramp	40	1,491	1,461	30	0	0	0	2,015	1,975	40	0	0	0
EB I-94 Ramps - SB Merriman Rd Off-Ramp	40	272	266	5	0	0	0	368	360	7	0	0	0
EB I-94 Ramps - SB Merriman Rd On-Ramp	40	347	340	7	0	0	0	347	340	7	0	0	0
EB I-94 Ramps - NB Merriman Rd Off-Ramp	40	304	298	6	0	0	0	315	308	6	0	0	0
EB I-94 Ramps - NB Merriman Rd On-Ramp	40	414	406	8	0	0	0	771	755	15	0	0	0
WB I-94 Mainline - East of Merriman Rd Off-Ramp	70	3,311	2,881	331	99	0	0	4,064	3,780	203	81	0	0
WB I-94 Mainline - Between Merriman Rd Off-Ramp & NB Merriman On-Ramp	70	3,311	2,881	331	99	0	0	4,064	3,780	203	81	0	0
WB I-94 Mainline - Between NB Merriman Rd On-Ramp & SB Merriman Rd On-Ramp	70	3,311	2,881	331	99	0	0	4,064	3,780	203	81	0	0
WB I-94 Mainline - West of SB Merriman Rd On-Ramp	70	4,529	3,940	453	136	0	0	5,684	5,286	284	114	0	0
WB I-94 Collector-Distributor Lane - C-D Lane East of Merriman Off-Ramp Split	40	1,766	1,731	35	0	0	0	1,991	1,952	40	0	0	0
WB I-94 C-D Lane - C-D Lane Between Off-Ramp Split & NB Merriman On-Ramp	40	761	745	15	0	0	0	917	899	18	0	0	0
WB I-94 C-D Lane - CD Lane Between NB Merriman On-Ramp & SB Merriman On-Ramp	40	895	877	18	0	0	0	1,316	1,290	26	0	0	0
WB I-94 Collector-Distributor Lane - C-D Lane West of SB Merriman On-Ramp	40	1,217	1,192	24	0	0	0	1,619	1,586	32	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - Merriman Off-Ramp Split	40	1,005	985	20	0	0	0	1,023	1,003	20	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - Merriman Off-Ramp Split- NB Ramp	40	447	438	9	0	0	0	518	508	10	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - Merriman Off-Ramp Split- SB Ramp	40	557	546	11	0	0	0	555	544	11	0	0	0
NB Merriman On-Ramp	40	134	132	3	0	0	0	399	391	8	0	0	0
NB Merriman Road/I-94 Ramps/C-D Lane - SB Merriman On-Ramp	40	320	313	6	0	0	0	302	296	6	0	0	0

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
Middlebelt Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Middlebelt Rd - North of WB I-94 On-Ramp	45	1,018	926	41	41	0	0	955	821	67	57	10	0
SB Middlebelt Rd - Between WB I-94 On-Ramp & EB I-94 Off-Ramp	45	725	660	29	29	0	0	746	642	52	45	7	0
SB Middlebelt Rd - SB of EB I-94 Off-Ramp	45	1,080	864	108	108	0	0	1,367	1,299	41	27	0	0
NB Middlebelt Rd - South of EB I-94 On-Ramp	45	1,166	1,052	59	51	3	0	1,104	938	88	77	0	0
NB Middlebelt Rd - Between EB I-94 On-Ramp & WB I-94 On-Ramp	45	743	557	111	67	7	0	1,050	935	84	32	0	0
NB Middlebelt Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	338	254	51	30	3	0	474	422	38	14	0	0
NB Middlebelt Rd - North of WB I-94 Off-Ramp	45	938	704	141	84	9	0	1,086	967	87	33	0	0
EB I-94 Mainline - West of Middlebelt Rd Off-Ramp	70	2,934	2,670	205	88	0	0	3,813	3,546	191	76	0	0
EB I-94 Mainline - Between Middlebelt Rd Off-Ramp and Middlebelt On-Ramp	70	2,934	2,670	205	88	0	0	3,813	3,546	191	76	0	0
EB I-94 Mainline - East of Middlebelt Rd On-Ramp	70	4,071	3,705	285	122	0	0	5,306	4,935	265	106	0	0
EB I-94 Collector-Distributor Lane - C-D Lane West of SB Middlebelt Rd Off-Ramp	30	1,359	1,332	27	0	0	0	1,837	1,800	37	0	0	0
EB I-94 C-D Lane - C-D Lane Between SB Middlebelt Off-Ramp & NB Middlebelt On-Ramp	30	695	681	14	0	0	0	1,020	1,000	20	0	0	0
EB I-94 Collector-Distributor Lane - C-D Lane East of NB Middlebelt On-Ramp	30	1,137	1,114	23	0	0	0	1,493	1,463	30	0	0	0
EB I-94 Ramps - SB Middlebelt Rd Off-Ramp	25	664	651	13	0	0	0	817	801	16	0	0	0
EB I-94 Ramps - SB Middlebelt Rd On-Ramp	25	442	433	9	0	0	0	473	464	9	0	0	0
WB I-94 Mainline - East of Middlebelt Rd Off-Ramp	70	4,344	3,779	434	130	0	0	5,098	4,741	255	102	0	0
WB I-94 Mainline - Between Middlebelt Rd Off-Ramp & NB Middlebelt Rd On-Ramp	70	2,993	2,604	299	90	0	0	3,681	3,423	184	74	0	0
WB I-94 Mainline - Between NB Middlebelt Rd On-Ramp & SB Middlebelt Rd On-Ramp	70	2,993	2,604	299	90	0	0	3,681	3,423	184	74	0	0
WB I-94 Mainline - West of SB Middlebelt Rd On-Ramp	70	2,993	2,604	299	90	0	0	3,681	3,423	184	74	0	0
WB I-94 Collector-Distributor Lane - C-D Lane East of Middlebelt Rd Off-Ramp	30	1,351	1,324	27	0	0	0	1,417	1,389	28	0	0	0
WB I-94 C-D Lane - C-D Lane Between Middlebelt Off-Ramp & NB Middlebelt On-Ramp	30	916	898	18	0	0	0	979	959	20	0	0	0
WB I-94 C-D Lane - C-D Lane Between NB Middlebelt On-Ramp & SB Middlebelt On-Ramp	30	1,321	1,295	26	0	0	0	1,555	1,524	31	0	0	0
WB I-94 Collector-Distributor Lane - C-D Lane West of SB Middlebelt Rd On-Ramp	30	1,610	1,578	32	0	0	0	1,815	1,779	36	0	0	0
WB I-94 Ramps - Middlebelt Rd Off-Ramp	25	435	426	9	0	0	0	438	429	9	0	0	0
WB I-94 Ramps - NB Middlebelt Rd On-Ramp	25	405	397	8	0	0	0	576	564	12	0	0	0
WB I-94 Ramps - SB Middlebelt Rd On-Ramp	25	289	283	6	0	0	0	260	255	5	0	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
Middlebelt Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Middlebelt Rd - North of WB I-94 On-Ramp	45	933	849	37	37	0	0	847	728	59	51	8	0
SB Middlebelt Rd - Between WB I-94 On-Ramp & EB I-94 Off-Ramp	45	970	883	39	39	0	0	924	795	65	55	9	0
SB Middlebelt Rd - SB of EB I-94 Off-Ramp	45	1,429	1,144	143	143	0	0	1,400	1,330	42	28	0	0
NB Middlebelt Rd - South of EB I-94 On-Ramp	45	1,413	1,275	72	62	4	0	1,372	1,167	110	96	0	0
NB Middlebelt Rd - Between EB I-94 On-Ramp & WB I-94 On-Ramp	45	1,247	935	187	112	12	0	1,252	1,115	100	38	0	0
NB Middlebelt Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	45	803	602	120	72	8	0	621	553	50	19	0	0
NB Middlebelt Rd - North of WB I-94 Off-Ramp	45	909	682	136	82	9	0	809	720	65	24	0	0
EB I-94 Mainline - West of Middlebelt Rd Off-Ramp	70	3,247	2,955	227	97	0	0	4,210	3,915	210	84	0	0
EB I-94 Mainline - Between Middlebelt Rd Off-Ramp and Middlebelt On-Ramp	70	3,247	2,955	227	97	0	0	4,210	3,915	210	84	0	0
EB I-94 Mainline - East of Middlebelt Rd On-Ramp	70	4,494	4,090	315	135	0	0	5,848	5,439	292	117	0	0
EB I-94 Collector-Distributor Lane - C-D Lane West of SB Middlebelt Rd Off-Ramp	30	1,491	1,461	30	0	0	0	2,015	1,975	40	0	0	0
EB I-94 C-D Lane - C-D Lane Between SB Middlebelt Off-Ramp & NB Middlebelt On-Ramp	30	763	747	15	0	0	0	1,119	1,097	22	0	0	0
EB I-94 Collector-Distributor Lane - C-D Lane East of NB Middlebelt On-Ramp	30	1,247	1,222	25	0	0	0	1,638	1,605	33	0	0	0
EB I-94 Ramps - SB Middlebelt Rd Off-Ramp	25	728	713	15	0	0	0	896	878	18	0	0	0
EB I-94 Ramps - SB Middlebelt Rd On-Ramp	25	485	475	10	0	0	0	518	508	10	0	0	0
WB I-94 Mainline - East of Middlebelt Rd Off-Ramp	70	4,793	4,170	479	144	0	0	5,619	5,226	281	112	0	0
WB I-94 Mainline - Between Middlebelt Rd Off-Ramp & NB Middlebelt Rd On-Ramp	70	3,311	2,881	331	99	0	0	4,064	3,780	203	81	0	0
WB I-94 Mainline - Between NB Middlebelt Rd On-Ramp & SB Middlebelt Rd On-Ramp	70	3,311	2,881	331	99	0	0	4,064	3,780	203	81	0	0
WB I-94 Mainline - West of SB Middlebelt Rd On-Ramp	70	3,311	2,881	331	99	0	0	4,064	3,780	203	81	0	0
WB I-94 Collector-Distributor Lane - C-D Lane East of Middlebelt Rd Off-Ramp	30	1,482	1,453	30	0	0	0	1,555	1,524	31	0	0	0
WB I-94 C-D Lane - C-D Lane Between Middlebelt Off-Ramp & NB Middlebelt On-Ramp	30	1,005	985	20	0	0	0	1,074	1,053	21	0	0	0
WB I-94 C-D Lane - C-D Lane Between NB Middlebelt On-Ramp & SB Middlebelt On-Ramp	30	1,449	1,420	29	0	0	0	1,705	1,671	34	0	0	0
WB I-94 Collector-Distributor Lane - C-D Lane West of SB Middlebelt Rd On-Ramp	30	1,766	1,731	35	0	0	0	1,991	1,952	40	0	0	0
WB I-94 Ramps - Middlebelt Rd Off-Ramp	25	476	467	10	0	0	0	481	471	10	0	0	0
WB I-94 Ramps - NB Middlebelt Rd On-Ramp	25	444	435	9	0	0	0	631	619	13	0	0	0
WB I-94 Ramps - SB Middlebelt Rd On-Ramp	25	317	310	6	0	0	0	285	279	6	0	0	0

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
Ecorse Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
EB Ecorse Rd - West of EB I-94 On-Ramp	50	692	581	55	55	0	0	771	671	69	31	0	0
EB Ecorse Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	50	254	213	20	20	0	0	284	247	26	11	0	0
EB Ecorse Rd - East of EB I-94 Off-Ramp	50	437	367	35	35	0	0	708	616	64	28	0	0
EB Ecorse Rd - West of Inkster Road	50	494	438	40	13	2	1	545	488	46	8	2	1
WB Ecorse Rd - East of WB I-94 On-Ramp	50	882	785	53	44	0	0	946	795	104	47	0	0
WB Ecorse Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	50	643	572	39	32	0	0	720	605	79	36	0	0
WB Ecorse Rd - West of WB I-94 Off-Ramp	50	1057	941	63	53	0	0	1153	969	127	58	0	0
WB Ecorse Rd - West of Inkster Road	50	464	377	75	11	0	1	524	443	69	8	1	3
EB I-94 Mainline - West of Ecorse Rd Off-Ramp	70	4,071	3,705	285	122	0	0	5,306	4,935	265	106	0	0
EB I-94 Mainline - Between Ecorse Rd Off-Ramp and Ecorse On-Ramp	70	3,888	3,538	272	117	0	0	4,882	4,540	244	98	0	0
EB I-94 Mainline - East of Ecorse Rd On-Ramp	70	4,326	3,937	303	130	0	0	5,369	4,993	268	107	0	0
EB I-94 Ramps - Ecorse Rd Off-Ramp	40	183	179	4	0	0	0	424	416	8	0	0	0
EB I-94 Ramps - Ecorse Rd On-Ramp	40	438	429	9	0	0	0	487	477	10	0	0	0
WB I-94 Mainline - East of Ecorse Rd Off-Ramp	70	4,519	3,932	452	136	0	0	5,305	4,934	265	106	0	0
WB I-94 Mainline - Between Ecorse Rd Off-Ramp & WB Ecorse Rd On-Ramp	70	4,105	3,571	411	123	0	0	4,872	4,531	244	97	0	0
WB I-94 Mainline - West of WB Ecorse Rd On-Ramp	70	4,344	3,779	434	130	0	0	5,098	4,741	255	102	0	0
WB I-94 Ramps - Ecorse Rd Off-Ramp	40	414	406	8	0	0	0	433	424	9	0	0	0
WB I-94 Ramps - Ecorse Rd On-Ramp	40	239	234	5	0	0	0	226	221	5	0	0	0
NB Inkster Rd - North of Ecorse Rd	45	321	307	5	8	1	0	572	555	0	10	7	0
NB Inkster Rd - South of Ecorse Rd	45	404	388	8	8	0	0	396	384	0	8	4	0
SB Inkster Rd - North of Ecorse Rd	45	331	313	2	16	0	0	543	518	2	11	12	0
SB Inkster Rd - South of Ecorse Rd	45	296	280	2	14	0	0	476	454	2	10	10	0
NB Beech Daly Road	40	596	566	12	12	6	0	790	751	16	16	0	8
SB Beech Daly Road	40	559	529	11	15	2	3	609	581	14	11	0	4

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
Ecorse Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
EB Ecorse Rd - West of EB I-94 On-Ramp	50	1045	877	84	84	0	0	895	779	81	36	0	0
EB Ecorse Rd - Between EB I-94 On-Ramp & EB I-94 Off-Ramp	50	1065	895	85	85	0	0	938	816	84	38	0	0
EB Ecorse Rd - East of EB I-94 Off-Ramp	50	824	692	66	66	0	0	781	679	70	31	0	0
EB Ecorse Rd - West of Inkster Road	50	745	663	60	22	0	0	600	537	50	9	2	1
WB Ecorse Rd - East of WB I-94 On-Ramp	50	748	666	45	37	0	0	470	395	52	24	0	0
WB Ecorse Rd - Between WB I-94 On-Ramp & WB I-94 Off-Ramp	50	719	640	43	36	0	0	432	363	47	22	0	0
WB Ecorse Rd - West of WB I-94 Off-Ramp	50	1129	1005	68	56	0	0	929	780	102	46	0	0
WB Ecorse Rd - West of Inkster Road	50	563	457	91	13	0	1	552	466	73	8	1	3
EB I-94 Mainline - West of Ecorse Rd Off-Ramp	70	4494	4,090	315	135	0	0	5848	5439	292	117	0	0
EB I-94 Mainline - Between Ecorse Rd Off-Ramp and Ecorse On-Ramp	70	4267	3,883	299	128	0	0	5358	4983	268	107	0	0
EB I-94 Mainline - East of Ecorse Rd On-Ramp	70	4805	4,372	336	144	0	0	5955	5538	298	119	0	0
EB I-94 Ramps - Ecorse Rd Off-Ramp	40	227	223	5	0	0	0	490	480	10	0	0	0
EB I-94 Ramps - Ecorse Rd On-Ramp	40	490	480	10	0	0	0	598	586	12	0	0	0
WB I-94 Mainline - East of Ecorse Rd Off-Ramp	70	5251	4,568	525	158	0	0	6130	5701	307	123	0	0
WB I-94 Mainline - Between Ecorse Rd Off-Ramp & WB Ecorse Rd On-Ramp	70	4505	3,920	451	135	0	0	5346	4972	267	107	0	0
WB I-94 Mainline - West of WB Ecorse Rd On-Ramp	70	4793	4,170	479	144	0	0	5619	5226	281	112	0	0
WB I-94 Ramps - Ecorse Rd Off-Ramp	40	745	730	15	0	0	0	784	768	16	0	0	0
WB I-94 Ramps - Ecorse Rd On-Ramp	40	289	283	6	0	0	0	273	267	5	0	0	0
NB Inkster Rd - North of Ecorse Rd	45	667	640	13	13	0	0	798	774	0	16	8	0
NB Inkster Rd - South of Ecorse Rd	45	486	466	10	10	0	0	643	624	0	13	6	0
SB Inkster Rd - North of Ecorse Rd	45	701	664	4	34	0	0	839	800	3	17	18	0
SB Inkster Rd - South of Ecorse Rd	45	760	719	5	36	0	0	771	735	3	15	17	0
NB Beech Daly Road	40	447	425	9	9	4	0	483	458	10	10	0	5
SB Beech Daly Road	40	416	394	8	11	1	2	579	552	13	11	0	3

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
Telegraph Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Telegraph Rd - North WB I-94 On-Ramp	45	1,672	1,605	33	33	0	0	2,286	2,240	23	23	0	0
SB Telegraph Rd - Between WB I-94 On-Ramps	45	1,167	1,120	23	23	0	0	1,901	1,863	19	19	0	0
SB Telegraph Rd - Between EB I-94 Off-Ramps	45	1,915	1,838	38	38	0	0	2,414	2,366	24	24	0	0
SB Telegraph Rd - South of SB Telegraph Rd EB I-94 Off- Ramp	45	2,062	1,980	41	41	0	0	2,696	2,642	27	27	0	0
NB Telegraph Rd - South of NB Telegraph Rd EB I-94 On-Ramp	45	2,047	1,936	41	57	10	2	2,634	2,581	26	26	0	0
NB Telegraph Rd - Between EB I-94 On-Ramps	45	721	682	14	20	4	1	1,931	1,892	19	19	0	0
NB Telegraph Rd - Between WB I-94 Off-Ramps	45	1,090	1,031	22	31	5	1	1,373	1,346	14	14	0	0
NB Telegraph Rd - North of WB I-94 Off-Ramp	45	1,494	1,413	30	42	7	1	1,969	1,930	20	20	0	0
WB I-94 Mainline - East of Telegraph Rd Off-Ramp	70	4,557	3,965	456	137	0	0	5,971	5,553	299	119	0	0
WB I-94 Mainline - Between Telegraph Rd Off-Ramp and Telegraph Rd/WB I-94 On-Ramp	70	3,655	3,180	366	110	0	0	4,598	4,276	230	92	0	0
WB I-94 Mainline - West of Telegraph Rd/WB I-94 On-Ramp	70	4,519	3,932	452	136	0	0	5,305	4,934	265	106	0	0
WB I-94 On-Ramp - SB Telegraph WB I-94 On-Ramp	30	505	495	10	0	0	0	385	377	8	0	0	0
WB I-94 On-Ramp - NB Telegraph WB I-94 On-Ramp	30	359	352	7	0	0	0	322	316	6	0	0	0
WB I-94 On-Ramp - WB I-94 On-Ramp (West of merge ramps)	30	864	847	17	0	0	0	707	693	14	0	0	0
WB I-94 Off-Ramp - Off-Ramp (east of ramp split)	30	902	884	18	0	0	0	1,373	1,346	27	0	0	0
WB I-94 Off-Ramp - Off-Ramp/NB Telegraph Rd	30	404	396	8	0	0	0	596	584	12	0	0	0
WB I-94 Off-Ramp - Off-Ramp/SB Telegraph Rd	30	498	488	10	0	0	0	777	761	16	0	0	0
EB I-94 Mainline - West of Telegraph Rd Off-Ramp	70	4,236	3,855	297	127	0	0	5,369	4,993	268	107	0	0
EB I-94 Mainline - Between Telegraph Rd Off-Ramp and Telegraph Rd/EB I-94 On-Ramp	70	3,828	3,483	268	115	0	0	4,578	4,258	229	92	0	0
EB I-94 Mainline - East of Telegraph Rd/EB I-94 On-Ramp	70	5,846	5,320	409	175	0	0	5,785	5,380	289	116	0	0
EB I-94 On-Ramp - NB Telegraph Rd EB I-94 On-Ramp	30	692	678	14	0	0	0	504	494	10	0	0	0
EB I-94 On-Ramp - SB Telegraph Rd EB I-94 On-Ramp	30	1,326	1,299	27	0	0	0	703	689	14	0	0	0
EB I-94 On-Ramp - EB I-94 On-Ramp (east of merge ramps)	30	2,018	1,978	40	0	0	0	1,207	1,183	24	0	0	0
EB I-94 Off-Ramp - Off-Ramp (west of ramp split)	30	498	488	10	0	0	0	791	775	16	0	0	0
EB I-94 Off-Ramp - Off-Ramp/NB Telegraph Rd	30	351	344	7	0	0	0	509	499	10	0	0	0
EB I-94 Off-Ramp - Off-Ramp/SB Telegraph Rd	30	147	144	3	0	0	0	282	276	6	0	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
Telegraph Road and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB Telegraph Rd - North WB I-94 On-Ramp	45	3,161	3,035	63	63	0	0	3,260	3,195	33	33	0	0
SB Telegraph Rd - Between WB I-94 On-Ramps	45	2,620	2,515	52	52	0	0	2,828	2,772	28	28	0	0
SB Telegraph Rd - Between EB I-94 Off-Ramps	45	2,264	2,174	45	45	0	0	2,922	2,864	29	29	0	0
SB Telegraph Rd - South of SB Telegraph Rd EB I-94 Off- Ramp	45	2,428	2,331	49	49	0	0	3,194	3,130	32	32	0	0
NB Telegraph Rd - South of NB Telegraph Rd EB I-94 On-Ramp	45	3,827	3,621	77	107	19	4	2,788	2,732	28	28	0	0
NB Telegraph Rd - Between EB I-94 On-Ramps	45	2,395	2,265	48	67	12	2	2,055	2,014	21	21	0	0
NB Telegraph Rd - Between WB I-94 Off-Ramps	45	2,398	2,268	48	67	12	2	2,259	2,214	23	23	0	0
NB Telegraph Rd - North of WB I-94 Off-Ramp	45	2,837	2,683	57	79	14	3	2,872	2,815	29	29	0	0
WB I-94 Mainline - East of Telegraph Rd Off-Ramp	70	5,169	4,497	517	155	0	0	6,740	6,268	337	135	0	0
WB I-94 Mainline - Between Telegraph Rd Off-Ramp and Telegraph Rd/WB I-94 On-Ramp	70	4,303	3,743	430	129	0	0	5,354	4,980	268	107	0	0
WB I-94 Mainline - West of Telegraph Rd/WB I-94 On-Ramp	70	5,251	4,568	525	158	0	0	6,130	5,701	307	123	0	0
WB I-94 On-Ramp - SB Telegraph WB I-94 On-Ramp	30	554	543	11	0	0	0	422	413	8	0	0	0
WB I-94 On-Ramp - NB Telegraph WB I-94 On-Ramp	30	393	385	8	0	0	0	353	346	7	0	0	0
WB I-94 On-Ramp - WB I-94 On-Ramp (West of merge ramps)	30	948	929	19	0	0	0	776	760	16	0	0	0
WB I-94 Off-Ramp - Off-Ramp (east of ramp split)	30	866	849	17	0	0	0	1,386	1,358	28	0	0	0
WB I-94 Off-Ramp - Off-Ramp/NB Telegraph Rd	30	443	434	9	0	0	0	654	641	13	0	0	0
WB I-94 Off-Ramp - Off-Ramp/SB Telegraph Rd	30	424	415	8	0	0	0	731	716	15	0	0	0
EB I-94 Mainline - West of Telegraph Rd Off-Ramp	70	4,805	4,372	336	144	0	0	5,955	5,538	298	119	0	0
EB I-94 Mainline - Between Telegraph Rd Off-Ramp and Telegraph Rd/EB I-94 On-Ramp	70	4,258	3,875	298	128	0	0	5,087	4,731	254	102	0	0
EB I-94 Mainline - East of Telegraph Rd/EB I-94 On-Ramp	70	6,472	5,890	453	194	0	0	6,412	5,963	321	128	0	0
EB I-94 On-Ramp - NB Telegraph Rd EB I-94 On-Ramp	30	1,455	1,426	29	0	0	0	771	755	15	0	0	0
EB I-94 On-Ramp - SB Telegraph Rd EB I-94 On-Ramp	30	759	743	15	0	0	0	553	542	11	0	0	0
EB I-94 On-Ramp - EB I-94 On-Ramp (east of merge ramps)	30	2,214	2,170	44	0	0	0	1,325	1,298	26	0	0	0
EB I-94 Off-Ramp - Off-Ramp (west of ramp split)	30	547	536	11	0	0	0	868	851	17	0	0	0
EB I-94 Off-Ramp - Off-Ramp/NB Telegraph Rd	30	385	377	8	0	0	0	558	547	11	0	0	0
EB I-94 Off-Ramp - Off-Ramp/SB Telegraph Rd	30	161	158	3	0	0	0	308	302	6	0	0	0

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
M-39 and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB M-39 - North of Southfield Rd Off-Ramp	55	1,656	1,457	70	129	0	0	3,123	3,009	53	59	2	0
SB M-39 - Between Southfield Rd Off-Ramp & Southfield Rd On-Ramp	55	1,963	1,784	80	99	0	0	3,404	3,318	43	37	5	2
SB M-39 - Between Southfield Rd On-Ramp & I-94 On-Ramp Split	55	2,270	2,111	91	68	0	0	3,685	3,626	33	15	7	4
SB M-39 - Between I-94 On-Ramp Split & Van Born Ramp	55	1,134	1,055	45	34	0	0	1,905	1,875	17	8	4	2
SB M-39 - Between Van Born Ramp & EB I-94 Off-Ramp	40	1,319	1,227	53	40	0	0	2,026	1,994	18	8	4	2
SB M-39 - South of EB I-94 Off-Ramp	40	1,988	1,849	80	60	0	0	2,897	2,851	26	12	6	3
SB M-39 to I-94 On-Ramps - I-94 On-Ramp - north of WB/EB I-94 Ramp Split	40	1,136	1,084	34	18	0	0	1,780	1,739	19	21	0	0
SB M-39 to I-94 On-Ramps - WB I-94 On-Ramp - South of WB/EB I-94 Ramp Split	40	1,003	963	30	10	0	0	1,697	1,663	17	17	0	0
SB M-39 to I-94 On-Ramps - EB I-94 On-Ramp - South of WB/EB I-94 Ramp Split	30	133	121	4	8	0	0	83	76	2	4	0	0
NB M-39 - South of I-94 On-Ramp Split	40	2,763	2,688	36	33	6	0	2,820	2,707	85	28	0	0
NB M-39 - Between I-94 On-Ramp Split & Van Born On-Ramp Cross-Over	55	1,828	1,779	24	22	4	0	1,883	1,808	56	19	0	0
NB M-39 - Between Van Born On-Ramp Cross-Over & I-94 Off-Ramp	55	1,843	1,793	24	22	4	0	1,952	1,874	59	20	0	0
NB M-39 - Between WB I-94 Off-Ramp & Southfield Rd Off-Ramp	55	3,576	3,479	46	43	7	0	3,027	2,906	91	30	0	0
NB M-39 - Between Southfield Rd Off-Ramp & Southfield Rd On-Ramp	55	3,214	3,098	62	49	5	0	2,689	2,592	63	33	0	0
NB M-39 - North of Southfield Rd On-Ramp	55	2,852	2,717	78	55	2	0	2,350	2,278	36	36	0	0
NB M-39 to I-94/Van Born On-Ramp - I-94 On-Ramp - South of WB/EB I-94 Ramp Split	40	935	916	19	0	0	0	937	918	19	0	0	0
NB M-39 to I-94/Van Born On-Ramp - EB I-94 On-Ramp - North of WB/EB I-94 Ramp Split	25	180	176	4	0	0	0	177	173	4	0	0	0
NB M-39 to I-94/Van Born On-Ramp - WB I-94 On-Ramp - North WB/EB I-94 Ramp Split	25	611	532	73	6	0	0	510	459	51	0	0	0
NB M-39 to I-94/Van Born On-Ramp - WB Van Born Ramp - North of WB I-94 On-Ramp	25	129	124	5	0	0	0	181	174	5	2	0	0
Van Born Interchange - EB Van Born Rd - West of Southfield FWY (M-39) Ramps	40	583	560	17	6	0	0	650	631	10	8	0	2
Van Born Interchange - EB Van Born Rd Ramp to SB Southfield FWY (M-39)	40	185	181	4	0	0	0	121	119	2	0	0	0
Van Born Interchange - EB Van Born Rd Ramp to NB Southfield FWY (M-39)	25	502	492	10	0	0	0	391	383	8	0	0	0
Van Born Interchange - S/SWB Van Born Rd - North of Southfield FWY (M-39) Off-Ramp	35	216	208	5	2	0	1	306	289	10	4	1	2
Van Born Interchange - WB Van Born/NB Southfield FWY (M-39) Off-Ramp	40	204	197	4	2	0	1	411	388	14	6	1	2
Van Born Interchange - WB Van Born - west of NB M-39 Ramp/Van Born Rd Merge Lane	40	375	360	11	4	0	0	531	510	16	5	0	0
SB Pelham Rd - North of Van Born Rd	35	440	436	0	4	0	0	653	649	0	2	1	1
SB Pelham Rd - North of WB I-94 On-Ramp	35	578	572	0	6	0	0	853	847	0	3	1	1
SB Pelham Rd - Between WB I-94 On-Ramp & EB I-94 Off-Ramp	35	580	545	17	17	0	0	1,010	983	15	9	0	3
SB Pelham Rd - South of EB I-94 Off-Ramp	35	614	577	18	18	0	0	1,095	1,065	16	10	0	3
NB Pelham - South of EB I-94 On-Ramp	35	1,149	1,097	25	24	0	1	856	839	9	9	0	0
NB Pelham - Between EB I-94 On-Ramp & WB I-94 Off-Ramp	35	977	933	21	20	1	1	825	809	8	8	0	0
NB Pelham - North of WB I-94 Off-Ramp	35	732	725	0	7	0	0	761	756	2	1	0	2
NB Pelham - North of Van Born Rd	35	1,240	1,228	0	12	0	0	523	520	1	1	0	2
Pelham Rd & I-94 On-Ramps - EB I-94 On-Ramp	40	291	285	6	0	0	0	239	234	5	0	0	0
Pelham Rd & I-94 On-Ramps - WB I-94 On-Ramp	40	317	307	6	3	0	0	295	280	9	6	0	0
EB I-94 to M-39/Pelham Off-Ramps - Off-Ramp to NB/SB M-39/Pelham Rd Split	40	2,686	2,540	113	32	0	0	1,926	1,842	74	10	0	0
EB I-94 to M-39/Pelham Off-Ramps - Pelham Rd Off-Ramp - East of NB/SB M-39 Split	40	437	415	17	4	0	0	317	307	6	3	0	0
EB I-94 to M-39/Pelham Off-Ramps - M-39 NB/SB Off-Ramps - East of Pelham Rd Split	40	2,249	2,125	96	28	0	0	1,609	1,534	68	7	0	0

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
M-39 and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

EB I-94 to M-39/Pelham Off-Ramps - SB M-39 Off-Ramp - East of NB/SB M-39 Ramp Split	25	562	506	45	11	0	0	660	614	40	7	0	0
EB I-94 to M-39/Pelham Off-Ramps - NB M-39 Off-Ramp - East of NB/SB M-39 Ramp Split	35	1,687	1,620	51	17	0	0	949	921	28	0	0	0
WB I-94 to M-39/Pelham Off-Ramps - Off-Ramp to NB M-39 & SB M-39/Pelham Rd Split	40	303	297	6	0	0	0	735	720	15	0	0	0
WB I-94 to M-39/Pelham Off-Ramps - NB M-39 Off-Ramp - W of SB M-39/Pelham Split	40	46	45	1	0	0	0	126	123	3	0	0	0
WB I-94 to M-39/Pelham Off-Ramps - SB M-39/Pelham Rd Ramp - West of NB M-39 Split	40	257	215	22	20	0	0	609	533	39	38	0	0
WB I-94 to M-39/Pelham Off-Ramps - Pelham Rd Off-Ramp - West of SB M-39 Split	40	150	140	8	3	0	0	398	370	20	8	0	0
WB I-94 to M-39/Pelham Off-Ramps - SB M-39 Off-Ramp - West of Pelham Rd Split	30	107	75	14	17	0	0	211	162	19	30	0	0
EB I-94 Mainline - West of Southfield FWY (M-39)/Pelham Rd Off-Ramp	70	5,846	5,320	409	175	0	0	5,785	5,380	289	116	0	0
EB I-94 Mainline - Between M-39/Pelham Rd Off-Ramp & Pelham Rd On-Ramp	70	3,160	2,876	221	95	0	0	3,859	3,589	193	77	0	0
EB I-94 Mainline - Between Pelham Rd On-Ramp & NB Southfield FWY (M-39) On-Ramp	70	3,451	3,140	242	104	0	0	4,098	3,811	205	82	0	0
EB I-94 Mainline - East of NB Southfield FWY (M-39) On-Ramp	70	3,764	3,425	263	113	0	0	4,358	4,053	218	87	0	0
WB I-94 Mainline - East of Southfield FWY (M-39) & Van Born Rd Off-Ramp	70	2,949	2,566	295	88	0	0	4,204	3,910	210	84	0	0
WB I-94 Mainline - Between M-39/Van Born Rd Off-Ramp & NB M-39 On-Ramp	70	2,646	2,302	265	79	0	0	3,469	3,226	173	69	0	0
WB I-94 Mainline - Between NB M-39 On-Ramp & SB Southfield FWY (M-39) On-Ramp	70	3,237	2,816	324	97	0	0	3,979	3,700	199	80	0	0
WB I-94 Mainline - Between SB Southfield FWY (M-39) On-Ramp & Pelham Rd On-Ramp	70	4,240	3,689	424	127	0	0	5,676	5,279	284	114	0	0
WB I-94 Mainline - West of Pelham Rd On-Ramp	70	4,557	3,965	456	137	0	0	5,971	5,553	299	119	0	0
Extra Ramps - EB 94 off ramp and VanBorn to SB M-39 On ramp	40	669	656	13	0	0	0	871	854	17	0	0	0
Extra Ramps - On-Ramp from NB M-39 and SB M-39 before merging with EB 94	40	313	307	6	0	0	0	260	255	5	0	0	0
Extra Ramps - NB M-39 between VanBorn Off Ramp and EB/WB ramps onto M-39	40	15	15	0	0	0	0	69	68	1	0	0	0
Extra Ramps - EB & WB 94 to NB M-39	40	1,733	1,698	35	0	0	0	1,075	1,054	22	0	0	0
Outer Dr - Westbound	35	608	597	10	1	0	0	829	818	8	3	0	0
Outer Dr - Eastbound	35	593	587	3	3	0	0	1,037	1,019	13	5	0	0
EB Van Born Rd - West of Pelham Road	35	668	641	7	20	0	0	727	705	11	9	0	2
EB Van Born Rd - East of Pelham Road	35	583	560	6	17	0	0	650	631	10	8	0	2
WB Van Born Rd - East of Pelham Road	35	375	360	5	9	0	1	551	53	11	6	0	0
WB Van Born Rd - West of Pelham Road	35	533	511	6	13	1	2	681	66	14	7	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
M-39 and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
SB M-39 - North of Southfield Rd Off-Ramp	55	1,845	1,623	74	148	0	0	3,479	3,339	70	70	0	0
SB M-39 - Between Southfield Rd Off-Ramp & Southfield Rd On-Ramp	55	2,187	1,990	87	109	0	0	3,792	3,695	48	41	5	2
SB M-39 - Between Southfield Rd On-Ramp & I-94 On-Ramp Split	55	2,288	2,128	92	69	0	0	4,043	3,978	36	16	8	4
SB M-39 - Between I-94 On-Ramp Split & Van Born Ramp	55	1,042	969	42	31	0	0	2,090	2,057	19	8	4	2
SB M-39 - Between Van Born Ramp & EB I-94 Off-Ramp	40	1,244	1,157	50	37	0	0	2,223	2,187	20	9	4	2
SB M-39 - South of EB I-94 Off-Ramp	40	2,182	2,029	87	65	0	0	3,179	3,128	29	13	6	3
SB M-39 to I-94 On-Ramps - I-94 On-Ramp - north of WB/EB I-94 Ramp Split	40	1,246	1,187	37	20	0	1	1,953	1,905	21	23	0	2
SB M-39 to I-94 On-Ramps - WB I-94 On-Ramp - South of WB/EB I-94 Ramp Split	40	1,100	1,056	33	11	0	0	1,861	1,824	19	19	0	0
SB M-39 to I-94 On-Ramps - EB I-94 On-Ramp - South of WB/EB I-94 Ramp Split	30	146	131	4	9	0	1	91	82	3	5	0	2
NB M-39 - South of I-94 On-Ramp Split	40	3,032	2,950	39	36	6	0	3,094	2,975	71	35	9	4
NB M-39 - Between I-94 On-Ramp Split & Van Born On-Ramp Cross-Over	55	2,008	1,954	26	24	4	0	2,068	1,988	47	24	6	3
NB M-39 - Between Van Born On-Ramp Cross-Over & I-94 Off-Ramp	55	2,024	1,969	26	24	4	0	2,143	2,061	49	25	6	3
NB M-39 - Between WB I-94 Off-Ramp & Southfield Rd Off-Ramp	55	3,924	3,818	51	47	8	0	3,321	3,193	76	38	10	4
NB M-39 - Between Southfield Rd Off-Ramp & Southfield Rd On-Ramp	55	3,580	3,437	72	72	0	0	2,995	2,887	72	36	0	0
NB M-39 - North of Southfield Rd On-Ramp	55	3,177	3,018	95	64	0	0	2,618	2,537	40	40	0	0
NB M-39 to I-94/Van Born On-Ramp - I-94 On-Ramp - South of WB/EB I-94 Ramp Split	40	1,024	1,004	20	0	0	0	1,026	1,006	21	0	0	0
NB M-39 to I-94/Van Born On-Ramp - EB I-94 On-Ramp - N of WB/EB I-94 Ramp Split	25	197	193	4	0	0	0	193	190	4	0	0	0
NB M-39 to I-94/Van Born On-Ramp - WB I-94 On-Ramp - North WB/EB I-94 Ramp Split	25	670	576	80	7	0	7	559	503	56	0	0	0
NB M-39 to I-94/Van Born On-Ramp - WB Van Born Ramp - North of WB I-94 On-Ramp	25	142	136	6	0	0	0	199	191	6	2	0	0
Van Born Interchange - EB Van Born Rd - West of Southfield FWY (M-39) Ramps	40	649	623	19	6	0	0	724	702	11	9	0	2
Van Born Interchange - EB Van Born Rd Ramp to SB Southfield FWY (M-39)	40	203	199	4	0	0	0	132	130	3	0	0	0
Van Born Interchange - EB Van Born Rd Ramp to NB Southfield FWY (M-39)	25	559	548	11	0	0	0	436	427	9	0	0	0
Van Born Interchange - S/SWB Van Born Rd - North of Southfield FWY (M-39) Off-Ramp	35	241	232	5	3	0	1	341	322	11	5	1	2
Van Born Interchange - WB Van Born/NB Southfield FWY (M-39) Off-Ramp	40	227	219	5	2	0	1	458	433	15	6	1	2
Van Born Interchange - WB Van Born - west of NB M-39 Ramp/Van Born Rd Merge Lane	40	418	401	13	4	0	0	591	568	18	6	0	0
SB Pelham Rd - North of Van Born Rd	35	472	468	0	5	0	0	723	718	0	2	1	1
SB Pelham Rd - North of WB I-94 On-Ramp	35	492	462	15	15	0	0	998	971	15	9	0	3
SB Pelham Rd - Between WB I-94 On-Ramp & EB I-94 Off-Ramp	35	746	702	22	22	0	0	1,212	1,179	18	11	0	4
SB Pelham Rd - South of EB I-94 Off-Ramp	35	614	577	18	18	0	0	1,095	1,065	16	10	0	3
NB Pelham - South of EB I-94 On-Ramp	35	1,012	966	22	21	0	1	904	886	9	9	0	0
NB Pelham - Between EB I-94 On-Ramp & WB I-94 Off-Ramp	35	909	868	20	19	1	1	792	776	8	8	0	0
NB Pelham - North of WB I-94 Off-Ramp	35	682	675	0	7	0	0	695	691	2	1	0	2
NB Pelham - North of Van Born Rd	35	1,240	1,228	0	12	0	0	523	520	1	1	0	2
Pelham Rd & I-94 On-Ramps - EB I-94 On-Ramp	40	319	312	6	0	0	0	262	256	5	0	0	0
Pelham Rd & I-94 On-Ramps - WB I-94 On-Ramp	40	347	333	7	3	0	3	323	303	10	6	0	3
EB I-94 to M-39/Pelham Off-Ramps - Off-Ramp to NB/SB M-39/Pelham Rd Split	40	2,948	2,786	124	36	0	0	2,114	2,019	82	11	0	0
EB I-94 to M-39/Pelham Off-Ramps - Pelham Rd Off-Ramp - East of NB/SB M-39 Split	40	479	455	19	5	0	0	347	337	7	3	0	0
EB I-94 to M-39/Pelham Off-Ramps - M-39 NB/SB Off-Ramps - East of Pelham Rd Split	40	2,467	2,331	105	31	0	0	1,764	1,683	75	7	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
M-39 and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

EB I-94 to M-39/Pelham Off-Ramps - SB M-39 Off-Ramp - E of NB/SB M-39 Ramp Split	25	616	554	49	12	0	0	724	673	43	7	0	0
EB I-94 to M-39/Pelham Off-Ramps - NB M-39 Off-Ramp - E of NB/SB M-39 Ramp Split	35	1,851	1,777	56	19	0	0	1,041	1,009	31	0	0	0
WB I-94 to M-39/Pelham Off-Ramps - Off-Ramp to NB M-39 & SB M-39/Pelham Rd Split	40	333	326	7	0	0	0	806	790	16	0	0	0
WB I-94 to M-39/Pelham Off-Ramps - NB M-39 Off-Ramp - W of SB M-39/Pelham Split	40	50	49	1	0	0	0	137	135	3	0	0	0
WB I-94 to M-39/Pelham Off-Ramps - SB M-39/Pelham Rd Ramp - W of NB M-39 Split	40	283	220	23	22	0	15	669	553	43	41	0	30
WB I-94 to M-39/Pelham Off-Ramps - Pelham Rd Off-Ramp - West of SB M-39 Split	40	164	152	8	3	0	0	436	405	22	9	0	0
WB I-94 to M-39/Pelham Off-Ramps - SB M-39 Off-Ramp - West of Pelham Rd Split	30	117	68	15	19	0	15	231	148	21	32	0	30
EB I-94 Mainline - West of Southfield FWY (M-39)/Pelham Rd Off-Ramp	70	6,472	5,890	453	194	0	0	6,412	5,963	321	128	0	0
EB I-94 Mainline - Between M-39/Pelham Rd Off-Ramp & Pelham Rd On-Ramp	70	3,525	3,208	247	106	0	0	4,299	3,998	215	86	0	0
EB I-94 Mainline - Between Pelham Rd On-Ramp & NB Southfield FWY (M-39) On-Ramp	70	3,843	3,498	269	115	0	0	4,560	4,241	228	91	0	0
EB I-94 Mainline - East of NB Southfield FWY (M-39) On-Ramp	70	4,493	4,089	315	135	0	0	4,846	4,507	242	97	0	0
WB I-94 Mainline - East of Southfield FWY (M-39) & Van Born Rd Off-Ramp	70	3,383	2,943	338	101	0	0	4,802	4,465	240	96	0	0
WB I-94 Mainline - Between M-39/Van Born Rd Off-Ramp & NB M-39 On-Ramp	70	3,050	2,654	305	92	0	0	3,994	3,715	200	80	0	0
WB I-94 Mainline - Between NB M-39 On-Ramp & SB Southfield FWY (M-39) On-Ramp	70	3,720	3,237	372	112	0	0	4,553	4,234	228	91	0	0
WB I-94 Mainline - Between SB Southfield FWY (M-39) On-Ramp & Pelham Rd On-Ramp	70	4,820	4,193	482	145	0	0	6,414	5,965	321	128	0	0
WB I-94 Mainline - West of Pelham Rd On-Ramp	70	5,169	4,497	517	155	0	0	6,740	6,268	337	135	0	0
Extra Ramps - EB 94 off ramp and VanBorn to SB M-39 On ramp	40	734	719	15	0	0	0	956	937	19	0	0	0
Extra Ramps - On-Ramp from NB M-39 and SB M-39 before merging with EB 94	40	343	336	7	0	0	0	285	279	6	0	0	0
Extra Ramps - NB M-39 between VanBorn Off Ramp and EB/WB ramps onto M-39	40	16	16	0	0	0	0	75	74	2	0	0	0
Extra Ramps - EB & WB 94 to NB M-39	40	1,902	1,864	38	0	0	0	1,180	1,156	24	0	0	0
Outer Dr - Westbound	35	677	664	14	0	0	0	923	914	9	0	0	0
Outer Dr - Eastbound	35	661	654	3	3	0	0	1,155	1,135	14	6	0	0
EB Van Born Rd - West of Pelham Road	35	744	714	7	22	0	0	810	785	12	10	0	2
EB Van Born Rd - East of Pelham Road	35	649	623	6	19	0	0	724	702	11	9	0	2
WB Van Born Rd - East of Pelham Road	35	418	401	5	10	0	1	614	595	12	6	0	0
WB Van Born Rd - West of Pelham Road	35	594	569	7	15	1	2	759	736	15	8	0	0

Appendix D - Traffic Volumes
Existing Year (2019) Peak Hour Traffic Volumes
Oakwood Boulevard and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
EB Oakwood Blvd - West of SB/WB I-94 On Ramp	40	616	598	6	12	0	0	876	858	9	9	0	0
EB Oakwood Blvd - Between SB/WB I-94 On-Ramp & SB/WB I-94 Off-Ramp	40	550	534	6	11	0	0	726	711	7	7	0	0
EB Oakwood Blvd - Between SB/WB I-94 Off-Ramp & NB/EB I-94 On-Ramp	40	653	633	7	13	0	0	900	882	9	9	0	0
EB Oakwood Blvd - Between NB/EB I-94 On-Ramp & S Enterprise Drive	40	436	423	4	9	0	0	598	586	6	6	0	0
EB Oakwood Blvd - East of S Enterprise Drive	30	362	351	4	7	0	0	574	564	1	7	1	0
WB Oakwood Blvd - East of S Enterprise Dr.	30	482	463	5	14	0	0	539	528	5	5	0	0
WB Oakwood Blvd - Between S Enterprise Dr. & N Enterprise Dr.	40	659	633	7	20	0	0	664	650	7	7	0	0
WB Oakwood Blvd - Between N Enterprise Dr. & SB/WB I-94 On/Off-Ramp	40	545	523	5	16	0	0	535	524	5	5	0	0
WB Oakwood Blvd - West of SB/WB I-94 Off-Ramp	40	623	604	6	12	0	0	785	769	8	8	0	0
NB/EB I-94 Ramps - NB/EB I-94 Off Ramp to Enterprise Dr.	40	184	180	4	0	0	0	230	225	5	0	0	0
NB/EB I-94 Ramps - NB/EB I-94 On-Ramp from EB Oakwood Dr	40	148	145	3	0	0	0	194	190	4	0	0	0
NB/EB I-94 Ramps - NB/EB I-94 On-Ramp From Enterprise Dr.	40	204	200	4	0	0	0	286	280	6	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 Off-Ramp - WB Oakwood Dr.	30	331	324	7	0	0	0	351	344	7	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 Off-Ramp - EB Oakwood Dr.	25	103	101	2	0	0	0	174	171	3	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 On-Ramp - WB Oakwood Dr.	40	50	49	1	0	0	0	27	26	1	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 On-Ramp - EB Oakwood Dr.	40	148	145	3	0	0	0	281	275	6	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 On-Ramp Combined	40	198	194	4	0	0	0	308	302	6	0	0	0
NB/EB I-94 Mainline - West/South of Enterprise Dr. Off-Ramp	70	3,764	3,388	263	113	0	0	4,358	3,992	261	105	0	0
NB/EB I-94 Mainline - Between Enterprise Dr. Off-Ramp and Oakwood Blvd. On-Ramp	70	3,580	3,222	251	107	0	0	4,128	3,781	248	99	0	0
NB/EB I-94 Mainline - Between Oakwood Blvd. On-Ramp & Enterprise Dr. On-Ramp	70	3,728	3,355	261	112	0	0	4,322	3,959	259	104	0	0
NB/EB I-94 Mainline - East/North of Enterprise Dr. On-Ramp	70	3,932	3,539	275	118	0	0	4,608	4,221	276	111	0	0
SB/WB I-94 Mainline - North/East of WB Oakwood Blvd. Off-Ramp	70	3,185	2,612	446	127	0	0	4,421	4,112	221	88	0	0
SB/WB I-94 Mainline - Between WB Oakwood Blvd. Off-Ramp & EB Oakwood Off-Ramp	70	2,854	2,340	400	114	0	0	4,070	3,785	204	81	0	0
SB/WB I-94 Mainline - Between EB Oakwood Blvd. Off-Ramp and SB/WB I-94 On-Ramp	70	2,751	2,256	385	110	0	0	3,896	3,623	195	78	0	0
SB/WB I-94 Mainline - South/West of Oakwood Blvd. On-Ramp	70	2,949	2,566	295	88	0	0	4,204	3,910	210	84	0	0
NB Enterprise Dr - S of Oakwood Blvd	35	397	385	12	0	0	0	317	307	10	0	0	0
NB Enterprise Dr - N of Oakwood Blvd	35	331	321	10	0	0	0	380	369	11	0	0	0
SB Enterprise Dr - N of Oakwood Blvd	35	103	100	3	0	0	0	123	119	4	0	0	0
SB Enterprise Dr - S of Oakwood Blvd	35	43	42	1	0	0	0	68	66	2	0	0	0

Appendix D - Traffic Volumes
Design Year (2051) Peak Hour Traffic Volumes
Oakwood Boulevard and I-94 Interchange

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Roadway	Posted Speed mph	AM Total Vehicles	AM Autos	AM Heavy Trucks	AM Medium Trucks	AM Buses	AM Motorcycles	PM Total Vehicles	PM Autos	PM Heavy Trucks	PM Medium Trucks	PM Buses	PM Motorcycles
EB Oakwood Blvd - West of SB/WB I-94 On Ramp	40	686	666	7	14	0	0	976	956	10	10	0	0
EB Oakwood Blvd - Between SB/WB I-94 On-Ramp & SB/WB I-94 Off-Ramp	40	613	594	6	12	0	0	809	792	8	8	0	0
EB Oakwood Blvd - Between SB/WB I-94 Off-Ramp & NB/EB I-94 On-Ramp	40	727	706	7	15	0	0	1,002	982	10	10	0	0
EB Oakwood Blvd - Between NB/EB I-94 On-Ramp & S Enterprise Drive	40	486	471	5	10	0	0	666	652	7	7	0	0
EB Oakwood Blvd - East of S Enterprise Drive	30	403	391	4	8	0	0	639	628	1	8	2	0
WB Oakwood Blvd - East of S Enterprise Dr.	30	537	515	5	16	0	0	600	588	6	6	0	0
WB Oakwood Blvd - Between S Enterprise Dr. & N Enterprise Dr.	40	734	705	7	22	0	0	739	724	7	7	0	0
WB Oakwood Blvd - Between N Enterprise Dr. & SB/WB I-94 On/Off-Ramp	40	607	583	6	18	0	0	596	584	6	6	0	0
WB Oakwood Blvd - West of SB/WB I-94 Off-Ramp	40	694	673	7	14	0	0	874	857	9	9	0	0
NB/EB I-94 Ramps - NB/EB I-94 Off Ramp to Enterprise Dr.	40	205	201	4	0	0	0	256.19	251	5	0	0	0
NB/EB I-94 Ramps - NB/EB I-94 On-Ramp from EB Oakwood Dr	40	165	162	3	0	0	0	216.09	212	4	0	0	0
NB/EB I-94 Ramps - NB/EB I-94 On-Ramp From Enterprise Dr.	40	227	223	5	0	0	0	318.57	312	6	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 Off-Ramp - WB Oakwood Dr.	30	369	361	7	0	0	0	390.97	383	8	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 Off-Ramp - EB Oakwood Dr.	25	115	112	2	0	0	0	193.81	190	4	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 On-Ramp - WB Oakwood Dr.	40	56	55	1	0	0	0	30	29	1	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 On-Ramp - EB Oakwood Dr.	40	165	162	3	0	0	0	313	307	6	0	0	0
SB/WB I-94 Ramps - SB/WB I-94 On-Ramp Combined	40	221	216	4	0	0	0	343.07	336	7	0	0	0
NB/EB I-94 Mainline - West/South of Enterprise Dr. Off-Ramp	70	4,193	3,773	293	126	0	0	4,854	4,446	291	117	0	0
NB/EB I-94 Mainline - Between Enterprise Dr. Off-Ramp and Oakwood Blvd. On-Ramp	70	3,988	3,589	279	120	0	0	4,598	4,212	276	110	0	0
NB/EB I-94 Mainline - Between Oakwood Blvd. On-Ramp & Enterprise Dr. On-Ramp	70	4,152	3,737	291	125	0	0	4,814	4,410	289	116	0	0
NB/EB I-94 Mainline - East/North of Enterprise Dr. On-Ramp	70	4,380	3,942	307	131	0	0	5,133	4,702	308	123	0	0
SB/WB I-94 Mainline - North/East of WB Oakwood Blvd. Off-Ramp	70	3,548	2,909	497	142	0	0	4,924	4,580	246	98	0	0
SB/WB I-94 Mainline - Between WB Oakwood Blvd. Off-Ramp & EB Oakwood Off-Ramp	70	3,179	2,607	445	127	0	0	4,533	4,216	227	91	0	0
SB/WB I-94 Mainline - Between EB Oakwood Blvd. Off-Ramp and SB/WB I-94 On-Ramp	70	3,064	2,513	429	123	0	0	4,340	4,036	217	87	0	0
SB/WB I-94 Mainline - South/West of Oakwood Blvd. On-Ramp	70	3,285	2,858	328	99	0	0	4,683	4,355	234	94	0	0
NB Enterprise Dr - S of Oakwood Blvd	35	442	429	13	0	0	0	353	343	11	0	0	0
NB Enterprise Dr - N of Oakwood Blvd	35	369	358	11	0	0	0	423	411	13	0	0	0
SB Enterprise Dr - N of Oakwood Blvd	35	115	111	3	0	0	0	137	133	4	0	0	0
SB Enterprise Dr - S of Oakwood Blvd	35	48	46	1	0	0	0	76	73	2	0	0	0

APPENDIX E
RECEPTOR INPUTS

Appendix E - Receptor Inputs
CNE A

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
A-01	1	B	Residential	66	13388710.3	267120.5	651.0
A-02	1	B	Residential	66	13388748.1	267213.4	650.9
A-03	1	B	Residential	66	13388781.4	267271.6	649.8

Appendix E - Receptor Inputs
CNE B

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
B-01	1	B	Residential	66	13389353.1	267857.9	649.2
B-02	1	B	Residential	66	13389423.7	267846.0	649.5
B-03	1	B	Residential	66	13389482.3	267853.6	650.0
B-04	1	B	Residential	66	13389611.6	268140.4	650.7
B-05	1	B	Residential	66	13389664.6	267863.3	649.0
B-06	1	B	Residential	66	13389769.8	267865.5	647.6
B-07	1	B	Residential	66	13389708.4	268080.5	648.9
B-08	1	B	Residential	66	13389737.6	268165.9	650.6
B-09	1	B	Residential	66	13389791.2	268200.3	650.3
B-10	1	B	Residential	66	13389817.3	268156.0	650.1
B-11	1	B	Residential	66	13389856.3	268095.6	648.6
B-12	1	B	Residential	66	13389851.2	267864.4	647.4
B-13	1	B	Residential	66	13389988.3	267878.9	647.7
B-14	1	B	Residential	66	13389951.7	268108.1	649.3
B-15	1	B	Residential	66	13390018.3	268124.2	648.6
B-16	1	B	Residential	66	13390063.6	268140.4	649.0
B-17	1	B	Residential	66	13390120.6	267880.9	647.3
B-18	1	B	Residential	66	13390120.4	268130.5	648.5
B-19	1	B	Residential	66	13390169.4	268139.9	648.3
B-20	1	B	Residential	66	13390214.9	268142.4	647.8
B-21	1	B	Residential	66	13390221.7	267893.4	647.7
B-22	1	B	Residential	66	13390340.3	267909.5	647.3
B-23	1	B	Residential	66	13390293.1	268145.0	647.8
B-24	1	B	Residential	66	13390336.8	268149.1	648.2
B-25	1	B	Residential	66	13390383.2	268150.2	647.1
B-26	1	B	Residential	66	13390446.7	268152.8	646.9
B-27	1	B	Residential	66	13390418.8	267890.4	646.9
B-28	1	B	Residential	66	13390566.4	267899.5	647.2
B-29	1	B	Residential	66	13390500.4	268159.6	647.4
B-30	1	B	Residential	66	13390573.3	268160.6	647.0
B-31	1	B	Residential	66	13390621.7	268172.6	646.8
B-32	1	B	Residential	66	13390646.2	267899.1	645.9
B-33	1	B	Residential	66	13390671.2	268179.9	646.5
B-34	1	B	Residential	66	13390724.8	268187.2	646.6
B-35	1	B	Residential	66	13390766.3	267905.0	646.0
B-36	1	B	Residential	66	13390780.0	268201.7	646.8
B-37	1	B	Residential	66	13390824.8	268215.3	646.3
B-38	1	B	Residential	66	13390895.7	268242.4	647.1
B-39	1	B	Residential	66	13390913.3	267902.3	646.0
B-40	1	B	Residential	66	13391001.5	267834.8	646.0
B-41	1	B	Residential	66	13391051.0	267847.2	645.6
B-42	1	B	Residential	66	13391116.9	267895.7	645.7
B-43	1	B	Residential	66	13391078.9	267972.6	645.1
B-44	1	B	Residential	66	13391078.2	268029.9	644.6
B-45	1	B	Residential	66	13390942.5	268232.0	646.5
B-46	1	B	Residential	66	13390999.8	268233.0	646.3
B-47	1	B	Residential	66	13391051.4	268249.1	645.7
B-48	1	B	Residential	66	13391109.8	268238.3	645.1
B-49	1	B	Residential	66	13391115.7	268075.1	644.3
B-50	1	B	Residential	66	13391154.6	268091.7	644.5
B-51	1	B	Residential	66	13391154.0	268257.6	645.4
B-52	1	B	Residential	66	13391210.3	268256.0	644.7
B-53	1	B	Residential	66	13391242.1	268076.8	644.3
B-54	1	B	Residential	66	13391256.4	267855.9	645.3
B-55	1	B	Residential	66	13391294.2	267901.2	644.9

Appendix E - Receptor Inputs
CNE B

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
B-56	1	B	Residential	66	13391342.9	267920.2	644.2
B-57	1	B	Residential	66	13391388.2	267969.7	644.1
B-58	1	B	Residential	66	13391298.0	268076.1	644.0
B-59	1	B	Residential	66	13391344.0	268099.6	643.9
B-60	1	B	Residential	66	13391293.9	268197.9	644.2
B-61	1	B	Residential	66	13391328.1	268261.0	644.7
B-62	1	B	Residential	66	13391449.4	267986.1	644.2
B-63	1	B	Residential	66	13391497.4	267999.2	644.3
B-64	1	B	Residential	66	13391548.3	268023.8	644.6
B-65	1	B	Residential	66	13391586.4	268037.2	644.5
B-66	1	B	Residential	66	13391488.6	268135.0	644.2
B-67	1	B	Residential	66	13391450.2	268219.7	644.9
B-68	1	B	Residential	66	13391450.2	268293.2	645.8
B-69	1	B	Residential	66	13391451.8	268353.1	645.7
B-70	1	B	Residential	66	13391631.5	268409.8	643.4
B-71	1	B	Residential	66	13391629.8	268356.7	643.7
B-72	1	B	Residential	66	13391636.4	268299.4	643.7
B-73	1	B	Residential	66	13391637.4	268187.5	643.9
B-74	1	B	Residential	66	13391658.0	268055.6	644.4
B-75	1	B	Residential	66	13391720.9	268064.3	644.0
B-76	1	B	Residential	66	13391761.7	268091.2	644.3
B-77	1	B	Residential	66	13391808.8	268092.0	643.8
B-78	1	B	Residential	66	13391772.5	268247.8	643.9
B-79	1	B	Residential	66	13391737.8	268326.2	643.6
B-80	1	B	Residential	66	13391739.4	268380.1	643.7
B-81	1	B	Residential	66	13391738.3	268436.3	643.6
B-82	1	B	Residential	66	13391738.2	268487.4	643.8
B-83	1	B	Residential	66	13391938.5	268520.4	643.5
B-84	1	B	Residential	66	13391940.9	268467.0	643.4
B-85	1	B	Residential	66	13391941.4	268412.5	643.3
B-86	1	B	Residential	66	13391944.6	268358.3	643.4
B-87	1	B	Residential	66	13391931.9	268295.7	643.6
B-88	1	B	Residential	66	13391888.0	268130.7	643.9
B-89	1	B	Residential	66	13391934.7	268150.6	644.1
B-90	1	B	Residential	66	13391981.3	268154.7	643.5
B-91	1	B	Residential	66	13392048.1	268188.5	644.4
B-92	1	B	Residential	66	13392116.7	268220.9	644.6
B-93	1	B	Residential	66	13392061.4	268341.9	643.2
B-94	1	B	Residential	66	13392050.3	268397.8	643.3
B-95	1	B	Residential	66	13392048.3	268454.4	643.4
B-96	1	B	Residential	66	13392045.8	268508.9	643.6
B-97	1	B	Residential	66	13392046.9	268561.7	643.7

Appendix E - Receptor Inputs
CNE D

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
D-01	3	E	Delta Hotels by Marriott Detroit Metro Airport - Outdoor Pool	71	13399029.7	270997.7	637.0
D-02	5	E	Wyndham Garden Romulus Detroit Metro Airport - Outdoor Pool	71	13399652.5	270951.9	636.7
D-03	4	E	Clarion Hotel Detroit Metro Airport - Outdoor Pool	71	13399636.9	272209.4	635.4

Appendix E - Receptor Inputs
CNE F

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
F-01	3	E	Howard Johnson by Wyndham Romulus Detroit Metro Airport - Outdoor Pool	71	13400122.9	272484.9	634.0
F-02	4	E	La Quinta Inn & Suites by Wyndham Detroit Metro Airport - Courtyard	71	13400753.0	272481.8	634.3
F-03	1	E	Detroit Metro Airport Romulus - Courtyard	71	13401304.0	272348.7	632.2
F-04	1	E	Detroit Metro Airport Marriott - Courtyard	71	13401942.0	271849.6	632.3
F-05	1	B	Residential	66	13403894.0	272390.3	628.9

Appendix E - Receptor Inputs
CNE H

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
H-01	1	B	Residential	66	13407270.7	273574.8	628.1
H-02	1	B	Residential	66	13407431.3	273572.2	627.7
H-03	1	B	Residential	66	13407626.6	273634.7	627.5
H-04	1	B	Residential	66	13407766.4	273639.0	626.8

Appendix E - Receptor Inputs
CNE I

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
I-01	1	B	Residential	66	13410012.6	273790.3	628.7
I-02	N/A	D	Masco Corporation Research & Dev Center - Office	52	13412189.9	275896.7	626.8
I-03	1	B	Residential	66	13413123.2	276201.8	627.3
I-04	1	B	Residential	66	13413100.3	276409.1	627.8
I-05	1	B	Residential	66	13413304.1	276201.8	628.5
I-06	1	B	Residential	66	13413333.9	276548.5	629.6
I-07	1	B	Residential	66	13413481.0	276543.7	627.1
I-08	1	B	Residential	66	13413609.4	276554.2	626.5
I-09	1	B	Residential	66	13413679.9	276557.1	626.3
I-10	2	B	Residential	66	13413756.9	276497.9	626.1
I-11	2	B	Residential	66	13413746.1	276425.3	625.9
I-12	2	B	Residential	66	13413755.0	276353.4	625.7
I-13	2	B	Residential	66	13413758.8	276284.0	625.8
I-14	2	B	Residential	66	13413827.6	276457.2	624.9
I-15	2	B	Residential	66	13413833.3	276383.9	625.4
I-16	2	B	Residential	66	13413895.1	276311.3	625.3
I-17	2	B	Residential	66	13413911.6	276392.2	625.2
I-18	2	B	Residential	66	13413932.0	276452.7	624.7
I-19	2	B	Residential	66	13414003.9	276461.6	624.7
I-20	2	B	Residential	66	13413985.5	276396.7	624.8
I-21	2	B	Residential	66	13414052.3	276322.2	624.8
I-22	2	B	Residential	66	13414054.2	276404.3	624.9
I-23	2	B	Residential	66	13414070.8	276465.4	624.6
I-24	2	B	Residential	66	13414126.8	276415.8	624.3
I-25	2	B	Residential	66	13414184.1	276486.4	623.9
I-26	2	B	Residential	66	13414205.8	276423.4	624.0
I-27	2	B	Residential	66	13414254.2	276488.4	623.8

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
J-01	1	B	Residential	66	13412954.0	279288.8	623.8
J-02	1	B	Residential	66	13413130.0	279111.2	624.5
J-03	1	B	Residential	66	13413172.0	278890.1	628.2
J-04	1	B	Residential	66	13413421.0	278760.8	627.0
J-05	1	B	Residential	66	13413406.0	278834.7	626.5
J-06	1	B	Residential	66	13413365.0	279041.0	626.7
J-07	1	B	Residential	66	13413329.0	279111.2	627.7
J-08	1	B	Residential	66	13413153.0	279247.9	625.7
J-09	1	B	Residential	66	13413151.0	279314.2	626.4
J-10	1	B	Residential	66	13413047.0	279349.5	624.6
J-11	1	B	Residential	66	13413263.0	279328.3	626.1
J-12	1	B	Residential	66	13413745.0	279357.3	625.5
J-13	1	B	Residential	66	13413957.0	279426.7	625.8
J-14	1	B	Residential	66	13414049.0	279392.9	626.3
J-15	1	B	Residential	66	13414010.0	279611.7	626.9
J-16	1	B	Residential	66	13414010.0	279711.6	626.5
J-17	1	B	Residential	66	13414058.0	279615.8	627.3
J-18	1	B	Residential	66	13414100.0	279620.4	627.3
J-19	1	B	Residential	66	13414158.0	279626.1	627.7
J-20	1	B	Residential	66	13414216.0	279627.3	627.3
J-21	1	B	Residential	66	13414232.0	279770.5	626.6
J-22	1	B	Residential	66	13414334.0	279853.3	626.3
J-23	1	B	Residential	66	13414367.0	279801.9	627.2
J-24	1	B	Residential	66	13414368.0	279643.3	626.6
J-25	1	B	Residential	66	13414442.0	279651.6	625.7
J-26	1	B	Residential	66	13414545.0	279464.6	624.2
J-27	1	B	Residential	66	13414483.0	279663.1	625.0
J-28	1	B	Residential	66	13414567.0	279665.6	625.0
J-29	1	B	Residential	66	13414550.0	279777.0	625.4
J-30	1	B	Residential	66	13414563.0	279821.5	625.9
J-31	1	B	Residential	66	13414568.0	279867.5	626.3
J-32	1	B	Residential	66	13414558.0	279948.7	627.3
J-33	1	B	Residential	66	13414701.0	280008.9	627.8
J-34	1	B	Residential	66	13414681.0	279934.3	627.4
J-35	1	B	Residential	66	13414724.0	279875.0	626.8
J-36	1	B	Residential	66	13414731.0	279798.4	626.5
J-37	1	B	Residential	66	13414688.0	279676.2	624.8
J-38	1	B	Residential	66	13414698.0	279520.7	624.8
J-39	1	B	Residential	66	13414755.0	279696.1	625.3
J-40	1	B	Residential	66	13414793.0	279846.1	626.1
J-41	1	B	Residential	66	13414865.0	279875.4	625.8
J-42	1	B	Residential	66	13414865.0	279910.2	626.3
J-43	1	B	Residential	66	13414867.0	279951.3	625.6
J-44	1	B	Residential	66	13414864.0	279994.8	625.7
J-45	1	B	Residential	66	13414868.0	280031.8	625.8
J-46	1	B	Residential	66	13414863.0	280076.0	625.9
J-47	1	B	Residential	66	13415069.2	279883.4	625.4
J-48	1	B	Residential	66	13415071.0	279924.3	625.7
J-49	1	B	Residential	66	13415067.0	279976.9	625.4
J-50	1	B	Residential	66	13415073.0	280018.5	625.8
J-51	1	B	Residential	66	13415072.0	280078.3	626.1
J-52	1	B	Residential	66	13415208.0	280096.8	626.2
J-53	1	B	Residential	66	13415207.0	280056.8	626.7
J-54	1	B	Residential	66	13415215.0	279955.0	625.5
J-55	1	B	Residential	66	13415212.0	279805.8	627.1

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
J-56	1	B	Residential	66	13415425.0	279902.2	626.0
J-57	1	B	Residential	66	13415409.0	279939.6	625.7
J-58	1	B	Residential	66	13415365.0	279987.3	625.1
J-59	1	B	Residential	66	13415372.0	280026.0	625.3
J-60	1	B	Residential	66	13415340.0	280067.9	624.4
J-61	1	B	Residential	66	13415391.0	280144.8	625.0
J-62	1	B	Residential	66	13415368.0	280187.4	625.0
J-63	1	B	Residential	66	13415363.0	280266.0	624.8
J-64	1	B	Residential	66	13415501.0	280270.1	624.8
J-65	1	B	Residential	66	13415495.0	280182.3	626.1
J-66	1	B	Residential	66	13415476.0	280058.4	625.3
J-67	1	B	Residential	66	13415483.0	279984.7	625.3
J-68	1	B	Residential	66	13415631.0	280229.4	625.2
J-69	1	B	Residential	66	13415626.0	280267.5	625.9
J-70	1	B	Residential	66	13415667.0	280394.4	625.5
J-71	1	B	Residential	66	13415716.0	280211.4	625.5
J-72	1	B	Residential	66	13415803.0	280123.8	624.9
J-73	1	B	Residential	66	13415857.0	280205.6	626.4
J-74	1	B	Residential	66	13415849.0	280287.3	625.9
J-75	1	B	Residential	66	13415849.0	280328.4	626.2
J-76	1	B	Residential	66	13415846.0	280364.8	626.2
J-77	1	B	Residential	66	13415845.0	280405.3	625.8
J-78	1	B	Residential	66	13415847.0	280445.3	625.6
J-79	1	B	Residential	66	13415846.0	280483.4	626.6
J-80	1	B	Residential	66	13415992.0	280494.4	627.1
J-81	1	B	Residential	66	13415996.0	280417.8	626.5
J-82	1	B	Residential	66	13416003.0	280369.5	626.6
J-83	1	B	Residential	66	13415992.0	280291.9	626.5
J-84	1	B	Residential	66	13416101.0	280388.3	626.3
J-85	1	B	Residential	66	13416105.0	280472.7	626.9
J-86	1	B	Residential	66	13416129.0	280498.4	625.8
J-87	1	B	Residential	66	13416118.0	280600.9	624.4
J-88	1	B	Residential	66	13416313.0	280702.4	624.4
J-89	1	B	Residential	66	13416314.0	280663.9	624.6
J-90	1	B	Residential	66	13416350.0	280616.7	624.4
J-91	1	B	Residential	66	13416343.0	280510.6	624.2
J-92	1	B	Residential	66	13416321.0	280470.0	624.4
J-93	1	B	Residential	66	13416321.0	280422.3	624.3
J-94	1	B	Residential	66	13416469.0	280472.9	623.5
J-95	1	B	Residential	66	13416456.0	280624.3	625.0
J-96	1	B	Residential	66	13416446.0	280697.4	625.2
J-97	1	B	Residential	66	13416627.0	280818.2	623.0
J-98	1	B	Residential	66	13416637.0	280750.9	623.2
J-99	1	B	Residential	66	13416628.0	280710.3	623.4
J-100	1	B	Residential	66	13416636.0	280670.4	623.7
J-101	1	B	Residential	66	13416690.0	280635.6	623.7
J-102	1	B	Residential	66	13416808.0	280634.9	623.7
J-103	1	B	Residential	66	13416808.0	280678.0	623.5
J-104	1	B	Residential	66	13416800.0	280727.9	624.3
J-105	1	B	Residential	66	13416814.0	280795.1	623.9
J-106	1	B	Residential	66	13416803.0	280865.6	623.8
J-107	1	B	Residential	66	13416965.0	280888.5	624.5
J-108	1	B	Residential	66	13416962.0	280845.6	623.9
J-109	1	B	Residential	66	13416966.0	280787.9	622.9
J-110	1	B	Residential	66	13416956.0	280720.2	623.1

Appendix E - Receptor Inputs
CNE J

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
J-111	1	B	Residential	66	13417109.0	280723.8	622.5
J-112	1	B	Residential	66	13417117.0	280856.2	621.2
J-113	1	B	Residential	66	13417123.0	280899.9	622.1
J-114	1	B	Residential	66	13417114.0	280942.5	622.1
J-115	1	B	Residential	66	13417276.0	281001.4	619.5
J-116	1	B	Residential	66	13417286.0	280963.8	620.2
J-117	1	B	Residential	66	13417262.0	280904.6	621.4
J-118	1	B	Residential	66	13417253.0	280851.3	621.4
J-119	1	B	Residential	66	13417414.0	280813.5	621.7
J-120	1	B	Residential	66	13417442.0	280871.4	622.1
J-121	1	B	Residential	66	13417441.0	280922.2	621.9
J-122	1	B	Residential	66	13417439.0	280984.6	621.2
J-123	1	B	Residential	66	13417437.0	281020.7	620.0
J-124	1	C	Quest Charter Academy -	66	13417721.0	281096.3	617.9
J-125	1	B	Residential	66	13418241.0	281160.5	619.5
J-126	1	B	Residential	66	13418242.0	281118.6	619.9
J-127	1	B	Residential	66	13418248.0	281083.6	619.7
J-128	1	B	Residential	66	13418247.0	281042.5	619.8
J-129	1	B	Residential	66	13418243.0	281000.4	619.9
J-130	1	B	Residential	66	13418240.0	280964.3	619.4
J-131	1	B	Residential	66	13418406.0	280970.4	620.2
J-132	1	B	Residential	66	13418371.0	281008.2	621.1
J-133	1	B	Residential	66	13418373.0	281051.1	621.0
J-134	1	B	Residential	66	13418382.0	281095.2	621.1
J-135	1	B	Residential	66	13418369.0	281131.9	620.7
J-136	1	B	Residential	66	13418376.0	281180.0	620.7
J-137	1	B	Residential	66	13418377.0	281208.6	621.1
J-138	1	B	Residential	66	13418570.0	281177.7	620.3
J-139	1	B	Residential	66	13418564.0	281143.9	620.7
J-140	1	B	Residential	66	13418573.0	281059.2	620.2
J-141	1	B	Residential	66	13418547.0	280972.5	620.5
J-142	1	B	Residential	66	13418661.0	280962.8	620.8
J-143	1	B	Residential	66	13418741.0	281048.8	620.7
J-144	1	B	Residential	66	13418742.0	281151.4	620.3
J-145	1	B	Residential	66	13418747.0	281188.8	619.8
J-146	1	B	Residential	66	13418740.0	281232.0	619.7
J-147	1	B	Residential	66	13419243.0	281358.3	615.5
J-148	1	B	Residential	66	13419391.0	281382.3	614.7
J-149	1	B	Residential	66	13419388.0	281344.7	614.5
J-150	1	B	Residential	66	13419388.0	281302.8	614.4
J-151	1	B	Residential	66	13419385.0	281224.7	614.2
J-152	1	B	Residential	66	13419390.0	281183.9	614.1
J-153	1	B	Residential	66	13419386.0	281143.0	614.4
J-154	1	B	Residential	66	13419388.0	281072.8	614.4
J-155	1	B	Residential	66	13419388.0	281033.2	614.6
J-156	1	B	Residential	66	13419385.0	280989.7	614.6
J-157	1	B	Residential	66	13419519.0	280990.7	614.2
J-158	1	B	Residential	66	13419501.0	281037.4	614.0
J-159	1	B	Residential	66	13419500.0	281148.6	614.0
J-160	1	B	Residential	66	13419497.0	281189.2	614.2
J-161	1	B	Residential	66	13419496.0	281230.3	614.6
J-162	1	B	Residential	66	13419497.0	281269.6	614.2
J-163	1	B	Residential	66	13419501.0	281308.9	614.1
J-164	1	B	Residential	66	13419501.0	281350.5	614.0

Appendix E - Receptor Inputs
CNE J

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
J-165	1	B	Residential	66	13419500.0	281387.2	614.2
J-166	1	B	Residential	66	13419710.0	281565.8	614.2
J-167	1	B	Residential	66	13419716.0	281536.9	614.1
J-168	1	B	Residential	66	13419708.0	281401.2	614.1
J-169	1	B	Residential	66	13419713.0	281367.4	613.9
J-170	1	B	Residential	66	13419716.0	281285.9	614.4
J-171	1	B	Residential	66	13419715.0	281254.1	614.2
J-172	1	B	Residential	66	13419719.0	281209.2	614.1
J-173	1	B	Residential	66	13419664.0	281130.6	614.6
J-174	1	B	Residential	66	13419668.0	281079.7	613.3
J-175	1	B	Residential	66	13419708.0	281007.5	614.4
J-176	1	B	Residential	66	13419847.0	281204.7	614.5
J-177	1	B	Residential	66	13419850.0	281253.7	614.5
J-178	1	B	Residential	66	13419860.0	281299.2	615.0
J-179	1	B	Residential	66	13419858.0	281331.3	615.5
J-180	1	B	Residential	66	13419859.0	281373.9	615.0
J-181	1	B	Residential	66	13419854.0	281418.1	614.0
J-182	1	B	Residential	66	13419872.0	281496.7	614.3
J-183	1	B	Residential	66	13419848.0	281541.8	614.4
J-184	1	B	Residential	66	13419860.0	281581.8	614.5
J-185	1	B	Residential	66	13419891.0	281633.3	614.4
J-186	N/A	C	Oak Grove Burying Ground -	66	13418966.0	281128.8	627.8
J-187	N/A	C	Oak Grove Burying Ground -	66	13418964.0	281229.9	625.9
J-188	N/A	C	Oak Grove Burying Ground -	66	13418963.0	281310.8	624.8
J-189	1	B	Residential	66	13416436.0	280742.5	625.2

Appendix E - Receptor Inputs
CNE K

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
K-01	1	B	Residential	66	13413142.8	276897.0	626.9
K-02	1	B	Residential	66	13413443.3	276903.1	625.5
K-03	1	B	Residential	66	13413512.4	276910.8	626.5
K-04	1	B	Residential	66	13413581.3	276917.7	626.8
K-05	1	B	Residential	66	13413641.5	276911.1	626.8
K-06	1	B	Residential	66	13413749.4	277048.9	627.1
K-07	1	B	Residential	66	13413744.7	277123.1	626.7
K-08	1	B	Residential	66	13413927.9	277138.6	625.7
K-09	1	B	Residential	66	13413928.8	277187.7	625.6
K-10	1	B	Residential	66	13413926.4	277230.3	625.8
K-11	1	B	Residential	66	13413927.5	277263.9	625.8
K-12	1	B	Residential	66	13413924.9	277311.7	625.8
K-13	1	B	Residential	66	13414127.0	277258.6	625.6
K-14	1	B	Residential	66	13414074.6	277198.9	625.3
K-15	1	B	Residential	66	13414078.4	277147.2	625.0
K-16	1	B	Residential	66	13414077.3	277108.6	624.9
K-17	1	B	Residential	66	13414207.3	277126.1	624.1
K-18	1	B	Residential	66	13414236.4	277094.9	624.0
K-19	1	B	Residential	66	13414295.8	276968.0	623.1
K-20	1	B	Residential	66	13413813.0	277889.5	625.7
K-21	1	B	Residential	66	13413900.0	277999.7	626.7
K-22	1	B	Residential	66	13414159.9	278131.7	626.3
K-23	1	B	Residential	66	13414208.0	278172.4	625.9
K-24	1	B	Residential	66	13414227.9	278205.4	626.1
K-25	1	B	Residential	66	13414544.3	278366.6	623.9
K-26	1	B	Residential	66	13414557.6	278389.6	624.2
K-27	1	B	Residential	66	13414555.6	278436.9	624.4
K-28	1	B	Residential	66	13414547.0	278474.8	624.3
K-29	1	B	Residential	66	13414556.4	278514.3	624.7
K-30	1	B	Residential	66	13414544.2	278555.1	624.7
K-31	1	B	Residential	66	13414547.0	278598.7	625.4
K-32	1	B	Residential	66	13414549.1	278639.4	623.9
K-33	1	B	Residential	66	13414678.9	278834.7	624.9
K-34	1	B	Residential	66	13414687.8	278751.3	625.2
K-35	1	B	Residential	66	13414695.8	278640.3	624.8
K-36	1	B	Residential	66	13414695.3	278573.8	625.0
K-37	1	B	Residential	66	13414694.5	278519.6	625.2
K-38	1	B	Residential	66	13414840.5	278563.6	624.5
K-39	1	B	Residential	66	13414840.6	278669.8	625.3
K-40	1	B	Residential	66	13414854.0	278765.3	626.0
K-41	1	C	Taylor Meadows Golf Club Hole 13 - Tee Box	66	13415297.1	279328.4	628.4
K-42	1	C	Taylor Meadows Golf Club Hole 12 - Hole	66	13415199.0	279187.5	629.8
K-43	1	C	Taylor Meadows Golf Club Hole 16 - Hole	66	13415309.4	278786.0	626.2
K-44	1	C	Taylor Meadows Golf Club Hole 2 - Hole	66	13415715.8	278943.8	628.7
K-45	1	C	Taylor Meadows Golf Club Hole 16 - Tee Box	66	13416473.5	279397.2	630.1
K-46	1	C	Taylor Meadows Golf Club Hole 15 - Hole	66	13416877.9	279480.4	634.4
K-47	1	C	Taylor Meadows Golf Club Hole 13 - Hole	66	13416735.9	279577.1	628.6
K-48	1	C	Taylor Meadows Golf Club Hole 14 - Tee Box	66	13416770.3	279697.0	624.9

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
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Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
K-49	1	E	Michigan Department of Transportation - Taylor Transportation Service Center Office	71	13419765.0	280294.8	620.9
K-50	1	B	Residential	66	13414432.5	278223.9	625.8
K-51	1	B	Residential	66	13414479.8	278199.0	624.1
K-52	1	B	Residential	66	13414431.9	278148.8	624.7
K-53	1	B	Residential	66	13414429.3	278107.0	624.2
K-54	1	B	Residential	66	13414572.8	278132.0	624.8
K-55	1	B	Residential	66	13414550.9	278200.8	624.9
K-56	1	B	Residential	66	13414546.3	278229.1	624.6
K-57	1	B	Residential	66	13414541.6	278279.3	624.0
K-58	1	B	Residential	66	13414553.2	278312.2	624.0
K-59	1	B	Residential	66	13414559.5	278352.7	623.8
K-60	1	B	Residential	66	13414740.1	278452.8	624.5
K-61	1	B	Residential	66	13414742.0	278368.9	624.7
K-62	1	B	Residential	66	13414751.8	278281.3	624.6
K-63	1	B	Residential	66	13414737.8	278242.8	626.2
K-64	1	B	Residential	66	13414740.0	278203.3	624.9
K-65	1	B	Residential	66	13414745.5	278173.6	625.4
K-66	1	B	Residential	66	13414871.0	278151.5	625.8
K-67	1	B	Residential	66	13414857.3	278233.2	626.0
K-68	1	B	Residential	66	13414863.7	278377.4	624.3
K-69	1	B	Residential	66	13414841.7	278433.9	624.2
K-70	1	B	Residential	66	13414847.7	278532.8	624.5
K-71	1	B	Residential	66	13414434.0	278060.9	624.4
K-72	1	B	Residential	66	13414446.2	278018.3	624.8
K-73	1	B	Residential	66	13414445.3	277980.0	625.3
K-74	1	B	Residential	66	13414442.7	277945.2	624.9
K-75	1	B	Residential	66	13414445.3	277893.0	625.3
K-76	1	B	Residential	66	13414212.2	278077.4	625.7
K-77	1	B	Residential	66	13414216.5	278049.6	625.8
K-78	1	B	Residential	66	13414218.2	278001.7	625.9
K-79	1	B	Residential	66	13414220.9	277966.1	625.8
K-80	1	B	Residential	66	13414221.7	277921.7	625.3
K-81	1	B	Residential	66	13414223.5	277880.8	625.4
K-82	1	B	Residential	66	13414117.3	277923.4	626.0
K-83	1	B	Residential	66	13414112.1	277870.4	626.5
K-84	1	B	Residential	66	13414112.1	277826.0	626.3
K-85	1	B	Residential	66	13413899.8	277862.5	626.9
K-86	1	B	Residential	66	13413822.4	277794.7	626.3

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
L-01	1	B	Residential	66	13420183.3	281543.5	615.4
L-02	1	B	Residential	66	13420326.9	281592.2	618.9
L-03	1	B	Residential	66	13420325.6	281504.5	619.9
L-04	1	B	Residential	66	13420320.7	281406.9	620.5
L-05	1	B	Residential	66	13420307.4	281326.1	620.0
L-06	1	B	Residential	66	13420318.1	281230.3	620.4
L-07	1	B	Residential	66	13420486.0	281171.2	621.7
L-08	1	B	Residential	66	13420474.0	281226.8	620.5
L-09	1	B	Residential	66	13420471.4	281308.9	620.5
L-10	1	B	Residential	66	13420475.6	281348.2	620.2
L-11	1	B	Residential	66	13420472.4	281393.4	619.9
L-12	1	B	Residential	66	13420550.0	281461.6	619.2
L-13	1	B	Residential	66	13420547.7	281593.5	619.0
L-14	1	B	Residential	66	13420662.6	281331.2	619.8
L-15	1	B	Residential	66	13420657.4	281251.0	619.6
L-16	1	B	Residential	66	13420653.9	281139.5	619.2
L-17	1	B	Residential	66	13420832.1	281147.6	618.3
L-18	1	B	Residential	66	13420777.5	281225.0	618.6
L-19	1	B	Residential	66	13420814.4	281347.4	618.7
L-20	1	B	Residential	66	13420805.2	281424.8	619.8
L-21	1	B	Residential	66	13420963.4	281393.6	618.1
L-22	1	B	Residential	66	13420970.9	281331.2	619.2
L-23	1	B	Residential	66	13420965.1	281230.8	619.6
L-24	1	B	Residential	66	13420954.7	281167.3	619.4
L-25	1	B	Residential	66	13421113.8	281154.0	620.1
L-26	1	B	Residential	66	13421112.3	281263.7	620.2
L-27	1	B	Residential	66	13421130.0	281354.3	619.8
L-28	1	B	Residential	66	13421300.2	281366.6	620.1
L-29	1	B	Residential	66	13421292.4	281302.8	620.7
L-30	1	B	Residential	66	13421291.7	281251.9	621.3
L-31	1	B	Residential	66	13421280.5	281162.7	620.8
L-32	1	B	Residential	66	13421436.6	281175.8	619.3
L-33	1	B	Residential	66	13421454.1	281242.7	620.2
L-34	1	B	Residential	66	13421450.4	281324.3	620.8
L-35	1	B	Residential	66	13421546.5	281367.9	620.2
L-36	1	B	Residential	66	13421552.1	281288.8	619.8
L-37	1	B	Residential	66	13421542.1	281248.6	619.8
L-38	1	B	Residential	66	13421556.9	281176.5	618.2
L-39	1	B	Residential	66	13421803.0	281148.1	617.0
L-40	1	B	Residential	66	13421758.7	281280.3	618.4
L-41	1	B	Residential	66	13421757.9	281415.3	619.5
L-42	1	B	Residential	66	13425089.7	281303.5	607.1
L-43	1	B	Residential	66	13425099.5	281350.3	607.7
L-44	1	B	Residential	66	13425035.0	281410.4	607.3
L-45	1	B	Residential	66	13425097.9	281471.8	608.2
L-46	1	B	Residential	66	13425095.7	281513.9	608.6
L-47	1	B	Residential	66	13425094.2	281559.4	608.5
L-48	1	B	Residential	66	13425107.9	281604.4	607.2
L-49	1	B	Residential	66	13425187.1	281643.5	607.5
L-50	1	B	Residential	66	13425193.7	281596.3	607.6
L-51	1	B	Residential	66	13425194.0	281555.7	607.7
L-52	1	B	Residential	66	13425196.2	281515.0	607.5
L-53	1	B	Residential	66	13425197.3	281473.6	607.3
L-54	1	B	Residential	66	13425202.9	281428.9	607.4
L-55	1	B	Residential	66	13425200.3	281397.5	607.1

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
L-56	1	B	Residential	66	13425204.0	281355.4	607.3
L-57	1	B	Residential	66	13425237.6	281315.4	607.3
L-58	1	B	Residential	66	13425376.0	281655.4	606.5
L-59	1	B	Residential	66	13425588.7	281634.4	607.1
L-60	1	B	Residential	66	13425746.5	281632.2	606.6
L-61	1	B	Residential	66	13425760.9	281522.4	606.8
L-62	1	B	Residential	66	13425760.6	281472.1	606.6
L-63	1	B	Residential	66	13425761.8	281420.8	606.7
L-64	1	B	Residential	66	13425766.3	281368.8	606.9
L-65	1	B	Residential	66	13425759.7	281316.7	607.0
L-66	1	B	Residential	66	13425886.2	281284.8	606.9
L-67	1	B	Residential	66	13425863.7	281332.4	606.8
L-68	1	B	Residential	66	13425862.5	281393.4	606.8
L-69	1	B	Residential	66	13425862.2	281441.8	607.0
L-70	1	B	Residential	66	13425857.4	281486.6	606.8
L-71	1	B	Residential	66	13425855.2	281524.2	606.7
L-72	1	B	Residential	66	13425867.3	281636.0	606.6
L-73	1	B	Residential	66	13426072.1	281646.9	606.7
L-74	1	B	Residential	66	13426092.4	281540.9	606.7
L-75	1	B	Residential	66	13426088.7	281491.3	606.5
L-76	1	B	Residential	66	13426092.0	281452.2	606.7
L-77	1	B	Residential	66	13426094.4	281410.4	606.7
L-78	1	B	Residential	66	13426094.6	281373.5	606.4
L-79	1	B	Residential	66	13426097.7	281331.6	606.5
L-80	1	B	Residential	66	13426088.4	281287.2	606.4
L-81	1	B	Residential	66	13426222.5	281297.0	606.5
L-82	1	B	Residential	66	13426248.8	281351.2	606.7
L-83	1	B	Residential	66	13426235.9	281390.1	606.6
L-84	1	B	Residential	66	13426256.9	281429.3	606.3
L-85	1	B	Residential	66	13426235.7	281475.2	606.6
L-86	1	B	Residential	66	13426233.7	281509.4	607.0
L-87	1	B	Residential	66	13426188.9	281539.8	607.0
L-88	1	B	Residential	66	13426185.5	281655.8	606.6
L-89	1	B	Residential	66	13426370.7	281663.2	606.6
L-90	1	B	Residential	66	13426376.5	281560.1	606.9
L-91	1	B	Residential	66	13426371.0	281518.4	607.0
L-92	1	B	Residential	66	13426333.0	281457.7	606.3
L-93	1	B	Residential	66	13426383.6	281412.2	606.2
L-94	1	B	Residential	66	13426377.9	281358.0	606.0
L-95	1	B	Residential	66	13426547.0	281308.4	606.1
L-96	1	B	Residential	66	13426570.7	281372.2	606.3
L-97	1	B	Residential	66	13426556.9	281410.5	606.3
L-98	1	B	Residential	66	13426564.2	281475.8	606.2
L-99	1	B	Residential	66	13426563.6	281516.6	606.5
L-100	1	B	Residential	66	13426567.0	281568.6	606.2
L-101	1	B	Residential	66	13426519.4	281667.5	606.3
L-102	1	B	Residential	66	13426690.6	281669.4	605.8
L-103	1	B	Residential	66	13426706.9	281564.6	605.8
L-104	1	B	Residential	66	13426662.1	281527.5	606.3
L-105	1	B	Residential	66	13426658.7	281485.1	606.3
L-106	1	B	Residential	66	13426675.0	281449.7	606.0
L-107	1	B	Residential	66	13426654.7	281416.3	605.9
L-108	1	B	Residential	66	13426678.5	281371.2	605.9
L-109	1	B	Residential	66	13426681.4	281327.7	606.1
L-110	1	B	Residential	66	13428139.5	281410.3	604.6

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
L-111	1	B	Residential	66	13428135.5	281489.3	603.9
L-112	1	B	Residential	66	13428160.0	281549.5	604.0
L-113	1	B	Residential	66	13428125.0	281576.5	604.1
L-114	1	B	Residential	66	13428142.2	281643.5	604.0
L-115	1	B	Residential	66	13428081.0	281720.5	604.7
L-116	1	B	Residential	66	13428293.1	281773.0	603.8
L-117	1	B	Residential	66	13428292.7	281729.3	604.2
L-118	1	B	Residential	66	13428300.1	281631.8	603.9
L-119	1	B	Residential	66	13428305.3	281591.9	604.0
L-120	1	B	Residential	66	13428307.9	281550.5	604.1
L-121	1	B	Residential	66	13428302.7	281513.5	604.1
L-122	1	B	Residential	66	13428307.5	281465.9	604.2
L-123	1	B	Residential	66	13428307.9	281419.7	604.2
L-124	1	B	Residential	66	13428439.4	281418.4	603.2
L-125	1	B	Residential	66	13428402.7	281478.0	603.5
L-126	1	B	Residential	66	13428398.7	281520.8	603.5
L-127	1	B	Residential	66	13428398.0	281558.4	603.7
L-128	1	B	Residential	66	13428395.2	281597.5	603.8
L-129	1	B	Residential	66	13428394.7	281634.6	603.9
L-130	1	B	Residential	66	13428387.4	281735.3	604.0
L-131	1	B	Residential	66	13428388.8	281773.3	603.9
L-132	1	B	Residential	66	13428603.5	281744.1	604.0
L-133	1	B	Residential	66	13428566.6	281628.5	603.9
L-134	1	B	Residential	66	13428569.6	281566.9	603.5
L-135	1	B	Residential	66	13428579.8	281421.3	603.9
L-136	1	C	Lucinda Burns Park - Center Play Structure	N/A	13428753.5	281540.3	602.7
L-137	1	B	Residential	66	13428763.9	281751.2	603.9
L-138	1	B	Residential	66	13428906.6	281798.8	603.9
L-139	1	B	Residential	66	13428907.3	281756.3	604.2
L-140	1	B	Residential	66	13428915.1	281657.7	603.2
L-141	1	B	Residential	66	13428917.7	281617.7	603.3
L-142	1	B	Residential	66	13428921.7	281580.0	603.6
L-143	1	B	Residential	66	13428925.8	281537.2	603.9
L-144	1	B	Residential	66	13428925.4	281501.3	603.7
L-145	1	B	Residential	66	13428910.6	281439.2	603.5
L-146	1	B	Residential	66	13429061.1	281439.6	603.2
L-147	1	B	Residential	66	13429021.9	281485.8	603.7
L-148	1	B	Residential	66	13429018.2	281543.1	603.4
L-149	1	B	Residential	66	13429017.1	281581.2	603.3
L-150	1	B	Residential	66	13429014.9	281622.5	603.2
L-151	1	B	Residential	66	13429013.4	281663.6	603.5
L-152	1	B	Residential	66	13429006.4	281768.5	603.8
L-153	1	B	Residential	66	13429000.8	281811.8	603.5
L-154	1	B	Residential	66	13429006.3	281844.4	603.3
L-155	1	B	Residential	66	13429205.2	281848.7	603.5
L-156	1	B	Residential	66	13429207.0	281808.8	603.4
L-157	1	B	Residential	66	13429218.1	281770.7	603.4
L-158	1	B	Residential	66	13429215.9	281671.0	603.3
L-159	1	B	Residential	66	13429231.1	281592.2	602.9
L-160	1	B	Residential	66	13429209.6	281503.2	602.8
L-161	1	B	Residential	66	13429358.2	281450.0	603.1
L-162	1	B	Residential	66	13429337.9	281498.0	603.0
L-163	1	B	Residential	66	13429334.9	281549.0	603.1
L-164	1	B	Residential	66	13429324.2	281595.2	603.4

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Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
L-165	1	B	Residential	66	13429331.9	281635.1	602.9
L-166	1	B	Residential	66	13429328.6	281675.4	603.0
L-167	1	B	Residential	66	13429316.0	281778.5	603.2
L-168	1	B	Residential	66	13429318.3	281819.9	602.7
L-169	1	B	Residential	66	13429508.6	281822.8	602.5
L-170	1	B	Residential	66	13429531.5	281684.6	602.7
L-171	1	B	Residential	66	13429541.5	281527.2	604.0
L-172	1	B	Residential	66	13429541.5	281494.3	603.7
L-173	1	B	Residential	66	13429543.0	281457.7	603.4
L-174	1	B	Residential	66	13429663.7	281462.3	603.5
L-175	1	B	Residential	66	13429641.3	281502.5	604.2
L-176	1	B	Residential	66	13429641.0	281536.3	604.0
L-177	1	B	Residential	66	13429636.7	281573.0	604.1
L-178	1	B	Residential	66	13429636.7	281660.7	604.5
L-179	1	B	Residential	66	13429624.4	281790.3	602.5
L-180	1	B	Residential	66	13429619.4	281838.3	602.6
L-181	1	B	Residential	66	13429691.1	281868.7	602.2
L-182	1	B	Residential	66	13429790.0	281890.0	602.1
L-183	1	B	Residential	66	13429829.7	281797.8	602.7
L-184	1	B	Residential	66	13429840.7	281697.1	603.5
L-185	1	B	Residential	66	13429843.6	281657.1	603.3
L-186	1	B	Residential	66	13429845.3	281616.2	603.1
L-187	1	B	Residential	66	13429825.4	281566.8	602.9
L-188	1	B	Residential	66	13429963.2	281523.3	602.7
L-189	1	B	Residential	66	13429949.5	281583.7	602.4
L-190	1	B	Residential	66	13429938.2	281630.5	602.4
L-191	1	B	Residential	66	13429929.1	281706.8	602.3
L-192	1	B	Residential	66	13429942.4	281806.9	602.2
L-193	1	B	Residential	66	13429936.0	281846.6	602.1
L-194	1	B	Residential	66	13429930.3	281884.7	602.1
L-195	1	B	Residential	66	13429926.2	281919.8	602.3
L-196	1	B	Residential	66	13430138.2	281967.0	601.9
L-197	1	B	Residential	66	13430085.6	281906.3	602.1
L-198	1	B	Residential	66	13430137.9	281853.3	602.1
L-199	1	B	Residential	66	13430139.2	281813.7	601.7
L-200	1	B	Residential	66	13430153.8	281711.4	601.9
L-201	1	B	Residential	66	13430146.0	281560.0	602.1
L-202	1	B	Residential	66	13430257.8	281593.1	601.7
L-203	1	B	Residential	66	13430258.4	281696.4	601.7
L-204	1	B	Residential	66	13430245.7	281843.6	601.4
L-205	1	B	Residential	66	13430232.4	281893.3	602.0
L-206	1	B	Residential	66	13430232.4	281960.8	601.5
L-207	1	C	Lucinda Burns Park - South Play Structure	N/A	13428732.0	281451.9	603.5
L-208	1	C	Lucinda Burns Park - Northwest Play Structure	N/A	13428732.0	281655.5	603.5
L-209	1	C	Lucinda Burns Park - Northeast Play Structure	N/A	13428790.0	281658.1	603.5
L-210	1	B	Residential	66	13426704.1	281730.1	606.0
L-211	1	B	Residential	66	13426703.6	281771.6	605.5
L-212	1	B	Residential	66	13426702.2	281815.4	605.6
L-213	1	B	Residential	66	13426700.7	281852.5	605.6
L-214	1	B	Residential	66	13426499.3	281739.4	606.1
L-215	1	B	Residential	66	13426505.3	281784.6	606.3
L-216	1	B	Residential	66	13426501.5	281830.6	606.2
L-217	1	B	Residential	66	13426371.2	281718.3	606.9

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
L-218	1	B	Residential	66	13426372.7	281762.8	606.8
L-219	1	B	Residential	66	13426371.2	281799.7	606.8
L-220	1	B	Residential	66	13426366.7	281844.9	606.2
L-221	1	B	Residential	66	13426175.4	281713.1	606.5
L-222	1	B	Residential	66	13426172.4	281757.5	606.4
L-223	1	B	Residential	66	13426172.4	281827.5	606.6
L-224	1	B	Residential	66	13426087.3	281709.3	606.7
L-225	1	B	Residential	66	13426089.2	281754.1	606.5
L-226	1	B	Residential	66	13426093.9	281794.1	606.3
L-227	1	B	Residential	66	13426089.2	281830.6	606.5
L-228	1	B	Residential	66	13425839.7	281695.3	606.6
L-229	1	B	Residential	66	13425837.3	281744.7	606.6
L-230	1	B	Residential	66	13425838.5	281789.4	606.7
L-231	1	B	Residential	66	13425839.7	281825.9	606.6
L-232	1	B	Residential	66	13425762.0	281700.0	607.2
L-233	1	B	Residential	66	13425760.8	281741.2	606.7
L-234	1	B	Residential	66	13425758.5	281784.7	606.9
L-235	1	B	Residential	66	13425760.8	281823.5	606.5
L-236	1	B	Residential	66	13425590.2	281671.7	607.6
L-237	1	B	Residential	66	13425599.6	281717.6	607.3
L-238	1	B	Residential	66	13425374.8	281735.3	606.1
L-239	1	B	Residential	66	13425187.7	281691.7	607.7
L-240	1	B	Residential	66	13425184.2	281730.6	607.2
L-241	1	B	Residential	66	13425183.0	281769.4	607.0
L-242	1	B	Residential	66	13425180.6	281807.1	607.0
L-243	1	B	Residential	66	13425106.5	281683.5	607.2
L-244	1	B	Residential	66	13425106.5	281727.0	606.6
L-245	1	B	Residential	66	13425112.4	281768.2	607.2
L-246	1	B	Residential	66	13425107.7	281814.1	606.7

Appendix E - Receptor Inputs
CNE N

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
N-01	1	B	Residential	66	13430793.5	281835.4	601.3
N-02	1	B	Residential	66	13430793.5	281875.1	601.5
N-03	1	B	Residential	66	13430793.0	281915.3	601.3
N-04	1	B	Residential	66	13430797.2	281957.1	601.0
N-05	1	B	Residential	66	13430789.1	282017.8	601.0
N-06	1	B	Residential	66	13430790.3	282054.2	601.1
N-07	1	B	Residential	66	13430943.5	282098.6	601.0
N-08	1	B	Residential	66	13430957.9	282020.7	601.5
N-09	1	B	Residential	66	13430926.9	281951.8	601.6
N-10	1	B	Residential	66	13430942.7	281896.8	601.7
N-11	1	B	Residential	66	13430946.1	281853.9	601.3
N-12	1	B	Residential	66	13431079.5	281856.5	601.1
N-13	1	B	Residential	66	13431043.5	281960.1	600.5
N-14	1	B	Residential	66	13431042.6	282041.7	601.1
N-15	1	B	Residential	66	13431048.1	282119.8	600.9
N-16	1	B	Residential	66	13431253.6	282112.4	601.1
N-17	1	B	Residential	66	13431294.3	282068.9	599.9
N-18	1	B	Residential	66	13431293.8	282013.5	600.6
N-19	1	B	Residential	66	13431277.6	281987.3	600.0
N-20	1	B	Residential	66	13431294.2	281913.6	600.5
N-21	1	B	Residential	66	13431365.1	282042.5	600.8
N-22	1	B	Residential	66	13431358.9	282082.6	600.6
N-23	1	B	Residential	66	13431351.3	282101.7	599.9
N-24	1	B	Residential	66	13431572.6	282208.4	600.6
N-25	1	B	Residential	66	13431580.2	282157.8	600.7
N-26	1	B	Residential	66	13431590.6	282127.9	599.9
N-27	1	B	Residential	66	13431666.8	282155.5	600.1
N-28	1	B	Residential	66	13431660.0	282199.4	600.0
N-29	1	B	Residential	66	13431670.4	282244.3	599.9
N-30	1	B	Residential	66	13431672.8	282280.9	599.8
N-31	1	B	Residential	66	13431907.9	282307.7	599.7
N-32	1	B	Residential	66	13431906.1	282271.9	599.8
N-33	1	B	Residential	66	13430781.1	282107.5	601.1
N-34	1	B	Residential	66	13430936.6	282131.0	601.4
N-35	1	B	Residential	66	13431248.2	282168.7	600.7
N-36	1	B	Residential	66	13431556.5	282281.8	600.9
N-37	1	B	Residential	66	13431362.6	282160.0	601.5
N-38	1	B	Residential	66	13431643.3	282310.7	599.8
N-39	1	B	Residential	66	13431901.8	282404.0	599.4
N-40	1	B	Residential	66	13431672.0	282353.6	600.3
N-41	1	B	Residential	66	13431662.0	282402.9	600.1
N-42	1	B	Residential	66	13431662.0	282449.3	600.1
N-43	1	B	Residential	66	13431669.0	282482.9	600.5
N-44	1	B	Residential	66	13431553.0	282475.8	600.6
N-45	1	B	Residential	66	13431552.0	282440.8	600.7
N-46	1	B	Residential	66	13431542.0	282400.8	599.9
N-47	1	B	Residential	66	13431556.0	282367.2	600.7
N-48	1	B	Residential	66	13431360.0	282228.0	600.5
N-49	1	B	Residential	66	13431358.0	282267.3	600.7
N-50	1	B	Residential	66	13431315.0	282301.5	600.0
N-51	1	B	Residential	66	13431369.0	282355.8	600.8
N-52	1	B	Residential	66	13431341.0	282394.3	600.0
N-53	1	B	Residential	66	13431348.0	282432.2	600.6
N-54	1	B	Residential	66	13431360.0	282471.5	600.3
N-55	1	B	Residential	66	13431235.0	282458.6	600.9

Appendix E - Receptor Inputs
CNE N

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
N-56	1	B	Residential	66	13431237.0	282425.1	601.1
N-57	1	B	Residential	66	13431236.0	282390.8	601.2
N-58	1	B	Residential	66	13431241.0	282345.8	600.7
N-59	1	B	Residential	66	13431244.0	282302.2	600.5
N-60	1	B	Residential	66	13431249.0	282262.9	600.5
N-61	1	B	Residential	66	13431041.0	282213.7	601.1
N-62	1	B	Residential	66	13431038.0	282257.9	601.2
N-63	1	B	Residential	66	13431034.0	282299.4	601.5
N-64	1	B	Residential	66	13431031.0	282337.9	601.5
N-65	1	B	Residential	66	13431027.0	282413.4	601.6
N-66	1	B	Residential	66	13431031.0	282461.8	601.3
N-67	1	B	Residential	66	13430921.0	282455.0	601.5
N-68	1	B	Residential	66	13430918.0	282412.5	602.4
N-69	1	B	Residential	66	13430917.0	282373.2	602.8
N-70	1	B	Residential	66	13430951.0	282324.3	601.3
N-71	1	B	Residential	66	13430923.0	282293.2	601.9
N-72	1	B	Residential	66	13430930.0	282252.9	601.3
N-73	1	B	Residential	66	13430918.0	282207.3	600.9

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
O-01	1	C	Cunningham Park - Fire Pit	66	13431788.6	280774.3	600.0
O-02	1	C	Cunningham Park - West Playground	66	13431940.6	280772.9	599.9
O-03	1	C	Cunningham Park - West Gazebo	66	13432024.2	280741.2	599.9
O-04	1	C	Cunningham Park - Baseball Field	66	13432293.8	280774.8	600.3
O-05	1	C	Cunningham Park - Football Field	66	13432696.3	280892.5	599.4
O-06	1	C	Cunningham Park - East Playground	66	13433052.6	280805.1	598.6
O-07	1	C	Cunningham Park - East Gazebo	66	13433128.3	280767.4	598.4

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
P-01	1	B	Residential	66	13432756.0	283260.1	600.0
P-02	1	B	Residential	66	13432763.0	283303.8	600.1
P-03	1	B	Residential	66	13432844.0	283349.3	601.0
P-04	1	B	Residential	66	13432860.0	283466.1	599.9
P-05	1	B	Residential	66	13432866.0	283526.0	598.3
P-06	1	B	Residential	66	13432867.0	283563.3	597.8
P-07	1	B	Residential	66	13432870.0	283588.8	598.5
P-08	1	B	Residential	66	13432869.0	283642.0	598.0
P-09	1	B	Residential	66	13433042.0	283526.1	599.8
P-10	1	B	Residential	66	13433069.0	283571.1	599.7
P-11	1	B	Residential	66	13433117.0	283646.5	599.2
P-12	1	B	Residential	66	13432768.0	283951.8	598.4
P-13	1	B	Residential	66	13432727.0	283902.8	599.8
P-14	1	B	Residential	66	13432731.0	283866.8	599.9
P-15	1	B	Residential	66	13432730.0	283827.4	599.4
P-16	1	B	Residential	66	13432738.0	283710.4	598.5
P-17	1	B	Residential	66	13432737.0	283666.1	597.8
P-18	1	B	Residential	66	13432743.0	283630.0	597.9
P-19	1	B	Residential	66	13432752.0	283593.9	598.1
P-20	1	B	Residential	66	13432740.0	283550.0	598.2
P-21	1	B	Residential	66	13432750.0	283509.8	599.2
P-22	1	B	Residential	66	13432746.0	283471.9	599.1
P-23	1	B	Residential	66	13432742.0	283429.8	600.1
P-24	1	B	Residential	66	13432574.0	283646.9	598.5
P-25	1	B	Residential	66	13432533.0	283551.9	598.7
P-26	1	B	Residential	66	13432546.0	283502.7	598.7
P-27	1	B	Residential	66	13432544.0	283453.4	599.9
P-28	1	B	Residential	66	13432551.0	283326.3	600.3
P-29	1	B	Residential	66	13432554.0	283283.4	600.3
P-30	1	B	Residential	66	13432561.0	283247.0	600.0
P-31	1	B	Residential	66	13432546.0	283214.2	600.0
P-32	1	B	Residential	66	13432536.0	283162.8	600.0
P-33	1	B	Residential	66	13432536.0	283130.6	600.0
P-34	1	B	Residential	66	13432559.0	283098.5	599.9
P-35	1	B	Residential	66	13432469.0	282961.4	599.3
P-36	1	B	Residential	66	13432440.0	283007.8	600.3
P-37	1	B	Residential	66	13432434.0	283048.5	600.2
P-38	1	B	Residential	66	13432431.0	283091.3	599.8
P-39	1	B	Residential	66	13432429.0	283129.2	600.5
P-40	1	B	Residential	66	13432425.0	283174.9	600.0
P-41	1	B	Residential	66	13432437.0	283214.2	600.0
P-42	1	B	Residential	66	13432425.0	283253.4	600.3
P-43	1	B	Residential	66	13432451.0	283289.1	600.0
P-44	1	B	Residential	66	13432435.0	283326.5	600.0
P-45	1	B	Residential	66	13432432.0	283419.3	600.0
P-46	1	B	Residential	66	13432422.0	283461.3	599.7
P-47	1	B	Residential	66	13432423.0	283500.2	599.6
P-48	1	B	Residential	66	13432231.0	283310.5	599.2
P-49	1	B	Residential	66	13432242.0	283278.1	598.9
P-50	1	B	Residential	66	13432252.0	283162.4	598.9
P-51	1	B	Residential	66	13432230.0	283112.2	599.8
P-52	1	B	Residential	66	13432236.0	283046.4	600.2
P-53	1	B	Residential	66	13432241.0	282996.1	600.1
P-54	1	B	Residential	66	13432247.0	282953.1	600.1
P-55	1	B	Residential	66	13432247.0	282913.8	599.9

Appendix E - Receptor Inputs
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Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
P-56	1	B	Residential	66	13432245.0	282879.1	600.2
P-57	1	B	Residential	66	13432116.0	282880.0	600.1
P-58	1	B	Residential	66	13432116.0	282917.9	600.4
P-59	1	B	Residential	66	13432112.0	282958.2	600.2
P-60	1	B	Residential	66	13432110.0	282998.8	600.0
P-61	1	B	Residential	66	13432106.0	283036.8	600.2
P-62	1	B	Residential	66	13432105.0	283080.2	599.7
P-63	1	B	Residential	66	13432104.0	283119.5	599.6
P-64	1	B	Residential	66	13432102.0	283167.5	599.6
P-65	1	B	Residential	66	13432094.0	283271.7	599.9
P-66	1	B	Residential	66	13432101.0	283307.8	599.7
P-67	1	B	Residential	66	13431901.0	283297.0	599.9
P-68	1	B	Residential	66	13431914.0	283261.3	599.4
P-69	1	B	Residential	66	13431907.0	283223.4	599.7
P-70	1	B	Residential	66	13431906.0	283178.4	599.8
P-71	1	B	Residential	66	13431887.0	283103.5	599.7
P-72	1	B	Residential	66	13431905.0	283021.2	600.3
P-73	1	B	Residential	66	13431898.0	282984.7	599.9
P-74	1	B	Residential	66	13431907.0	282896.0	600.4
P-75	1	B	Residential	66	13431787.0	282939.9	600.4
P-76	1	B	Residential	66	13431774.0	282977.3	600.0
P-77	1	B	Residential	66	13431786.0	283018.0	600.8
P-78	1	B	Residential	66	13431784.0	283053.7	600.9
P-79	1	B	Residential	66	13431810.0	283090.3	599.8
P-80	1	B	Residential	66	13431799.0	283133.7	599.6
P-81	1	B	Residential	66	13431790.0	283217.8	599.9
P-82	1	B	Residential	66	13431772.0	283258.9	600.4
P-83	1	B	Residential	66	13431816.0	283291.3	600.1
P-84	1	B	Residential	66	13431562.0	283286.4	600.0
P-85	1	B	Residential	66	13431566.0	283251.1	599.9
P-86	1	B	Residential	66	13431588.0	283124.2	600.0
P-87	1	B	Residential	66	13431590.0	283053.5	600.4
P-88	1	B	Residential	66	13431570.0	283000.4	600.5
P-89	1	B	Residential	66	13431505.0	282908.5	600.2
P-90	1	B	Residential	66	13431474.0	282964.2	600.0
P-91	1	B	Residential	66	13431466.0	283003.9	600.5
P-92	1	B	Residential	66	13431492.0	283126.9	600.3
P-93	1	B	Residential	66	13431446.0	283160.1	600.3
P-94	1	B	Residential	66	13431493.0	283243.3	599.9
P-95	1	B	Residential	66	13431456.0	283279.4	600.4
P-96	1	B	Residential	66	13431245.0	283268.3	601.0
P-97	1	B	Residential	66	13431246.0	283231.3	601.1
P-98	1	B	Residential	66	13431229.0	283165.7	600.9
P-99	1	B	Residential	66	13431228.0	283111.2	600.0
P-100	1	B	Residential	66	13431254.0	283039.0	600.0
P-101	1	B	Residential	66	13431260.0	282998.4	600.2
P-102	1	B	Residential	66	13431129.0	282753.0	602.0
P-103	1	B	Residential	66	13431143.0	282908.5	601.1
P-104	1	B	Residential	66	13431157.0	282942.2	601.1
P-105	1	B	Residential	66	13431135.0	282991.9	601.0
P-106	1	B	Residential	66	13431164.0	283043.4	601.0
P-107	1	B	Residential	66	13431151.0	283076.0	600.9
P-108	1	B	Residential	66	13431162.0	283123.2	600.8
P-109	1	B	Residential	66	13431165.0	283194.3	600.8
P-110	1	B	Residential	66	13431125.0	283235.9	601.0

Appendix E - Receptor Inputs
CNE P

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
P-111	1	B	Residential	66	13431116.0	283264.6	601.0
P-112	1	B	Residential	66	13430924.0	283265.3	600.8
P-113	1	B	Residential	66	13430926.0	283225.6	600.8
P-114	1	B	Residential	66	13430924.0	283181.3	601.2
P-115	1	B	Residential	66	13430924.0	283143.4	601.1
P-116	1	B	Residential	66	13430930.0	283107.3	601.3
P-117	1	B	Residential	66	13430921.0	283055.8	600.9
P-118	1	B	Residential	66	13430933.0	283022.1	601.6
P-119	1	B	Residential	66	13430927.0	282978.9	601.4
P-120	1	B	Residential	66	13430935.0	282941.1	601.1
P-121	1	B	Residential	66	13432236.0	283046.4	600.2

Appendix E - Receptor Inputs
CNE Q

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
Q-01	1	B	Residential	66	13433031.0	284307.8	598.1
Q-02	1	B	Residential	66	13433056.0	284377.0	598.2
Q-03	1	B	Residential	66	13433064.0	284425.0	597.9
Q-04	1	B	Residential	66	13433150.0	284471.8	598.0
Q-05	1	B	Residential	66	13433132.0	284333.3	597.7
Q-06	1	B	Residential	66	13433157.0	284274.0	598.2
Q-07	1	B	Residential	66	13433159.0	284238.4	598.0
Q-08	1	B	Residential	66	13433320.0	284294.1	597.8
Q-09	1	B	Residential	66	13433307.0	284424.8	598.6
Q-10	1	B	Residential	66	13433361.0	284478.8	598.3
Q-11	1	B	Residential	66	13433344.0	284570.1	597.7
Q-12	1	B	Residential	66	13433347.0	284594.6	597.9
Q-13	1	B	Residential	66	13433511.0	284640.2	597.7
Q-14	1	B	Residential	66	13433449.0	284532.1	597.2
Q-15	1	B	Residential	66	13433495.0	284416.9	598.6
Q-16	1	B	Residential	66	13433502.0	284316.9	598.1
Q-17	1	B	Residential	66	13433482.0	284283.6	597.7
Q-18	1	B	Residential	66	13433572.0	284414.2	598.8
Q-19	1	B	Residential	66	13433619.0	284521.1	598.3
Q-20	1	B	Residential	66	13433676.0	284592.0	598.8
Q-21	1	B	Residential	66	13433689.0	284627.5	598.5
Q-22	1	B	Residential	66	13433754.0	284739.2	597.7
Q-23	1	B	Residential	66	13433775.0	284772.2	598.0
Q-24	1	B	Residential	66	13433798.0	284813.3	597.9
Q-25	1	B	Residential	66	13433840.0	284885.1	597.3
Q-26	1	B	Residential	66	13433855.0	284912.1	597.2
Q-27	1	B	Residential	66	13433882.0	284955.3	597.4
Q-28	1	B	Residential	66	13433895.0	284983.2	597.7
Q-29	1	B	Residential	66	13433916.0	285014.6	597.4
Q-30	1	B	Residential	66	13433848.0	285312.0	597.9
Q-31	1	B	Residential	66	13433895.0	285308.7	597.7
Q-32	1	B	Residential	66	13433938.0	285315.3	597.7
Q-33	1	B	Residential	66	13434007.0	285317.8	598.4
Q-34	1	B	Residential	66	13433863.0	285408.8	597.6
Q-35	1	B	Residential	66	13433858.0	285596.0	597.9
Q-36	1	B	Residential	66	13433921.0	285510.0	597.5
Q-37	1	B	Residential	66	13433991.0	285462.5	597.9
Q-38	1	B	Residential	66	13434023.0	285439.3	597.5
Q-39	1	B	Residential	66	13434057.0	285416.2	597.9
Q-40	1	B	Residential	66	13434005.0	285679.9	598.3
Q-41	1	B	Residential	66	13433962.0	285717.1	598.2
Q-42	1	B	Residential	66	13433922.0	285732.8	597.6
Q-43	1	B	Residential	66	13433888.0	285754.3	598.3
Q-44	1	B	Residential	66	13433650.0	284842.6	598.0
Q-45	1	B	Residential	66	13433643.0	284888.6	597.5
Q-46	1	B	Residential	66	13433650.0	284923.1	597.5
Q-47	1	B	Residential	66	13433655.0	284971.1	597.9
Q-48	1	B	Residential	66	13433683.0	285005.6	597.2
Q-49	1	B	Residential	66	13433739.0	285042.8	596.6
Q-50	1	B	Residential	66	13433704.0	285073.9	597.3
Q-51	1	B	Residential	66	13433660.0	285122.6	598.5
Q-52	1	B	Residential	66	13433629.0	285195.7	598.6
Q-53	1	B	Residential	66	13433753.0	285316.8	598.1
Q-54	1	B	Residential	66	13433714.0	285310.7	598.5
Q-55	1	B	Residential	66	13433601.0	285314.8	597.8

Appendix E - Receptor Inputs
CNE Q

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
Q-56	1	B	Residential	66	13433674.0	285249.8	598.4
Q-57	1	B	Residential	66	13433473.0	285112.5	597.2
Q-58	1	B	Residential	66	13433485.0	285065.8	597.6
Q-59	1	B	Residential	66	13433401.0	285044.8	597.8
Q-60	1	B	Residential	66	13433498.0	284958.9	597.9
Q-61	1	B	Residential	66	13433465.0	284917.7	597.8
Q-62	1	B	Residential	66	13433496.0	284871.0	598.4
Q-63	1	B	Residential	66	13433499.0	284772.2	597.8
Q-64	1	B	Residential	66	13433366.0	284645.1	597.7
Q-65	1	B	Residential	66	13433380.0	284762.3	598.1
Q-66	1	B	Residential	66	13433357.0	284832.4	598.1

Appendix E - Receptor Inputs
CNE R

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
R-01	1	B	Residential	66	13434001.0	285949.1	599.0
R-02	1	B	Residential	66	13434038.0	285930.8	598.5
R-03	1	B	Residential	66	13434110.0	285860.5	597.5
R-04	1	B	Residential	66	13434387.0	285783.3	598.4
R-05	1	B	Residential	66	13434413.0	285825.6	598.4
R-06	1	B	Residential	66	13434318.0	285893.6	598.2
R-07	1	B	Residential	66	13434128.0	285966.1	599.6
R-08	1	B	Residential	66	13434063.0	286001.5	598.2
R-09	1	B	Residential	66	13434089.0	286044.2	598.4
R-10	1	B	Residential	66	13434152.0	286000.6	598.8
R-11	1	B	Residential	66	13434338.0	285937.2	598.2
R-12	1	B	Residential	66	13434451.0	285896.1	598.2
R-13	1	B	Residential	66	13434495.0	285972.9	598.4
R-14	1	B	Residential	66	13434358.0	285973.5	598.3
R-15	1	B	Residential	66	13434187.0	286040.5	598.2
R-16	1	B	Residential	66	13434136.0	286128.2	598.0
R-17	1	B	Residential	66	13434200.0	286086.9	598.4
R-18	1	B	Residential	66	13434415.0	286057.1	598.1
R-19	1	B	Residential	66	13434519.0	285999.9	597.4
R-20	1	B	Residential	66	13434558.0	286075.1	598.0
R-21	1	B	Residential	66	13434437.0	286105.8	598.1
R-22	1	B	Residential	66	13434227.0	286128.2	598.3
R-23	1	B	Residential	66	13434263.0	286162.2	598.3
R-24	1	B	Residential	66	13434498.0	286150.7	596.9
R-25	1	B	Residential	66	13434607.0	286152.0	597.9
R-26	1	B	Residential	66	13434529.0	286234.1	598.2
R-27	1	B	Residential	66	13434642.0	286216.0	597.8
R-28	1	B	Residential	66	13434545.0	286276.5	598.1
R-29	1	B	Residential	66	13434571.0	286321.0	598.3
R-30	1	B	Residential	66	13434593.0	286370.1	598.2
R-31	1	B	Residential	66	13434703.0	286305.5	598.1
R-32	1	B	Residential	66	13434724.0	286344.5	598.0
R-33	1	B	Residential	66	13434630.0	286397.0	597.5
R-34	1	B	Residential	66	13434748.0	286383.6	598.4
R-35	1	B	Residential	66	13434657.0	286440.2	598.1

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
S-1	3	E	Cold Stone Creamery, Five Guys, & Starbucks	71	13434941.1	285729.5	599.9

Appendix E - Receptor Inputs
CNE T

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
T-01	1	C	Mt. Hope Lutheran Church	66	13433572.5	283602.0	600.1
T-02	1	C	Mt. Hope School	66	13433655.0	283788.1	600.2
T-03	1	B	Residential	66	13433673.9	283928.8	600.3
T-04	1	B	Residential	66	13433741.5	283890.5	601.0
T-05	1	B	Residential	66	13433778.1	283814.4	600.4
T-06	1	C	Peterson Playground	66	13433867.8	283779.4	599.3
T-07	1	B	Residential	66	13433978.5	283916.6	599.7
T-08	1	B	Residential	66	13433942.1	283941.4	601.0
T-09	1	B	Residential	66	13433910.7	283956.2	601.7
T-10	1	B	Residential	66	13433813.1	284010.0	600.3
T-11	1	B	Residential	66	13433766.8	284039.7	599.4
T-12	1	B	Residential	66	13433915.7	284219.1	596.9
T-13	1	B	Residential	66	13433953.7	284193.5	596.9
T-14	1	B	Residential	66	13434005.8	284155.5	597.5
T-15	1	B	Residential	66	13434086.0	284110.0	597.8
T-16	1	B	Residential	66	13434146.6	284257.9	597.3
T-17	1	B	Residential	66	13434099.2	284419.2	598.0
T-18	1	B	Residential	66	13434028.1	284457.2	598.1
T-19	11	C	Little Jungle Preschool	66	13433933.0	284459.7	598.5
T-20	1	B	Residential	66	13434049.8	284642.5	598.6
T-21	1	B	Residential	66	13434146.6	284793.9	598.0
T-22	1	B	Residential	66	13434195.0	284717.9	598.4
T-23	1	B	Residential	66	13434146.6	284594.0	597.4
T-24	1	B	Residential	66	13434256.4	284949.7	598.8
T-25	1	B	Residential	66	13434309.9	284929.6	596.3
T-26	1	B	Residential	66	13434358.4	284913.0	596.0
T-27	1	B	Residential	66	13434614.1	284974.0	596.9
T-28	1	B	Residential	66	13434555.4	285012.6	597.0
T-29	1	B	Residential	66	13434522.6	285033.8	596.9
T-30	1	B	Residential	66	13434494.0	285052.3	596.6
T-31	1	B	Residential	66	13434450.1	285076.1	597.4
T-32	1	B	Residential	66	13434417.3	285097.8	597.5
T-33	1	B	Residential	66	13434373.4	285122.7	597.4
T-34	1	B	Residential	66	13434503.0	285197.8	597.7
T-35	1	B	Residential	66	13434567.0	285190.4	597.5
T-36	1	B	Residential	66	13434588.2	285160.8	597.4
T-37	1	B	Residential	66	13434621.5	285141.7	596.7
T-38	1	B	Residential	66	13434685.0	285112.6	597.1
T-39	1	B	Residential	66	13434783.0	285046.4	597.0
T-40	1	B	Residential	66	13434827.0	285120.3	596.9
T-41	1	B	Residential	66	13433674.0	283928.8	600.3
T-42	1	B	Residential	66	13434099.0	284419.2	598.0
T-43	1	B	Residential	66	13434086.0	284110.0	597.9
T-44	1	B	Residential	66	13434006.0	284155.5	597.5
T-45	1	B	Residential	66	13434050.0	284642.5	598.6
T-46	1	B	Residential	66	13434147.0	284594.1	597.4
T-47	1	B	Residential	66	13434195.0	284717.9	598.4
T-48	1	B	Residential	66	13434671.0	284881.5	596.8
T-49	1	B	Residential	66	13434597.0	284736.7	597.9
T-50	1	B	Residential	66	13434487.0	284796.9	598.4
T-51	1	B	Residential	66	13434438.0	284828.6	598.8
T-52	1	B	Residential	66	13434417.0	284839.2	598.5
T-53	1	B	Residential	66	13434481.0	284563.9	597.9
T-54	1	B	Residential	66	13434458.0	284449.6	597.3
T-55	1	B	Residential	66	13434396.0	284608.5	597.8

Appendix E - Receptor Inputs
CNE T

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
T-56	1	B	Residential	66	13434368.0	284621.4	598.2
T-57	1	B	Residential	66	13434329.0	284636.3	598.1
T-58	1	B	Residential	66	13434289.0	284666.7	598.3
T-59	1	B	Residential	66	13434267.0	284681.6	598.0
T-60	1	B	Residential	66	13434226.0	284704.6	598.4
T-61	1	B	Residential	66	13434212.0	284590.9	598.2
T-62	1	B	Residential	66	13434248.0	284569.3	598.0
T-63	1	B	Residential	66	13434274.0	284549.0	598.0
T-64	1	B	Residential	66	13434311.0	284553.7	597.7
T-65	1	B	Residential	66	13434311.0	284277.7	596.4
T-66	1	B	Residential	66	13434224.0	284317.0	595.8
T-67	1	B	Residential	66	13434202.0	284350.1	596.5
T-68	1	B	Residential	66	13434135.0	284406.3	597.2
T-69	1	B	Residential	66	13434153.0	284007.2	599.1

Appendix E - Receptor Inputs
CNE U

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
U-01	1	B	Residential	66	13433345.0	282586.8	598.2
U-02	1	B	Residential	66	13433411.0	282608.4	598.6
U-03	1	B	Residential	66	13433444.0	282587.7	599.0
U-04	1	B	Residential	66	13433490.0	282532.7	598.6
U-05	1	B	Residential	66	13433579.0	282500.5	598.8
U-06	1	B	Residential	66	13433623.0	282486.2	598.2
U-07	1	B	Residential	66	13433948.0	282492.1	598.4
U-08	1	B	Residential	66	13433860.0	282570.6	598.7
U-09	1	B	Residential	66	13433820.0	282582.3	598.6
U-10	1	B	Residential	66	13433786.0	282624.8	599.3
U-11	1	B	Residential	66	13433748.0	282628.5	598.8
U-12	1	B	Residential	66	13433716.0	282649.7	598.4
U-13	1	B	Allen Park Church of Christ	66	13437361.0	285036.9	596.4
U-14	1	B	Residential	66	13433686.0	282686.5	598.5
U-15	1	B	Residential	66	13433644.0	282695.6	598.4
U-16	1	B	Residential	66	13433601.0	282723.1	598.5
U-17	1	B	Residential	66	13433556.0	282772.7	598.8
U-18	1	B	Residential	66	13433517.0	282790.8	598.6
U-19	1	B	Residential	66	13433465.0	282840.4	597.7
U-20	1	B	Residential	66	13433354.0	282849.9	598.6
U-21	1	B	Residential	66	13433314.0	282872.0	598.2
U-22	1	B	Residential	66	13433294.0	283098.8	598.5
U-23	1	B	Residential	66	13433328.0	283078.8	598.7
U-24	1	B	Residential	66	13433362.0	283056.4	598.5
U-25	1	B	Residential	66	13433403.0	283033.0	598.4
U-26	1	B	Residential	66	13433442.0	283010.4	598.4
U-27	1	B	Residential	66	13433515.0	282965.3	598.3
U-28	1	B	Residential	66	13433558.0	282940.9	598.4
U-29	1	B	Residential	66	13433590.0	282920.3	598.2
U-30	1	B	Residential	66	13433622.0	282900.3	598.3
U-31	1	B	Residential	66	13433656.0	282880.3	598.2
U-32	1	B	Residential	66	13433687.0	282859.7	598.4
U-33	1	B	Residential	66	13433722.0	282798.0	597.8
U-34	1	B	Residential	66	13433757.0	282766.9	597.9
U-35	1	B	Residential	66	13433820.0	282727.9	598.0
U-36	1	B	Residential	66	13433885.0	282684.9	598.5
U-37	1	B	Residential	66	13433929.0	282667.3	598.1
U-38	1	B	Residential	66	13434004.0	282615.3	598.3
U-39	1	B	Residential	66	13434050.0	282602.9	598.0
U-40	1	B	Residential	66	13434074.0	282574.0	598.1
U-41	1	B	Residential	66	13434138.0	282500.4	598.0
U-42	1	B	Residential	66	13433698.0	283024.1	598.0
U-43	1	B	Residential	66	13433655.0	283023.3	597.7
U-44	1	B	Residential	66	13433612.0	283107.9	597.8
U-45	1	B	Residential	66	13433490.0	283146.8	598.3
U-46	1	B	Residential	66	13433448.0	283173.6	598.3
U-47	1	B	Residential	66	13433416.0	283187.7	598.8
U-48	1	B	Residential	66	13433345.0	283242.6	599.6
U-49	1	B	Residential	66	13433316.0	283264.8	598.9
U-50	1	B	Residential	66	13433387.0	283419.5	599.4
U-51	1	B	Residential	66	13433427.0	283396.8	599.0
U-52	1	B	Residential	66	13433496.0	283357.1	598.4
U-53	1	B	Residential	66	13433529.0	283326.9	598.7
U-54	1	B	Residential	66	13433602.0	283286.2	598.4
U-55	1	B	Residential	66	13433641.0	283175.1	598.0

Appendix E - Receptor Inputs
CNE U

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
U-56	1	B	Residential	66	13433684.0	283407.8	598.6
U-57	1	B	Residential	66	13433649.0	283429.0	598.9
U-58	1	B	Residential	66	13433607.0	283441.8	598.9
U-59	1	B	Residential	66	13433557.0	283493.8	599.2
U-60	1	B	Residential	66	13433502.0	283515.7	599.1
U-61	1	B	Residential	66	13433713.0	283161.3	598.2
U-62	1	B	Residential	66	13433796.0	283328.4	598.3
U-63	1	B	Residential	66	13433760.0	283353.4	598.0
U-64	1	B	Residential	66	13434412.0	282606.2	597.6
U-65	1	B	Residential	66	13434614.0	282601.3	597.5
U-66	1	B	Residential	66	13434589.0	282628.7	597.8
U-67	1	B	Residential	66	13434561.0	282667.7	597.5
U-68	1	B	Residential	66	13434509.0	282681.2	598.1
U-69	1	B	Residential	66	13434454.0	282718.5	598.2
U-70	1	B	Residential	66	13434419.0	282740.5	598.0
U-71	1	B	Residential	66	13434390.0	282759.1	598.0
U-72	1	B	Residential	66	13434597.0	282798.9	597.2
U-73	1	B	Residential	66	13434631.0	282781.4	597.4
U-74	1	B	Residential	66	13434663.0	282760.8	597.1
U-75	1	B	Residential	66	13434696.0	282739.1	597.1
U-76	1	B	Residential	66	13434732.0	282715.8	597.2
U-77	1	C	John F. Kennedy Memorial Park - Trail	66	13434772.0	282700.0	596.9
U-78	1	B	Residential	66	13434939.0	282727.7	595.9
U-79	1	C	John F. Kennedy Memorial Park - Baseball Field	66	13434846.0	282861.9	597.4
U-80	1	B	Residential	66	13435162.0	282800.4	597.3
U-81	1	B	Residential	66	13436376.0	283392.6	596.4
U-82	1	B	Residential	66	13436285.0	283371.4	597.3
U-83	1	B	Residential	66	13436217.0	283360.8	597.4
U-84	1	B	Residential	66	13436134.0	283416.5	596.3
U-85	1	B	Residential	66	13436068.0	283467.7	596.9
U-86	1	B	Residential	66	13436142.0	283561.1	596.5
U-87	2	B	The Cove at Allen Park - Balcony	66	13436315.0	283541.2	596.7
U-88	1	B	Residential	66	13436475.0	283559.0	595.5
U-89	1	B	Residential	66	13436385.0	283610.1	596.8
U-90	1	B	Residential	66	13436175.0	283618.9	596.5
U-91	1	B	Residential	66	13436202.0	283664.4	596.6
U-92	5	B	The Cove at Allen Park - Swimming Pool	66	13436388.0	283669.8	597.2
U-93	1	B	Residential	66	13436577.0	283636.4	595.3
U-94	1	B	The Cove at Allen Park - Balcony	66	13436421.0	283719.5	596.7
U-95	1	B	Residential	66	13436232.0	283712.4	596.2
U-96	1	B	Residential	66	13436262.0	283766.1	596.7
U-97	1	B	Residential	66	13436456.0	283787.3	596.7
U-98	2	B	The Cove at Allen Park - Balcony	66	13436636.0	283760.7	595.4
U-99	2	B	The Cove at Allen Park - Balcony	66	13436688.0	283755.1	595.3
U-100	2	B	The Cove at Allen Park - Balcony	66	13436732.0	283804.2	595.2
U-101	2	B	The Cove at Allen Park - Balcony	66	13436681.0	283818.9	595.2
U-102	1	B	Residential	66	13436477.0	283840.2	597.0
U-103	1	B	Residential	66	13436507.0	283897.3	597.1
U-104	1	B	Residential	66	13436564.0	283926.4	596.2
U-105	2	B	The Cove at Allen Park - Balcony	66	13436707.0	283881.6	595.3
U-106	2	B	The Cove at Allen Park - Balcony	66	13436786.0	283839.8	595.2
U-107	1	B	The Cove at Allen Park - Balcony	66	13436890.0	283875.9	595.1
U-108	2	B	The Cove at Allen Park - Balcony	66	13436810.0	283897.9	595.4
U-109	1	B	The Cove at Allen Park - Balcony	66	13436737.0	283927.4	595.5
U-110	1	B	Residential	66	13436615.0	283978.3	596.1

Appendix E - Receptor Inputs
CNE U

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
U-111	1	B	The Cove at Allen Park - Balcony	66	13436761.0	283944.9	595.4
U-112	2	B	The Cove at Allen Park - Balcony	66	13436914.0	283926.3	595.3
U-113	2	B	The Cove at Allen Park - Balcony	66	13436952.0	283996.3	595.3
U-114	2	B	The Cove at Allen Park - Balcony	66	13436793.0	283998.0	595.3
U-115	1	B	Residential	66	13436651.0	284032.8	596.9
U-116	1	B	Residential	66	13436673.0	284081.4	596.4
U-117	2	B	The Cove at Allen Park - Balcony	66	13436839.0	284063.0	595.3
U-118	2	B	The Cove at Allen Park - Balcony	66	13436998.0	284059.6	595.4
U-119	1	B	The Cove at Allen Park - Balcony	66	13437030.0	284115.5	595.4
U-120	2	B	The Cove at Allen Park - Balcony	66	13436938.0	284108.7	595.6
U-121	2	B	The Cove at Allen Park - Balcony	66	13436876.0	284133.6	595.5
U-122	1	B	Residential	66	13436669.0	284171.4	596.9
U-123	1	B	Residential	66	13436693.0	284210.5	597.0
U-124	1	B	The Cove at Allen Park - Balcony	66	13436907.0	284191.8	595.4
U-125	1	B	The Cove at Allen Park - Balcony	66	13437063.0	284161.3	595.6
U-126	2	B	The Cove at Allen Park - Balcony	66	13437087.0	284217.2	595.4
U-127	2	B	The Cove at Allen Park - Balcony	66	13437028.0	284250.5	595.5
U-128	1	B	The Cove at Allen Park - Balcony	66	13436937.0	284238.7	595.3
U-129	1	B	Residential	66	13436776.0	284241.8	596.3
U-130	2	B	The Cove at Allen Park - Balcony	66	13436967.0	284290.1	595.1
U-131	2	B	The Cove at Allen Park - Balcony	66	13437123.0	284281.6	595.2
U-132	2	B	The Cove at Allen Park - Balcony	66	13437159.0	284335.8	595.3
U-133	2	B	The Cove at Allen Park - Balcony	66	13437011.0	284347.7	594.9
U-134	2	B	The Cove at Allen Park - Balcony	66	13437034.0	284406.4	595.2
U-135	1	B	The Cove at Allen Park - Balcony	66	13437190.0	284377.6	595.4
U-136	2	B	The Cove at Allen Park - Balcony	66	13437151.0	284462.4	595.3
U-137	1	B	The Cove at Allen Park - Balcony	66	13437066.0	284459.6	595.3
U-138	1	B	Residential	66	13437180.0	284544.1	595.0
U-139	1	B	Residential	66	13437267.0	284519.5	595.3
U-140	1	D	Hope City Church	66	13437709.0	284848.0	595.2
U-141	1	B	Residential	66	13434209.0	282729.5	598.4
U-142	1	B	Residential	66	13434245.0	282702.0	597.8
U-143	1	B	Residential	66	13434325.0	282650.6	598.4
U-144	1	B	Residential	66	13436607.0	283713.3	595.2

Appendix E - Receptor Inputs
CNE V

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
V-01	N/A	D	Melvindale High School	51	13438052.5	284383.6	595.1

Appendix E - Receptor Inputs
CNE W

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
W-01	1	C	Comfort Inn & Suites Allen Park - Dearborn	66	13439672.0	286802.1	603.7
W-02	1	C	Best Western Greenfield Inn	66	13439977.0	287218.8	605.5
W-03	1	B	Residential	66	13440484.0	287110.2	591.4
W-04	1	B	Residential	66	13440542.0	287197.5	592.8
W-05	1	B	Residential	66	13440553.0	287225.4	592.8
W-06	1	B	Residential	66	13440576.0	287264.4	592.0
W-07	1	B	Residential	66	13440605.0	287285.9	591.0
W-08	1	B	Residential	66	13440614.0	287328.4	592.2
W-09	1	B	Residential	66	13440638.0	287348.2	592.3
W-10	1	B	Residential	66	13440668.0	287408.1	592.2
W-11	1	B	Residential	66	13440759.0	287561.3	593.3
W-12	1	B	Residential	66	13440775.0	287598.1	592.4
W-13	1	B	Residential	66	13440790.0	287629.8	592.2
W-14	1	B	Residential	66	13440821.0	287648.0	592.3

Appendix E - Receptor Inputs
CNE Y

Draft Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Receptor ID	Dwelling Units	Activity Category Classification	Land-Use Type	Noise Abatement Criteria (dBA)	X-Coordinates	Y-Coordinates	Z-Coordinates
Y-01	5	B	Lake Village of Fairlane - Swimming Pool	66	13442982.0	294420.5	592.7
Y-02	2	B	Lake Village of Fairlane - Balcony	66	13442951.0	294350.2	594.0
Y-03	2	B	Lake Village of Fairlane - Balcony	66	13442905.0	294290.3	594.1
Y-04	2	B	Lake Village of Fairlane - Balcony	66	13442916.0	294240.6	594.1
Y-05	2	B	Lake Village of Fairlane - Balcony	66	13442972.0	294195.7	594.0
Y-06	2	B	Lake Village of Fairlane - Balcony	66	13442923.0	294132.2	594.1
Y-07	2	B	Lake Village of Fairlane - Balcony	66	13442936.0	294077.3	596.9
Y-08	2	B	Lake Village of Fairlane - Balcony	66	13442946.0	294006.6	596.5
Y-09	2	B	Lake Village of Fairlane - Balcony	66	13442951.0	293947.6	598.0
Y-10	2	B	Lake Village of Fairlane - Balcony	66	13443012.0	293898.6	598.0
Y-11	2	B	Lake Village of Fairlane - Balcony	66	13442970.0	293836.4	597.9
Y-12	2	B	Lake Village of Fairlane - Balcony	66	13442969.0	293790.5	597.9
Y-13	2	B	Lake Village of Fairlane - Balcony	66	13443029.0	293743.6	598.0
Y-14	2	B	Lake Village of Fairlane - Balcony	66	13442977.0	293674.8	598.0
Y-15	1	B	Lake Village of Fairlane - Tennis Court	66	13442982.0	293518.9	609.2
Y-16	2	B	Lake Village of Fairlane - Balcony	66	13442919.0	293723.1	598.1
Y-17	2	B	Lake Village of Fairlane - Balcony	66	13442907.0	293886.7	597.5
Y-18	2	B	Lake Village of Fairlane - Balcony	66	13442830.0	293901.1	597.9
Y-19	2	B	Lake Village of Fairlane - Balcony	66	13442775.0	293830.5	597.9
Y-20	2	B	Lake Village of Fairlane - Balcony	66	13442718.0	293877.8	598.0
Y-21	2	B	Lake Village of Fairlane - Balcony	66	13442768.0	293944.7	597.6
Y-22	2	B	Lake Village of Fairlane - Balcony	66	13442748.0	294011.9	596.1
Y-23	2	B	Lake Village of Fairlane - Balcony	66	13442674.0	294006.0	595.5
Y-24	2	B	Lake Village of Fairlane - Balcony	66	13442750.0	294087.7	594.1
Y-25	2	B	Lake Village of Fairlane - Balcony	66	13442681.0	294139.3	594.0
Y-26	2	B	Lake Village of Fairlane - Balcony	66	13442726.0	294198.9	593.8
Y-27	2	B	Lake Village of Fairlane - Balcony	66	13442794.0	294148.6	594.2
Y-28	2	B	Lake Village of Fairlane - Balcony	66	13442866.0	294179.1	594.1
Y-29	2	B	Lake Village of Fairlane - Balcony	66	13442834.0	294339.8	593.9
Y-30	2	B	Lake Village of Fairlane - Balcony	66	13442882.0	294401.8	594.0

APPENDIX F

SPECIAL LAND USE DESCRIPTIONS

COMMON NOISE ENVIRONMENT D

CNE D includes three (3) hotels that contain outdoor pool areas. This CNE contained a total of three (3) modeled receptors with an Activity Category E land-use classification. The DUEs were determined by utilizing the equation outlined in the Michigan Department of Transportation (MDOT) Highway Noise Analysis and Abatement Handbook, which is as follows:

$$\frac{\# \text{ of Occupants}}{\text{Average Persons per Household (3)}} \times \left(\frac{\# \text{ Daily Hours Used}}{\# \text{ Hours per Day (24)}} \times \frac{\# \text{ Days Used per Year}}{\text{Days per Year (365)}} \right)$$

For the purposes of a swimming pool, the number of occupants is determined by the bather capacity limit. In the Michigan Department of Environment, Great Lakes, and Energy Drinking Water and Environmental Health Division (EGLE)'s Public Act and Rules Governing Public Swimming Pools (EQP2263), page 26 under R 321.2193, Section 2a of Rule 93 states that seven persons per 100 square feet of surface water area where the water depth is not more than 5 feet determines the bather capacity limit for the pool. Therefore, bather capacity limit for each swimming pool was determined by approximating the square footage of the outdoor pool in Google Earth imagery, then dividing by 100 and multiplying by 7.

The number of daily hours and days used was determined, if possible, by sourcing an online listing correlating to the hotel. Otherwise, 14 hours per day (average amount of daylight) and 102 days per year (from Memorial Day to Labor Day) were assumed.

D-1 Delta Hotels by Marriott Detroit Metro Airport

Receptor D-1 was determined to have an outdoor pool area of approximately 700 square feet, which equates to 48 occupants. The website listing for this hotel stated outdoor pool operation hours to be between 8:00 AM-10:00 PM daily, equaling 14 hours of operation. No operating season information was located, so 102 days were assumed. The following equation determined the DUE for this receptor:

$$\frac{48}{3} \times \left(\frac{14}{24} \times \frac{102}{365} \right) = 2.6 \text{ DUEs (3 rounded up)}$$

D-2 Wyndham Garden Romulus Detroit Metro Airport

Receptor D-2 was determined to have an outdoor pool area of approximately 1,200 square feet, which equates to 84 occupants. The outdoor pool was not listed under the amenities on the hotel's website; therefore, the daily operation length for the hotel pool was assumed to equal 14 hours per day, and the yearly operation length was assumed to equal 102 days per year. The following equation determined the DUE for this receptor:

$$\frac{84}{3} \times \left(\frac{14}{24} \times \frac{102}{365} \right) = 4.6 \text{ DUEs (5 rounded up)}$$

D-3 Clarion Hotel Detroit Metro Airport

Receptor D-3, Clarion Hotel Detroit Metro Airport, was determined to have an outdoor pool area of approximately 1,150 square feet, which equates to 80.5 (81 rounded up) occupants. The website listing for this hotel stated outdoor pool operation hours to be between 8:00 AM-10:00 PM daily, equaling 14 hours of operation. No operating season information was located, so 102 days were assumed. The following equation determined the DUE for this receptor:

$$\frac{81}{3} \times \left(\frac{14}{24} \times \frac{102}{365} \right) = 4.4 \text{ DUEs (4 rounded down)}$$

COMMON NOISE ENVIRONMENT F

Four (4) of the receptors in CNE F represent twelve (12) DUEs associated with four (4) hotels with outdoor pool areas and/or patio areas with an Activity Category E land-use classification. The DUEs were determined by utilizing the equation outlined in the MDOT Noise Handbook.

F-1 Howard Johnson by Wyndham Romulus Detroit Metro Airport

Receptor F-1 was determined to have an outdoor pool area of approximately 750 square feet, which equates to 52.5 (53 rounded up) occupants. The outdoor pool was not listed under the amenities on the hotel's website; therefore, the daily operation length for the hotel pool was assumed to equal 14 hours per day, and the yearly operation length was assumed to equal 102 days per year. The following equation determined the DUE for this receptor:

$$\frac{53}{3} \times \left(\frac{14}{24} \times \frac{102}{365} \right) = 2.9 \text{ DUEs (3 rounded up)}$$

F-2 La Quinta Inn & Suites by Wyndham Romulus Detroit Metro Airport

Receptor F-2 was determined to have an outdoor pool area of approximately 1000 square feet, which equates to 70 occupants. The outdoor pool was not listed under the amenities on the hotel's website; therefore, the daily operation length for the hotel pool was assumed to equal 14 hours per day, and the yearly operation length was assumed to equal 102 days per year. The following equation determined the DUE for this receptor:

$$\frac{70}{3} \times \left(\frac{14}{24} \times \frac{102}{365} \right) = 3.8 \text{ DUEs (4 rounded up)}$$

F-3 Courtyard Detroit Metro Airport Romulus

Receptor F-3 was determined to have a courtyard with a fire pit and four chairs, which equates to four occupants. The courtyard was not listed under the amenities on the hotel's website; therefore, the daily operation length for the courtyard was assumed to equal 14 hours per day, and the yearly operation length was assumed to equal the equivalent of the seasons of spring, summer, and fall, which equals 274 days per year. The following equation determined the DUE for this receptor:

$$\frac{4}{3} \times \left(\frac{14}{24} \times \frac{274}{365} \right) = 0.6 \text{ DUEs (1 rounded up)}$$

F-4 Detroit Metro Airport Marriott

Receptor F-4, Detroit Metro Airport Marriott, was determined to have a courtyard with three two-person benches surrounding a table, which equates to six occupants. The courtyard was not listed under the amenities on the hotel's website; therefore, the daily operation length for the courtyard was assumed to equal 14 hours per day, and the yearly operation length was assumed to equal the equivalent of the seasons of spring, summer, and fall, which equals 274 days per year. The following equation determined the DUE for this receptor:

$$\frac{6}{3} \times \left(\frac{14}{24} \times \frac{274}{365} \right) = 0.9 \text{ DUEs (1 rounded up)}$$

COMMON NOISE ENVIRONMENT T

One (1) modeled receptor was used to represent the Little Jungle Preschool playground area (receptor T-19), which was identified with an Activity Category C land-use classification. The DUEs were determined by utilizing the equation outlined in the MDOT Noise Handbook.

T-19 Little Jungle Preschool

The DUEs for Little Jungle Preschool were determined by its approximate maximum enrollment (90 students) plus the amount of teachers listed on their website (14), its operating season (244 days per year) and operating hours (11 hours per day). The following equation determined the DUE for this receptor:

$$\frac{104}{3} * \left(\frac{11}{24} * \frac{244}{365} \right) = 10.6 \text{ DUEs (11 rounded up)}$$

COMMON NOISE ENVIRONMENT U

One (1) modeled receptor was used to represent the Cove at Allen Park apartment complex outdoor pool area, which was classified with an Activity Category C land-use classification. The DUEs were determined by utilizing the equation outlined in the MDOT Noise Handbook.

U-93 The Cove at Allen Park – Swimming Pool

The swimming pool was determined to have an area of approximately 1,200 square feet, which equates to 84 occupants. No details about the outdoor pool were listed on any of the apartment complex's websites; therefore, the daily operation length for the swimming pool was assumed to equal 14 hours per day, and the yearly operation length was assumed to equal 102 days per year. The following equation determined the DUE for this receptor:

$$\frac{84}{3} \times \left(\frac{14}{24} \times \frac{102}{365} \right) = 4.5 \text{ DUEs (5 rounded up)}$$

COMMON NOISE ENVIRONMENT Y

One (1) modeled receptor was used to represent the Lake Village of Fairlane apartment complex outdoor pool. The DUEs associated with outdoor pool area were determined by utilizing the equation outlined in the MDOT Noise Handbook.

Y-01 Lake Village of Fairlane – Swimming Pool

The swimming pool was determined to have an area of approximately 1,200 square feet, which equates to 84 occupants. No details about the outdoor pool were listed on the apartment complex's website; therefore, the daily operation length for the hotel pool was assumed to equal 14 hours per day, and the yearly operation length was assumed to equal 102 days per year. The following equation determined the DUE for this receptor:

$$\frac{84}{3} \times \left(\frac{14}{24} \times \frac{102}{365} \right) = 4.5 \text{ DUEs (5 rounded up)}$$

APPENDIX G
FIELD MEASUREMENT DATA SHEETS

Appendix G - Field Measurement Data Sheets
A-1 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-1 Data
Date	Monday, December 12, 2022
Location	34224 McBride Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	40° F
Cloud Cover	Cloudy
Wind	None
Time Start	3:33 PM
Time Stop	3:48 PM
Noise Meter Reading $L_{eq(A)}$	65.2
Noise Meter Reading $L_{90(A)}$	62.2
Noise Meter Reading $L_{50(A)}$	64.3
Noise Meter Reading $L_{10(A)}$	67.0
Noise Meter Reading $L_{max(A)}$	75.5
Noise Meter Reading $L_{peak(C)}$	87.3
Distance to Roadway	60 feet
Eastbound I-94 Autos	899
Eastbound I-94 Medium Trucks	33
Eastbound I-94 Heavy Trucks	74
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	969
Westbound I-94 Medium Trucks	17
Westbound I-94 Heavy Trucks	72
Westbound I-94 Buses	1
Westbound I-94 Motorcycles	0
Eastbound McBride Street Autos	3
Eastbound McBride Street Medium Trucks	0
Eastbound McBride Street Heavy Trucks	0
Eastbound McBride Street Buses	0
Eastbound McBride Street Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-2 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-2 Data
Date	Monday, December 12, 2022
Location	88' S EB I-94, 66' N Exit 197
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	38° F
Cloud Cover	Cloudy
Wind	5 mph; no direction
Time Start	4:03 PM
Time Stop	4:18 PM
Noise Meter Reading $L_{eq(A)}$	74.9
Noise Meter Reading $L_{90(A)}$	72.3
Noise Meter Reading $L_{50(A)}$	74.4
Noise Meter Reading $L_{10(A)}$	76.6
Noise Meter Reading $L_{max(A)}$	81.5
Noise Meter Reading $L_{peak(C)}$	94.4
Distance to Roadway	88 feet
Eastbound I-94 Autos	945
Eastbound I-94 Medium Trucks	35
Eastbound I-94 Heavy Trucks	69
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	1021
Westbound I-94 Medium Trucks	33
Westbound I-94 Heavy Trucks	65
Westbound I-94 Buses	2
Westbound I-94 Motorcycles	1
Eastbound Exit 197 Autos	20
Eastbound Exit 197 Medium Trucks	3
Eastbound Exit 197 Heavy Trucks	7
Eastbound Exit 197 Buses	0
Eastbound Exit 197 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-3 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

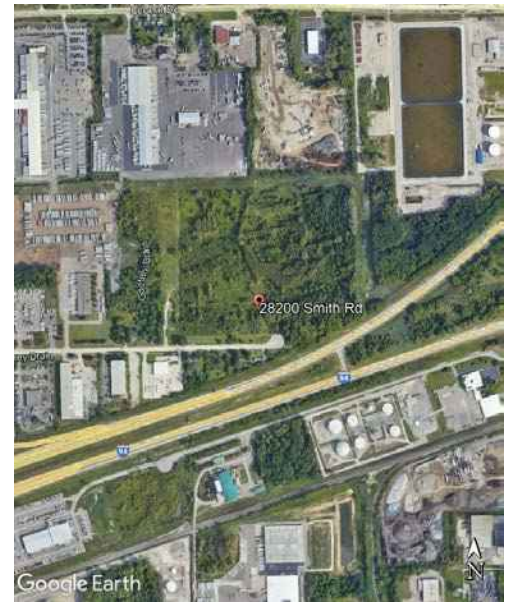
Description	A-3 Data
Date	Tuesday, December 13, 2022
Location	31555 Wick Road
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	35° F
Cloud Cover	Cloudy
Wind	5 mph; no direction
Time Start	8:50 AM
Time Stop	9:05 AM
Noise Meter Reading $L_{eq(A)}$	79.4
Noise Meter Reading $L_{90(A)}$	73.6
Noise Meter Reading $L_{50(A)}$	77.9
Noise Meter Reading $L_{10(A)}$	82.4
Noise Meter Reading $L_{max(A)}$	88.0
Noise Meter Reading $L_{peak(C)}$	100.0
Distance to Roadway	35 feet
Eastbound I-94 Autos	724
Eastbound I-94 Medium Trucks	34
Eastbound I-94 Heavy Trucks	103
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	552
Westbound I-94 Medium Trucks	41
Westbound I-94 Heavy Trucks	137
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-4 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-4 Data
Date	Tuesday, December 13, 2022
Location	28200 Smith Road
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	38° F
Cloud Cover	Cloudy
Wind	5 mph; no direction
Time Start	9:18 AM
Time Stop	9:32 AM
Noise Meter Reading $L_{eq(A)}$	73.8
Noise Meter Reading $L_{90(A)}$	70.1
Noise Meter Reading $L_{50(A)}$	72.9
Noise Meter Reading $L_{10(A)}$	75.9
Noise Meter Reading $L_{max(A)}$	89.6
Noise Meter Reading $L_{peak(C)}$	99.8
Distance to Roadway	200 feet
Eastbound I-94 Autos	680
Eastbound I-94 Medium Trucks	37
Eastbound I-94 Heavy Trucks	128
Eastbound I-94 Buses	3
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	609
Westbound I-94 Medium Trucks	36
Westbound I-94 Heavy Trucks	110
Westbound I-94 Buses	2
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-5 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-5 Data
Date	Tuesday, December 13, 2022
Location	6597 McGuire Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	38° F
Cloud Cover	Cloudy
Wind	None
Time Start	9:55 AM
Time Stop	10:10 AM
Noise Meter Reading $L_{eq(A)}$	70.1
Noise Meter Reading $L_{90(A)}$	65.5
Noise Meter Reading $L_{50(A)}$	68.7
Noise Meter Reading $L_{10(A)}$	73.0
Noise Meter Reading $L_{max(A)}$	79.3
Noise Meter Reading $L_{peak(C)}$	94.2
Distance to Roadway	250 feet
Eastbound I-94 Autos	596
Eastbound I-94 Medium Trucks	34
Eastbound I-94 Heavy Trucks	128
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	583
Westbound I-94 Medium Trucks	30
Westbound I-94 Heavy Trucks	108
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-6 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-6 Data
Date	Tuesday, December 13, 2022
Location	6365 Oldham Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	38° F
Cloud Cover	Cloudy
Wind	None
Time Start	10:28 AM
Time Stop	10:43 AM
Noise Meter Reading $L_{eq(A)}$	65.9
Noise Meter Reading $L_{90(A)}$	62.8
Noise Meter Reading $L_{50(A)}$	65.2
Noise Meter Reading $L_{10(A)}$	67.7
Noise Meter Reading $L_{max(A)}$	76.2
Noise Meter Reading $L_{peak(C)}$	89.1
Distance to Roadway	150 feet
Eastbound I-94 Autos	642
Eastbound I-94 Medium Trucks	33
Eastbound I-94 Heavy Trucks	124
Eastbound I-94 Buses	3
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	624
Westbound I-94 Medium Trucks	27
Westbound I-94 Heavy Trucks	119
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-7 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-7 Data
Date	Tuesday, December 13, 2022
Location	4475 Willow Cove Boulevard
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	38° F
Cloud Cover	Cloudy
Wind	None
Time Start	11:16 AM
Time Stop	11:31 AM
Noise Meter Reading $L_{eq(A)}$	77.4
Noise Meter Reading $L_{90(A)}$	71.8
Noise Meter Reading $L_{50(A)}$	76.1
Noise Meter Reading $L_{10(A)}$	80.4
Noise Meter Reading $L_{max(A)}$	85.8
Noise Meter Reading $L_{peak(C)}$	100.0
Distance to Roadway	60 feet
Eastbound I-94 Autos	437
Eastbound I-94 Medium Trucks	25
Eastbound I-94 Heavy Trucks	91
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	533
Westbound I-94 Medium Trucks	34
Westbound I-94 Heavy Trucks	101
Westbound I-94 Buses	1
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-8 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

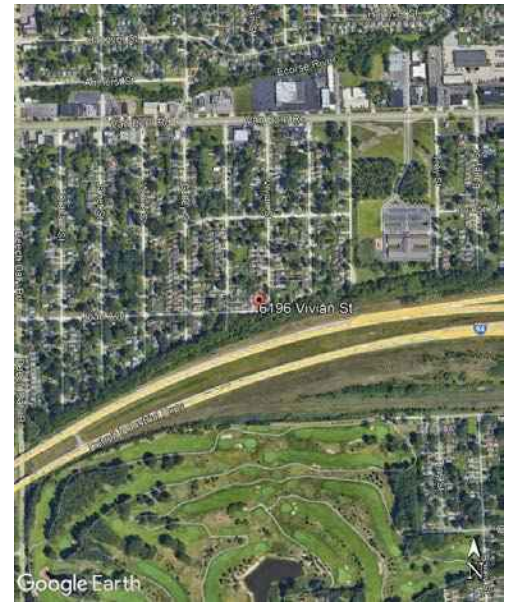
Description	A-8 Data
Date	Tuesday, December 13, 2022
Location	15403 Commerce Drive S
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	38° F
Cloud Cover	Cloudy
Wind	None
Time Start	11:51 AM
Time Stop	12:06 PM
Noise Meter Reading $L_{eq(A)}$	68.0
Noise Meter Reading $L_{90(A)}$	64.3
Noise Meter Reading $L_{50(A)}$	67.2
Noise Meter Reading $L_{10(A)}$	70.3
Noise Meter Reading $L_{max(A)}$	76.5
Noise Meter Reading $L_{peak(C)}$	91.2
Distance to Roadway	275 feet
Eastbound I-94 Autos	511
Eastbound I-94 Medium Trucks	33
Eastbound I-94 Heavy Trucks	83
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	501
Westbound I-94 Medium Trucks	31
Westbound I-94 Heavy Trucks	90
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0
Northwest Greenfield Road Autos	69
Northwest Greenfield Road Medium Trucks	3
Northwest Greenfield Road Heavy Trucks	4
Northwest Greenfield Road Buses	0
Northwest Greenfield Road Motorcycles	0
Southeast Greenfield Road Autos	89
Southeast Greenfield Road Medium Trucks	4
Southeast Greenfield Road Heavy Trucks	5
Southeast Greenfield Road Buses	0
Southeast Greenfield Road Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-9 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-9 Data
Date	Tuesday, November 7, 2023
Location	6196 Vivian Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	49° F
Cloud Cover	Mostly cloudy
Wind	9 mph SE
Time Start	8:30 AM
Time Stop	8:45 AM
Noise Meter Reading $L_{eq(A)}$	59.5
Noise Meter Reading $L_{90(A)}$	57.3
Noise Meter Reading $L_{50(A)}$	58.8
Noise Meter Reading $L_{10(A)}$	60.6
Noise Meter Reading $L_{max(A)}$	82.6
Noise Meter Reading $L_{peak(C)}$	86.5
Distance to Roadway	150 feet
Eastbound I-94 Autos	945
Eastbound I-94 Medium Trucks	51
Eastbound I-94 Heavy Trucks	139
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	889
Westbound I-94 Medium Trucks	25
Westbound I-94 Heavy Trucks	98
Westbound I-94 Buses	1
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-10 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-10 Data
Date	Tuesday, November 7, 2023
Location	6090 Burr Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	51° F
Cloud Cover	Cloudy
Wind	9 mph SE
Time Start	8:58 AM
Time Stop	9:13 AM
Noise Meter Reading $L_{eq}(A)$	63.5
Noise Meter Reading $L_{90}(A)$	60.6
Noise Meter Reading $L_{50}(A)$	62.1
Noise Meter Reading $L_{10}(A)$	63.7
Noise Meter Reading $L_{max}(A)$	80.6
Noise Meter Reading $L_{peak}(C)$	93.3
Distance to Roadway	175 feet
Eastbound I-94 Autos	875
Eastbound I-94 Medium Trucks	39
Eastbound I-94 Heavy Trucks	100
Eastbound I-94 Buses	1
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	821
Westbound I-94 Medium Trucks	39
Westbound I-94 Heavy Trucks	104
Westbound I-94 Buses	2
Westbound I-94 Motorcycles	0
Northbound Telegraph Road Autos	60
Northbound Telegraph Road Medium Trucks	0
Northbound Telegraph Road Heavy Trucks	11
Northbound Telegraph Road I-94 Buses	0
Northbound Telegraph Road Motorcycles	0
Southbound Telegraph Road Autos	85
Southbound Telegraph Road Medium Trucks	0
Southbound Telegraph Road Heavy Trucks	2
Southbound Telegraph Road Buses	0
Southbound Telegraph Road Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-11 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-11 Data
Date	Tuesday, November 7, 2023
Location	24799 Beverly Road
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	51° F
Cloud Cover	Mostly cloudy
Wind	10 mph SE
Time Start	9:30 AM
Time Stop	9:45 AM
Noise Meter Reading $L_{eq(A)}$	64.2
Noise Meter Reading $L_{90(A)}$	61.0
Noise Meter Reading $L_{50(A)}$	63.0
Noise Meter Reading $L_{10(A)}$	65.3
Noise Meter Reading $L_{max(A)}$	78.5
Noise Meter Reading $L_{peak(C)}$	87.7
Distance to Roadway	550 feet
Eastbound I-94 Autos	815
Eastbound I-94 Medium Trucks	41
Eastbound I-94 Heavy Trucks	145
Eastbound I-94 Buses	2
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	696
Westbound I-94 Medium Trucks	34
Westbound I-94 Heavy Trucks	97
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-12 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-12 Data
Date	Tuesday, November 7, 2023
Location	6041 Pine Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	51° F
Cloud Cover	Cloudy
Wind	10 mph SE
Time Start	10:15 AM
Time Stop	10:30 AM
Noise Meter Reading $L_{eq(A)}$	66.2
Noise Meter Reading $L_{90(A)}$	63.0
Noise Meter Reading $L_{50(A)}$	64.8
Noise Meter Reading $L_{10(A)}$	68.0
Noise Meter Reading $L_{max(A)}$	83.5
Noise Meter Reading $L_{peak(C)}$	88.4
Distance to Roadway	275 feet
Eastbound I-94 Autos	849
Eastbound I-94 Medium Trucks	43
Eastbound I-94 Heavy Trucks	142
Eastbound I-94 Buses	2
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	803
Westbound I-94 Medium Trucks	28
Westbound I-94 Heavy Trucks	87
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0
Northbound Telegraph Road Autos	60
Northbound Telegraph Road Medium Trucks	3
Northbound Telegraph Road Heavy Trucks	2
Northbound Telegraph Road I-94 Buses	0
Northbound Telegraph Road Motorcycles	0
Southbound Telegraph Road Autos	95
Southbound Telegraph Road Medium Trucks	1
Southbound Telegraph Road Heavy Trucks	10
Southbound Telegraph Road Buses	0
Southbound Telegraph Road Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-13 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-13 Data
Date	Tuesday, November 7, 2023
Location	6092 Roosevelt Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	51° F
Cloud Cover	Mostly cloudy
Wind	10 mph SE
Time Start	10:43 AM
Time Stop	10:58 AM
Noise Meter Reading $L_{eq(A)}$	65.7
Noise Meter Reading $L_{90(A)}$	63.5
Noise Meter Reading $L_{50(A)}$	65.1
Noise Meter Reading $L_{10(A)}$	67.2
Noise Meter Reading $L_{max(A)}$	77.5
Noise Meter Reading $L_{peak(C)}$	89.4
Distance to Roadway	150 feet
Eastbound I-94 Autos	845
Eastbound I-94 Medium Trucks	32
Eastbound I-94 Heavy Trucks	114
Eastbound I-94 Buses	2
Eastbound I-94 Motorcycles	1
Westbound I-94 Autos	801
Westbound I-94 Medium Trucks	44
Westbound I-94 Heavy Trucks	119
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-14 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-14 Data
Date	Tuesday, November 7, 2023
Location	6065 Williams Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	52° F
Cloud Cover	Mostly cloudy
Wind	10 mph SE
Time Start	11:06 AM
Time Stop	11:21 AM
Noise Meter Reading $L_{eq(A)}$	65.6
Noise Meter Reading $L_{90(A)}$	63.1
Noise Meter Reading $L_{50(A)}$	65.1
Noise Meter Reading $L_{10(A)}$	67.4
Noise Meter Reading $L_{max(A)}$	73.7
Noise Meter Reading $L_{peak(C)}$	86.3
Distance to Roadway	100 feet
Eastbound I-94 Autos	1004
Eastbound I-94 Medium Trucks	34
Eastbound I-94 Heavy Trucks	118
Eastbound I-94 Buses	2
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	787
Westbound I-94 Medium Trucks	37
Westbound I-94 Heavy Trucks	87
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-15 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-15 Data
Date	Tuesday, November 7, 2023
Location	6199 Hipp Street
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	52° F
Cloud Cover	Mostly cloudy
Wind	10 mph SE
Time Start	11:28 AM
Time Stop	11:43 AM
Noise Meter Reading $L_{eq(A)}$	67.2
Noise Meter Reading $L_{90(A)}$	65.1
Noise Meter Reading $L_{50(A)}$	66.9
Noise Meter Reading $L_{10(A)}$	68.6
Noise Meter Reading $L_{max(A)}$	77.3
Noise Meter Reading $L_{peak(C)}$	85.2
Distance to Roadway	250 feet
Eastbound I-94 Autos	908
Eastbound I-94 Medium Trucks	23
Eastbound I-94 Heavy Trucks	109
Eastbound I-94 Buses	1
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	790
Westbound I-94 Medium Trucks	31
Westbound I-94 Heavy Trucks	98
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-16 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-16 Data
Date	Monday, November 6, 2023
Location	17499 Anne Avenue
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	50° F
Cloud Cover	Cloudy
Wind	10 mph W
Time Start	4:15 PM
Time Stop	4:30 PM
Noise Meter Reading $L_{eq(A)}$	74.6
Noise Meter Reading $L_{90(A)}$	71.1
Noise Meter Reading $L_{50(A)}$	73.9
Noise Meter Reading $L_{10(A)}$	76.6
Noise Meter Reading $L_{max(A)}$	86.1
Noise Meter Reading $L_{peak(C)}$	99.2
Distance to Roadway	75 feet
Northbound M-39 Autos	314
Northbound M-39 Medium Trucks	8
Northbound M-39 Heavy Trucks	6
Northbound M-39 Buses	0
Northbound M-39 Motorcycles	0
Southbound M-39 Autos	551
Southbound M-39 Medium Trucks	5
Southbound M-39 Heavy Trucks	2
Southbound M-39 Buses	2
Southbound M-39 Motorcycles	0
Northbound M-39 Ramp Autos	375
Northbound M-39 Ramp Medium Trucks	0
Northbound M-39 Ramp Heavy Trucks	4
Northbound M-39 Ramp Buses	0
Northbound M-39 Ramp Motorcycles	0
Southbound M-39 Ramp Autos	311
Southbound M-39 Ramp Medium Trucks	10
Southbound M-39 Ramp Heavy Trucks	10
Southbound M-39 Ramp Buses	0
Southbound M-39 Ramp Motorcycles	0
Northbound Van Born Road Autos	80
Northbound Van Born Road Medium Trucks	0
Northbound Van Born Road Heavy Trucks	1
Northbound Van Born Road Buses	1
Northbound Van Born Road Motorcycles	0
Southbound Van Born Road Autos	60
Southbound Van Born Road Medium Trucks	1
Southbound Van Born Road Heavy Trucks	1
Southbound Van Born Road Buses	0
Southbound Van Born Road Motorcycles	0



Appendix G - Field Measurement Data Sheets
A-17 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-17 Data
Date	Tuesday, November 7, 2023
Location	4800 Parkside Boulevard
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	52° F
Cloud Cover	Mostly cloudy
Wind	10 mph SE
Time Start	12:03 PM
Time Stop	12:18 PM
Noise Meter Reading $L_{eq(A)}$	59.8
Noise Meter Reading $L_{90(A)}$	56.6
Noise Meter Reading $L_{50(A)}$	58.0
Noise Meter Reading $L_{10(A)}$	60.8
Noise Meter Reading $L_{max(A)}$	78.3
Noise Meter Reading $L_{peak(C)}$	96.0
Distance to Roadway	325 feet
Eastbound I-94 Autos	510
Eastbound I-94 Medium Trucks	40
Eastbound I-94 Heavy Trucks	96
Eastbound I-94 Buses	0
Eastbound I-94 Motorcycles	0
Westbound I-94 Autos	560
Westbound I-94 Medium Trucks	32
Westbound I-94 Heavy Trucks	88
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	1



Appendix G - Field Measurement Data Sheets
A-18 Noise Analysis Field Log

Traffic Noise Analysis Report
I-94, Wayne Road to East of Greenfield Road

Description	A-18 Data
Date	Tuesday, November 7, 2023
Location	Buckingham Avenue Dead End
Technician	Steve Winters
Project	I-94 Reconstruction
Project Number	2241-7496-00
Temperature	40° F
Cloud Cover	Cloudy
Wind	None
Time Start	3:33 PM
Time Stop	3:48 PM
Noise Meter Reading $L_{eq(A)}$	65.2
Noise Meter Reading $L_{90(A)}$	62.2
Noise Meter Reading $L_{50(A)}$	64.3
Noise Meter Reading $L_{10(A)}$	67.0
Noise Meter Reading $L_{max(A)}$	75.5
Noise Meter Reading $L_{peak(C)}$	87.3
Distance to Roadway	60 feet
Westbound I-94 Autos	561
Westbound I-94 Medium Trucks	34
Westbound I-94 Heavy Trucks	73
Westbound I-94 Buses	0
Westbound I-94 Motorcycles	0
Westbound I-94 On-Ramp Autos	244
Westbound I-94 On-Ramp Medium Trucks	11
Westbound I-94 On-Ramp Heavy Trucks	15
Westbound I-94 On-Ramp Buses	0
Westbound I-94 On-Ramp Motorcycles	0
Westbound Pelham Road Off-Ramp Autos	41
Westbound Pelham Road Off-Ramp Medium Trucks	2
Westbound Pelham Road Off-Ramp Heavy Trucks	5
Westbound Pelham Road Off-Ramp Buses	0
Westbound Pelham Road Off-Ramp Motorcycles	0

