

SUPPLEMENTAL NOISE IMPACT ANALYSIS

I-65/I-465 SOUTH INTERCHANGE MODIFICATION

INDOT DES #0902297

MARION COUNTY, INDIANA

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AUGUST, 2012
(Revised October 30, 2012)

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EXECUTIVE SUMMARY

The Indiana Department of Transportation (INDOT) proposes to improve the I-65/I-465 Interchange in southeastern Indianapolis, Indiana (Marion County). The project scope includes the following improvements:

- Addition of a travel lane on I-65 SB between I-465 and Gray Rd
- Addition of travel lanes on I-465 EB and WB between 9th Ave and I-65
- Addition of a lane on the N-E ramp
- Building a new 40 mph W-S “flyover” ramp
- Addition of a northbound auxiliary lane on I-65 between I-465 and Southport Road

Based on criteria of the FHWA and INDOT, the proposed project is a Type I Project because the above improvements involve increasing the number of through traffic lanes. Therefore, in accordance with 23 CFR Part 772-*Procedures for Abatement of Highway Noise* and the INDOT Traffic Noise Policy approved by the Federal Highway Administration effective July 13, 2011, a noise impact analysis is required.

The noise impacts from the first four bullet points listed above were examined as part of the original noise analysis, which was approved in June, 2012. As part of this supplemental noise impact analysis, the impacts from the last bullet point listed above have been added to the original noise study. Receptors within 500 feet of both sides of I-65 were identified and modeled with Federal Highway Administration Traffic Noise Model version 2.5 (FWHA-TNM) using traffic data provided in the Traffic Forecast (AECOM, revised September 2011) for the proposed project. Receptors identified within 500 feet of the project are listed in Appendix A to this report.

FHWA-TNM generates noise levels at each modeled receptor based on roadway configuration, traffic volume, vehicle speeds and distance from the edge of the outside travel lane (receptor location). Existing noise levels were generated based on current traffic volumes (2011) and the existing roadway alignment. Future noise levels were generated based on traffic volumes for design year (2032) and the preferred alternative for the proposed project.

If future noise impacts are anticipated to occur at a receptor, abatement of traffic noise impacts are evaluated to accomplish specific noise reduction level goals. The INDOT design goal of abatement is to provide a substantial noise reduction level to a majority (greater than 50%) of the benefited first row receptors. INDOT defines substantial noise reduction as at least 7 dB(A). First row receptors are receptors that do not have other receptors between them and the roadway.

Noise abatement incorporated in Type I Projects must be both feasible and reasonable. INDOT considers noise abatement feasible if a majority (greater than 50%) of impacted receptors achieve at least 5 dBA noise reduction in the design year. Noise abatement reasonableness is primarily based on the cost effectiveness of constructing the prescribed noise barrier per benefited receptor. INDOT considers noise abatement reasonable if the cost of noise barrier construction is \$25,000 or less per benefited receptor. Public feedback may also be considered in order to determine abatement reasonableness.

Based on the results of this noise impact analysis, three-hundred eight (308) receptors are located within 500 feet along the supplemental noise study area. Two-hundred seventy three (273) of the identified receptors are predicted to experience noise impacts in design year (2032). Impacted receptors are in the Exhibits to this report. The original noise analysis for I-465 and the interchange was not reanalyzed in this supplemental report because the added northbound auxiliary lane does not have any additional noise impacts to those areas of the study.

Eight (8) noise barriers were modeled along the project alignment. Based on the studies completed to date, noise abatement is feasible and reasonable (based on cost effectiveness) along portions of I-65 NB and I-65 SB. These preliminary indications of likely abatement measures are based upon the preliminary design for Noise Barrier I-65 NB2, I-65 NB3, I-65 NB4 (North of Gray Rd), and I-65 SB3.

Wall I-65 NB2 ranges in height from 13 to 14 feet and is 1,550 feet in length at an estimated cost of \$21,698 per benefited receptor. Wall I-65 NB2 will provide at least 7 dBA noise reduction to 100% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Wall I-65 NB3 was modeled in the original noise analysis and was found to be both feasible and reasonable, at a height of 12 feet for its entire length. However, with the added auxiliary travel lane on NB I-65, the wall needs to be modified to accommodate the increased traffic noise. The wall now ranges in height from 12 to 13 feet and is 1,875 feet in length, at an estimated cost of \$20,978 per benefited receptor. Wall I-65 NB3 will provide at least 7 dBA noise reduction to 66.7% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Wall I-65 NB4 (North of Gray Rd) ranges in height from 12 to 16 feet and is 2,700 feet in length at an estimated cost of \$21,600 per benefited receptor. Wall I-65 NB4 (North of Gray Rd) will provide at least 7 dBA noise reduction to 95.7% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Wall I-65 SB3 ranges in height from 13 to 16 feet and is 3,000 feet in length at an estimated cost of \$23,182 per benefited receptor. Wall I-65 SB3 will provide at least 7 dBA noise reduction to 95.2% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Noise abatement is not reasonable for the remaining noise barriers due to barrier costs exceeding \$25,000 per benefited receptor.

Noise abatement will be reevaluated during the final design if the project's design or scope changes. Changes to these noise abatement measures may occur due to conditions encountered during final design. Final decision on abatement measures will be made upon completion of the final project design.

Table 1: Noise Barrier Analysis

Barrier Name	Min. Height (ft)	Max. Height (ft)	Total length (ft)	¹ Estimated Total Cost (\$)	² Benefited Receptors	Estimated Cost per Benefited Receptors
I-65 NB1	15	19	2,875	\$1,491,750	23	\$64,859
I-65 NB2	13	14	1,550	\$629,250	29	\$21,698
I-65 NB3	12	13	1,875	\$713,250	34	\$20,978
I-65 NB4 (North of Gray Rd)	12	16	2,700	\$1,188,000	55	\$21,600
I-65 NB4 (South of Gray Rd)	16	18	1,500	\$795,000	20	\$39,750
I-65 SB1	15	20	2,600	\$1,366,500	18	\$75,917
I-65 SB2	14	17	2,000	\$954,000	4	\$238,500
I-65 SB3	13	16	3,000	\$1,275,000	55	\$23,182

Notes:

1. Cost is based on \$30 per square foot.
2. Reduction of 5 dBA or more.

1.0 INTRODUCTION

This investigation analyzes anticipated noise impacts generated by increased traffic volume due to the addition of travel lanes along I-65 in southeastern Indianapolis, Indiana (Marion County). Based on criteria of the Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT), the proposed project is a Type I Project because it increases the number of through-traffic lanes to the existing roadway. Therefore, FHWA requires a complete noise impact analysis before proceeding with the project.

The purpose of the noise impact analysis is to predict future noise level, identify potential impacted receptors and evaluate noise abatement measures in (if applicable) areas that show potential noise impacts as a result of the proposed project. Noise (unwanted sound) as perceived by the human ear, is the result of the sound pressure exerted on the eardrum. Sound pressure is the sensory mechanism by which the human ear perceives loudness. As sound pressure reduces, loudness (as perceived by the ear) decreases.

In accordance with 23 CFR Part 772 Procedures for Abatement of Highway Noise and the INDOT Traffic Noise Policy, the objectives of the study were achieved by performing the following tasks:

1. Measuring existing noise levels at representative locations using the Quest 2900 Sound Level Meter,
2. Estimating existing noise levels using the FHWA Traffic Noise Model version 2.5 (TNM) based on measured traffic volumes,
3. Identifying impacted receptors based on FHWA Noise Abatement Criteria (NAC),
4. Assessing traffic noise mitigation measures (single sided roadway barriers) in TNM to anticipate noise reduction levels for identified impacted receptors, and
5. Evaluating whether proposed abatement measures are both feasible and reasonable.

1.1 EXISTING CONDITIONS

Current roadway configuration along I-65 consists of a six-lane interstate roadway with 12' lanes, and 10' paved (11' usable) outside shoulders. South of Thompson Rd, the inside paved shoulders are 4' wide as part of a 36' grass median. North of Thompson Rd through the interchange, the inside shoulders are 13'-6" wide as part of a 27' paved median with a concrete median barrier (CMB). Posted speeds evolve from 65 mph at Southport Rd to 55 mph at I-465.

I-465 is a six-lane interstate roadway with 12' lanes, and 10' paved (11' usable) outside shoulders. The speed limit is posted at 55 mph. Within the subject interchange, the inside shoulders are 10' paved (11' usable) with a wide, variable grass median to contain the left-hand ramp merges (N-W and S-E, or Ramps J and L). Between Sherman Drive and 9th St, the inside shoulders are 17' wide as part of 36' paved median with CMB.

The basic interchange type is a modified cloverleaf with two left-hand-entering semi-directional ramps (to I-465). All ramps that are to accomplish the eight basic turning movements of the interchange are single-lane, and no skew exits with one route in respect to another. Land uses in the project area include residential, commercial, and undeveloped.

FHWA identifies four Noise Abatement Criteria (NAC) categories based on exterior land use activities with the exception of one category. This activity category compares interior noise levels to abatement criterion. Each land use category has an assigned noise level above which abatement is required. See Table 1-1 for a description of NAC Activity Categories and criteria levels. Based on the FHWA NAC, land use in the project area are associated with Activity Categories B, C and E.

Table 1-1: FHWA Noise Abatement Criteria in dBA

Activity Category	NAC	Activity Description
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Residential.
C	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio stations, 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.

Total number of receptors (a location where noise impacts are measured or modeled) identified within 500 feet of this supplemental noise analysis study area are listed below in Table 1-2 according to the associated NAC categorical classification. A single family residence, a commercial building or farm house are each considered as one receptor. Similarly, each unit within a hotel or apartment building is considered one (1) receptor. Receptors identified within the study area are listed in Appendix A.

Table 1-2: Receptors per FHWA Activity Category

FHWA Activity Category	Number of Receptors
A	0
B	290
C	8
D	0
E	10
F	0
G	0

1.2 PROJECT DESCRIPTION

The project scope includes the following improvements:

- Addition of travel lanes on I-65 SB between I-465 and Gray Rd
- Addition of travel lanes on I-465 EB and WB between 9th Ave and I-65
- Addition of a lane on the N-E ramp
- Building a new 40 mph W-S “flyover” ramp
- Addition of an auxiliary lane on I-65 NB between I-465 and Southport Rd

2.0 METHODOLOGY

The noise impact analysis includes: determination of existing noise levels, future noise level for the specified design year, identification of impacted receptors and noise abatement consideration if applicable.

The FHWA Traffic Noise Model version 2.5 (FHWA-TNM) is used to conduct the noise impact analysis. All models are inherently limited and do not fully represent real world conditions. Numerical noise models are a simplification of actual physical conditions. All model results are affected by numerical approximation used to solve the noise equations, modeled area, and the availability and the accuracy of data used to define receptors, traffic, etc. Limitations of the noise model for this project were based on the availability and reliability of traffic data, roadway characteristics, receptor locations and barrier design options.

AECOM provided a traffic forecast, dated September, 2011, that included AM and PM AADT traffic volumes, % DHV, and % commercial traffic along each roadway segment associated with the proposed project. Traffic data for years 2011, 2012, 2017, 2022 and 2032 is available for this analysis. For purposes of this study, 2032 is the design year. For the noise analysis, AM peak DHV traffic was analyzed for the areas on the northbound side of I-65 and PM peak DHV traffic was analyzed for the areas on the southbound side of I-65. Traffic was distributed across each travel lane. Traffic data for this project is in Appendix B to this report.

Thompson, Edgewood, and Southport Rd are roadways within the supplemental noise study area; however, these roadways were not modeled as part of this study. Noise from these roadways has little to no impact on total noise to nearby receptors in comparison to I-65. Noise levels generated by vehicles along I-65 are significantly higher than noise levels along the secondary roadways.

2.1 Determination of Existing Noise Levels

In the original noise analysis, Shrewsberry selected twelve (12) representative monitoring locations along the project alignment to measure existing noise levels at representative receptors. The criteria for selecting monitoring locations included, but were not limited to, existing land use, accessibility for purposes of conducting field measurements, and estimated distance from the edge of the roadway.

Existing noise levels at representative receptors were measured utilizing the Quest 2900 sound level meter. Noise levels were recorded for 5 minutes or 15 minutes, depending on the significance of each selected monitoring location. Data was gathered between 9am and 3pm on Friday, June 17, 2011. Noise was not measured during peak hour traffic due to the lower speeds (thus less noise) at which traffic flows during the peak periods. See Appendix F in the original noise analysis for approximate monitoring locations.

Next, existing noise levels for each identified receptor within 500 feet of the proposed alignment were modeled based on input parameters such as traffic volume for automobiles and heavy trucks (2011) and traffic speed using FHWA-TNM. Output from the FHWA-TNM existing model is included in Appendix C.

2.2 Prediction of Future Noise Levels

Future noise levels for each receptor within 500 feet of the outside travel lane were predicted using the FHWA-TNM software. Output from the FHWA-TNM proposed model is included in Appendix C.

2.3 Identification of Impacted Receptors

In accordance with the INDOT Traffic Noise Policy, the determination of noise impacts is associated with NAC Activity Category criterion level and/or substantial increases to the noise level. FHWA-TNM generated noise levels for each identified receptor are compared to the appropriate NAC level. The software also evaluates the increase in the noise level at each receptor. An affected receptor is classified as “impacted” if either of the two following conditions is met:

1. Predicted noise level approaches (within 1 dBA) or exceeds the applicable NAC, or
2. Predicted noise level substantially exceeds the existing noise level by at least 15 dBA.

2.4 Abatement Considerations

Once noise impacts are identified, noise abatement measures are considered in areas where receptors experienced noise impacts. Due to limitations on INDOT’s ability to acquire property for mitigation or to mitigate sites off of State Right-of-Way, the most common form of abatement is the construction of noise barriers. These barriers include Type 1 noise barrier walls (single sided absorptive roadway side), and Type 3 noise barrier walls (reflective). Noise barrier incorporated in Type 1 Projects must be both feasible and reasonable.

The feasibility analysis determines whether a particular form of abatement will reduce noise levels at a receptor. This assessment is based on engineering considerations such as type of abatement material, topography, drainage, safety and access/maintenance needs. Selected noise abatement options must benefit (at least 5 dBA reduction) the majority (greater than 50%) of impacted receptors in the design year, compared to the average non-abatement levels.

Abatement measures reasonableness considers noise abatement cost, the noise reduction design goal, and public input. Noise barrier cost effectiveness is determined based on the estimated construction cost and the total number of benefited receptors. Per INDOT’s noise policy, the estimated cost of constructing a noise barrier will be divided among the number of benefited receptors. A cost of \$25,000 or less per benefited receptor is currently considered to be cost-effective. Due to increased unit cost associated with barrier height, INDOT does not consider noise barriers in excess of 20 feet in height cost effective. The design goal for substantial noise reduction is to provide at least 7 dBA for a majority (greater than 50%) of the impacted first row receptors. A first row receptor is defined as a receptor that is directly adjacent to the roadway with nothing between the receptor and the road.

2.5 Agency Correspondence

FHWA regulations require that a noise analysis include undeveloped land that is “planned, designed and programmed”. INDOT defines undeveloped land as planned, designed and programmed if building permits have been issued for construction by local authorities. If no zoning or building permit process is in place the land is considered undeveloped unless foundations for new construction are in place. For

land where construction is not visible, those who build adjacent to a highway are presumed to understand and accept the possibility of traffic noise. At the time of this report, no development within the project area is planned.

2.6 Public Involvement

A survey is sent to property owners benefited by noise barriers found to be both feasible and cost effective. Property owners are surveyed to determine whether they do or do not want noise abatement. INDOT requires that a majority (greater than 50%) of benefited property owners respond by the due date or a second attempt will be made to solicit the views of those who did not respond. No third attempt will be made if a majority does not respond. For hotels, the decision as to whether a barrier is desired rests with property owners rather than occupants.

The majority of impacted and benefited property owners must state that they want a barrier constructed for it to be considered reasonable. If the majority of impacted and benefited receptors do not respond affirmatively or do not respond after the second attempt, then INDOT will base their decision on survey responses they received even though a majority of responses was not received.

The public involvement summary is provided in Section 5.3 of this report.

3.0 TRAFFIC NOISE LEVELS

3.1 Existing Noise Levels

Existing noise levels were not measured for this supplemental noise analysis. Refer to the approved original noise analysis report (June, 2012) for information on existing noise levels.

FHWA-TNM was utilized to estimate existing noise levels for all receptors identified within 500 feet of the outside edge of pavement along the project alignment. FHWA-TNM generated noise levels at each modeled receptor based on roadway configuration, traffic volume, vehicle speeds and distance from the outside travel lane (receptor location). Existing sound level results are provided in Appendix C to this report.

The existing model was validated in the original noise analysis (measured noise versus predicted noise levels were within 3 dB). Refer to the original noise analysis for further information regarding the model validation.

3.2 Predicted Noise Levels

FHWA-TNM was used to estimate future noise levels for identified receptors. Future noise levels were generated based on traffic volumes for design year (2032) and the preferred alternative for the proposed project.

Data provided in Appendix C shows several receptors along the proposed alignment that will experience noise impacts in design year (2032). Receptors can be impacted by either approaching or exceeding the applicable NAC, or by experiencing a 15 dBA or greater increase in noise level compared to the existing noise level, or a receptor can also experience both types of impact. In this study, each impacted receptor was due to the NAC being exceeded. No receptor will experience an increase in noise by greater than 15 dBA as compared to existing noise levels.

In an effort to reduce noise impacts, noise abatement measures were evaluated. INDOT requires that abatement measures provide substantial noise reduction (at least 7 dBA) to impacted first row receptors in the design year compared to average non-abatement levels. Noise abatement measures are discussed below in Section 4.0

4.0 NOISE ABATEMENT CONSIDERATIONS

Noise barriers reduce overall traffic noise to nearby receptors. Type 1 noise barrier walls (single sided absorptive roadway side) are the most common noise abatement measure used in the industry and were selected for this project. Absorbing noise barriers mitigate noise impacts by reducing the reflection of sound waves from the noise sources and thereby improving noise degradation. A noise reduction coefficient (NRC) number associated with a particular type of sound absorbing material establishes the amount of sound energy absorbed on striking a material. The higher the NRC rating, the more efficient the product is at reducing noise levels. INDOT requires a NRC of 0.70 to be used on the roadway side of the noise barrier.

4.1 Noise Barrier Locations

Type 1 noise barrier walls were selected as the method of abatement for the proposed project. Noise barrier wall analysis was conducted with the design goal to substantially reduce noise levels to impacted first row receptors in areas where receptors experienced noise impacts. Noise barriers were modeled with a 0.7 noise reduction coefficient on the roadside. Proposed noise barrier locations are shown in the Exhibits. Noise barrier descriptions are provided below in Table 4-1.

4.2 Noise Abatement Results

Eight (8) proposed noise barriers were modeled as described above in Section 4.1. For noise barrier to be considered feasible, the noise level reduction goal (5 dbA) must be met for a majority of the impacted receptors. For noise barriers to be reasonable, the Indiana noise level reduction design goal (at least 7 dBA to more than 50% of impacted first row receptors) must be achieved, the barrier must be cost effective, and the public input must be taken into consideration. Each barrier achieved the Indiana noise level reduction design goal with the exception of I-65 NB1 and I-65 SB1. Cost for each noise barrier was analyzed. For noise barriers to be considered cost effective, the price per benefited receptor must be less than \$25,000. Cost is summarized for each barrier in Table 4-2 below. Barriers I-65 NB1, I-65 NB4 (South of Gray Rd), I-65 SB1, and I-65 SB2 were not found to be cost effective.

Table 4-1: Noise Barrier Descriptions

Barrier Name	Minimum Height (ft)	Maximum Height (ft)	Total Length (ft)
I-65 NB1	15	19	2,875
I-65 NB2	13	14	1,550
I-65 NB3	12	13	1,875
I-65 NB4 (North of Gray Rd)	12	16	2,700
I-65 NB4 (South of Gray Rd)	16	18	1,500
I-65 SB1	15	20	2,600
I-65 SB2	14	17	2,000
I-65 SB3	13	16	3,000

Table 4-2: Cost Analysis

Barrier Name	¹ Estimated Total Cost (\$)	² Benefited Receptors	Estimated Cost per Benefited Receptors
I-65 NB1	\$1,491,750	23	\$64,859
I-65 NB2	\$629,250	29	\$21,698
I-65 NB3	\$713,250	34	\$20,978
I-65 NB4 (North of Gray Rd)	\$1,188,000	55	\$21,600
I-65 NB4 (South of Gray Rd)	\$795,000	20	\$39,750
I-65 SB1	\$1,366,500	18	\$75,917
I-65 SB2	\$954,000	4	\$238,500
I-65 SB3	\$1,275,000	55	\$23,182

Notes:

1. Cost is based on \$30 per square foot.
2. Reduction of 5 dBA or more.

Based on the analysis of noise reduction and cost, Walls I-65 NB2, I-65 NB3, I-65 NB4 (North of Gray Rd) and I-65 SB3 are all feasible and reasonable.

Wall I-65 NB2 ranges in height from 13 to 14 feet and is 1,550 feet in length at an estimated cost of \$21,698 per benefited receptor. Wall I-65 NB2 will provide at least 7 dBA noise reduction to 100% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Wall I-65 NB3 was modeled in the original noise analysis and was found to be both feasible and reasonable, at a height of 12 feet for its entire length. However, with the added auxiliary travel lane on NB I-65, the wall needs to be modified to accommodate the increased traffic noise. The wall now ranges in height from 12 to 13 feet and is 1,875 feet in length, at an estimated cost of \$20,978 per benefited receptor. Wall I-65 NB3 will provide at least 7 dBA noise reduction to 66.7% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Wall I-65 NB4 (North of Gray Rd) ranges in height from 12 to 16 feet and is 2,700 feet in length at an estimated cost of \$21,600 per benefited receptor. Wall I-65 NB4 (North of Gray Rd) will provide at least 7 dBA noise reduction to 95.7% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Wall I-65 SB3 ranges in height from 13 to 16 feet and is 3,000 feet in length at an estimated cost of \$23,182 per benefited receptor. Wall I-65 SB3 will provide at least 7 dBA noise reduction to 95.2% of impacted first row receptors and provide an average noise reduction of greater than 5.0 dBA to benefited receptors.

Noise abatement is not reasonable for the remaining noise barriers due to barrier costs exceeding \$25,000 per benefited receptor.

5.0 FINDINGS

5.1 Agency Correspondence

The results of this noise study should be shared with local development agencies for their use in appropriate land use planning adjacent to this study area.

5.2 Feasibility and Reasonableness

Based on the studies completed to date, noise abatement is feasible and cost-effective (reasonable) along portions of the project. These preliminary indications of likely abatement measures are based upon the preliminary design for noise barrier Walls I-65 NB2, I-65 NB3, I-65 NB4 (North of Gray Rd) and I-65 SB3.

Noise abatement is not reasonable for the remaining noise barriers due to barrier costs exceeding \$25,000 per benefited receptor. Noise abatement will be reevaluated during the final design if the projects design or scope changes.

5.3 Public Involvement

Responses for Wall I-65 NB3 were received with the original noise analysis, and the majority of owners benefited by I-65 NB3 were in favor of the noise barrier wall. For this additional analysis, a survey was sent and the responses taken into consideration as part of the reasonableness of barriers I-65 NB2, I-65 NB4 (North of Gray Rd) and I-65 SB3. A total of 127 surveys were mailed on August 31, 2012. Out of the 127 surveys mailed, 23 were returned as undeliverable and 64 responses were received, of which 62 responses were in favor of noise barrier walls and 2 responses were not in favor. The public notice letter and survey responses are provided in Appendix D to this report. A public information meeting was also held on October 1, 2012, during which many residents in the area expressed a need for noise barrier walls along I-65 south of the I-65/I-465 interchange.

5.4 Outreach to Local Government Officials

Upon completion of the environmental document phase, the noise study will be provided directly to the Indianapolis and Marion County Department of Metropolitan Development. INDOT understands that it is in a unique position to provide outreach to local government and county planning units. INDOT also understands that it is the local government that has the power to regulate land development. INDOT is willing to help the local government by providing expert guidance on noise-related issues. This can include recommendations on setbacks, how to interpret noise studies that have been provided for FHWA projects, and other general noise concerns so that noise impacts are minimized for areas that are being developed.

5.4 Construction Noise

In addition to noise from traffic, construction activities themselves can produce increased noise of a temporary nature. INDOT will be sensitive to local needs and may make adjustments to work practices in order to reduce inconvenience to the public.

6.0 RECOMMENDATIONS

Shrewsberry conducted the noise impact analysis for the I-65/I-465 Interchange Interim Modification project in Marion County, Indiana. Based on the results of this noise impact analysis and public involvement, Shrewsberry recommends construction of Type 1 (single sided adsorptive roadside) noise barrier walls to reduce noise impacts along portions of I-65 Northbound and Southbound, in addition to the noise barriers that were recommended in the original noise analysis for areas along I-465. These preliminary indications of likely abatement measures are based upon the preliminary design for noise barrier Walls I-65 NB2, I-65 NB3, I-65 NB4 (North of Gray Rd) and I-65 SB3. The remaining locations evaluated do not meet either the feasible or reasonable criteria, or both.

Statement of Likelihood:

Based on the studies completed to date, the State of Indiana has identified 273 impacted receptors and has determined that noise abatement is likely, but not guaranteed, at 4 locations. Noise abatement at these locations is based upon preliminary design costs and design criteria. Noise abatement in these locations at this time has been estimated to cost \$3,805,500 and will reduce the noise level by a minimum of 5 dB(A) at a majority of the identified impacted receptors. If during final design it has been determined that conditions have changed such that noise abatement is not feasible and reasonable, the abatement measures might not be provided. The final decision on the installation of an abatement measure will be made upon the completion of the project's final design with consideration of the public involvement processes.

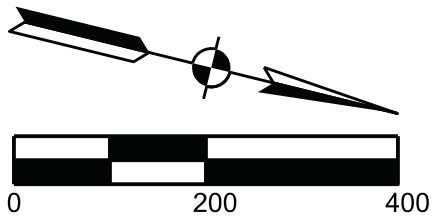
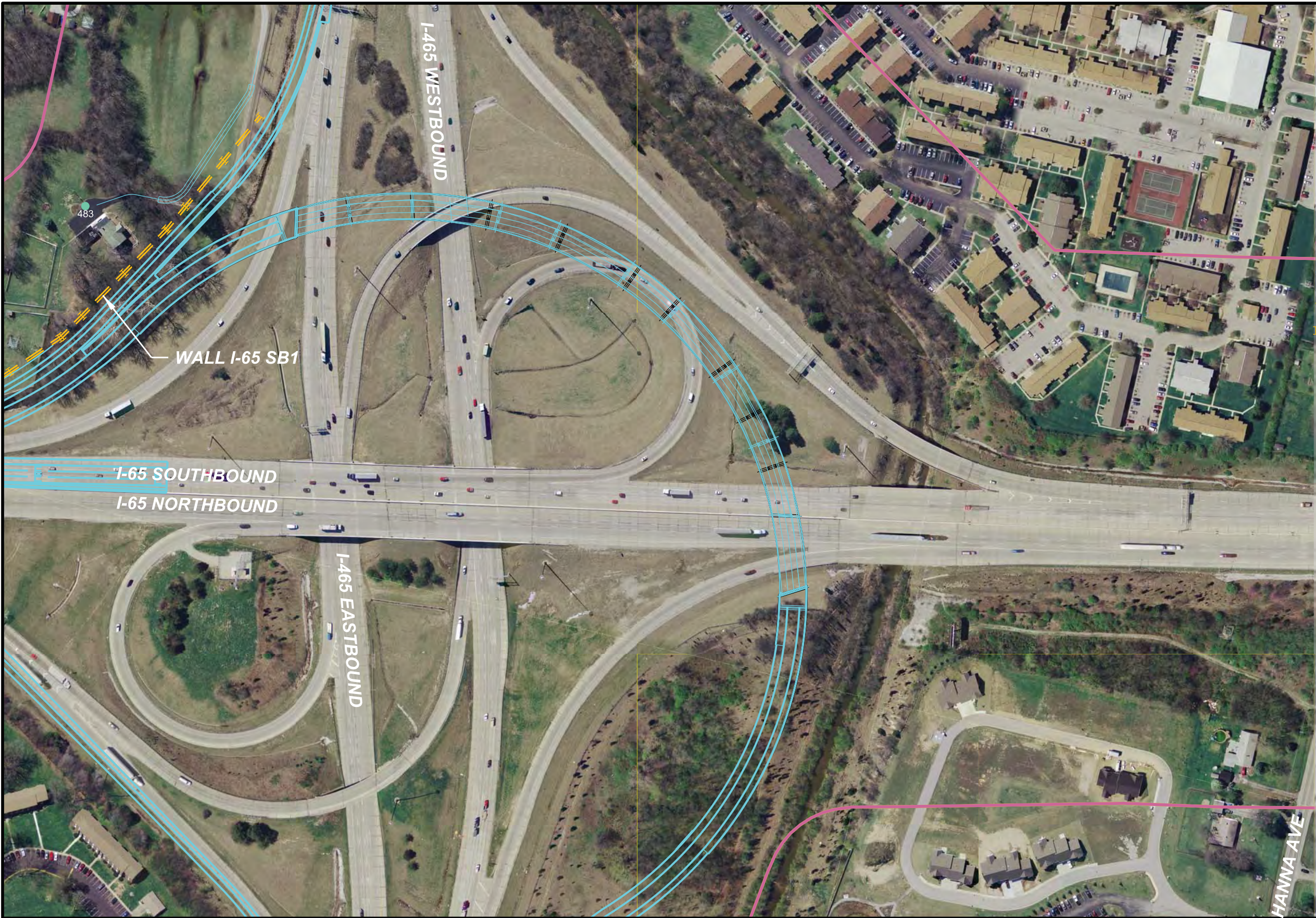
The viewpoints of the benefited residents and property owners were sought and were considered in determining the reasonableness of highway traffic noise for proposed highway construction projects. INDOT will incorporate highway traffic noise consideration in on-going activities for public involvement in the highway program.

Changes to these noise abatement measures may occur due to conditions encountered during final design. The design engineer must investigate engineering considerations, such as topography and drainage to assess whether the recommended noise barrier locations (offset) are practical. Decision on abatement measures will be made upon completion of the final project design and public involvement process. Additionally, noise abatement will be reevaluated during the final design if the project design or scope changes.

FHWA does not specify the type of material that must be used for noise barrier construction, but chosen material type must meet State of Indiana Department of Transportation specifications.



EXHIBITS



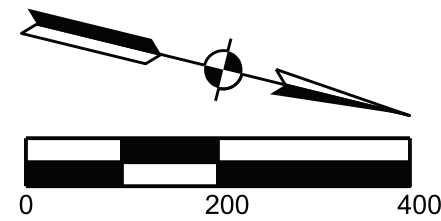
LEGEND

- NOISE ANALYSIS STUDY AREA
- EDGE OF ROADWAY
- - - CONSTRUCTION LIMITS
- MODELED NOISE WALL
- RECEPTOR LOCATION
- IMPACTED RECEPTOR



shrewsberry
7321 Shadeland Station
Suite 160
Indianapolis, Indiana 46256
(t) 317.841.4799 (f) 317.841.4790

I-465 / I-65 INTERCHANGE MODIFICATION
DES. NO. 0902297



LEGEND

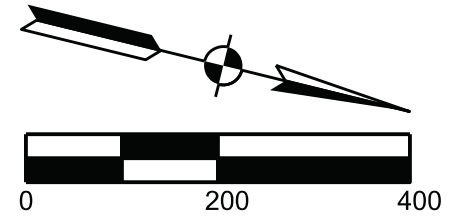
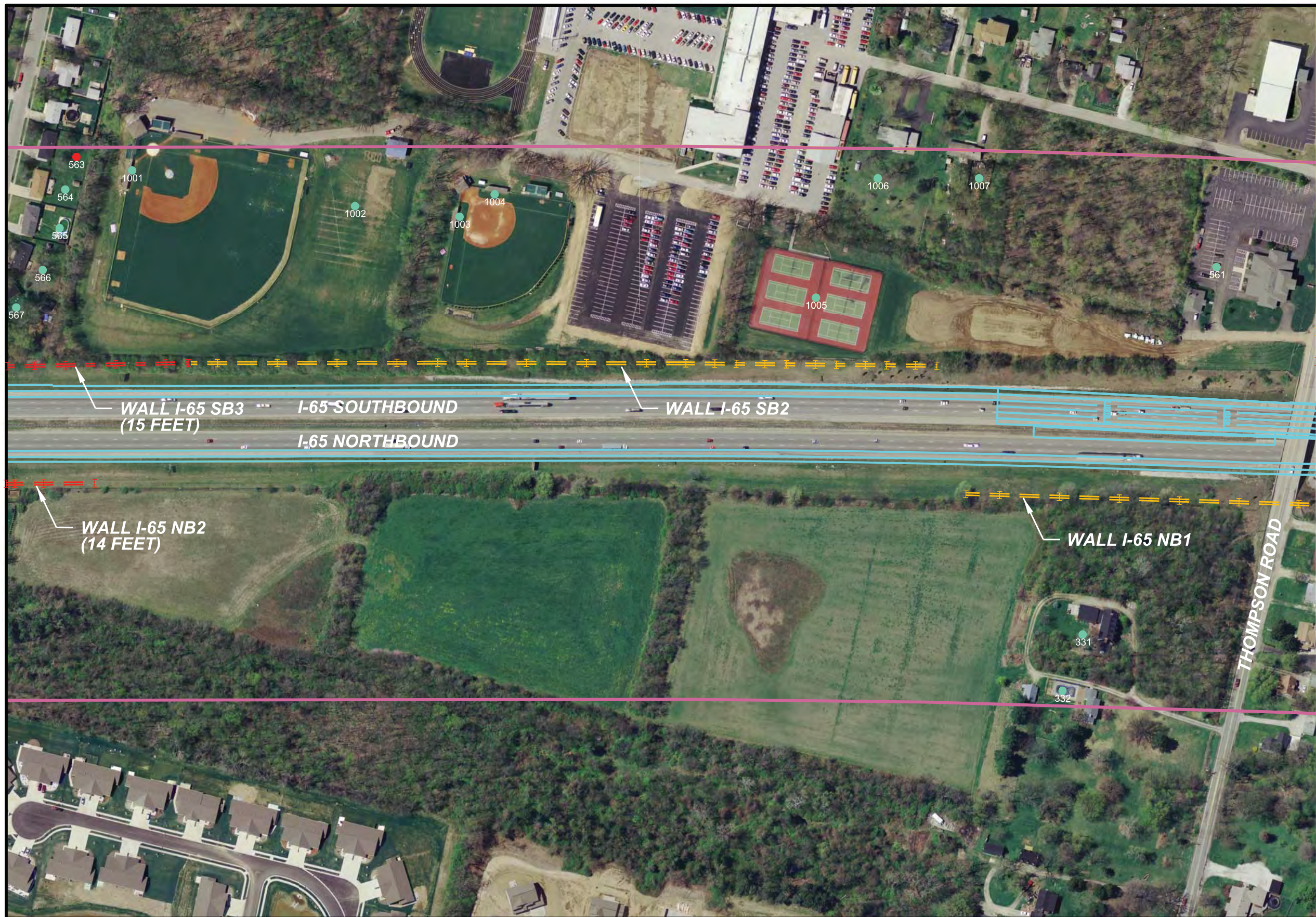
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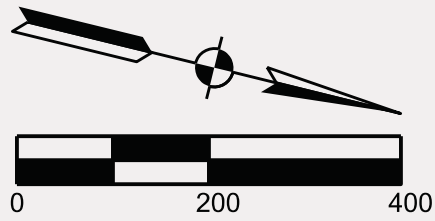
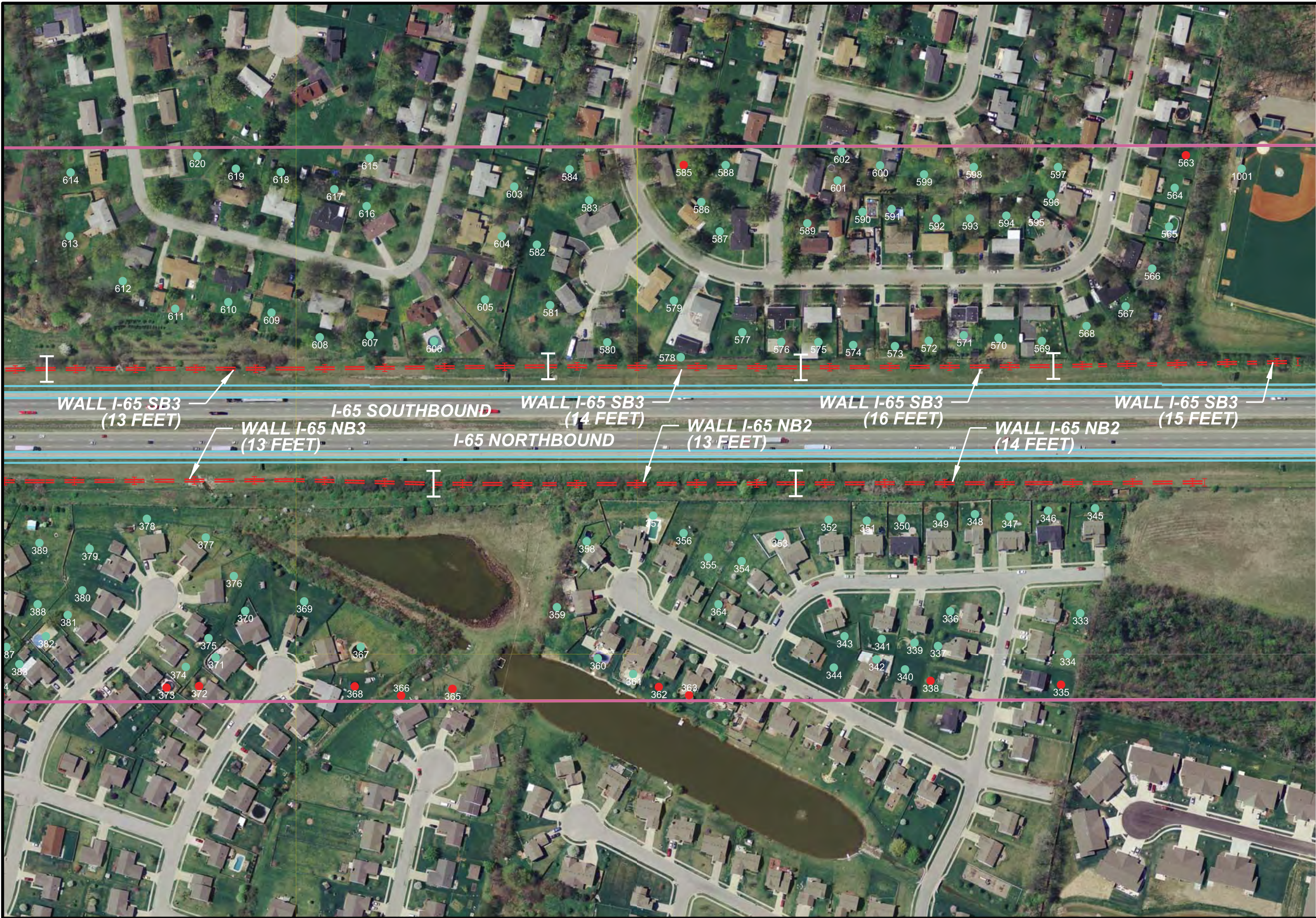
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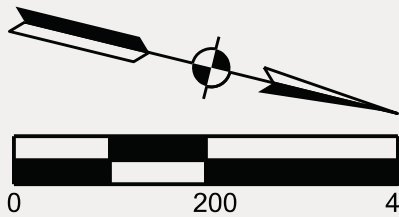
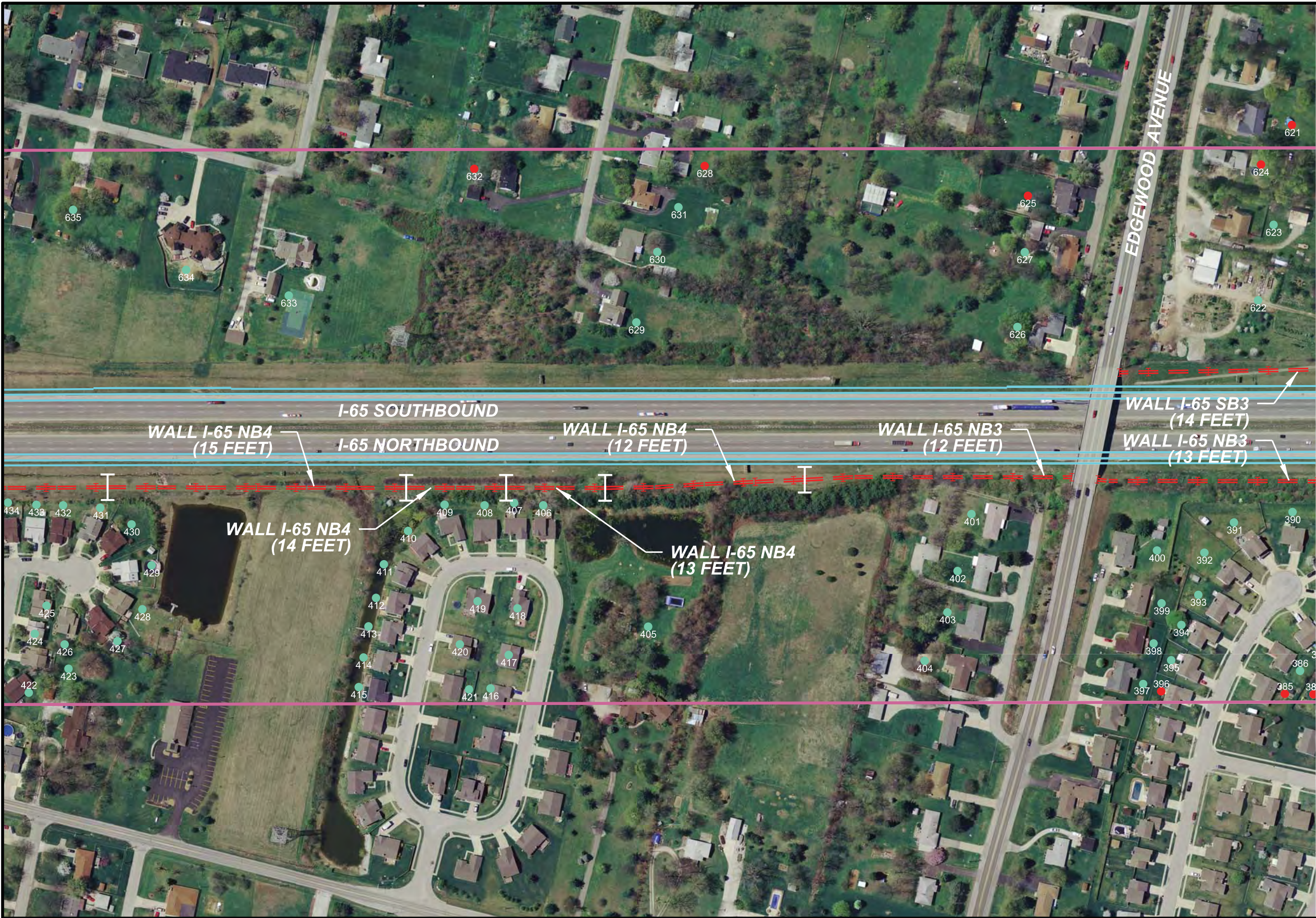
LEGEND

- NOISE ANALYSIS STUDY AREA
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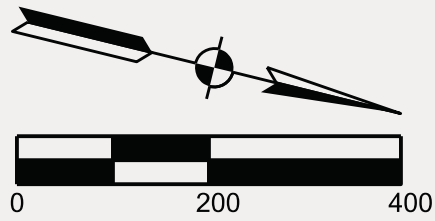
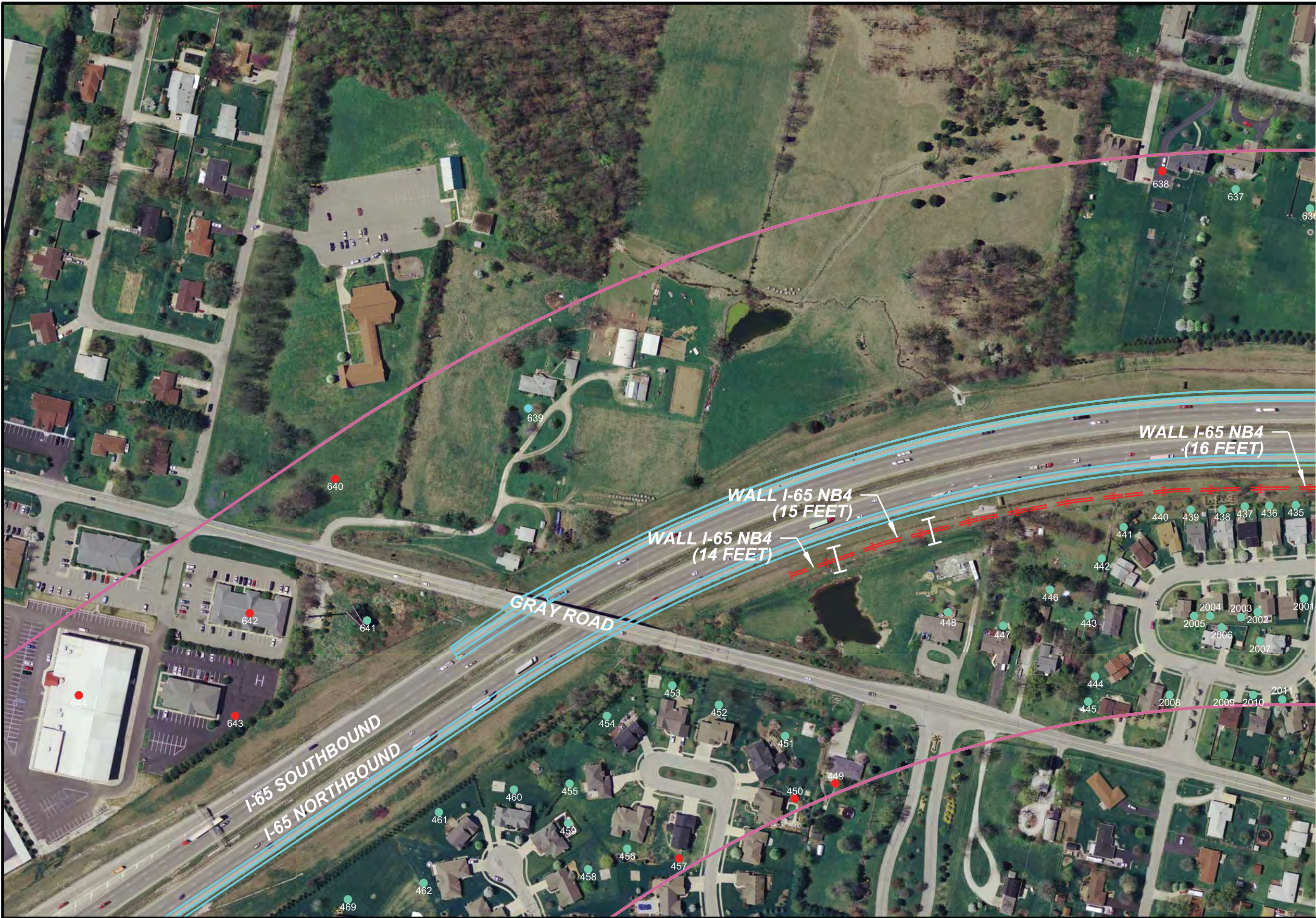
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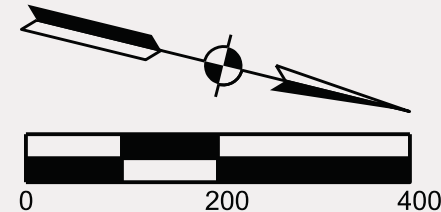
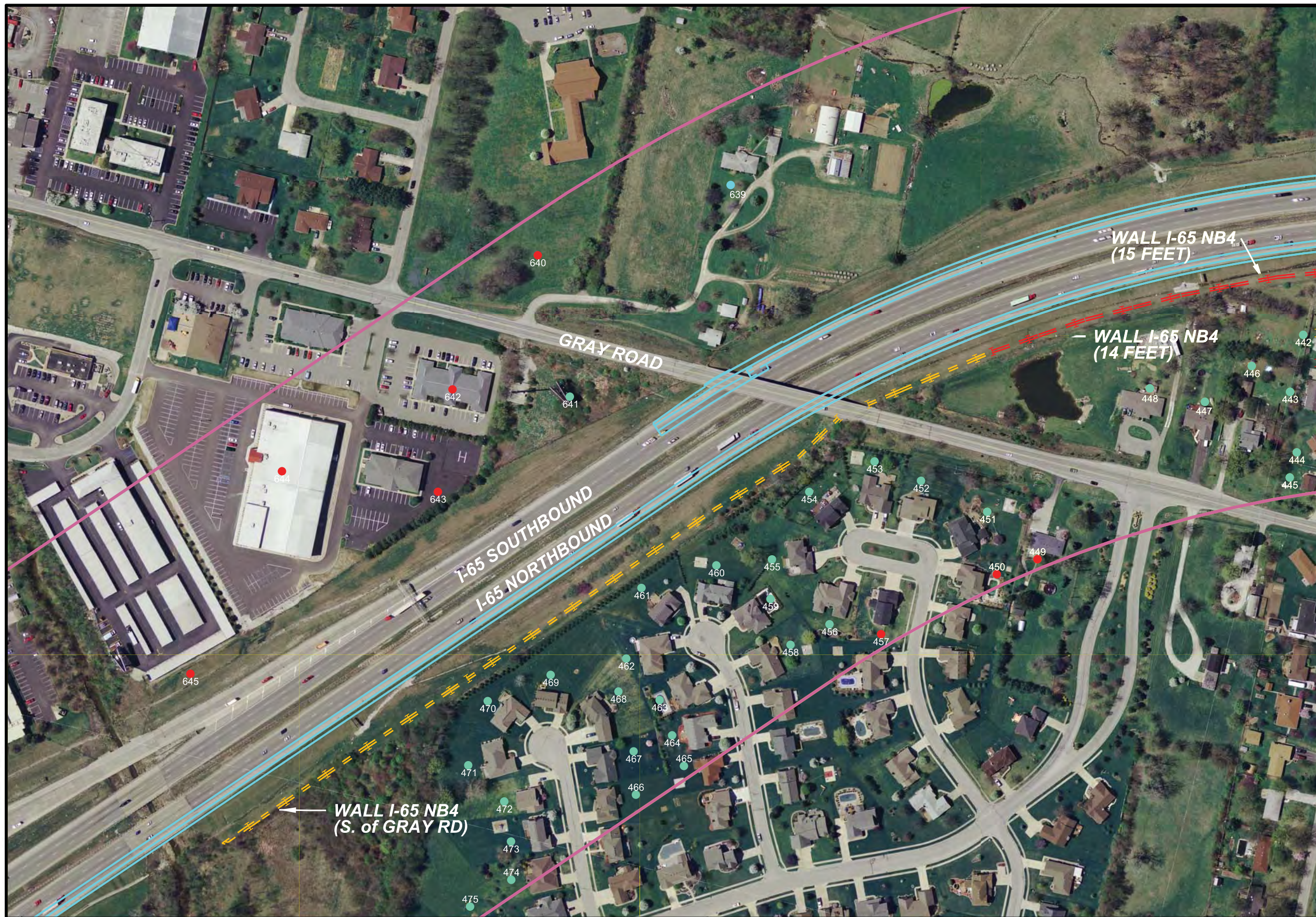
- NOISE ANALYSIS STUDY AREA
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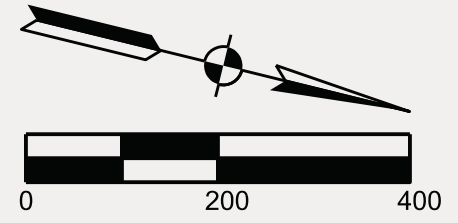
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APPENDICES

APPENDIX A
RECEPTOR ADDRESSES

Receptor No.	Street Number	Street	City, State, Zip	Owner Name
303	3302	Lindbergh Dr	Indianapolis, IN 46237	Emmack, Malcolm W & Barbara A, CO-TRUSTEES, REVOCABLE LIVING
304	3304	Lindbergh Dr	Indianapolis, IN 46237	Joseph P. Yates
305	3310	Lindbergh Dr	Indianapolis, IN 46237	Uldis & Jane E. Duselis
306	3305	Lindbergh Dr	Indianapolis, IN 46237	Deutsche Bank National Trust Company Trustee
307	3309	Lindbergh Dr	Indianapolis, IN 46237	Roxie J. Porter
308	3345	Lindbergh Dr	Indianapolis, IN 46237	Gary Lee Stickford
309	4555	S La Salle St	Indianapolis, IN 46237	Paul E. & Frances L. Murphy
310	3312	Chamberlin Dr	Indianapolis, IN 46237	David Beisinger
311	3316	Chamberlin Dr	Indianapolis, IN 46237	Robert M. Lee, Jr
312	3320	Chamberlin Dr	Indianapolis, IN 46237	Kathleen Rigby
313	3301	Chamberlin Dr	Indianapolis, IN 46237	Miranda S. & Susan T. Morse
314	3305	Chamberlin Dr	Indianapolis, IN 46237	Virginia D. Searles
315	3309	Chamberlin Dr	Indianapolis, IN 46237	Virgil Ray & Deloris J. Ross
316	3315	Chamberlin Dr	Indianapolis, IN 46237	Priscilla Marie Label
317	3321	Chamberlin Dr	Indianapolis, IN 46237	Bunny Maclean
318	3302	Byrd Dr	Indianapolis, IN 46237	Suelynne Childers
319	3310	Byrd Dr	Indianapolis, IN 46237	Steven Eugene & Jo Ann Swinford
320	3314	Byrd Dr	Indianapolis, IN 46237	Jason & Brittani Hess
321	3326	Byrd Dr	Indianapolis, IN 46237	Sarah G. Harp & Jonathan J Robbins
322	3350	Byrd Dr	Indianapolis, IN 46237	Denise A. Maio
323	3315	Byrd Dr	Indianapolis, IN 46237	Timothy D. & Jennifer L. Coleman
324	3325	Byrd Dr	Indianapolis, IN 46237	Thomas G. Jr & Donna J. Hale
325	3349	Byrd Dr	Indianapolis, IN 46237	Kent A. Stephens
326	3353	Byrd Dr	Indianapolis, IN 46237	Carolyn R. Jacobs
327	3650	E Thompson Rd	Indianapolis, IN 46237	Norman R, Jr. & Heidi E Randall
328	3660	E Thompson Rd	Indianapolis, IN 46237	Kittie A. & Patrick A Bradley
329	3706	E Thompson Rd	Indianapolis, IN 46237	Keith J. Woodcock
330	3710	E Thompson Rd	Indianapolis, IN 46237	Andree M. Muns
331	3709	E Thompson Rd	Indianapolis, IN 46237	Catherine B. Black
332	3725	E Thompson Rd	Indianapolis, IN 46237	Georgia Ann Pitcher
333	3802	Cherry Blossom Bl	Indianapolis, IN 46237	Edward A. & Lisa M. Baxter
334	3810	Cherry Blossom Bl	Indianapolis, IN 46237	Timothy D. & Sheryl L. Roller
335	3818	Cherry Blossom Bl	Indianapolis, IN 46237	Keeler, Tony J & Deborah L Starnes-Keeler
336	3809	Cherry Blossom Bl	Indianapolis, IN 46237	Michael J. & Judith E. Lucas
337	3817	Cherry Blossom Bl	Indianapolis, IN 46237	Zachary A. Shroyer & Sarah A. Willis
338	3825	Cherry Blossom Bl	Indianapolis, IN 46237	Stephen D. & Lisa A. Schuster
339	5535	Rum Cherry Wa	Indianapolis, IN 46237	Douglas A. & Lisa V. Polen
340	5530	Cherry Field Dr	Indianapolis, IN 46237	Linda Cornelius
341	5545	Rum Cherry Wa	Indianapolis, IN 46237	Cross, Kristi R & Theodore M Bell & Bonita G Bell
342	5540	Cherry Field Dr	Indianapolis, IN 46237	Read, Earl W & Julia E Pero-Read
343	5601	Rum Cherry Wa	Indianapolis, IN 46237	Edith A. Hendricks
344	5615	Rum Cherry Wa	Indianapolis, IN 46237	Jordan M. & Ashleigh Taylor
345	5506	Rum Cherry Wa	Indianapolis, IN 46237	Angela R. & Jeffrey L. Watson
346	5512	Rum Cherry Wa	Indianapolis, IN 46237	Robert G. & Stacey L. Moisant
347	5518	Rum Cherry Wa	Indianapolis, IN 46237	Ferd Stefan & Cathy D. Wolfla
348	5524	Rum Cherry Wa	Indianapolis, IN 46237	Ginger M. Adams
349	5532	Rum Cherry Wa	Indianapolis, IN 46237	Nguyen, Sang V & Hao T Pham (H&W)
350	5538	Rum Cherry Wa	Indianapolis, IN 46237	Stephanie L. Humerickhouse
351	5544	Rum Cherry Wa	Indianapolis, IN 46237	Monica Garcia
352	5550	Rum Cherry Wa	Indianapolis, IN 46237	Frank N. & Helen Angelyn Rojas
353	5602	Rum Cherry Wa	Indianapolis, IN 46237	Penny Pero
354	5608	Rum Cherry Wa	Indianapolis, IN 46237	Michelle Magana
355	5620	Cherry Field Dr	Indianapolis, IN 46237	Matthew A. & Karlyn K. Strack

Receptor No.	Street Number	Street	City, State, Zip	Owner Name
356	5628	Cherry Field Dr	Indianapolis, IN 46237	Vicki L. Lang
357	5634	Cherry Field Dr	Indianapolis, IN 46237	George D. & Christy Lynn Walton
358	5638	Cherry Field Dr	Indianapolis, IN 46237	James H. & Cheri L. Gable
359	5635	Cherry Field Dr	Indianapolis, IN 46237	David R. Mcdougall, & Mary L. Givens
360	5627	Cherry Field Dr	Indianapolis, IN 46237	Highfill, David M & Sherry L Whipkey-Highfill
361	5621	Cherry Field Dr	Indianapolis, IN 46237	Vincent J. & Donna L. Prendergast
362	5615	Cherry Field Dr	Indianapolis, IN 46237	Lou Ellen Sears
363	5609	Cherry Field Dr	Indianapolis, IN 46237	Yan & Guang Zhang
364	5616	Rum Cherry Wa	Indianapolis, IN 46237	Jose D. & Ruby R. Dadivas
365	3902	Jekyll Ct	Indianapolis, IN 46237	Terence & ebecca S. Cress
366	3901	Jekyll Ct	Indianapolis, IN 46237	Michael F. & Carol A. Cogdill
367	3828	St Simons Ct	Indianapolis, IN 46237	William C III & Lindsay A. Eland
368	3834	St Simons Ct	Indianapolis, IN 46237	Robert F. Slivka
369	3827	St Simons Ct	Indianapolis, IN 46237	Jeffrey D. Colford
370	3833	St Simons Ct	Indianapolis, IN 46237	David L. & Barbara S. Sweeney
371	3841	St Simons Ct	Indianapolis, IN 46237	Tammie J. Sorley
372	3909	St Simons Ct	Indianapolis, IN 46237	John A. & Stephanie L. Boosey
373	3842	Brunswick Av	Indianapolis, IN 46237	Mary L. & Jason Brewer
374	3836	Brunswick Av	Indianapolis, IN 46237	Melanie N. Holliday
375	3830	Brunswick Av	Indianapolis, IN 46237	Bradley & Barbara Delagrang
376	3824	Brunswick Av	Indianapolis, IN 46237	Wesley R. Woodhull
377	3818	Brunswick Av	Indianapolis, IN 46237	David Eric Smith
378	3819	Brunswick Av	Indianapolis, IN 46237	Ronald J. & Kimberly A. Smith
379	3823	Brunswick Av	Indianapolis, IN 46237	Matthew A. & Susan L. Whitman
380	3833	Brunswick Av	Indianapolis, IN 46237	Donald E. Sr & Patricia J. Allen
381	3843	Brunswick Av	Indianapolis, IN 46237	Mindy M. Schelling
382	3907	Brunswick Av	Indianapolis, IN 46237	Jennifer S. Gamboa
383	3915	Brunswick Av	Indianapolis, IN 46237	Robert E. Brummett
384	3921	Brunswick Av	Indianapolis, IN 46237	Chanel E. Finzen
385	3906	Maple Manor Dr	Indianapolis, IN 46237	Richard L. & Carol S. Whitsit
386	3838	Maple Manor Dr	Indianapolis, IN 46237	James D., Jr & Jennifer R. Sheard
387	3832	Maple Manor Dr	Indianapolis, IN 46237	Lisa Gail Lynch
388	3826	Maple Manor Dr	Indianapolis, IN 46237	Highfill, David & Sherry Whipkey Highfill
389	3820	Maple Manor Dr	Indianapolis, IN 46237	Mason A. Begley
390	3819	Maple Manor Dr	Indianapolis, IN 46237	Michael D. Byrd
391	3825	Maple Manor Dr	Indianapolis, IN 46237	James O. & Joyce A. Cooper
392	3831	Maple Manor Dr	Indianapolis, IN 46237	Mark A. Staggs
393	3837	Maple Manor Dr	Indianapolis, IN 46237	Christopher S. & Heather A. York
394	3901	Maple Manor Dr	Indianapolis, IN 46237	Brian K. & Robyn N. Ludlow
395	3907	Maple Manor Dr	Indianapolis, IN 46237	Eric J. & Michelle I. Isaacson
396	3913	Maple Manor Dr	Indianapolis, IN 46237	Jerry J. & Betty J. Tucker
397	3908	E Edgewood Av	Indianapolis, IN 46237	Phyllis M. Kidd
398	3902	E Edgewood Av	Indianapolis, IN 46237	Peter G. & Jackie S. Campbell
399	3836	E Edgewood Av	Indianapolis, IN 46237	Jason L. Williams
400	3830	E Edgewood Av	Indianapolis, IN 46237	Harry Daniel & Karen Ruth De Witt
401	3837	E Edgewood Av	Indianapolis, IN 46237	Marshall P. & Dorothy A. Grant
402	3841	E Edgewood Av	Indianapolis, IN 46237	Troy ,Sr & Loretta Fugate
403	3901	E Edgewood Av	Indianapolis, IN 46237	Doris D. Wehlage
404	3911	E Edgewood Av	Indianapolis, IN 46237	Scottie W & Mandy Jonte Steinbrook
405	6130	Gray Rd	Indianapolis, IN 46237	David J. Munn
406	3922	Gray Arbor Wa	Indianapolis, IN 46237	Vasko, Gary & Christine
407	3916	Gray Arbor Wa	Indianapolis, IN 46237	Brian Murle & Melissa K. Halcomb
408	3917	Gray Arbor Dr	Indianapolis, IN 46237	Adam T. Brawner
409	3921	Gray Arbor Dr	Indianapolis, IN 46237	Thomas C. & Deborah K. Miller
410	3925	Gray Arbor Dr	Indianapolis, IN 46237	Brenda Sue Cook

Receptor No.	Street Number	Street	City, State, Zip	Owner Name
411	3929	Gray Arbor Dr	Indianapolis, IN 46237	Jacob Pointer
412	3935	Gray Arbor Dr	Indianapolis, IN 46237	Talmadge & Marsha Bookout
413	3941	Gray Arbor Dr	Indianapolis, IN 46237	David C. & Michell D. Michael
414	3947	Gray Arbor Dr	Indianapolis, IN 46237	Pamela Elsey
415	4007	Gray Arbor Dr	Indianapolis, IN 46237	Jean Feldhake
416	4005	Gray Arbor Wa	Indianapolis, IN 46237	Douglas A. & Shelley R. Crawford
417	3939	Gray Arbor Wa	Indianapolis, IN 46237	Angel Vargas Luna
418	3931	Gray Arbor Wa	Indianapolis, IN 46237	Ronald J. & Maria C. Schwager
419	3924	Gray Arbor Wa	Indianapolis, IN 46237	Corey Freudenstein
420	3940	Gray Arbor Wa	Indianapolis, IN 46237	Jana L. Kime
421	4004	Gray Arbor Wa	Indianapolis, IN 46237	Jared S. Summeier
422	6359	Perry Pines Ct	Indianapolis, IN 46237	Jeffrey Neal & Beth A. Zorman
423	6353	Perry Pines Ct	Indianapolis, IN 46237	Dana R. & Matt Swales
424	6347	Perry Pines Ct	Indianapolis, IN 46237	Magdalena J. Mc Hargue
425	6337	Perry Pines Ct	Indianapolis, IN 46237	Brandon & Anna Peters
426	6331	Perry Pines Ct	Indianapolis, IN 46237	Duane L. & Carol L. King
427	6327	Perry Pines Ct	Indianapolis, IN 46237	Robert, Jr & Bethany Mueller
428	6323	Perry Pines Ct	Indianapolis, IN 46237	Michael E. & Tiffany F. Eland
429	6322	Perry Pines Ct	Indianapolis, IN 46237	Alyce Thorstad
430	6326	Perry Pines Ct	Indianapolis, IN 46237	Wilma J. Judd
431	6330	Perry Pines Ct	Indianapolis, IN 46237	Hutton, Jamie L Trustee Under The Jamie L Hutton
432	6334	Perry Pines Ct	Indianapolis, IN 46237	Castillo-Burgos, Luz M & Angel Burgos
433	6338	Perry Pines Ct	Indianapolis, IN 46237	Michael K. & Marilyn S. Sutherlin
434	6342	Perry Pines Ct	Indianapolis, IN 46237	Laforge, Maurice P li & Elizabeth S Cox
435	6406	Perry Pines Ct	Indianapolis, IN 46237	Jonathan Murphy
436	6412	Perry Pines Ct	Indianapolis, IN 46237	Emily D. Rushton
437	6418	Perry Pines Ct	Indianapolis, IN 46237	Alex E. & Nancy Y. Martinez
438	6424	Perry Pines Ct	Indianapolis, IN 46237	Lori L. Ellis
439	6430	Perry Pines Ct	Indianapolis, IN 46237	Trieu, Lillian & Phuong Van Nguyen
440	6436	Perry Pines Ct	Indianapolis, IN 46237	Peggy J. Stevens
441	6440	Perry Pines Ct	Indianapolis, IN 46237	James Bernard II & Lindsay C. Urrutia
442	6444	Perry Pines Ct	Indianapolis, IN 46237	Stephen T. Colinco
443	6447	Perry Pines Ct	Indianapolis, IN 46237	John E. & Kathy K. Mc Dowell
444	6437	Perry Pines Ct	Indianapolis, IN 46237	Richard & Karen Fyten
2001	6409	Perry Pines Ct	Indianapolis, IN 46237	Mandy Nelson & Mary Nelson
2002	6415	Perry Pines Ct	Indianapolis, IN 46237	Juurse J. Brown
2003	6421	Perry Pines Ct	Indianapolis, IN 46237	Jeremy J. McGee & Trena L. Robinson
2004	6427	Perry Pines Ct	Indianapolis, IN 46237	Kristy L. Shaffer
2005	6433	Perry Pines Ct	Indianapolis, IN 46237	Tamika I. Griffin
2006	6432	Perry Pines Ct	Indianapolis, IN 46237	Kevin R. & Lisa C. Mennel
2007	6354	Perry Pines Ct	Indianapolis, IN 46237	Tim M. Smith
2008	6431	Perry Pines Ct	Indianapolis, IN 46237	Samuel & Iyadunni Awosanya
2009	6417	Perry Pines Ct	Indianapolis, IN 46237	Rosendo H & Juana Garcia
2010	6407	Perry Pines Ct	Indianapolis, IN 46237	Karen A. Jones & Kevin R. McAndrews
2011	6365	Perry Pines Ct	Indianapolis, IN 46237	James T. & Maria J. Norris
445	6438	Gray Rd	Indianapolis, IN 46237	Bryan D. & Breanne N. Ruback
446	6450	Gray Rd	Indianapolis, IN 46237	Theresa Waters
447	6460	Gray Rd	Indianapolis, IN 46237	Darryl Dean & Anastasia N. Mitchell
448	6506	Gray Rd	Indianapolis, IN 46237	Kenneth R. Matkins
449	6519	Gray Rd	Indianapolis, IN 46237	David L. Mccrary,
450	4144	Moss Ridge Ln	Indianapolis, IN 46237	Gregory S. & Linda S. Hoffman
451	4136	Moss Ridge Ln	Indianapolis, IN 46237	Jack C. & Mary E. Finney
452	4130	Moss Ridge Ln	Indianapolis, IN 46237	Fred C. Poe
453	4124	Moss Ridge Ln	Indianapolis, IN 46237	Richard D. Cunneen
454	4114	Moss Ridge Ln	Indianapolis, IN 46237	Robert D. Vane

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455	4115	Moss Ridge Ln	Indianapolis, IN 46237	Timothy R. & Lora K. Hansell
456	4121	Moss Ridge Ln	Indianapolis, IN 46237	James W. Tilton & Mary Jo Zajeski
457	4151	Moss Ridge Ln	Indianapolis, IN 46237	Russell E. & Sarah E. Glassburn
458	4226	Moss Ridge Ct	Indianapolis, IN 46237	Archie L. & Joanna Russell
459	4218	Moss Ridge Ct	Indianapolis, IN 46237	Michael D. & Sharon L. Hunt
460	4210	Moss Ridge Ct	Indianapolis, IN 46237	Michael D., II & Danielle L. Chrysler
461	4209	Moss Ridge Ct	Indianapolis, IN 46237	Jeffrey E. & Patty S. Lathrop
462	4215	Moss Ridge Ct	Indianapolis, IN 46237	Richard H. & Leah R. Winzenread
463	4225	Moss Ridge Ct	Indianapolis, IN 46237	Paul Douglas & Therese Ann Bippus
464	4233	Moss Ridge Ct	Indianapolis, IN 46237	Dwight Hensley
465	4241	Moss Ridge Ct	Indianapolis, IN 46237	Robert J., Jr & Gwendolyn Hamm
466	4324	Moss Ridge Ci	Indianapolis, IN 46237	Prabhjot S. & Amarjit K. Chauhan
467	4316	Moss Ridge Ci	Indianapolis, IN 46237	William B. & Sharon L. Bryant
468	4306	Moss Ridge Ci	Indianapolis, IN 46237	Jose E. & Olga P. Castellanos
469	4302	Moss Ridge Ci	Indianapolis, IN 46237	Kamal & Ferial Sufan
470	4305	Moss Ridge Ci	Indianapolis, IN 46237	Kyle & Kimberly Akers
471	4311	Moss Ridge Ci	Indianapolis, IN 46237	Steven J. & Julia M. Conner
472	4319	Moss Ridge Ci	Indianapolis, IN 46237	Duane P. & Kellie L. Polley
473	4327	Moss Ridge Ci	Indianapolis, IN 46237	Anthony J. & Erin M. Turk
474	4335	Moss Ridge Ci	Indianapolis, IN 46237	Stephen O. Jones
475	6714	Moss Creek Pl	Indianapolis, IN 46237	Robert Todd & Glenna Teresa Musser
476	6722	Moss Creek Pl	Indianapolis, IN 46237	Larry J. & Charlene A. Pierle
483	3202	Redfern Dr	Indianapolis, IN 46227	Donald R. & Barbara J. Bush
484	3301	Redfern Dr	Indianapolis, IN 46227	James C. & Jean Elaine Butcher
485	3216	Lindbergh Dr	Indianapolis, IN 46237	Robert M. & Sally A. Hyde
486	3210	Lindbergh Dr	Indianapolis, IN 46237	Earl & Elva Ensinger
487	3202	Lindbergh Dr	Indianapolis, IN 46237	Anthony Weaver
488	3150	Lindbergh Dr	Indianapolis, IN 46237	Emerson, Mark S & Denise R
489	3213	Lindbergh Dr	Indianapolis, IN 46237	Norma J. & Mark Alan Matthias
490	3209	Lindbergh Dr	Indianapolis, IN 46237	Archie L. & Joanna Russell
491	3205	Lindbergh Dr	Indianapolis, IN 46237	Michael D. & Sharon L. Hunt
492	3155	Lindbergh Dr	Indianapolis, IN 46237	Larry S. & Anita L. Evans
493	3220	Chamberlin Dr	Indianapolis, IN 46227	Margie Troutman
494	3216	Chamberlin Dr	Indianapolis, IN 46227	Elizabeth R. Borton
495	3214	Chamberlin Dr	Indianapolis, IN 46227	Dwight Hensley
496	3212	Chamberlin Dr	Indianapolis, IN 46227	Paul R. Carmen
497	3208	Chamberlin Dr	Indianapolis, IN 46227	Dennis A. & Victoria F. Fox
498	3225	Chamberlin Dr	Indianapolis, IN 46227	John D ,Jr. & Amy M. Hammond
499	3223	Chamberlin Dr	Indianapolis, IN 46227	Rosella J. Tittle
500	3213	Chamberlin Dr	Indianapolis, IN 46227	Michael J. Tittle
501	3211	Chamberlin Dr	Indianapolis, IN 46227	Michael J. Tittle
502	3214	Byrd Dr	Indianapolis, IN 46227	Jeremy A. Guillemette & Brandi Mercer
503	3210	Byrd Dr	Indianapolis, IN 46227	Donald R.& Barbara J. Bush
504	3204	Byrd Dr	Indianapolis, IN 46227	Duane P. & Kellie L. Polley
505	3202	Byrd Dr	Indianapolis, IN 46227	Donald F. & Barbara A. Huddleston
506	3211	Byrd Dr	Indianapolis, IN 46227	James C. & Jean Elaine Butcher
507	3205	Byrd Dr	Indianapolis, IN 46227	James C. & Jean Elaine Butcher
508	3203	Byrd Dr	Indianapolis, IN 46227	Robert M. & Sally A. Hyde
509	3500	E Thompson Rd	Indianapolis, IN 46227	CHURCH, PARC-WAY ASSEMBLY OF GOD
510	3410	Rue Chanel (clubhouse)	Indianapolis, IN 46228	FSF PARC BORDEAUX ASSOCIATES, LLC
563	3528	Redwood Dr	Indianapolis, IN 46227	Elizabeth Snyder
564	3536	Redwood Dr	Indianapolis, IN 46227	Michael K. Morris
565	3602	Redwood Dr	Indianapolis, IN 46227	Dorinda Harbaugh
566	3610	Redwood Dr	Indianapolis, IN 46227	Richard A. Qualls
567	3618	Redwood Dr	Indianapolis, IN 46227	Ernest & Caroll Crenshaw
568	5503	S Kealing Av	Indianapolis, IN 46227	Billie J. Huntman

Receptor No.	Street Number	Street	City, State, Zip	Owner Name
569	5511	S Kealing Av	Indianapolis, IN 46227	Daniel & C. Samantha Fitzgerald
570	5519	S Kealing Av	Indianapolis, IN 46227	James David & Kimberly A. Dawson
571	5527	S Kealing Av	Indianapolis, IN 46227	Michael E. Monaghan
572	5601	S Kealing Av	Indianapolis, IN 46227	Jason & Julie Crewe
573	5609	S Kealing Av	Indianapolis, IN 46227	Theresa A. Wright
574	5617	S Kealing Av	Indianapolis, IN 46227	Kelly L. Gratien
575	5623	S Kealing Av	Indianapolis, IN 46227	Margaret E. Mcintosh
576	5629	S Kealing Av	Indianapolis, IN 46227	Richard E. & Cindy L. Perry
577	5633	S Kealing Av	Indianapolis, IN 46227	Thomas E. & Deborah S. Negri
578	5639	S Kealing Av	Indianapolis, IN 46227	Joseph D. & Rebecca L. Essex
579	5703	S Kealing Av	Indianapolis, IN 46227	Emily M. Phipps
580	3632	S Kealing Ct	Indianapolis, IN 46227	John O. & Marilyn J. Bullens
581	3635	S Kealing Ct	Indianapolis, IN 46227	Adam D. & Melissa L. Long
582	3627	S Kealing Ct	Indianapolis, IN 46227	Bobby L., Jr & Angie L. Jobe
583	3621	Ferncliff Av	Indianapolis, IN 46227	H & H Property Investments Inc
584	3615	Ferncliff Av	Indianapolis, IN 46227	Douglas A. Johnson
585	3618	Ferncliff Av	Indianapolis, IN 46227	Denney, Perry J & Rabenia S Trustees Denney Family Trust
586	5704	S Kealing Av	Indianapolis, IN 46227	Kevin M. Quillen & Dorothy J. Carey
587	5638	S Kealing Av	Indianapolis, IN 46227	H & H Property Investments Inc
588	3611	Royal Oak Dr	Indianapolis, IN 46227	Robert Hawkins
589	5622	S Kealing Av	Indianapolis, IN 46227	Barbara A. Englert
590	5614	S Kealing Av	Indianapolis, IN 46227	Joseph P., Jr & Shelli L. Wohlhieter
591	5608	S Kealing Av	Indianapolis, IN 46227	Thomas L. & Janet R. Springer
592	5532	S Kealing Av	Indianapolis, IN 46227	Jesus F. Cardoza
593	5524	S Kealing Av	Indianapolis, IN 46227	Marco V. Patino
594	5516	S Kealing Av	Indianapolis, IN 46227	Stanley O. & Rita J. Hall
595	5508	S Kealing Av	Indianapolis, IN 46227	Gary L. & Debra L. Sowders
596	3605	Redwood Dr	Indianapolis, IN 46227	Sharon K. Keim
597	3539	Redwood Dr	Indianapolis, IN 46227	Paul E. & Nancy J. Behymer
598	3530	E Dudley Av	Indianapolis, IN 46227	James T. & Joan M. Bartley
599	5605	S Gale St	Indianapolis, IN 46227	Paul D. & Rose Marie Russell
600	5615	S Gale St	Indianapolis, IN 46227	Robert & Carol R. Pollak
601	3610	Royal Oak Dr	Indianapolis, IN 46227	Christopher L. & Jodie L. Nelson
602	5625	S Gale St	Indianapolis, IN 46227	SECRETARY OF HOUSING & URBAN DEVELOPMENT % HARRINGTON MORAN BARKSDALE INC
603	3616	Whalen Av	Indianapolis, IN 46227	Ralph, Jr & Virginia F. De Boor
604	3626	Whalen Av	Indianapolis, IN 46227	Donald M. & Janet I. Carney
605	3636	Whalen Av	Indianapolis, IN 46227	Kevin L. Carney
606	5737	S Kealing Av	Indianapolis, IN 46227	Robert A. & Linda E. Thompson
607	5745	S Kealing Av	Indianapolis, IN 46227	Gloria Houchell
608	5801	S Kealing Av	Indianapolis, IN 46227	Rasnic, Steven James & Stephanie A Rasdell-Rasnic
609	5811	S Kealing Av	Indianapolis, IN 46227	Mark A. & Kelli R. Ramsey
610	5821	S Kealing Av	Indianapolis, IN 46227	Jeffrey M. & Kerry N. Anderson
611	5831	S Kealing Av	Indianapolis, IN 46227	Ronald D. Tanner
612	5841	S Kealing Av	Indianapolis, IN 46227	James L. Jackson
613	3641	E Brunswick Av	Indianapolis, IN 46227	Stephen R. & Roseanne Keefe
614	3631	E Brunswick Av	Indianapolis, IN 46227	Judith E. Villegas
615	3615	Whalen Av	Indianapolis, IN 46227	Ronald Mccord
616	3625	Whalen Av	Indianapolis, IN 46227	Faith Property Management LLC,
617	5806	S Kealing Av	Indianapolis, IN 46227	Barbara J. Bruce
618	5816	S Kealing Av	Indianapolis, IN 46227	Jo Ann Kouts
619	5838	S Kealing Av	Indianapolis, IN 46227	Bradley S. & Stephanie Parks
620	3626	E Brunswick Av	Indianapolis, IN 46227	Martin & Maria M. Ponce

Receptor No.	Street Number	Street	City, State, Zip	Owner Name
621	3712	E Edgewood Av	Indianapolis, IN 46227	F James & Wanda I Nordsiek
622	3704	E Edgewood Av	Indianapolis, IN 46227	Basilio J., Jr & Nenita Delacruz
623	3330	E Edgewood Av	Indianapolis, IN 46227	Bryan K. & Deborah S. Himes
624	3630	E Edgewood Av	Indianapolis, IN 46227	Donald P. & Jonnie F. Harris
625	3417	E Edgewood Av	Indianapolis, IN 46227	Emma Jean Rhoton
626	3401	E Edgewood Av	Indianapolis, IN 46227	Rhoton, Stanley & Emma J Daniels
627	3351	E Edgewood Av	Indianapolis, IN 46227	Vicki L. Davis
628	3810	Busy Bee Ln	Indianapolis, IN 46227	Martha P. Reardon
629	3736	Busy Bee Ln	Indianapolis, IN 46227	Jacqueline M. Ray
630	3530	Busy Bee Ln	Indianapolis, IN 46227	Edward M., Jr & Ageline Petronie
631	3420	Busy Bee Ln	Indianapolis, IN 46227	Lawrence A. & Barbara Voorheis
632	3531	Busy Bee Ln	Indianapolis, IN 46227	Stanley T. & Teresa K. Mayo
633	6315	S Sherman Dr	Indianapolis, IN 46227	Donald R. & Beverly G. Newman
634	6325	S Sherman Dr	Indianapolis, IN 46227	Sanja Puletz
635	6335	S Sherman Dr	Indianapolis, IN 46227	Gregg A. & Kathleen M. Inman
636	6351	S Sherman Dr	Indianapolis, IN 46227	Douglas W. & Katherine M. Kuhn
637	6425	S Sherman Dr	Indianapolis, IN 46227	Larry L. & Wanda K. Cooney
638	6445	S Sherman Dr	Indianapolis, IN 46227	Eric M. & Melanie F. Crouch
639	6600	Gray Rd	Indianapolis, IN 46237	Allen S. & Susan L. Anderson
640	3932	Mi Casa Av	Indianapolis, IN 46237	Church, St Pauls Evangelical Lutheran Trs
641	6721	Gray Rd	Indianapolis, IN 46237	K F M Partners, Lp C/O Harry C Kim
642	6745	Gray Rd	Indianapolis, IN 46237	Ceeco & Associates, Inc Suite D
643	6755	Gray Rd	Indianapolis, IN 46237	Solar Sources, Inc % Felson Bowman
644	4150	Kildeer Dr	Indianapolis, IN 46237	Ceeco & Associates Inc
645	4049	Kildeer Dr	Indianapolis, IN 46237	Extra Space Properties Thirty Llc % Extra Space Storage Llc Attn: Real Estate Legal
646	4402	E Creekview Dr	Indianapolis, IN 46237	Jer/Jameson Properties Llc % Longhouse Hospitality Suite 200
647	4650	E Southport Rd	Indianapolis, IN 46237	DAB Investments, Southport Commons
648	4441	Southport Cross Dr	Indianapolis, IN 46237	Bef Reit, Inc
649	4670	Southport Cross Dr	Indianapolis, IN 46237	Brisam Court Indy Llc
650	4690	Southport Cross Dr	Indianapolis, IN 46237	Private Restaurant Properties, Llc Suite 470a
1001	3300	Prague Rd	Indianapolis, IN 46227	Roncalli High School - baseball
1002	3300	Prague Rd	Indianapolis, IN 46227	Roncalli High School - practice field
1003	3300	Prague Rd	Indianapolis, IN 46227	Roncalli High School - softball 1
1004	3300	Prague Rd	Indianapolis, IN 46227	Roncalli High School - softball 2
1005	3300	Prague Rd	Indianapolis, IN 46227	Roncalli High School - tennis
1006	5145	S LaSalle St	Indianapolis, IN 46227	Roman Catholic Archdiocese of Indianapolis Properties, Inc.
1007	5129	S LaSalle St	Indianapolis, IN 46227	Darlene Kay & Charles G. Bowman

Notes:

1. Stone Lake Apartments do not have outdoor spaces therefore no receptors modeled
2. Rue Chanel Apartments: Pool/Clubhouse modeled
3. Receptor Numbers 651 through 670 are not used.
4. Majority of receptors in the study area are Category B, except as noted by highlights.

Category C
Category E

APPENDIX B

TRAFFIC FORECAST

Design Year Traffic Data

Design Year Traffic Data

Direction	Segment		VPH		% Trucks		AM		PM		Lane 0		Lane 1		Lane 2		Lane 3	
	From	To	Peak AM	Peak PM	AM	PM	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks	Cars	Trucks
											30%	30%	30%	40%	30%	28%	10%	2%
I-65 NB	Southport	I-465	6367		15		5412	955	0	0	1624	287	1624	382	1624	267	541	19
											30%	32%	30%	32%	30%	32%	10%	4%
I-65 SB	Southport	I-465	3331		15		2831	500	0	0	849	160	849	160	849	160	283	20
											30%	30%	30%	40%	30%	28%	10%	2%
I-65 NB	Southport	I-465		3820		16	0	0	3209	611	963	183	963	244	963	171	321	12
											30%	30%	30%	40%	30%	28%	10%	2%
I-65 SB	Southport	I-465		5996		14	0	0	5157	839	1547	252	1547	336	1547	235	516	17

APPENDIX C-1
SOUND LEVEL RESULTS

RESULTS: SOUND LEVELS

I-65/I-465 South, DES 0902297

Shrewsberry												
Melanie Barnes												
9 August 2012												
TNM 2.5												
Calculated with TNM 2.5												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT: I-65/I-465 South, DES 0902297												
RUN: I-65 NB1												
BARRIER DESIGN: Wall 1 I-65 NB - PH2												
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.												
ATMOSPHERICS: 68 deg F, 50% RH												
Receiver												
Name	No.	#DUs	Existing	No Barrier	Crit'n	Increase over existing		With Barrier				
			LAeq1h	LAeq1h		Calculated	Crit'n	Type	Calculated	Noise Reduction	Goal	Calculated
				Calculated			Sub'l Inc	Impact	LAeq1h	Calculated		minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
306	1093	1	68.0	70.6	66	2.6	15	Snd Lvl	65.3	5.3	7	-1.7
307	1094	1	66.4	69.0	66	2.6	15	Snd Lvl	64.0	5.0	7	-2.0
308	1095	1	64.2	66.4	66	2.2	15	Snd Lvl	62.7	3.7	7	-3.3
309	1096	1	71.9	74.3	66	2.4	15	Snd Lvl	65.5	8.8	7	1.8
310	1097	1	67.6	70.3	66	2.7	15	Snd Lvl	64.2	6.1	7	-0.9
311	1098	1	65.6	68.1	66	2.5	15	Snd Lvl	62.5	5.6	7	-1.4
312	1099	1	63.8	65.8	66	2.0	15	----	61.3	4.5	7	-2.5
313	1100	1	73.8	75.8	66	2.0	15	Snd Lvl	68.5	7.3	7	0.3
314	1101	1	69.4	72.1	66	2.7	15	Snd Lvl	64.6	7.5	7	0.5
315	1102	1	67.9	70.6	66	2.7	15	Snd Lvl	63.5	7.1	7	0.1
316	1103	1	65.9	68.4	66	2.5	15	Snd Lvl	62.4	6.0	7	-1.0
317	1104	1	64.6	66.7	66	2.1	15	Snd Lvl	61.3	5.4	7	-1.6
318	1105	1	75.9	77.5	66	1.6	15	Snd Lvl	64.5	13.0	7	6.0
319	1106	1	73.0	74.9	66	1.9	15	Snd Lvl	64.1	10.8	7	3.8
320	1107	1	68.5	70.9	66	2.4	15	Snd Lvl	63.4	7.5	7	0.5
321	1108	1	66.0	68.5	66	2.5	15	Snd Lvl	62.3	6.2	7	-0.8
322	1109	1	65.2	67.4	66	2.2	15	Snd Lvl	61.6	5.8	7	-1.2
323	1110	1	73.0	74.7	66	1.7	15	Snd Lvl	63.5	11.2	7	4.2
324	1111	1	69.0	71.4	66	2.4	15	Snd Lvl	63.2	8.2	7	1.2
325	1112	1	67.1	69.3	66	2.2	15	Snd Lvl	62.2	7.1	7	0.1
326	1113	1	64.8	66.9	66	2.1	15	Snd Lvl	60.7	6.2	7	-0.8
327	1114	1	74.2	75.6	66	1.4	15	Snd Lvl	71.4	4.2	7	-2.8
328	1115	1	70.9	72.7	66	1.8	15	Snd Lvl	67.7	5.0	7	-2.0
329	1116	1	67.6	69.2	66	1.6	15	Snd Lvl	63.6	5.6	7	-1.4

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

330	1117	1	65.7	66.6	66	0.9	15	Snd Lvl	60.2	6.4	7	-0.6
331	1118	1	68.4	69.7	66	1.3	15	Snd Lvl	64.3	5.4	7	-1.6
332	1119	1	65.9	66.4	66	0.5	15	Snd Lvl	61.9	4.5	7	-2.5
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		27	3.7	6.6	13.0							
All Impacted		26	3.7	6.7	13.0							
All that meet NR Goal		10	7.1	8.9	13.0							

RESULTS: SOUND LEVELS

I-65/I-465 South, DES 0902297

Shrewsberry												
Melanie Barnes												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
I-65/I-465 South, DES 0902297												
RUN:												
I-65 NB2												
BARRIER DESIGN:												
Wall 2 I-65 NB												
ATMOSPHERICS:												
68 deg F, 50% RH												
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.												
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	With Barrier				
								Type Impact	Calculated LAeq1h	Noise Reduction		
										Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
333	1120	1	68.3	67.5	66	-0.8	15	Snd Lvl	63.0	4.5	7	-2.5
334	1121	1	66.7	66.1	66	-0.6	15	Snd Lvl	61.7	4.4	7	-2.6
335	1122	1	65.6	65.2	66	-0.4	15	----	60.8	4.4	7	-2.6
336	1123	1	68.7	68.4	66	-0.3	15	Snd Lvl	61.8	6.6	7	-0.4
337	1124	1	67.1	67.0	66	-0.1	15	Snd Lvl	60.7	6.3	7	-0.7
338	1125	1	65.7	65.5	66	-0.2	15	----	59.7	5.8	7	-1.2
339	1126	1	67.1	67.2	66	0.1	15	Snd Lvl	60.7	6.5	7	-0.5
340	1127	1	66.2	66.5	66	0.3	15	Snd Lvl	60.1	6.4	7	-0.6
341	1128	1	67.4	67.8	66	0.4	15	Snd Lvl	60.9	6.9	7	-0.1
342	1129	1	66.5	66.9	66	0.4	15	Snd Lvl	60.3	6.6	7	-0.4
343	1130	1	67.5	67.9	66	0.4	15	Snd Lvl	61.1	6.8	7	-0.2
344	1131	1	66.2	66.6	66	0.4	15	Snd Lvl	60.0	6.6	7	-0.4
345	1132	1	76.2	73.2	66	-3.0	15	Snd Lvl	64.8	8.4	7	1.4
346	1133	1	76.0	73.2	66	-2.8	15	Snd Lvl	64.3	8.9	7	1.9
347	1134	1	75.4	73.0	66	-2.4	15	Snd Lvl	64.2	8.8	7	1.8
348	1135	1	75.8	74.5	66	-1.3	15	Snd Lvl	64.2	10.3	7	3.3
349	1136	1	75.8	75.9	66	0.1	15	Snd Lvl	64.2	11.7	7	4.7
350	1137	1	75.6	76.8	66	1.2	15	Snd Lvl	64.9	11.9	7	4.9
351	1138	1	75.5	76.7	66	1.2	15	Snd Lvl	65.7	11.0	7	4.0
352	1139	1	75.6	76.7	66	1.1	15	Snd Lvl	65.1	11.6	7	4.6
353	1140	1	73.8	74.6	66	0.8	15	Snd Lvl	64.5	10.1	7	3.1
354	1141	1	71.7	72.4	66	0.7	15	Snd Lvl	63.8	8.6	7	1.6
355	1142	1	71.9	72.8	66	0.9	15	Snd Lvl	64.1	8.7	7	1.7
356	1143	1	74.2	75.1	66	0.9	15	Snd Lvl	64.9	10.2	7	3.2

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

357	1144	1	76.2	77.3	66	1.1	15	Snd Lvl	65.6	11.7	7	4.7
358	1145	1	73.4	74.3	66	0.9	15	Snd Lvl	65.2	9.1	7	2.1
359	1146	1	68.9	69.0	66	0.1	15	Snd Lvl	63.1	5.9	7	-1.1
360	1147	1	66.8	66.7	66	-0.1	15	Snd Lvl	61.0	5.7	7	-1.3
361	1148	1	66.0	66.0	66	0.0	15	Snd Lvl	60.2	5.8	7	-1.2
362	1149	1	65.5	65.8	66	0.3	15	----	59.9	5.9	7	-1.1
363	1150	1	65.3	65.4	66	0.1	15	----	59.5	5.9	7	-1.1
364	1151	1	69.0	69.5	66	0.5	15	Snd Lvl	62.4	7.1	7	0.1
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		32	4.4	7.8	11.9							
All Impacted		28	4.4	8.1	11.9							
All that meet NR Goal		15	7.1	9.9	11.9							

RESULTS: SOUND LEVELS

I-65/I-465 South, DES 0902297

Shrewsberry								9 August 2012					
Melanie Barnes								TNM 2.5					
								Calculated with TNM 2.5					
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		I-65/I-465 South, DES 0902297											
RUN:		I-65 NB3											
BARRIER DESIGN:		Wall 3 I-65 NB						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH											
Receiver													
Name	No.	#DUS	Existing	No Barrier				With Barrier					
			LAeq1h	LAeq1h		Increase over	existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
365	1152	1	65.6	64.1	66	-1.5	15	----	61.5	2.6	7	-4.4	
366	1153	1	65.4	63.9	66	-1.5	15	----	60.6	3.3	7	-3.7	
367	1154	1	69.2	66.4	66	-2.8	15	Snd Lvl	62.2	4.2	7	-2.8	
368	1155	1	67.2	64.8	66	-2.4	15	----	60.8	4.0	7	-3.0	
369	1156	1	65.8	69.4	66	3.6	15	Snd Lvl	63.4	6.0	7	-1.0	
370	1157	1	68.8	69.0	66	0.2	15	Snd Lvl	62.7	6.3	7	-0.7	
371	1158	1	66.8	66.8	66	0.0	15	Snd Lvl	61.2	5.6	7	-1.4	
372	1159	1	65.7	65.5	66	-0.2	15	----	60.4	5.1	7	-1.9	
373	1160	1	65.7	65.5	66	-0.2	15	----	60.2	5.3	7	-1.7	
374	1161	1	66.4	66.3	66	-0.1	15	Snd Lvl	60.8	5.5	7	-1.5	
375	1162	1	67.6	67.7	66	0.1	15	Snd Lvl	61.8	5.9	7	-1.1	
376	1163	1	70.9	71.5	66	0.6	15	Snd Lvl	64.1	7.4	7	0.4	
377	1164	1	73.9	74.7	66	0.8	15	Snd Lvl	65.0	9.7	7	2.7	
378	1165	1	75.9	76.9	66	1.0	15	Snd Lvl	65.7	11.2	7	4.2	
379	1166	1	72.8	73.6	66	0.8	15	Snd Lvl	64.3	9.3	7	2.3	
380	1167	1	69.9	70.5	66	0.6	15	Snd Lvl	63.1	7.4	7	0.4	
381	1168	1	68.6	69.1	66	0.5	15	Snd Lvl	62.3	6.8	7	-0.2	
382	1169	1	67.6	67.9	66	0.3	15	Snd Lvl	61.9	6.0	7	-1.0	
383	1170	1	66.6	66.5	66	-0.1	15	Snd Lvl	61.1	5.4	7	-1.6	
384	1171	1	65.6	65.4	66	-0.2	15	----	60.1	5.3	7	-1.7	
385	1172	1	65.6	65.4	66	-0.2	15	----	60.3	5.1	7	-1.9	
386	1173	1	66.4	66.3	66	-0.1	15	Snd Lvl	60.9	5.4	7	-1.6	
387	1174	1	67.2	67.3	66	0.1	15	Snd Lvl	61.7	5.6	7	-1.4	
388	1175	1	69.1	69.7	66	0.6	15	Snd Lvl	63.1	6.6	7	-0.4	

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

389	1176	1	73.3	74.3	66	1.0	15	Snd Lvl	65.1	9.2	7	2.2
390	1177	1	76.8	77.8	66	1.0	15	Snd Lvl	66.5	11.3	7	4.3
391	1178	1	75.5	76.7	66	1.2	15	Snd Lvl	65.8	10.9	7	3.9
392	1179	1	72.5	73.5	66	1.0	15	Snd Lvl	64.7	8.8	7	1.8
393	1180	1	69.7	70.2	66	0.5	15	Snd Lvl	63.3	6.9	7	-0.1
394	1181	1	68.2	68.5	66	0.3	15	Snd Lvl	62.6	5.9	7	-1.1
395	1182	1	66.8	66.9	66	0.1	15	Snd Lvl	61.4	5.5	7	-1.5
396	1183	1	65.8	65.6	66	-0.2	15	----	60.5	5.1	7	-1.9
398	1184	1	67.4	67.6	66	0.2	15	Snd Lvl	62.2	5.4	7	-1.6
399	1185	1	69.2	69.8	66	0.6	15	Snd Lvl	63.5	6.3	7	-0.7
400	1186	1	72.8	73.8	66	1.0	15	Snd Lvl	65.1	8.7	7	1.7
401	1187	1	76.7	77.7	66	1.0	15	Snd Lvl	66.9	10.8	7	3.8
402	1188	1	71.3	72.1	66	0.8	15	Snd Lvl	66.0	6.1	7	-0.9
403	1189	1	68.8	69.3	66	0.5	15	Snd Lvl	64.6	4.7	7	-2.3
404	1190	1	66.8	66.7	66	-0.1	15	Snd Lvl	63.0	3.7	7	-3.3
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		39	2.6	6.5	11.3							
All Impacted		31	3.7	7.0	11.3							
All that meet NR Goal		11	7.4	9.5	11.3							

RESULTS: SOUND LEVELS

I-65/I-465 South, DES 0902297

Shrewsberry												
Melanie Barnes												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT: I-65/I-465 South, DES 0902297												
RUN: I-65 NB4												
BARRIER DESIGN: I-65 NB 4 North of Gray												
ATMOSPHERICS: 68 deg F, 50% RH												
Receiver												
Name	No.	#DUs	Existing	No Barrier	Crit'n	Increase over existing		With Barrier				
			LAeq1h	LAeq1h		Calculated	Crit'n	Type	Calculated	Noise Reduction	Goal	Calculated
				Calculated			Sub'l Inc	Impact	LAeq1h	Calculated		minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
405	1191	1	68.2	68.9	66	0.7	15	Snd Lvl	63.6	5.3	7	-1.7
406	1192	1	77.9	79.3	66	1.4	15	Snd Lvl	70.1	9.2	7	2.2
407	1193	1	77.9	79.2	66	1.3	15	Snd Lvl	67.7	11.5	7	4.5
408	1194	1	77.6	78.9	66	1.3	15	Snd Lvl	67.4	11.5	7	4.5
409	1195	1	77.6	78.9	66	1.3	15	Snd Lvl	67.3	11.6	7	4.6
410	1196	1	74.6	75.9	66	1.3	15	Snd Lvl	65.8	10.1	7	3.1
411	1197	1	71.6	72.7	66	1.1	15	Snd Lvl	64.4	8.3	7	1.3
412	1198	1	69.4	70.4	66	1.0	15	Snd Lvl	63.5	6.9	7	-0.1
413	1199	1	68.0	68.9	66	0.9	15	Snd Lvl	62.7	6.2	7	-0.8
414	1200	1	66.8	67.5	66	0.7	15	Snd Lvl	61.8	5.7	7	-1.3
415	1201	1	65.8	66.4	66	0.6	15	Snd Lvl	61.0	5.4	7	-1.6
416	1202	1	65.8	66.4	66	0.6	15	Snd Lvl	61.3	5.1	7	-1.9
417	1203	1	66.8	67.6	66	0.8	15	Snd Lvl	62.6	5.0	7	-2.0
418	1204	1	68.9	69.9	66	1.0	15	Snd Lvl	64.2	5.7	7	-1.3
419	1205	1	69.3	70.3	66	1.0	15	Snd Lvl	64.2	6.1	7	-0.9
420	1206	1	67.3	68.1	66	0.8	15	Snd Lvl	62.6	5.5	7	-1.5
421	1207	1	65.8	66.3	66	0.5	15	Snd Lvl	61.3	5.0	7	-2.0
422	1208	1	65.7	66.6	66	0.9	15	Snd Lvl	61.1	5.5	7	-1.5
423	1209	1	66.4	67.4	66	1.0	15	Snd Lvl	61.7	5.7	7	-1.3
424	1210	1	67.8	69.0	66	1.2	15	Snd Lvl	62.9	6.1	7	-0.9
425	1211	1	69.1	70.2	66	1.1	15	Snd Lvl	63.2	7.0	7	0.0
426	1212	1	67.4	68.3	66	0.9	15	Snd Lvl	62.0	6.3	7	-0.7
427	1213	1	67.4	68.3	66	0.9	15	Snd Lvl	62.4	5.9	7	-1.1
428	1214	1	68.8	70.0	66	1.2	15	Snd Lvl	63.4	6.6	7	-0.4

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

429	1215	1	71.5	73.0	66	1.5	15	Snd Lvl	64.8	8.2	7	1.2
430	1216	1	75.4	77.2	66	1.8	15	Snd Lvl	66.6	10.6	7	3.6
431	1217	1	77.4	78.9	66	1.5	15	Snd Lvl	67.4	11.5	7	4.5
432	1218	1	77.6	79.1	66	1.5	15	Snd Lvl	67.1	12.0	7	5.0
433	1219	1	77.7	79.3	66	1.6	15	Snd Lvl	67.3	12.0	7	5.0
434	1220	1	78.1	79.6	66	1.5	15	Snd Lvl	67.5	12.1	7	5.1
435	1221	1	77.9	79.4	66	1.5	15	Snd Lvl	68.1	11.3	7	4.3
436	1222	1	77.9	79.4	66	1.5	15	Snd Lvl	67.8	11.6	7	4.6
437	1223	1	77.9	79.4	66	1.5	15	Snd Lvl	67.9	11.5	7	4.5
438	1224	1	77.7	79.2	66	1.5	15	Snd Lvl	67.8	11.4	7	4.4
439	1225	1	77.9	79.3	66	1.4	15	Snd Lvl	67.9	11.4	7	4.4
440	1226	1	78.1	79.6	66	1.5	15	Snd Lvl	68.1	11.5	7	4.5
441	1227	1	76.7	78.3	66	1.6	15	Snd Lvl	67.4	10.9	7	3.9
442	1228	1	73.5	75.3	66	1.8	15	Snd Lvl	66.3	9.0	7	2.0
443	1229	1	69.7	71.4	66	1.7	15	Snd Lvl	64.6	6.8	7	-0.2
444	1230	1	67.0	68.3	66	1.3	15	Snd Lvl	62.9	5.4	7	-1.6
445	1231	1	66.3	67.4	66	1.1	15	Snd Lvl	62.4	5.0	7	-2.0
446	1233	1	71.7	73.4	66	1.7	15	Snd Lvl	65.5	7.9	7	0.9
447	1471	1	70.9	72.6	66	1.7	15	Snd Lvl	65.6	7.0	7	0.0
448	1472	1	72.7	74.5	66	1.8	15	Snd Lvl	67.0	7.5	7	0.5
2001	1473	1	69.5	70.8	66	1.3	15	Snd Lvl	63.5	7.3	7	0.3
2002	1474	1	69.0	70.3	66	1.3	15	Snd Lvl	63.4	6.9	7	-0.1
2003	1475	1	68.8	70.2	66	1.4	15	Snd Lvl	63.5	6.7	7	-0.3
2004	1476	1	68.9	70.4	66	1.5	15	Snd Lvl	63.6	6.8	7	-0.2
2005	1477	1	69.0	70.4	66	1.4	15	Snd Lvl	63.6	6.8	7	-0.2
2006	1478	1	68.4	69.7	66	1.3	15	Snd Lvl	63.2	6.5	7	-0.5
2007	1479	1	67.6	68.7	66	1.1	15	Snd Lvl	62.5	6.2	7	-0.8
2008	1480	1	66.1	67.1	66	1.0	15	Snd Lvl	61.6	5.5	7	-1.5
2009	1481	1	65.9	66.8	66	0.9	15	Snd Lvl	61.2	5.6	7	-1.4
2010	1482	1	65.9	66.7	66	0.8	15	Snd Lvl	61.1	5.6	7	-1.4
2011	1483	1	65.7	66.5	66	0.8	15	Snd Lvl	60.8	5.7	7	-1.3
Dwelling Units			# DUs	Noise Reduction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected			55	7.8	12.1							
All Impacted			55	7.8	12.1							
All that meet NR Goal			24	10.3	12.1							

RESULTS: SOUND LEVELS

I-65/I-465 South, DES 0902297

Shrewsberry
Melanie Barnes

9 August 2012

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

I-65/I-465 South, DES 0902297

RUN:

I-65 NB4

BARRIER DESIGN:

Wall 4 NB - South of Gray

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver													
Name	No.	#DUs	Existing	No Barrier				With Barrier					
			LAeq1h	LAeq1h		Increase over	existing	Type Impact	Calculated LAeq1h	Noise Reduction		Calculated minus Goal	
				Calculated	Crit'n	Calculated	Crit'n			Calculated	Goal		
							Sub'l Inc						
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
449	1235	1	65.9	63.3	66	-2.6	15	----	61.2	2.1	7	-4.9	
450	1236	1	66.1	63.4	66	-2.7	15	----	60.0	3.4	7	-3.6	
451	1237	1	68.2	66.6	66	-1.6	15	Snd Lvl	64.7	1.9	7	-5.1	
452	1238	1	71.4	69.4	66	-2.0	15	Snd Lvl	65.4	4.0	7	-3.0	
453	1239	1	74.4	72.7	66	-1.7	15	Snd Lvl	64.7	8.0	7	1.0	
454	1240	1	75.2	76.0	66	0.8	15	Snd Lvl	66.1	9.9	7	2.9	
455	1241	1	72.0	73.2	66	1.2	15	Snd Lvl	64.6	8.6	7	1.6	
456	1242	1	67.1	67.0	66	-0.1	15	Snd Lvl	61.2	5.8	7	-1.2	
457	1243	1	66.0	65.1	66	-0.9	15	----	60.0	5.1	7	-1.9	
458	1244	1	67.3	67.5	66	0.2	15	Snd Lvl	61.5	6.0	7	-1.0	
459	1245	1	69.7	70.7	66	1.0	15	Snd Lvl	63.1	7.6	7	0.6	
460	1246	1	74.0	75.7	66	1.7	15	Snd Lvl	65.4	10.3	7	3.3	
461	1247	1	76.6	77.9	66	1.3	15	Snd Lvl	68.1	9.8	7	2.8	
462	1248	1	72.1	73.9	66	1.8	15	Snd Lvl	66.1	7.8	7	0.8	
463	1249	1	68.7	70.0	66	1.3	15	Snd Lvl	63.7	6.3	7	-0.7	
464	1250	1	67.0	67.9	66	0.9	15	Snd Lvl	62.3	5.6	7	-1.4	
465	1251	1	65.8	66.3	66	0.5	15	Snd Lvl	61.0	5.3	7	-1.7	
466	1252	1	65.9	66.5	66	0.6	15	Snd Lvl	61.2	5.3	7	-1.7	
467	1253	1	67.3	68.2	66	0.9	15	Snd Lvl	62.1	6.1	7	-0.9	
468	1254	1	70.4	71.8	66	1.4	15	Snd Lvl	64.1	7.7	7	0.7	
469	1255	1	74.5	76.5	66	2.0	15	Snd Lvl	69.8	6.7	7	-0.3	
470	1256	1	76.1	77.7	66	1.6	15	Snd Lvl	75.6	2.1	7	-4.9	
471	1257	1	72.3	74.7	66	2.4	15	Snd Lvl	71.4	3.3	7	-3.7	
472	1258	1	69.0	70.4	66	1.4	15	Snd Lvl	64.6	5.8	7	-1.2	

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

473	1259	1	67.0	67.7	66	0.7	15	Snd Lvl	61.9	5.8	7	-1.2
474	1260	1	65.9	66.2	66	0.3	15	Snd Lvl	60.9	5.3	7	-1.7
475	1261	1	65.8	66.2	66	0.4	15	Snd Lvl	61.4	4.8	7	-2.2
476	1262	1	65.8	65.8	66	0.0	15	----	61.6	4.2	7	-2.8
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		28	1.9	5.9	10.3							
All Impacted		24	1.9	6.2	10.3							
All that meet NR Goal		8	7.6	8.7	10.3							

RESULTS: SOUND LEVELS

I-65/I-465 South, DES 0902297

Shrewsberry								26 October 2012					
Melanie Barnes								TNM 2.5					
								Calculated with TNM 2.5					
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		I-65/I-465 South, DES 0902297											
RUN:		I-65 SB1											
BARRIER DESIGN:		Wall 1 I-65 SB						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH											
Receiver													
Name	No.	#DUS	Existing	No Barrier				With Barrier					
			LAeq1h	LAeq1h		Increase over	existing	Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
487	1105	1	67.1	69.4	66	2.3	15	Snd Lvl	66.4	3.0	7	-4.0	
489	1107	1	70.7	73.6	66	2.9	15	Snd Lvl	64.7	8.9	7	1.9	
490	1108	1	67.9	70.8	66	2.9	15	Snd Lvl	62.9	7.9	7	0.9	
491	1109	1	66.4	69.3	66	2.9	15	Snd Lvl	63.7	5.6	7	-1.4	
492	1110	1	64.4	67.1	66	2.7	15	Snd Lvl	62.5	4.6	7	-2.4	
493	1111	1	73.6	76.3	66	2.7	15	Snd Lvl	69.2	7.1	7	0.1	
494	1112	1	70.5	73.7	66	3.2	15	Snd Lvl	65.7	8.0	7	1.0	
495	1113	1	67.7	71.0	66	3.3	15	Snd Lvl	63.8	7.2	7	0.2	
496	1114	1	65.2	68.2	66	3.0	15	Snd Lvl	61.8	6.4	7	-0.6	
497	1115	1	64.0	66.7	66	2.7	15	Snd Lvl	61.0	5.7	7	-1.3	
498	1116	1	74.8	77.6	66	2.8	15	Snd Lvl	69.2	8.4	7	1.4	
499	1117	1	67.6	71.4	66	3.8	15	Snd Lvl	63.6	7.8	7	0.8	
500	1118	1	65.2	68.7	66	3.5	15	Snd Lvl	61.2	7.5	7	0.5	
501	1119	1	64.0	67.1	66	3.1	15	Snd Lvl	60.4	6.7	7	-0.3	
502	1471	1	73.4	76.6	66	3.2	15	Snd Lvl	64.4	12.2	7	5.2	
503	1472	1	69.2	73.1	66	3.9	15	Snd Lvl	63.6	9.5	7	2.5	
504	1473	1	66.6	70.5	66	3.9	15	Snd Lvl	62.2	8.3	7	1.3	
505	1474	1	64.6	67.7	66	3.1	15	Snd Lvl	60.3	7.4	7	0.4	
506	1475	1	67.2	68.5	66	1.3	15	Snd Lvl	62.3	6.2	7	-0.8	
507	1476	1	65.6	67.0	66	1.4	15	Snd Lvl	61.9	5.1	7	-1.9	
508	1477	1	63.9	65.3	66	1.4	15	----	60.5	4.8	7	-2.2	
509	1478	1	73.1	74.6	66	1.5	15	Snd Lvl	74.5	0.1	7	-6.9	
510	1479	1	66.5	69.6	66	3.1	15	Snd Lvl	66.4	3.2	7	-3.8	
483	1101	1	65.6	69.2	66	3.6	15	Snd Lvl	66.1	3.1	7	-3.9	

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

484	1102	1	64.0	67.4	66	3.4	15	Snd Lvl	65.2	2.2	7	-4.8
485	1103	1	74.0	76.5	66	2.5	15	Snd Lvl	72.4	4.1	7	-2.9
486	1104	1	71.1	73.5	66	2.4	15	Snd Lvl	69.2	4.3	7	-2.7
488	1106	1	64.8	66.8	66	2.0	15	Snd Lvl	63.8	3.0	7	-4.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		28	0.1	6.0	12.2							
All Impacted		27	0.1	6.1	12.2							
All that meet NR Goal		12	7.1	8.3	12.2							

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

Shrewsberry												
Melanie Barnes												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT: I-65/I-465 South, DES 0902297												
RUN: I-65 SB2												
BARRIER DESIGN: Wall I-65 SB2-PH2												
ATMOSPHERICS: 68 deg F, 50% RH												
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	With Barrier				
								Type Impact	Calculated LAeq1h	Noise Reduction		
										Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1001	1471	1	66.0	67.0	66	1.0	15	Snd Lvl	62.4	4.6	7	-2.4
1002	1472	1	66.9	68.1	66	1.2	15	Snd Lvl	61.1	7.0	7	0.0
1003	1473	1	67.2	68.3	66	1.1	15	Snd Lvl	61.0	7.3	7	0.3
1004	1474	1	66.6	67.6	66	1.0	15	Snd Lvl	60.6	7.0	7	0.0
1005	1475	1	72.6	75.0	66	2.4	15	Snd Lvl	68.0	7.0	7	0.0
1006	1477	1	66.0	67.2	66	1.2	15	Snd Lvl	64.3	2.9	7	-4.1
1007	1478	1	66.0	67.3	66	1.3	15	Snd Lvl	65.7	1.6	7	-5.4
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		7	1.6	5.3	7.3							
All Impacted		7	1.6	5.3	7.3							
All that meet NR Goal		4	7.0	7.1	7.3							

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

Shrewsberry												
Melanie Barnes												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:												
I-65/I-465 South, DES 0902297												
RUN:												
I-65 SB3												
BARRIER DESIGN:												
Wall 3 I-65 SB - Rev												
ATMOSPHERICS:												
68 deg F, 50% RH												
Receiver												
Name												
No.												
#DUs												
Existing												
LAeq1h												
No Barrier												
LAeq1h												
Calculated												
Crit'n												
Increase over existing												
Calculated												
Crit'n												
Sub'l Inc												
Type												
Impact												
Calculated												
LAeq1h												
Noise Reduction												
Calculated												
Goal												
Calculated												
minus												
Goal												
dB												
dB												
dB												
dB												
563	1299	1	66.0	65.7	66	-0.3	15	----	62.4	3.3	5	-1.7
564	1300	1	66.3	67.4	66	1.1	15	Snd Lvl	63.3	4.1	5	-0.9
565	1301	1	67.7	69.2	66	1.5	15	Snd Lvl	64.3	4.9	5	-0.1
566	1302	1	70.0	72.0	66	2.0	15	Snd Lvl	65.7	6.3	5	1.3
567	1303	1	72.9	75.4	66	2.5	15	Snd Lvl	66.8	8.6	5	3.6
568	1304	1	75.3	77.7	66	2.4	15	Snd Lvl	66.8	10.9	5	5.9
569	1305	1	76.9	79.4	66	2.5	15	Snd Lvl	67.2	12.2	5	7.2
570	1306	1	76.6	79.1	66	2.5	15	Snd Lvl	66.5	12.6	5	7.6
571	1307	1	76.2	78.6	66	2.4	15	Snd Lvl	66.1	12.5	5	7.5
572	1308	1	76.7	79.2	66	2.5	15	Snd Lvl	66.5	12.7	5	7.7
573	1309	1	77.2	79.9	66	2.7	15	Snd Lvl	66.8	13.1	5	8.1
574	1310	1	77.3	80.0	66	2.7	15	Snd Lvl	66.7	13.3	5	8.3
575	1311	1	76.8	79.3	66	2.5	15	Snd Lvl	66.7	12.6	5	7.6
576	1312	1	76.7	79.3	66	2.6	15	Snd Lvl	66.8	12.5	5	7.5
577	1313	1	75.8	78.5	66	2.7	15	Snd Lvl	66.8	11.7	5	6.7
578	1314	1	75.3	77.3	66	2.0	15	Snd Lvl	66.4	10.9	5	5.9
579	1315	1	72.1	74.8	66	2.7	15	Snd Lvl	65.3	9.5	5	4.5
580	1316	1	77.1	79.9	66	2.8	15	Snd Lvl	66.7	13.2	5	8.2
581	1317	1	73.4	76.3	66	2.9	15	Snd Lvl	65.9	10.4	5	5.4
582	1318	1	68.8	70.5	66	1.7	15	Snd Lvl	63.7	6.8	5	1.8
583	1319	1	66.4	67.5	66	1.1	15	Snd Lvl	61.9	5.6	5	0.6
584	1320	1	66.1	66.9	66	0.8	15	Snd Lvl	61.1	5.8	5	0.8
585	1321	1	65.1	65.7	66	0.6	15	----	60.7	5.0	5	0.0
586	1322	1	66.5	67.7	66	1.2	15	Snd Lvl	61.9	5.8	5	0.8

RESULTS: SOUND LEVELS
I-65/I-465 South, DES 0902297

587	1323	1	67.6	69.1	66	1.5	15	Snd Lvl	62.8	6.3	5	1.3
588	1324	1	65.7	66.7	66	1.0	15	Snd Lvl	60.9	5.8	5	0.8
589	1325	1	66.6	68.0	66	1.4	15	Snd Lvl	62.3	5.7	5	0.7
590	1326	1	66.6	68.0	66	1.4	15	Snd Lvl	62.2	5.8	5	0.8
591	1327	1	66.7	68.1	66	1.4	15	Snd Lvl	62.1	6.0	5	1.0
592	1328	1	67.0	68.4	66	1.4	15	Snd Lvl	62.5	5.9	5	0.9
593	1329	1	67.0	68.5	66	1.5	15	Snd Lvl	62.6	5.9	5	0.9
594	1330	1	67.0	68.4	66	1.4	15	Snd Lvl	62.7	5.7	5	0.7
595	1331	1	67.0	68.4	66	1.4	15	Snd Lvl	62.8	5.6	5	0.6
596	1332	1	66.5	67.7	66	1.2	15	Snd Lvl	62.5	5.2	5	0.2
597	1333	1	65.7	66.7	66	1.0	15	Snd Lvl	61.8	4.9	5	-0.1
598	1334	1	66.3	67.5	66	1.2	15	Snd Lvl	62.3	5.2	5	0.2
599	1335	1	66.2	67.5	66	1.3	15	Snd Lvl	61.8	5.7	5	0.7
600	1336	1	65.9	67.0	66	1.1	15	Snd Lvl	61.3	5.7	5	0.7
601	1337	1	66.3	67.5	66	1.2	15	Snd Lvl	61.5	6.0	5	1.0
602	1338	1	65.3	66.1	66	0.8	15	Snd Lvl	60.5	5.6	5	0.6
603	1339	1	69.2	71.1	66	1.9	15	Snd Lvl	63.8	7.3	5	2.3
604	1340	1	68.4	69.7	66	1.3	15	Snd Lvl	63.3	6.4	5	1.4
605	1341	1	71.9	74.2	66	2.3	15	Snd Lvl	65.9	8.3	5	3.3
606	1342	1	76.7	79.3	66	2.6	15	Snd Lvl	68.1	11.2	5	6.2
607	1343	1	76.7	79.2	66	2.5	15	Snd Lvl	67.5	11.7	5	6.7
608	1344	1	76.0	78.6	66	2.6	15	Snd Lvl	66.4	12.2	5	7.2
609	1345	1	73.6	76.1	66	2.5	15	Snd Lvl	65.7	10.4	5	5.4
610	1346	1	72.5	74.7	66	2.2	15	Snd Lvl	65.2	9.5	5	4.5
611	1347	1	73.0	73.4	66	0.4	15	Snd Lvl	65.1	8.3	5	3.3
612	1348	1	71.2	71.0	66	-0.2	15	Snd Lvl	63.9	7.1	5	2.1
613	1349	1	69.0	68.8	66	-0.2	15	Snd Lvl	62.6	6.2	5	1.2
614	1350	1	66.5	66.1	66	-0.4	15	Snd Lvl	60.5	5.6	5	0.6
615	1387	1	65.9	66.4	66	0.5	15	Snd Lvl	60.7	5.7	5	0.7
616	1388	1	67.4	68.2	66	0.8	15	Snd Lvl	62.3	5.9	5	0.9
617	1389	1	67.3	67.9	66	0.6	15	Snd Lvl	61.9	6.0	5	1.0
618	1390	1	66.0	66.8	66	0.8	15	Snd Lvl	61.2	5.6	5	0.6
619	1391	1	65.5	66.2	66	0.7	15	Snd Lvl	60.7	5.5	5	0.5
620	1392	1	65.7	66.2	66	0.5	15	Snd Lvl	60.5	5.7	5	0.7
621	1393	1	64.8	64.7	66	-0.1	15	----	60.0	4.7	5	-0.3
622	1394	1	71.6	71.1	66	-0.5	15	Snd Lvl	64.6	6.5	5	1.5
623	1395	1	67.6	67.5	66	-0.1	15	Snd Lvl	62.7	4.8	5	-0.2
624	1396	1	66.0	65.6	66	-0.4	15	----	61.0	4.6	5	-0.4
625	1397	1	63.6	63.6	66	0.0	15	----	61.7	1.9	5	-3.1
626	1398	1	73.2	73.2	66	0.0	15	Snd Lvl	73.0	0.2	5	-4.8
627	1399	1	69.9	68.9	66	-1.0	15	Snd Lvl	68.2	0.7	5	-4.3

RESULTS: SOUND LEVELS**I-65/I-465 South, DES 0902297**

Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		65	0.2	7.3	13.3							
All Impacted		60	0.2	7.6	13.3							
All that meet NR Goal		54	5.2	8.1	13.3							

APPENDIX C-2
NOISE BARRIER EVALUATION

Noise Reduction Analysis - Wall I-65 NB1

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
303	0.8	X			X	
304	1.6				X	
305	1.7				X	
306	5.3	X		X	X	X
307	5.0			X	X	X
308	3.7				X	
309	8.8	X	X	X	X	X
310	6.1			X	X	X
311	5.6			X	X	X
312	4.5					
313	7.3	X	X	X	X	X
314	7.5			X	X	X
315	7.1			X	X	X
316	6.0			X	X	X
317	5.4			X	X	X
318	13.0	X	X	X	X	X
319	10.8			X	X	X
320	7.5			X	X	X
321	6.2			X	X	X
322	5.8			X	X	X
323	11.2	X	X	X	X	X
324	8.2			X	X	X
325	7.1			X	X	X
326	6.2			X	X	X
327	4.2	X			X	
328	5.0			X	X	X
329	5.6			X	X	X
330	6.4			X	X	X
331	5.4	X		X	X	X
332	4.5				X	
Totals		8	4	23	29	23

Feasible? Yes.

Cost Analysis - Wall I-65 NB1

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
15	1,225	18,375	\$ 30.00	\$ 551,250.00
19	1,650	31,350	\$ 30.00	\$ 940,500.00
	2,875	49,725	Total	\$ 1,491,750.00
			Cost per Benefited	\$ 64,858.70

Cost Effective? No.

Meets noise reduction design goal? No.

Noise Reduction Analysis - Wall I-65 NB2

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
333	4.5				X	
334	4.4				X	
335	4.4					
336	6.6			X	X	X
337	6.3			X	X	X
338	5.8			X		
339	6.5			X	X	X
340	6.4			X	X	X
341	6.9			X	X	X
342	6.6			X	X	X
343	6.8			X	X	X
344	6.6			X	X	X
345	8.4	X	X	X	X	X
346	8.9	X	X	X	X	X
347	8.8	X	X	X	X	X
348	10.3	X	X	X	X	X
349	11.7	X	X	X	X	X
350	11.9	X	X	X	X	X
351	11.0	X	X	X	X	X
352	11.6	X	X	X	X	X
353	10.1	X	X	X	X	X
354	8.6			X	X	X
355	8.7	X	X	X	X	X
356	10.2	X	X	X	X	X
357	11.7	X	X	X	X	X
358	9.1	X	X	X	X	X
359	5.9			X	X	X
360	5.7			X	X	X
361	5.8			X	X	X
362	5.9			X		
363	5.9			X		
364	7.1			X	X	X
Totals		13	13	29	28	26

Feasible? Yes.

Cost Analysis - Wall I-65 NB2

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
13	725	9,425	\$ 30.00	\$ 282,750.00
14	825	11,550	\$ 30.00	\$ 346,500.00
1,550		20,975	Total	\$ 629,250.00
		Cost per Benefited	\$	21,698.28

Cost Effective? Yes.

Noise Reduction Analysis - Wall I-65 NB3

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
365	2.6	X				
366	3.3	X				
367	4.2	X			X	
368	4.0					
369	6.0	X		X	X	X
370	6.3	X		X	X	X
371	5.6			X	X	X
372	5.1			X		
373	5.3			X		
374	5.5			X	X	X
375	5.9			X	X	X
376	7.4	X	X	X	X	X
377	9.7	X	X	X	X	X
378	11.2	X	X	X	X	X
379	9.3	X	X	X	X	X
380	7.4			X	X	X
381	6.8			X	X	X
382	6.0			X	X	X
383	5.4			X	X	X
384	5.3			X		
385	5.1			X		
386	5.4			X	X	X
387	5.6			X	X	X
388	6.6			X	X	X
389	9.2	X	X	X	X	X
390	11.3	X	X	X	X	X
391	10.9	X	X	X	X	X
392	8.8	X	X	X	X	X
393	6.9			X	X	X
394	5.9			X	X	X
395	5.5			X	X	X
396	5.1			X		
397	5.0			X	X	X
398	5.4			X	X	X
399	6.3			X	X	X
400	8.7	X	X	X	X	X
401	10.8	X	X	X	X	X
402	6.1			X	X	X
403	4.7				X	
404	3.7				X	
Totals		15	10	34	32	29

Feasible? Yes.

Cost Analysis - Wall I-65 NB3

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
12	600	7,200	\$ 30.00	\$ 216,000.00
13	1,275	16,575	\$ 30.00	\$ 497,250.00
	1,875	23,775	Total	\$ 713,250.00
		Cost per Benefited	\$	20,977.94

Cost Effective? Yes.

Noise Reduction Analysis - Wall I-65 NB4 (North of Gray Road)

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
405	5.3	X		X	X	X
406	9.2	X	X	X	X	X
407	11.5	X	X	X	X	X
408	11.5	X	X	X	X	X
409	11.6	X	X	X	X	X
410	10.1	X	X	X	X	X
411	8.3			X	X	X
412	6.9			X	X	X
413	6.2			X	X	X
414	5.7			X	X	X
415	5.4			X	X	X
416	5.1			X	X	X
417	5.0			X	X	X
418	5.7			X	X	X
419	6.1			X	X	X
420	5.5			X	X	X
421	5.0			X	X	X
422	5.5			X	X	X
423	5.7			X	X	X
424	6.1			X	X	X
425	7.0			X	X	X
426	6.3			X	X	X
427	5.9			X	X	X
428	6.6			X	X	X
429	8.2	X	X	X	X	X
430	10.6	X	X	X	X	X
431	11.5	X	X	X	X	X
432	12.0	X	X	X	X	X
433	12.0	X	X	X	X	X
434	12.1	X	X	X	X	X
435	11.3	X	X	X	X	X
436	11.6	X	X	X	X	X
437	11.5	X	X	X	X	X
438	11.4	X	X	X	X	X
439	11.4	X	X	X	X	X
440	11.5	X	X	X	X	X
441	10.9	X	X	X	X	X
442	9.0	X	X	X	X	X
443	6.8			X	X	X
444	5.4			X	X	X
445	5.0			X	X	X
446	7.9	X	X	X	X	X
447	7.0	X	X	X	X	X
448	7.5	X	X	X	X	X
2001	7.3			X	X	X
2002	6.9			X	X	X
2003	6.7			X	X	X
2004	6.8			X	X	X
2005	6.8			X	X	X

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
2006	6.5			X	X	X
2007	6.2			X	X	X
2008	5.5			X	X	X
2009	5.6			X	X	X
2010	5.6			X	X	X
2011	5.7			X	X	X
Totals		23	22	55	55	55

Feasible? Yes.

Cost Analysis - Wall I-65 NB4 (North of Gray Road)

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
12	400	4,800	\$ 30.00	\$ 144,000.00
13	200	2,600	\$ 30.00	\$ 78,000.00
14	300	4,200	\$ 30.00	\$ 126,000.00
15	800	12,000	\$ 30.00	\$ 360,000.00
16	1,000	16,000	\$ 30.00	\$ 480,000.00
	2,700	39,600	Total	\$ 1,188,000.00
		Cost per Benefited	\$	21,600.00

Cost Effective? Yes

Noise Reduction Analysis - Wall I-65 NB4 (South of Gray Road)

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
449	2.1					
450	3.4					
451	1.9				X	
452	4.0				X	
453	8.0	X	X	X	X	X
454	9.9	X	X	X	X	X
455	8.6	X	X	X	X	X
456	5.8			X	X	X
457	5.1			X		
458	6.0			X	X	X
459	7.6			X	X	X
460	10.3	X	X	X	X	X
461	9.8	X	X	X	X	X
462	7.8	X	X	X	X	X
463	6.3			X	X	X
464	5.6			X	X	X
465	5.3			X	X	X
466	5.3			X	X	X
467	6.1			X	X	X
468	7.7	X	X	X	X	X
469	6.7	X		X	X	X
470	2.1	X			X	
471	3.3	X			X	
472	5.8			X	X	X
473	5.8			X	X	X
474	5.3			X	X	X
475	4.8	X			X	
476	4.2	X				
Totals		12	7	20	24	19

Feasible? Yes.

Cost Analysis - Wall I-65 NB4 (South of Gray Road)

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
16	200	3,200	\$ 30.00	\$ 96,000.00
17	100	1,700	\$ 30.00	\$ 51,000.00
18	1,200	21,600	\$ 30.00	\$ 648,000.00
	1,500	26,500	Total	\$ 795,000.00
		Cost per Benefited	\$	39,750.00

Cost Effective? No.

Noise Reduction Analysis - Wall I-65 SB1

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
483	3.1	X			X	
484	2.2	X			X	
485	4.1	X	X		X	
486	4.3				X	
487	3.0				X	
488	3.0				X	
489	8.9	X	X	X	X	X
490	7.9			X	X	X
491	5.6			X	X	X
492	4.6				X	
493	7.1	X	X	X	X	X
494	8.0			X	X	X
495	7.2			X	X	X
496	6.4			X	X	X
497	5.7			X	X	X
498	8.4	X	X	X	X	X
499	7.8			X	X	X
500	7.5			X	X	X
501	6.7			X	X	X
502	12.2	X	X	X	X	X
503	9.5			X	X	X
504	8.3			X	X	X
505	7.4			X	X	X
506	6.2	X		X	X	X
507	5.1			X	X	X
508	4.8					
509	0.1	X			X	
510	3.2	X			X	
Totals		10	5	18	27	18

Feasible? Yes.

Cost Analysis - Wall I-65 SB1

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
15	775	11,625	\$ 30.00	\$ 348,750.00
17	300	5,100	\$ 30.00	\$ 153,000.00
18	500	9,000	\$ 30.00	\$ 270,000.00
19	675	12,825	\$ 30.00	\$ 384,750.00
20	350	7,000	\$ 30.00	\$ 210,000.00
	2,600	45,550	Total	\$ 1,366,500.00
			Cost per Benefited	\$ 75,916.67

Cost Effective? No.

Meets noise reduction design goal? No.

Noise Reduction Analysis - Wall I-65 SB2

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
1001	4.6	X			X	
1002	7.0	X	X	X	X	X
1003	7.3	X	X	X	X	X
1004	7.0	X	X	X	X	X
1005	7.0	X	X	X	X	X
1006	2.9	X			X	
1007	1.6	X			X	
Totals		7	4	4	7	4

Feasible? Yes.

Cost Analysis - Wall I-65 SB2

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
14	100	1,400	\$ 30.00	\$ 42,000.00
15	500	7,500	\$ 30.00	\$ 225,000.00
16	900	14,400	\$ 30.00	\$ 432,000.00
17	500	8,500	\$ 30.00	\$ 255,000.00
	2,000	31,800	Total	\$ 954,000.00
		Cost per Benefited	\$	238,500.00

Cost Effective? No.

Noise Reduction Analysis - Wall I-65 SB3

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
563	3.3					
564	4.1				X	
565	4.9				X	
566	6.3			X	X	X
567	8.6	X	X	X	X	X
568	10.9	X	X	X	X	X
569	12.2	X	X	X	X	X
570	12.6	X	X	X	X	X
571	12..5	X	X	X	X	X
572	12.7	X	X	X	X	X
573	13.1	X	X	X	X	X
574	13.3	X	X	X	X	X
575	12.6	X	X	X	X	X
576	12.5	X	X	X	X	X
577	11.7	X	X	X	X	X
578	10.9	X	X	X	X	X
579	9.5			X	X	X
580	13.2	X	X	X	X	X
581	10.4			X	X	X
582	6.8			X	X	X
583	5.6			X	X	X
584	5.8			X	X	X
585	5.0			X		
586	5.8			X	X	X
587	6.3			X	X	X
588	5.8			X	X	X
589	5.7			X	X	X
590	5.8			X	X	X
591	6.0			X	X	X
592	5.9			X	X	X
593	5.9			X	X	X
594	5.7			X	X	X
595	5.6			X	X	X
596	5.2			X	X	X
597	4.9				X	
598	5.2			X	X	X
599	5.7			X	X	X
600	5.7			X	X	X
601	6.0			X	X	X
602	5.6			X	X	X
603	7.3			X	X	X
604	6.4			X	X	X
605	8.3			X	X	X
606	11.2	X	X	X	X	X

Noise Reduction Analysis - Wall I-65 SB3

Receptor No.	Noise Reduction dB(A)	First Row?	First Row and 7 dB(A) ?	5 dB(A) ?	Impacted?	Impacted and 5 dB(A) ?
607	11.7	X	X	X	X	X
608	12.2	X	X	X	X	X
609	10.4	X	X	X	X	X
610	9.5	X	X	X	X	X
611	8.3	X	X	X	X	X
612	7.1	X	X	X	X	X
613	6.2			X	X	X
614	5.6			X	X	X
615	5.7			X	X	X
616	5.9			X	X	X
617	6.0			X	X	X
618	5.6			X	X	X
619	5.5			X	X	X
620	5.7			X	X	X
621	4.7					
622	6.5			X	X	X
623	4.8				X	
624	4.6					
625	1.9					
626	0.2	X			X	
627	0.7				X	
Totals		21	20	55	60	54

Feasible? Yes.

Cost Analysis - Wall I-65 SB3

Wall Height	Length	Sq. Ft.	Cost per Sq. Ft.	Cost
13	1,000	13,000	\$ 30.00	\$ 390,000.00
14	1,000	14,000	\$ 30.00	\$ 420,000.00
15	500	7,500	\$ 30.00	\$ 225,000.00
16	500	8,000	\$ 30.00	\$ 240,000.00
	3,000	42,500	Total	\$ 1,275,000.00
		Cost per Benefited	\$	23,181.82

Cost Effective? Yes

APPENDIX D
PUBLIC INVOLVEMENT

August 31, 2012

Dear Property Owner:



On behalf of the Indiana Department of Transportation (INDOT), Shrewsberry & Associates, LLC (Shrewsberry) is soliciting input from property owners regarding potential construction of sound barrier walls along the east and west sides of I-65, in southeastern Indianapolis, Marion County, Indiana. The proposed sound barrier walls vary in height from 12 to 18 feet and range from 1,500 feet to 3,350 feet in length. The intended purpose of the walls is to reduce the impact of vehicular noise on adjacent property owners. Approximate locations of the proposed sound barriers are shown on the enclosed maps.

INDOT evaluates noise abatement measures for feasibility and reasonableness. Then, property owners have an opportunity to provide their input on the proposed sound barrier walls. Finally, INDOT makes the decision whether to construct the sound barrier wall based on feasibility, reasonableness and supportive responses from the public. Preliminary findings show that the proposed sound barriers are both feasible and reasonable. Now, INDOT needs your input on whether you want the above sound barriers constructed in your area. If the barriers are constructed, property owners will be given an opportunity to express a preference as to the type and style of barrier facing away from the roadway.

Therefore, please complete and return the enclosed self-addressed stamped postcard. **Due to the high importance of your input, please return the enclosed postcard by September 28, 2012.** The result of the survey is very important to the decision making process of the placement of sound barrier walls.

Again, INDOT is committed to listening to the thoughts and opinions from property owners concerning the proposed sound barrier walls. If you have any questions, please feel free to contact Melanie Barnes at mbarnes@shrewsusa.com or 317-841-4799, ext. 8244.

Sincerely,

SHREWSBERRY & ASSOCIATES, LLC

Melanie Barnes

Melanie Barnes, P.E.
Project Manager

Enc.

PROJECT DESCRIPTION

The Indiana Department of Transportation (INDOT) proposes to improve the I-65/I-465 Interchange in southeastern Indianapolis, Indiana (Marion County). The project scope includes the following improvements:

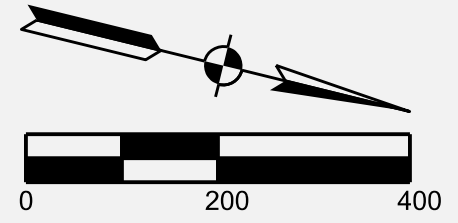
- Addition of travel lanes on I-65 SB between I-465 and Gray Rd
- Addition of travel lanes on I-465 EB and WB between 9th Ave and I-65
- Addition of a lane on the ramp from I-65 NB to I-465 EB
- Building a new 40 mph “flyover” ramp from I-465 WB to I-65 SB
- Addition of an auxillary lane on I-65 NB from Southport Rd to I-465

HIGHWAY TRAFFIC NOISE BARRIERS

For more information on traffic noise barriers, please visit:

http://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/keepdown.cfm

\$DATE\$ | \$TIME\$ | \$FILE\$ | Sheet No.: \$MODEL\$



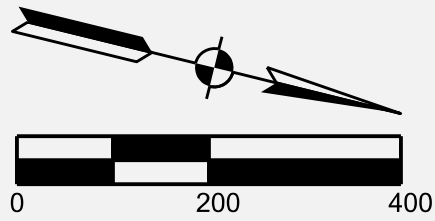
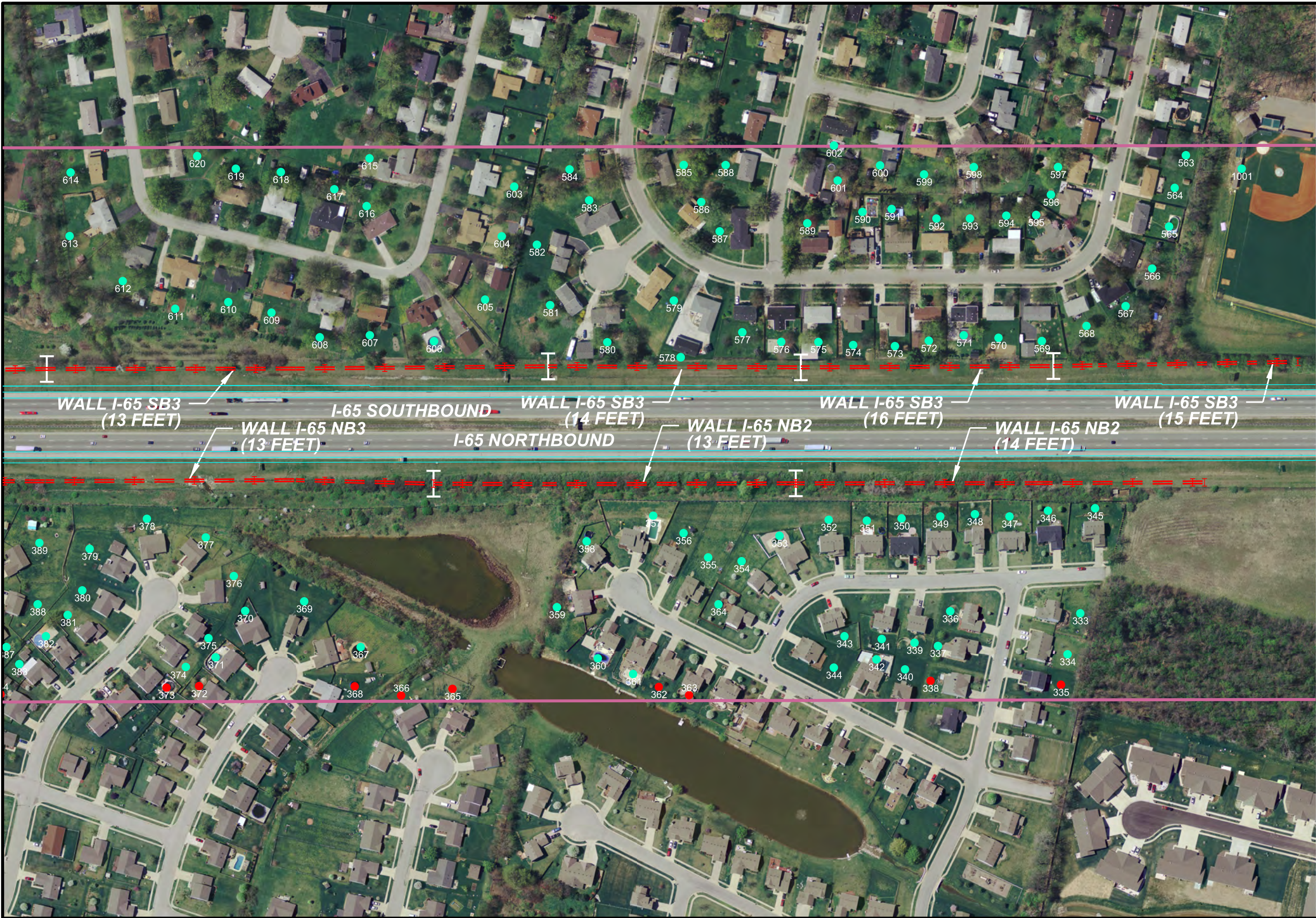
LEGEND

- NOISE ANALYSIS STUDY AREA
- EDGE OF ROADWAY
- - - CONSTRUCTION LIMITS
- 66 dBA CONTOUR LINE
- == MODELED NOISE WALL
- == PROPOSED NOISE WALL
- RECEPTOR LOCATION
- IMPACTED RECEPTOR



shrewsberry
7321 Shadeland Station
Suite 160
Indianapolis, Indiana 46256
(t) 317.841.4799 (f) 317.841.4790

I-465 / I-65 INTERCHANGE MODIFICATION
DES. NO. 0902297



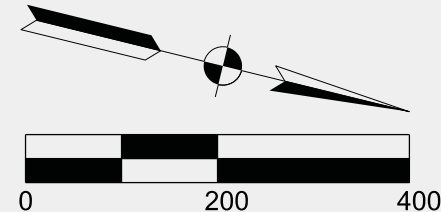
LEGEND

- NOISE ANALYSIS STUDY AREA
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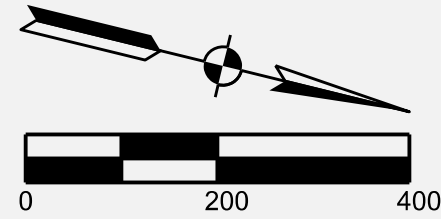
I-465 / I-65 INTERCHANGE MODIFICATION
DES. NO. 0902297



LEGEND

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I-465 / I-65 INTERCHANGE MODIFICATION DES. NO. 0902297



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I-465 / I-65 INTERCHANGE MODIFICATION DES. NO. 0902297

Receptor No.	Street Number	Street	City, State, Zip	Owner Name	Response
336	3809	Cherry Blossom Bl	Indianapolis, IN 46237	Michael J. & Judith E. Lucas	N
337	3817	Cherry Blossom Bl	Indianapolis, IN 46237	Zachary A. Shroyer & Sarah A. Willis	
339	5535	Rum Cherry Wa	Indianapolis, IN 46237	Douglas A. & Lisa V. Polen	N/R
340	5530	Cherry Field Dr	Indianapolis, IN 46237	Linda Cornelius	Y
341	5545	Rum Cherry Wa	Indianapolis, IN 46237	Cross, Kristi R & Theodore M Bell & Bonita G Bell	N/R
342	5540	Cherry Field Dr	Indianapolis, IN 46237	Read, Earl W & Julia E Pero-Read	Y
343	5601	Rum Cherry Wa	Indianapolis, IN 46237	Edith A. Hendricks	Y
344	5615	Rum Cherry Wa	Indianapolis, IN 46237	Jordan M. & Ashleigh Taylor	Y
345	5506	Rum Cherry Wa	Indianapolis, IN 46237	Angela R. & Jeffrey L. Watson	N/R
346	5512	Rum Cherry Wa	Indianapolis, IN 46237	Robert G. & Stacey L. Moisant	
347	5518	Rum Cherry Wa	Indianapolis, IN 46237	Ferd Stefan & Cathy D. Wolfla	N/R
348	5524	Rum Cherry Wa	Indianapolis, IN 46237	Ginger M. Adams	N/R
349	5532	Rum Cherry Wa	Indianapolis, IN 46237	Nguyen, Sang V & Hao T Pham (H&W)	N/R
350	5538	Rum Cherry Wa	Indianapolis, IN 46237	Stephanie L. Humerickhouse	N/R
351	5544	Rum Cherry Wa	Indianapolis, IN 46237	Monica Garcia	Y
352	5550	Rum Cherry Wa	Indianapolis, IN 46237	Frank N. & Helen Angelyn Rojas	N/R
353	5602	Rum Cherry Wa	Indianapolis, IN 46237	Penny Pero	N/R
354	5608	Rum Cherry Wa	Indianapolis, IN 46237	Michelle Magana	
355	5620	Cherry Field Dr	Indianapolis, IN 46237	Matthew A. & Karlyn K. Strack	Y
356	5628	Cherry Field Dr	Indianapolis, IN 46237	Vicki L. Lang	N/R
357	5634	Cherry Field Dr	Indianapolis, IN 46237	George D. & Christy Lynn Walton	
358	5638	Cherry Field Dr	Indianapolis, IN 46237	James H. & Cheri L. Gable	Y
359	5635	Cherry Field Dr	Indianapolis, IN 46237	David R. Mcdougall, & Mary L. Givens	Y
360	5627	Cherry Field Dr	Indianapolis, IN 46237	Highfill, David M & Sherry L Whipkey-Highfill	Y
361	5621	Cherry Field Dr	Indianapolis, IN 46237	Vincent J. & Donna L. Prendergast	Y
364	5616	Rum Cherry Wa	Indianapolis, IN 46237	Jose D. & Ruby R. Dadvias	
405	6130	Gray Rd	Indianapolis, IN 46237	David J. Munn	Y
406	3922	Gray Arbor Wa	Indianapolis, IN 46237	Vasko, Gary & Christine	
407	3916	Gray Arbor Wa	Indianapolis, IN 46237	Brian Murle & Melissa K. Halcomb	Y
408	3917	Gray Arbor Dr	Indianapolis, IN 46237	Adam T. Brawner	
409	3921	Gray Arbor Dr	Indianapolis, IN 46237	Deborah K. Miller	Y
410	3925	Gray Arbor Dr	Indianapolis, IN 46237	Brenda Sue Cook	
411	3929	Gray Arbor Dr	Indianapolis, IN 46237	Jacob Pointer	Y
412	3935	Gray Arbor Dr	Indianapolis, IN 46237	Talmadge & Marsha Bookout	Y
413	3941	Gray Arbor Dr	Indianapolis, IN 46237	David C. & Michell D. Michael	Y
414	3947	Gray Arbor Dr	Indianapolis, IN 46237	Pamela Elsey	Y
415	4007	Gray Arbor Dr	Indianapolis, IN 46237	Jean Feldhake	N/R
416	4005	Gray Arbor Wa	Indianapolis, IN 46237	Douglas A. & Shelley R. Crawford	Y
417	3939	Gray Arbor Wa	Indianapolis, IN 46237	Angel Vargas Luna	
418	3931	Gray Arbor Wa	Indianapolis, IN 46237	Ronald J. & Maria C. Schwager	
419	3924	Gray Arbor Wa	Indianapolis, IN 46237	Corey Freudenstein	Y
420	3940	Gray Arbor Wa	Indianapolis, IN 46237	Jana L. Kime	Y
421	4004	Gray Arbor Wa	Indianapolis, IN 46237	Jared S. Summeier	N/R
422	6359	Perry Pines Ct	Indianapolis, IN 46237	Jeffrey Neal & Beth A. Zorman	N/R
423	6353	Perry Pines Ct	Indianapolis, IN 46237	Dana R. & Matt Swales	
424	6347	Perry Pines Ct	Indianapolis, IN 46237	Magdalena J. Mc Hargue	N/R
425	6337	Perry Pines Ct	Indianapolis, IN 46237	Brandon & Anna Peters	Y
426	6331	Perry Pines Ct	Indianapolis, IN 46237	Duane L. & Carol L. King	Y
427	6327	Perry Pines Ct	Indianapolis, IN 46237	Robert, Jr & Bethany Mueller	N/R
428	6323	Perry Pines Ct	Indianapolis, IN 46237	Michael E. & Tiffany F. Eland	N/R
429	6322	Perry Pines Ct	Indianapolis, IN 46237	Alyce Thorstad	Y
430	6326	Perry Pines Ct	Indianapolis, IN 46237	Wilma J. Judd	Y
431	6330	Perry Pines Ct	Indianapolis, IN 46237	Hutton, Jamie L Trustee Under The Jamie L Hutton	
432	6334	Perry Pines Ct	Indianapolis, IN 46237	Castillo-Burgos, Luz M & Angel Burgos	N/R
433	6338	Perry Pines Ct	Indianapolis, IN 46237	Michael K. & Marilyn S. Sutherland	N
434	6342	Perry Pines Ct	Indianapolis, IN 46237	Laforge, Maurice P II & Elizabeth S Cox	N/R
435	6406	Perry Pines Ct	Indianapolis, IN 46237	Jonathan Murphy	N/R

Receptor No.	Street Number	Street	City, State, Zip	Owner Name	Response
436	6412	Perry Pines Ct	Indianapolis, IN 46237	Emily D. Rushton	Y
437	6418	Perry Pines Ct	Indianapolis, IN 46237	Alex E. & Nancy Y. Martinez	N/R
438	6424	Perry Pines Ct	Indianapolis, IN 46237	Lori L. Ellis	
439	6430	Perry Pines Ct	Indianapolis, IN 46237	Trieu, Lillian & Phuong Van Nguyen	N/R
440	6436	Perry Pines Ct	Indianapolis, IN 46237	Peggy J. Stevens	N/R
441	6440	Perry Pines Ct	Indianapolis, IN 46237	James Bernard II & Lindsay C. Urrutia	Y
442	6444	Perry Pines Ct	Indianapolis, IN 46237	Stephen T. Colinco	
443	6447	Perry Pines Ct	Indianapolis, IN 46237	John E. & Kathy K. Mc Dowell	Y
444	6437	Perry Pines Ct	Indianapolis, IN 46237	Richard & Karen Fyten	
445	6438	Gray Rd	Indianapolis, IN 46237	Bryan D. & Breanne N. Rubeck	
446	6450	Gray Rd	Indianapolis, IN 46237	Theresa Waters	
447	6460	Gray Rd	Indianapolis, IN 46237	Darryl Dean & Anastasia N. Mitchell	Y
448	6506	Gray Rd	Indianapolis, IN 46237	Kenneth R. Matkins	N/R
566	3610	Redwood Dr	Indianapolis, IN 46227	Richard A. Qualls	Y
567	3618	Redwood Dr	Indianapolis, IN 46227	Ernest & Carol Crenshaw	N/R
568	5503	S Kealing Av	Indianapolis, IN 46227	Billie J. Huntman	Y
569	5511	S Kealing Av	Indianapolis, IN 46227	Daniel & C. Samantha Fitzgerald	Y
570	5519	S Kealing Av	Indianapolis, IN 46227	James David & Kimberly A. Dawson	Y
571	5527	S Kealing Av	Indianapolis, IN 46227	Michael E. Monaghan	Y
572	5601	S Kealing Av	Indianapolis, IN 46227	Jason & Julie Crewe	
573	5609	S Kealing Av	Indianapolis, IN 46227	Theresa A. Wright	Y
574	5617	S Kealing Av	Indianapolis, IN 46227	Kelly L. Gratien	Y
575	5623	S Kealing Av	Indianapolis, IN 46227	Margaret E. Mcintosh	Y
576	5629	S Kealing Av	Indianapolis, IN 46227	Richard E. & Cindy L. Perry	Y
577	5633	S Kealing Av	Indianapolis, IN 46227	Thomas E. & Deborah S. Negri	Y
578	5639	S Kealing Av	Indianapolis, IN 46227	Joseph D. & Rebecca L. Essex	Y
579	5703	S Kealing Av	Indianapolis, IN 46227	Emily M. Phipps	N/R
580	3632	S Kealing Ct	Indianapolis, IN 46227	John O. & Marilyn J. Bullens	Y
581	3635	S Kealing Ct	Indianapolis, IN 46227	Adam D. & Melissa L. Long	Y
582	3627	S Kealing Ct	Indianapolis, IN 46227	Bobby L., Jr & Angie L. Jobe	Y
583	3621	Ferncliff Av	Indianapolis, IN 46227	H & H Property Investments Inc	N/R
584	3615	Ferncliff Av	Indianapolis, IN 46227	Douglas A. Johnson	Y
585	3618	Ferncliff Av	Indianapolis, IN 46227	Denney, Perry J & Rabenia S Trustees Denney Family Trust	
586	5704	S Kealing Av	Indianapolis, IN 46227	Kevin M. Quillen & Dorothy J. Carey	Y
587	5638	S Kealing Av	Indianapolis, IN 46227	H & H Property Investments Inc	N/R
588	3611	Royal Oak Dr	Indianapolis, IN 46227	Robert Hawkins	Y
589	5622	S Kealing Av	Indianapolis, IN 46227	Barbara A. Englert	Y
590	5614	S Kealing Av	Indianapolis, IN 46227	Joseph P., Jr & Shelli L. Wohlhieter	Y
591	5608	S Kealing Av	Indianapolis, IN 46227	Thomas L. & Janet R. Springer	Y
592	5532	S Kealing Av	Indianapolis, IN 46227	Jesus F. Cardoza	N/R
593	5524	S Kealing Av	Indianapolis, IN 46227	Marco V. Patino	Y
594	5516	S Kealing Av	Indianapolis, IN 46227	Stanley O. & Rita J. Hall	Y
595	5508	S Kealing Av	Indianapolis, IN 46227	Gary L. & Debra L. Sowders	N/R
596	3605	Redwood Dr	Indianapolis, IN 46227	Sharon K. Keim	N/R
598	3530	E Dudley Av	Indianapolis, IN 46227	James T. & Joan M. Bartley	Y
599	5605	S Gale St	Indianapolis, IN 46227	Paul D. & Rose Marie Russell	
600	5615	S Gale St	Indianapolis, IN 46227	Robert & Carol R. Pollak	N/R
601	3610	Royal Oak Dr	Indianapolis, IN 46227	Christopher L. & Jodie L. Nelson	N/R
602	5625	S Gale St	Indianapolis, IN 46227	Clayton A. Homann	
603	3616	Whalen Av	Indianapolis, IN 46227	Ralph, Jr & Virginia F. De Boor	Y
604	3626	Whalen Av	Indianapolis, IN 46227	Donald M. & Janet I. Carney	Y
605	3636	Whalen Av	Indianapolis, IN 46227	Kevin L. Carney	Y
606	5737	S Kealing Av	Indianapolis, IN 46227	Robert A. & Linda E. Thompson	
607	5745	S Kealing Av	Indianapolis, IN 46227	Gloria Houchell	Y
608	5801	S Kealing Av	Indianapolis, IN 46227	Rasnic, Steven James & Stephanie A Rasdell-Rasnic	Y
609	5811	S Kealing Av	Indianapolis, IN 46227	Mark A. & Kelli R. Ramsey	Y
610	5821	S Kealing Av	Indianapolis, IN 46227	Jeffrey M. & Kerry N. Anderson	Y
611	5831	S Kealing Av	Indianapolis, IN 46227	Ronald D. Tanner	N/R

Receptor No.	Street Number	Street	City, State, Zip	Owner Name	Response
612	5841	S Kealing Av	Indianapolis, IN 46227	James L. Jackson	N/R
613	3641	E Brunswick Av	Indianapolis, IN 46227	Stephen R. & Roseanne Keefe	Y
614	3631	E Brunswick Av	Indianapolis, IN 46227	Judith E. Villegas	N/R
615	3615	Whalen Av	Indianapolis, IN 46227	Ronald Mccord	N/R
616	3625	Whalen Av	Indianapolis, IN 46227	Faith Property Management LLC,	N/R
617	5806	S Kealing Av	Indianapolis, IN 46227	Barbara J. Bruce	N/R
618	5816	S Kealing Av	Indianapolis, IN 46227	Jo Ann Kouts	Y
619	5838	S Kealing Av	Indianapolis, IN 46227	Bradley S. & Stephanie Parks	N/R
620	3626	E Brunswick Av	Indianapolis, IN 46227	Martin & Maria M. Ponce	Y
622	3704	E Edgewood Av	Indianapolis, IN 46227	Basilio J., Jr & Nenita Delacruz	
623	3330	E Edgewood Av	Indianapolis, IN 46227	Bryan K. & Deborah S. Himes	Y
626	3401	E Edgewood Av	Indianapolis, IN 46227	Rhoton, Stanley & Emma J Daniels	N/R

 = UNDELIVERABLE

N/R = NO RESPONSE RECEIVED