STATE OF ILLINOIS
POLUTION CONTROL BOARD
JAMES R. THOMPSON CENTER
100 W. RANDOLPH STREET, SUITE 11-500
CHICAGO, IL 60601

PETER ARENDOVICH,	)	
	)	
Complainant,	)	
	)	
v.	)	PCB 29009-102
	)	
ILLINOIS STATE TOLL HIGHWAY AUTHORITY,	)	
	)	
Respondent.	)	

NOTICE OF FILING

TO: Mr. Peter Arendovich
1388 Gordon Lane
Lemont, IL 60439

Mr. Bradley Halloran
Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center, Suite 11-500
100 W. Randolph Street
Chicago, IL 60601

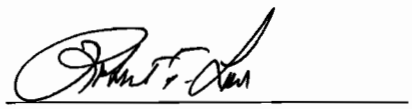
Please take notice that on the 23rd day of December, 2010, Respondent, Illinois State Toll Highway Authority's MOTION FOR SUMMARY JUDGMENT was filed with the Clerk of the Pollution Control Board, James R. Thompson Center, 100 W. Randolph Street, Suite 11-500, Chicago, IL 60601 via electronic filing.

ROBERT T. LANE
Assistant Attorney General
Illinois Toll Highway Authority
2700 Ogden Avenue
Downers Grove, IL 60515
(630) 241-6800 (ex. 1530)

LISA MADIGAN,
Attorney General of Illinois

CERTIFICATE OF SERVICE

The undersigned, being first duly sworn upon oath, deposes and states that a copy of this notice and the Tollway's MOTION FOR SUMMARY JUDGMENT were served upon the above named at the above address by depositing the same in the United States mail chute located at 2700 Ogden Avenue, Downers Grove, Illinois 60515 on the 23rd day of December 2010 with proper postage prepaid.



ILLINOIS POLLUTION CONTROL BOARD

PETER ARENDOVICH,	)	
	)	
Complainant,	)	
	)	
v.	)	PCB 09-102
	)	(Enforcement-Noise)
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY,	)	
	)	
Respondent.	)	

DEFENDANT ILLINOIS STATE TOLL HIGHWAY AUTHORITY'S MEMORANDUM OF LAW IN SUPPORT OF ITS MOTION FOR SUMMARY JUDGMENT

Respondent, Illinois State Toll Highway Authority ("Tollway"), pursuant to 735 Ill. Comp. Stat. 5-2/1005(b), by and through its attorney, LISA MADIGAN, moves for summary judgment. In support of its motion, the Respondent Tollway states as follows:

Statement of Facts

Complainant Peter Arendovich has filed a Private Enforcement Action with the Illinois Pollution Control Board (hereinafter referred to as the "Board"). Complainant alleges that the Tollway is causing noise pollution in violation of Board regulations, specifically 35 Ill. Adm. Code, Subtitle H, Chapter I, Section 900.102. See copy of First Amended Complaint attached as Exhibit A, paragraph 5. Complainant suggests that the noise pollution is caused by vehicles traveling near his residence located near the I-355 extension (Veterans Highway) between the 135th Street bridge and Archer Avenue. Id. at paragraphs 3, 4 and 6. Moreover, Complainant alleges that sound levels exceed maximum limits established under state and federal regulations. Id. at paragraph 7.

I. Background

FAP Route 340 (I-355 South Extension) has been contemplated and studied in the Chicago Metropolitan Region since the early 1960's and a centerline, putting the world on notice of the planned tollway, was recorded in 1968. See copy of Record of Decision (ROD), FHWA-IL-EIS-93-03-FS/4(f), February 25, 2002; Section I. Background (pg. 1) attached to Rocco Zucchero affidavit at Exhibit B-1. In 1993, the Illinois State Legislature authorized the Tollway to examine the feasibility of constructing FAP Route 340 as a tollway. Id. At that time, the Illinois Department of Transportation (IDOT) was already analyzing the project and its impacts and had begun preparing a Draft Environmental Impact Statement (DEIS). It was not until 1988 when the Complainant purchased the property at issue and later built his home. Arendovich Deposition at Exhibit C pages 30-31.

In February 1996, IDOT completed a Final Environmental Impact Statement and Section 4(f) Evaluation (FEIS) which was later approved by the FHWA. Exhibit B-1. However, before the venture began, the Illinois Chapter of the Sierra Club, *et al.* filed suit against the project. Sierra Club, Illinois Chapter v. U.S. Dept. of Transp., 962 F.Supp. 1037 (N.D. Ill. 1997). On November 12, 1998, the proposed I-355 extension was declared invalid. Id. at 1.

After the initial FEIS was invalidated, a Notice of Intent was published in the Federal Registrar to initiate the Draft Supplemental EIS (Draft SEIS). 64 Fed. Reg. 77, 19854 (Apr. 22, 1999). Exhibit B-1. The purpose of this document was to address the concerns of the aforementioned court ruling. After careful study was completed, the Final SEIS was published in September 2001. Exhibit B-1 at 1. On February 25, 2002, the FHWA approved the Final SEIS and signed the Record of Decision. Id. at 24.

II. I-355 South Extension Noise Abatement

The 1996 FEIS recommended noise abatement at six locations, including one near the Complainant's residence at 135th Street along the I-355 extension. Exhibit B. However, the SEIS prepared by IDOT in 2000/01 revised the noise abatement recommendations to reflect analysis changes based on the newly released Traffic Noise Model (TNM) adopted by FHWA and implemented by IDOT. See 23 C.F.R §772 (1997). Also See FAP 340 (I-355 South Extension), Final Supplemental Environmental Impact Statement and Section 4(f) Evaluation, August 31, 2001, (pg. 4-12) attached to Exhibit B as B-2. The SEIS reduced the recommended number of noise abatement from six locations to four locations. Id. at 4-13.

The noise abatement location near the Complainant's residence at 135th Street along the I-355 extension was eliminated because it was no longer deemed reasonable and feasible. Id. This was due, in part, because the FHWA TNM provided better accountability for terrain information and acoustics and the 2010 noise levels predicted in the 1996 FEIS used STAMINA 2.0 which over-predicted traffic generated noise levels by 2 to 4 dB(A). Id. The FHWA considered, *inter alia*, the noise abatement and on February 25, 2002, approved the Final SEIS and signed the Record of Decision, which did not require a noise abatement location near the Complainant's residence. Exhibit B-1 at 24.

Subsequently, on its own initiative, in 2004 the Tollway updated the traffic noise study and noise abatement recommendations to reflect 2030 traffic projections and a continuous six-lane corridor from I-55 to I-80. Exhibit B. The final Tollway proposal reinstituted all of the original noise abatement recommendations as outlined in the 1996 EIS, which included noise abatement near the Complainant's residence at 135th Street along the I-355 extension. Exhibit B.

A. Initial Sound Abatement:

Following the re-evaluation, the Tollway determined that it would build a noise wall 2,450 feet in length and 14 feet in average height. Exhibit B. The noise wall had an estimated cost of $34,300 per benefited residence. Id. Although the Tollway intentionally does not have an inflexible cost per benefited residence for noise abatement to be considered cost effective (See Illinois State Toll Highway Authority Traffic Noise Study and Abatement Policy attached as Exhibit B-3), the amount is well above the IDOT threshold. IDOT requires the cost per benefited residence to be at or below $24,000. The updated study and resulting noise abatement recommendation was made in large part to satisfy the Complainant's continuing complaints relating to noise concerns. Id.

As part of the planning process, IDOT and the Tollway conducted significant outreach, including a series of public meetings, seeking public feedback with respect to the need for the roadway. Id. Also See 605 ILCS 10/9. In addition, starting in 2004, the Tollway hosted monthly Local Advisory Committee meetings. Id. Also See 605 ILCS 10/14. The Complainant was present and participated at a majority of these public meetings and was involved in the entire FHWA/Tollway process including noise abatement. Exhibit C pages 22-25. In fact, many noise abatement measures were taken in large part to satisfy the then stated concerns of the Complainant. Id. 64-65.

B. Further Sound Abatement:

The Tollway's Noise Analysis Reevaluation included a noise abatement recommendation for 135th Street along the I-355 extension in the form of a noise wall 2,450 feet in length and 14.0 feet in average height. Exhibit B. Despite the fact this sound wall was not mandated by the ROD, attempting to provide further relief to Complainant and surrounding neighbors, the

Tollway again improved its sound abatement plan and instead built a higher longer noise wall 2,560 feet in length and 15.8 feet in average height (110 feet longer and 1.8 feet higher then recommended in its updated sound analysis). Id. This supplemental wall cost the Tollway an additional $57,879.46. Id.

C. Final Sound Abatement:

Despite the construction of the enhanced sound wall, the Complainant was still unsatisfied. Therefore, in a final effort to provide relief to the Complainant and surrounding persons, the Tollway built a wooden wall on the north end of the bridge near Complainant's home that stretches 240 feet in length and has an average height of 10 feet. Id. This supplemental wall cost the Tollway an additional $69,280. Id. The current sound wall configuration protecting the Complainant and his neighbors is illustrated in an aerial photograph attached as Exhibit B-4.

Standard of Review

Summary Judgment is proper if, and only if, the pleadings, depositions, admissions, affidavits and other relevant matters on file show that there is no genuine issue of material fact and the movant is entitled to judgment as a matter of law. Smith v. Tri-R Vending, 249 Ill.App.3d 645, 657, 619 N.E.2d 172, 174 (1993). The purpose of summary judgment is not to try a question of fact but to determine if one exists. Gilbert v. Sycamore Municipal Hospital, 156 Ill.2d 511, 517, 622 N.E.2d 788, 792 (1993). In determining whether a genuine issue of material fact exists, a court must construe the pleadings, admissions and affidavits strictly against the movant and liberally in favor of the opponent. Id. at 518. A triable issue precluding summary judgment exists where the material facts are disputed or where reasonable persons might draw different conclusions from undisputed facts. Id. at 518.

Discussion

A. The Board does not have Subject Matter Jurisdiction over This Matter.

1. Discretionary Decisions Made by the Tollway are Not Subject to Review.

The Complainant has alleged that at least one sound wall constructed to protect his and his neighbor's property from noise generated by the traffic on the roadway is inadequate. Mr. Arendovich concedes that the Tollway constructed 16 foot masonry wall directly to the west of his home is sufficient. Exhibit C at page 37. However, he does not feel that the subsequent wall constructed to the south of the initial wall and on the north end of the 131st Street bridge is affective. Id. at 38. Instead, he believes that an 18 foot wall should be constructed the entire length of the bridge and continue south to Archer Avenue. Id. at 54.[1]

In this case, the Tollway has built not one, but two separate sound walls with the hope that Complainant might be satisfied. Exhibit B. The Toll Highway Act (hereinafter referred to as the "Act") grants the Tollway sole discretion for its engineering and construction decisions. (605 ILCS 10/32). Specifically, the Act states as follows:

> All determinations made by the Authority in the exercise of its discretionary powers, with the approval of the Governor if such approval is expressly required by the provisions of this Act, including without limitation, the location and terminal points of any toll highway or section to be constructed by it, the materials to be used in its construction, the plans and specifications thereof, the tolls to be charged for the use thereof, and the letting of contracts for the construction of toll highways or any part thereof, or the sale of bonds, shall be conclusive and shall not be subject to review by the courts or by any administrative agency of the State. 605 ILCS 10/32.

The FHWA considered whether a sound wall would be a condition of construction, and after conducting public hearings on the issue which Complainant participated, it determined that a wall was unnecessary. Here, on its own initiative the Tollway and its consultants designed and

[1] Neither the Complainant nor his sound expert have identified any scientific evidence supporting the construction of this particular wall or evidencing the degree or level of sound reduction that might be experienced at the Arendovich property if the sought after wall were constructed.

built two sound walls near the Complainant's residence. The design and construction of the walls in question were discretionary Tollway determinations and its decisions are not subject to review.

The Complaint at issue is essentially an administrative review of the 2002 FHWA Record of Decision. As part of the ROD, the FHWA considered the identical issues raised here by the Complainant including the appropriateness of the roadway and the necessity for sound walls near the Complainant's property. Therefore, based on the fact these are unreviewable Tollway decisions and res judicata, this Board is without subject matter jurisdiction to hear this claim.

1. Vehicles Generate Sound, Not the Pavement.

Furthermore, whatever noise is emitted from the Tollway is generated by the passing cars, not the stationary highway. A similar issue was raised in the Appellate Court with respect to potential air pollution and environmental damage near a tollway or highway. In that case the Court reasoned as follows:

> It is obvious that it is not the toll road or its construction which would cause air pollution; it is the operation of certain types of vehicles using the road . . . . If defendants' arguments were valid, the construction of virtually all new roads would have to be barred because vehicles using the road emit certain gases and other contaminants harmful to the environment in general and to agriculture, in particular." Illinois State Toll Highway Authority v. Karn, 293 N.E.2d 162, 9 Ill.App.3d 784, 790 (2nd Dist., 1973) citing 45 C.F.R. sec. 1201.21; 42 U.S.C., sec. 1857f-1. (Emphasis added).

While the Karn decision was not limited to alleged noise pollution, the situation is nearly identical to the matter at bar and its reasoning applies. Without the passing vehicles, there would be no sound generated by the roadway.

2. The Complainant Has Not Alleged a Noise Level in Violation of the Illinois EPA Act.

The Complainant has not alleged a specific noise violation in excess of state limits. In his First Amended Complaint, Arendovich concludes that "the data shows that from Tuesdays through Fridays the noise generated by the highway is above the noise level indicated on Title 23 Chart (A) shows heavy trucks generate 86 db at a distance of 50 feet from the source. . . ." Exhibit 1 at paragraph 5.

Mr. Arendovich also concludes:

> " The noise levels recorded in the detailed scientific study are in excess of the required maximums established by federal and state regulations. FHWA regulations contained in IDOT's Traffic Noise Assessment Manual at 2-2 indicate that the maximum dBA for residential areas is 67 dBA. A copy of IDOT's FHWA Noise Abatement Criteria is attached hereto as Exhibit D." Id. at paragraph 6.

In its December 17, 2009 Order partially granting the Tollway's Motion to Dismiss, the Board struck the federal allegations contained in the First Amended Complaint. Specifically, the board found that the "allegations relating to alleged violations of 23 CFR Part 772.13(c) and 109(h) are frivolous and will be struck." Complainant has not cited to any specific violation of state law and his witness that performed the sound testing could not identify any state or Pollution Control Board violations. Larson Deposition attached as Exhibit D at pages 28, 29. Therefore, the complained of Tollway generated noise, allegedly in violation of the limits contained in U.S. Title 23, is irrelevant and need not be further considered by the Board.

3. Complainant's Sound Level Testimony was not Performed in Accord with Board Measurement Guidelines.

Even if the Board were to excuse the failure to identify a state law violation, the Complainant's relied upon sound levels must be disregarded. His purported sound expert was unaware of specific Illinois' testing procedures and does not appear to have made an effort to comply with the State of Illinois measurement guidelines. See Exhibit D at page 12, 16, 17; Also

See 35 Ill.Admn.Code 910.105. Further, he did not seem to be aware of the any specific state sound measurement guidelines. See Exhibit D page 7. At the time of his deposition, he had no understanding of the Board's detailed requirements for microphone placement Id. He did little or nothing to account for the noise that was not generated by the tollway traffic. Id. at 15, 16. Larson's general understanding of Illinois State Pollution Guidelines measurement guidelines is that you are simply required to test at the property line. Id. page 12. The Complainant's relied upon sound levels, which allegedly are in excess of those allowed by law, were not measured in a manner consistent with Board and Illinois EPA regulations. Therefore, they are of little value and must be disregarded.

Additionally, in paragraph 6 of his First Amended Complaint, the Complainant implies that FHWA regulations may have been adopted by IDOT. In support he attaches a page from IDOT's Highway Traffic Noise Assessment Manual which indeed references FHWA's Noise Abatement Criteria. However, the relied upon document goes on to state as follows:

> "FHWA has deferred to the State agencies to define the noise level that "approaches" the NAC and define a substantial increase in traffic noise levels. It should be noted that the NAC are not used as goals for noise attenuation design criteria or design targets. Instead, the NNAC are noise impact thresholds for considering abatement when they are approached, met or exceeded. Noise abetment measures are required to be considered as part of the project if impacts are identified." IDOT Highway Traffic Noise Assessment Manual. Emphasis Added.

Consistent with the above statement, the Tollway has indeed adopted a noise wall policy. See Tollway noise policy attached as Exhibit B-3. According to the Tollway policy, a sound wall will not be considered until a series of conditions, including economic feasibility are satisfied. Id. The policy requires that traffic noise abatement be achieved in a cost-effective manner. Id. The cost effectiveness is based on IDOT's $24,000 per benefited residence analysis. Exhibit B. If traffic noise abatement cannot be achieved in a cost effective and

economically reasonable manner, traffic noise abatement will not be included in the project. Interestingly, Mr. Larsen, the man who measured the sound levels at the Complainant's home, was unaware of the Tollway's sound wall policy and therefore, offered no opinion on whether the Tollway complied with its policies. Exhibit D pages 60, 61.

Notwithstanding the above, to the extent the policies do not conflict with State law, the Board does not have jurisdiction to enforce IDOT's or the Tollway's sound wall policies, its jurisdiction is limited to enforcement of the Illinois Environmental Protection Act and the supporting administrative rules.

B. Illinois Pollution Control Board Regulations do not Support the Construction of a Third Sound Wall.

The Board addressed a prior similar case involving the Illinois Tollway in which a sound wall was sought. Petrosius et al. v. the Illinois State Toll Highway Authority, PCB 04-36 (2007). In that case, the Board outlined a two-step analysis to be considered when considering if noise emissions rise to the level of a nuisance noise pollution violation. It stated that first, the Board must determine whether or not the noise constitutes interference in the enjoyment of Complainant's life. Second, considering the factors enunciated in Section 33c of the Act, the Board determines whether or not the interference is unreasonable. Id. at page 16.

In the case at bar, the Complainant alleges that noise emitted from the vehicles on Illinois Tollway are in excess of the legally allowable limits. While the Tollway contends above that the Complainant has not made an allegation over which this Board has jurisdiction, even if Complainant were to establish that the noise emitted from the Tollway rise constitute an interference in the enjoyment of complainant's life, he does not satisfy the Section 33c factors. The Section 33c factors consist of the following considerations: 1) The character and degree of injury to, or interference with the protection of health, general welfare and the physical property

of the people; 2) the social and economic value of the pollution source; 3) the suitability or unsuitability of the pollution source to the area in which it is located, including priority of location in the area involved; 4) the technical practicability and economic reasonableness of reducing or eliminating the emissions, discharges or deposits resulting from such pollution source; 4) any subsequent compliance. These are factors that must be weighed. The Tollway will address these considerations in order.

1. The Character and Degree of Injury to, or Interference with the Protection of Health, General Welfare and the Physical Property of the People.

In this case, there are very few homeowners affected by the complained of highway sound. The Tollway has received only two complaints about noise in this area, one coming from the Complainant. Exhibit B. According to Mr. Arendovich, there are a total of about 9 homes in the area that are impacted by the sound. Exhibit C at page 54.

Next are the measures that the Complainant has taken to address the complained of sound. He indicates that he has taken steps to insulate the wall closest to the roadway, but he still has trouble sleeping. Exhibit C at page 42. He has other bedrooms available, but instead he and his family choose to sleep in the rooms closest to the roadway. Id. at page 46.

Finally, the level of measured sound in the home is unknown. While it is admittedly not contemplated by the Illinois EPA regulations, it seems like it may have been helpful to determine the levels of sound in the Arendovich bedroom. Such a reading may have given some indication if the sound was excessive or if Complainant happens to be unusually sensitive to sound.

While Complainant is no doubt disappointed with the decision to construct the Tollway, when compared to the benefit to the population the roadway brings, this factor weights in favor of the Tollway.

2. The Social and Economic Value of the Pollution Source.

The Social and Economic Value of the I-355 extension is enormous. The project has enjoyed the longtime support of our elected officials. In 1993, the Illinois State Legislature passed legislation authorizing the Illinois State Tollway to study the feasibility of constructing the roadway at issue. Exhibit B-1 at page 1. Similarly, in its 2002 approval, the FHWA noted that the public was provided ample, innovative and manifestly reasonable access to the planning process and found that the project satisfied the Purpose and Need, posed the least impact on the environment and satisfied the National Environmental Protection Act. Id. at page 24.

On average, every day 65,320 vehicles cross the bridge constructed as part of the I-355 South Extension. Exhibit B. The extension has provided a convenient link for people in the Southwest suburbs to travel to schools and workplaces in DuPage County and the western suburbs. Exhibit C at page 58. The extension reduces travel times not only for I-355 users, but others traveling less congested North/South parallel thoroughfares. See Id. at page 59. Based on the benefits enjoyed by society as a direct and indirect result of this roadway, this 33(c) factor weighs heavily in the Tollway's favor.

3. The Suitability or Unsuitability of the Pollution Source to the area in which it is Located, including Priority of Location in the Area Involved.

The I-355 extension at issue has been planned and studied extensively. According to FHWA's Record of Decision approving the construction of the I-355 South Extension, it was noted that the Tollway extension was in the planning since 1962. Exhibit B-1 page 1. A centerline putting the world on notice that a highway would likely be built in the area was recorded in 1968. Id. Mr. Arendovich did not move into the area until sometime after he purchased the property in 1988. Exhibit C pages 30, 31. Planning for the Tollway started long before the Complainant purchased his lot and moved into the area. While the actual construction

of the road did not start until after Complainant bought his home, the planned roadway was a known or easily discoverable fact. More than 25 years passed between the initial planning for the I-355 extension had begun and the date Complainant bought the property and moved into the area.

The need for the I-355 extension, including its location, has been researched and deemed appropriate. Prior to the construction of the Tollway extension, a variety of engineering and environmental studies were completed. Five transportation alternatives were examined and evaluated in the Draft and Final SEIS. The alternatives included 1) no-action; 2) a mass transit alternative; 3) a Lemont bypass alternative; 4) an enhanced arterial alternative; and 5) the Tollroad/Freeway alternative. Exhibit B-1 at page 2. After years of careful research and forecasting, it was determined that the Tollroad/Freeway alternative was most beneficial. It maximized access to regional job centers by achieving the grates reduction in year 2020 travel times. This alternative surpassed travel time reductions achieved by the Lemont bypass alternative by 33 percent and the enhanced arterial alternative by 185 percent. Exhibit B-1 pages 3, 4. In the end, the FHWA approved the construction of the highway because it found that the Tollway satisfied the Purpose and Need contained in the Supplemental Environmental Impact Study, posed the least impacts on the environment; and 3) satisfied the National Environmental Protection Act requirements. Id. at page 24.

In the case at bar, the record demonstrates that the public roadway plans were in place long before the Complainant purchased his property. Furthermore, the suitability of this location was studied at great lengths. As a result, this consideration also weighs heavily against Complainant and in favor of the Tollway.

4. The Technical Practicability and Economic Reasonableness of Reducing or Eliminating the Emissions.

It is not technically practical or economically reasonable to re-locate the Tollway or construct another sound wall. While the plaintiff has not formally submitted any plans or specifications for the sought after sound wall, he indicated in his deposition that he might be satisfied with an 18 foot wall constructed the length of the bridge to Archer Avenue. Arendovich Dep. at page 50, 54, 56. This wall would be approximately 1,200 feet in length. Exhibit B. While the Complainant has not produced any cost proposals or specific sound wall design plans, the fact of the matter is that his proposed sound wall would be prohibitively expensive and potentially difficult to construct.

First, there has been no reliable evidence presented that the 135th Street Bridge can support the added weight of Complainant's proposed sound wall. Second, there has been no evidence presented that a sound wall of any height or length will necessarily satisfy the complainant. As it stands, only Mr. Arendovich is one of the few that have complained about the noise in this area. There is a real possibility that his sensitivity to sound may never be satisfied.

Sound walls are an expensive proposition. Based on the Tollway's past experience, sound walls typically cost $35 dollars per square foot. Exhibit B. Therefore, in rough numbers the suggested sound wall alone would cost $756,000 (1,200 x 18 x $35). This figure does not include the additional costs associated with design, mobilization and maintenance of traffic. There would also be additional engineering costs to determine if the bridge could support the weight/load of a sound wall. Id. For these reasons, technical practicability and economic feasibility weigh heavily in favor of the Tollway.

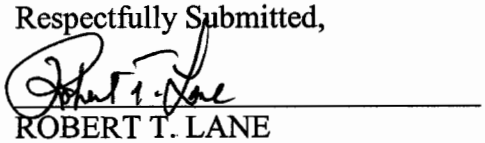
5. Any Subsequent Compliance.

The Tollway has gone to great lengths to attempt to satisfy the Complainant. As outlined in detail above, despite not required as part of the SEIS approval process, the Tollway has constructed two separate walls in effort to satisfy the Complainant. As a result, the "subsequent compliance factor" also weighs heavily in favor of the Tollway.

III. Conclusion

WHEREFORE, Respondent, Illinois State Toll Highway Authority, respectfully requests that the Pollution Control Board grant its Motion for Summary Judgment and dismiss this cause with prejudice.

Respectfully Submitted,



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Senior Assistant Attorney General
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STATE OF ILLINOIS
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PETER ARENDOVICH,	)	
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Respondent.	)	

FIRST AMENDED COMPLAINT

NOW COMES the Complainant, Peter Arendovich, pursuant to 415 ILCS 5/31(d) (1) and 35 Ill. Admn. Code 900.102 et seq. and complains of the Respondent, the Illinois State Toll Highway Authority as follows:

1. The Illinois State Toll Highway Authority, (ISTHA), has violated 23 CFR Part 772.13(c) and 23 USC 109(h) and 35 Ill. Adm. Code, Subtitle H, Chapter I, Section 900.102 by failing to provide the required noise abatement policies and procedures required under the provisions of both federal and state law.

2. ISTHA co-operated with the Federal Highway Administration in the planning and construction of I-355 through Cook and Will Counties.

3. A required Environmental Impact Statement, (EIS), was prepared by the Respondent and included the required noise abatement studies. The EIS indicates the location of the Complainant's residence as section 25 shown on the EIS exhibit

2-16. A Copy of the exhibit is attached hereto as Complainant's Ex A.

4. Table 4-15 of the EIS details the Results of the Noise Abatement Analysis and section 25, including the Complainant's residence as well as 23 other residences, states that a noise reduction barrier is likely to be implemented and that the potential noise reduction is to be 9 dB(A). (A copy is attached hereto as Exhibit B). The EIS establishes that heavy trucks generate 86dBA and the reduction of 9 dBA fails to comply with state and federal noise levels as is shown on charts 74 through 79 of Exhibit C.

5. The Complainant has consistently complained to ISTHA regarding the excessive noise levels of the constructed Tollway. ISHTA has failed to properly address the Complainants concerns. The Complainant hired the acoustical engineering firm, S&V Solutions to conduct detailed scientific studies in accordance with the measurement procedures set forth under the provisions of 35 Ill. Admn. Code Section 900.103. A detailed scientific study of the noise levels experienced at the Complainant's residence has been conducted and a copy of the detailed analysis and report is attached hereto as Exhibit C. The study's conclusions states as follows:

"The data shows that from Tuesdays through Fridays the noise generated by the highway is above the noise level indicated on Title 23
Chart (A) shows heavy trucks generate 86 db at a distance of 50 feet from the source.
Your property is about 150 feet from the source and the bedroom wall is 350 feet from the source.
Taking into account Chart (A), the generated noise by heavy trucks at 60 MPH is about 86 dB. Based on the

acoustic distance law, where the amount of decibels decrease by 5 every time distance is doubled(inverse square law), it is very unlikely the noise will dissipate to legal levels 150 feet away, nor at 350 ft. by your bedroom where the readings were taken. This is shown on charts from #74 through #89.
On charts #74 through #79 the high point which is above 65 db correlates with heavy truck noise decibels (db) and heavy truck traveling frequencies, passing at a given point."

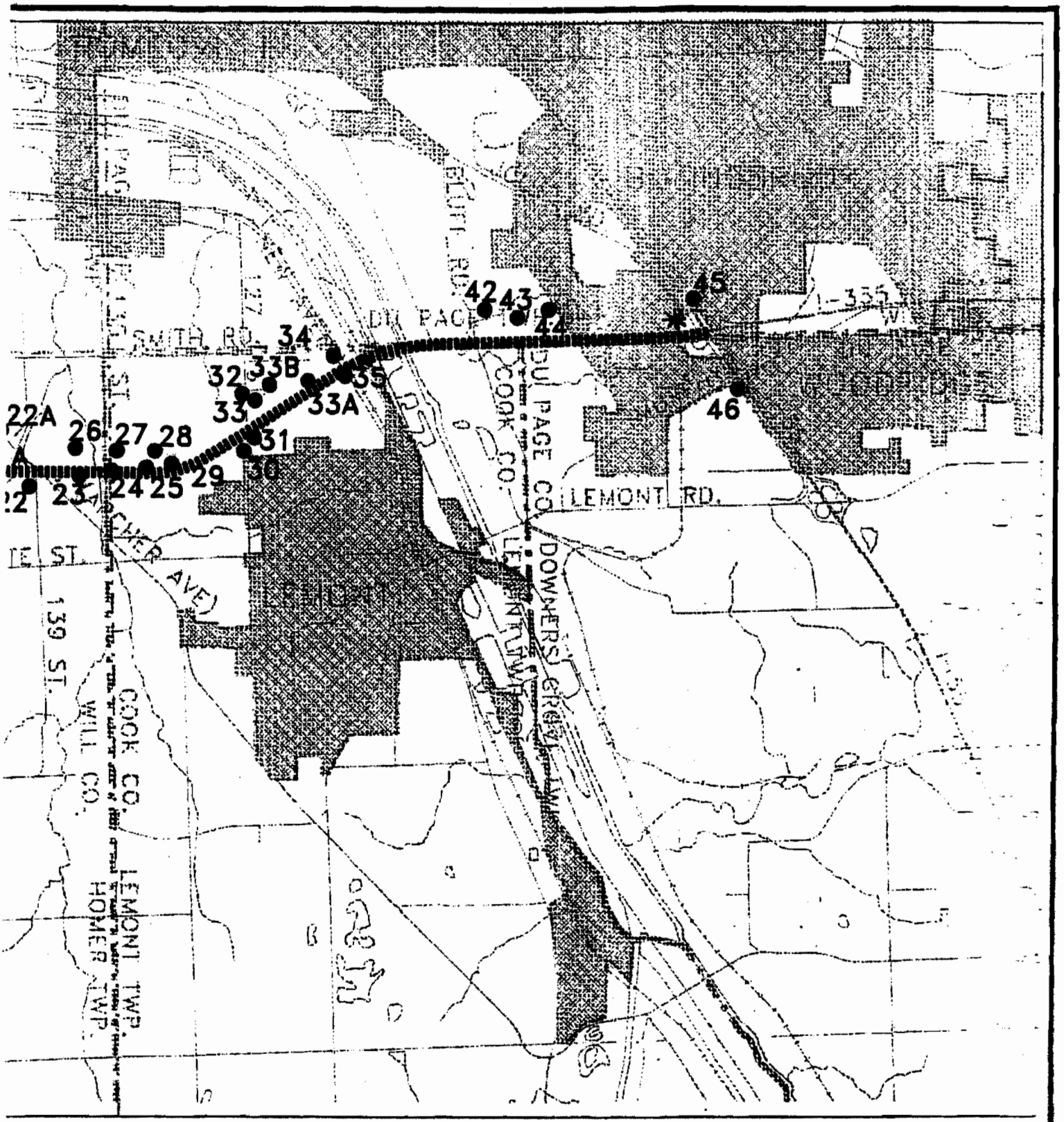
6. The noise levels recorded in the detailed scientific study are in excess of the required maximums established by federal and state regulations. FHWA regulations contained in IDOT's Traffic Noise Assessment Manual at 2-2 indicate that the maximum dBA for residential areas is 67 dBA. A copy of IDOT's FHWA NOISE ABATEMENT CRITERIA is attached hereto as Exhibit D.

7. All of the graphs included in the attached study show that the noise levels generated by the Tollway are consistently above the maximums established under state and federal regulations.

WHEREFORE the Complainant prays this Board to find ISTHA in violation of 35 Ill. Adm. Code, Subtitle H, Chapter I, Section 900.102 and to order the Respondent to construct proper noise abatement barriers as originally proposed in the Environmental Impact Study and in accordance with federal and state laws.

Respectfully submitted,

Peter Arendovich
1388 Gordon Lane
Lemont, IL.60439
630-257-8753



FAP ROUTE 340

NOISE SENSITIVE RECEPTORS

EXHIBIT "A"

Table 4-15
Results of Noise Abatement Analysis

Receptor	No. of Structures Represented	Barrier Height In Feet	Barrier Length In Feet	Cost* ($25/Sq. Ft.)	Reduction Potential dB(A)	Likely To Be Implemented	If I Reas Wi
SOUTHERN SECTION							
1 (R)	20	15	1200	$450,000	7	YES	-
2 (R)	18	15	1000	$375,000	6	YES	-
5(R)	16	15	6800	$2,550,000	1	NO	2
11(R)	13	25	7680	$4,800,000	2	NO	2
14A (P)	70	25	8800	$5,500,000	4-6	NO	1
15 (R)	1	25	1600	$1,000,000	7-8	NO	1
15A (R)	8	25	1000	$625,000	7-8	YES	-
MIDDLE SECTION							
15B(R)	9	15	1500	$562,500	2-3	NO	2
16(R)	16	15	1500	$562,500	2-3	NO	2
16A (R)	22	25	4700	$2,937,500	4	NO	2
17 (R)	12	-	-	-	-	NO	2
17A (R)	4	25	2200	$1,375,000	13	NO	1
18 (R)	17	25	10200	$6,375,000	2	NO	1,2
19 (R)	17	25	10200	$6,375,000	2	NO	1,2
21A (R)	2	25	5400	$3,375,000	8-9	NO	1,2
21B(R)	17	25	10200	$6,375,000	2	NO	1,2
25 (R)	22	25	3700	$1,400,000	9	YES	
28 (R)	1	25	2200	$1,375,000	9	NO	1,2
29 (R)	3	25	2600	$1,625,000	9	NO	1,2
30(R)	2	15	1700	$637,500	2	NO	1,2
31(R)	3	15	1300	$487,500	2	NO	1,2
32(R)	5	15	2300	$862,500	2	NO	1,2
NORTHERN SECTION							
33 (R)	3	15	3500	$1,312,500	4-6	NO	1
33A (P)	88	25	3000	$1,875,000	4	NO	2
33B (R)	1	25	11200	$7,000,000	2	NO	1,2
34(R)	6	15	3400	$1,275,000	4-6	NO	1,2
35(R)	4	15	3400	$1,275,000	4-6	NO	1
42 (R)	3	25	1400	$875,000	6-8	NO	1
43 (R)	2	25	2600	$1,625,000	6-8	NO	1
44 (R)	2	25	2200	$1,375,000	4-6	NO	1
45 (R)	20	25	1400	$875,000	5	YES	-
46 (R)	25	15	5000	$1,875,000	6-7	YES	-

Notes:

Receptors 16A and 17 share a common noise abatement barrier.

P) - Represents proposed residential cevelopments

R) - Represents existing residence

EXHIBIT "B"

* The cost includes preliminary analysis design, final design and related construction costs.

1 - Not economically reasonable or feasible based on cost compared to benefit.

2 - Does not provide substantial noise abatement.

" "

S&V Solutions
consultants in applied acoustics
and vibration technologies

27707 Moose Range Rd.
Sycamore, IL 60178
815 / 899-2021
815 / 899-2115 FAX

Date: June 13, 2009

To: Peter Arendovich, Lemont Resident

From: David Larson, Acoustical Consultant

Ref: I-355 Traffic Noise Level

Dear Peter:

I am writing to share the results of the noise monitoring I did it your residence for traffic noise coming from I-355. The equipment used is listed below:

1. Bruel & Kjaer type 2144 acoustics analyzer and data collector.
2. Bruel & Kjaer type 2639 microphone preamplifier.
3. Bruel & Kjaer type 4155 condenser microphone.
4. Bruel & Kjaer type 4231 portable acoustic calibrator.

This data analyzer/collector was placed on your premises with a microphone located in two positions:

Position 1: The microphone was placed at a distance of 340 ft from the bridge to your home's balcony tripod that held the mic 5 ft above the ground. The total height from the ground to the microphone was 14 feet. Wind speed and direction was taken from weather reports.

Position 2 was taken at a distance of 120 ft from the bridge onto your lot. The microphone was placed on a tripod 5 ft from the ground. Wind speed and direction was taken from weather reports.

The calibration was based on the standard portable B&K calibrator which was applied to the microphone at the beginning and end of the measurement session.

Data was taken at each position over several different periods of time during the day and night. The analyzer was set up to measure A-weighted sound level in intervals of one measurement every second or one measurement every 10 seconds.

The data was recorded on a floppy disk. This data from the disk was then analyzed and converted to an MS-Excel spreadsheet chart to be studied and to be compared to the value based on which the EIS was approved.

The following data was collected on a test made for 4 hours in length with 10 seconds intervals. Notice the noise generated in decibels in weighed scale A (dBA) at different times:

Chart 81 June 7 2008 Saturday	from 13.55 pm to 18.31 pm
Chart 83 June 10 2008 Tuesday	from 10.00 am to 14.36 am
Chart 85 June 10 2008 Tuesday	from 15.00 pm to 19.30 pm
Chart 87 June 11 2008 Wednesday	from 6 .00 am to 10.36 am
Chart 88 June 11 2008 Wednesday	from 13.30 pm to 18.06 pm

EXHIBIT "C"

S&V *Solutions*

Chart 90 June 12 2008 Thursday	from	13.30 pm to 19.06 pm
Chart 89 June 12 2008 Thursday	from	6.00 am to 19.38 am

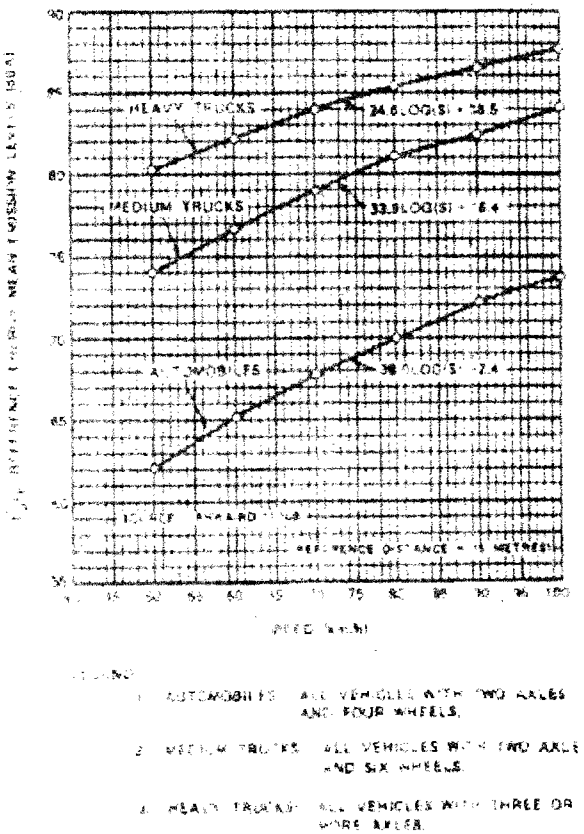
You can see a fluctuation in the noise at different times during rush hours (in the morning from 5.30 am to about 8.00 am, and again in the afternoon from about 3.00 pm to about 7.00 pm).

Data was also collected during a test made for 27 minutes at an interval length of 1 second. Notice the noise generated in decibels weighed scale a (dBA) at different times

Chart 74 June 5 2008 Thursday	from	7.00 am to 7.27 am
Chart 75 June 5 2008 Thursday	from	6.00 pm to 6.27 pm
Chart 77 June 6 2008 Friday	from	6.00 am to 6.27 am
Chart 78 June 6 2008 Friday	from	6.30 am to 6.57 am
Chart 79 June 6 2008 Friday	from	7.20 am to 7.47 am

In this set of charts it shows that even on Fridays the noise level measured on the A weighed scale is above the level indicated in the Title 23.

Chart (A) Is a chart provided by the FHA, This chart shows different size vehicles traveling at different speed and the noise level generated in decibel weighed scale A



National Reference Energy Mean Emission Levels as a Function of Speed

Chart A

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Conclusions

1. The data shows that from Tuesdays through Fridays the noise generated by the highway is above the noise level indicated on Title 23.

2. Chart (A) shows heavy trucks generate 86 db at a distance of 50 ft from the source.

3. Your property is about 150 ft. from the source and the bedroom wall is 350 ft from the source.

4. Taking into account Chart (A), the generated noise by heavy trucks at 60 mph is about 86 dB. Based on the acoustic distance law, where the amount of decibels decrease by 5 every time the distance is doubled (the inverse square law), it is very unlikely the noise will dissipate to legal levels 150 ft. away, nor at 350 ft. by your bedroom where the reading were taken. This is shown on charts from # 74 though #89.

5. On charts # 74 through #79 the high point which is above 65 db correlates with heavy trucks noise decibels (db) and heavy truck traveling frequencies, passing by at a given point.

Best Regards,

David A. Larson, S&V Solutions, Inc.

815-899-2021 office, 815-899-2115 FAX, 815-762-5333 cellular

email: techinfo@svsolutions.com

Appendix 1: inverse square law

When sound propagates freely in space the level of sound decays with one over the square of diatance. This is commonly called the inverse square law and can be written as follows:

$$L_2 = L_1 - 20 \times \text{LOG}\,(X_2/X_1)$$

Where L_2 is the level of sound a distance X_2, and L_1 is the level of sound at distance X_1.

Please remember this law applies on to purely free field radiation. Across a grassy field, or a paved parking lot, or down a gravel road (as examples) one will see less decay with distance.

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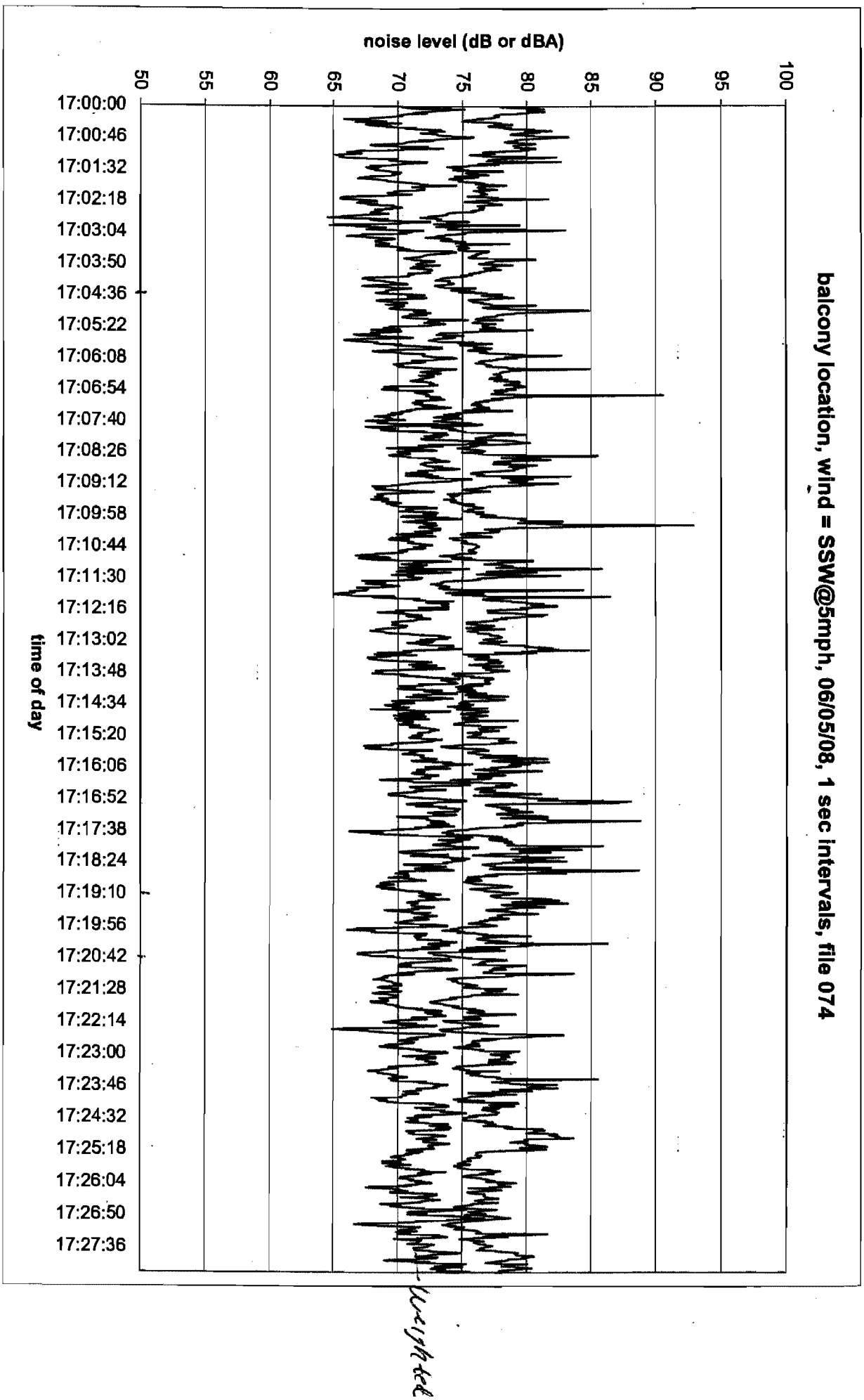
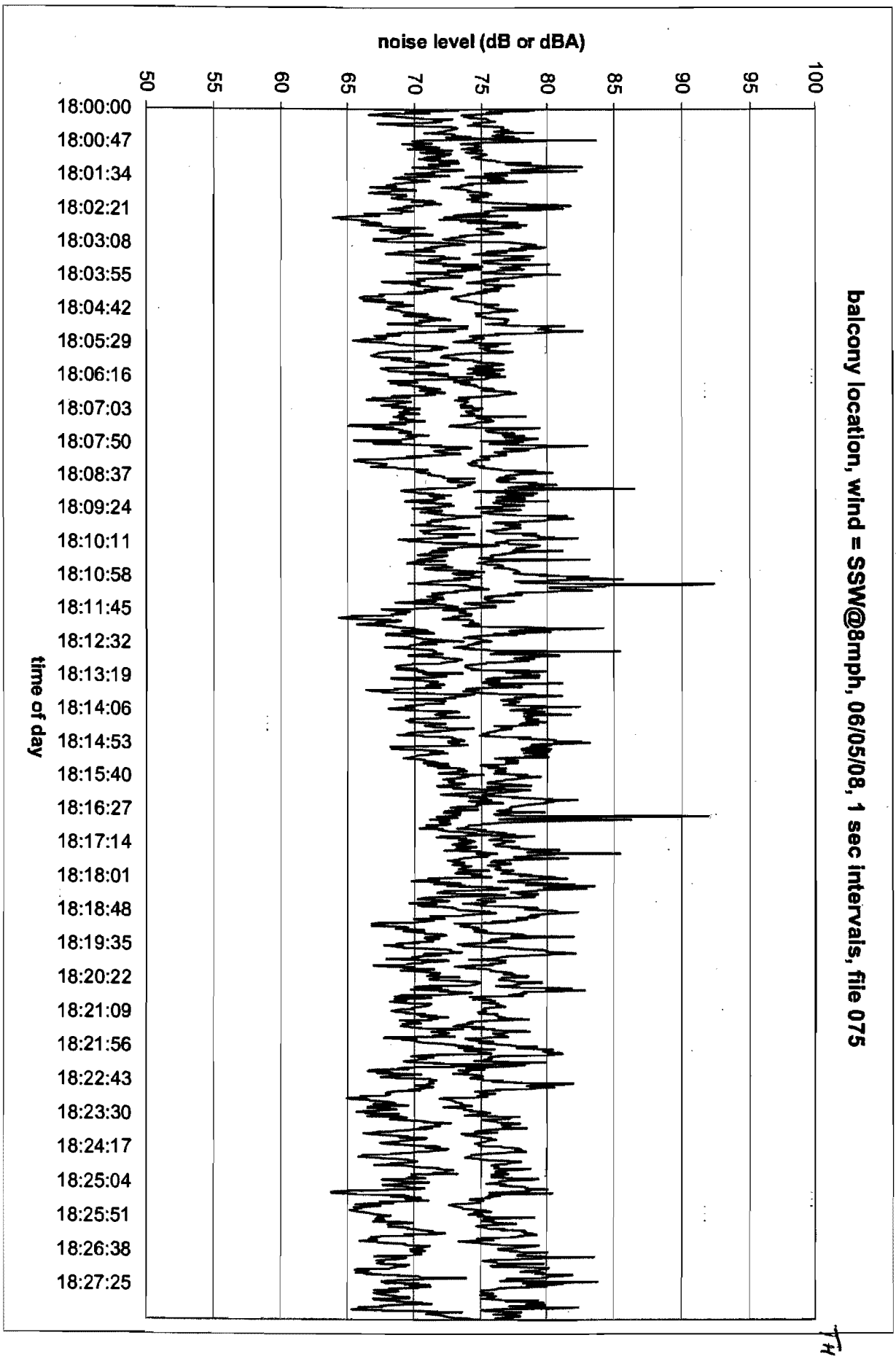
Appendix 2: multiple sources

If two noise sources of equal strength and uncorrelated with each other (such at two trucks on a highway) are added, such as they would if passing the same point at about the same time, then the total level would be 3 dB higher than one truck:

Lets us say that a fleet of trucks are all rated to produce 80 dBA total noise at 100 feet.

Two trucks passing at 100 feet = 83 dBA
Four trucks passing at 100 feet = 86 dBA
Eight trucks passing at 100 feet = 89 dBA




noise level (dB or dBA)
50
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time of day
18:00:00
18:00:47
18:01:34
18:02:21
18:03:08
18:03:55
18:04:42
18:05:29
18:06:16
18:07:03
18:07:50
18:08:37
18:09:24
18:10:11
18:10:58
18:11:45
18:12:32
18:13:19
18:14:06
18:14:53
18:15:40
18:16:27
18:17:14
18:18:01
18:18:48
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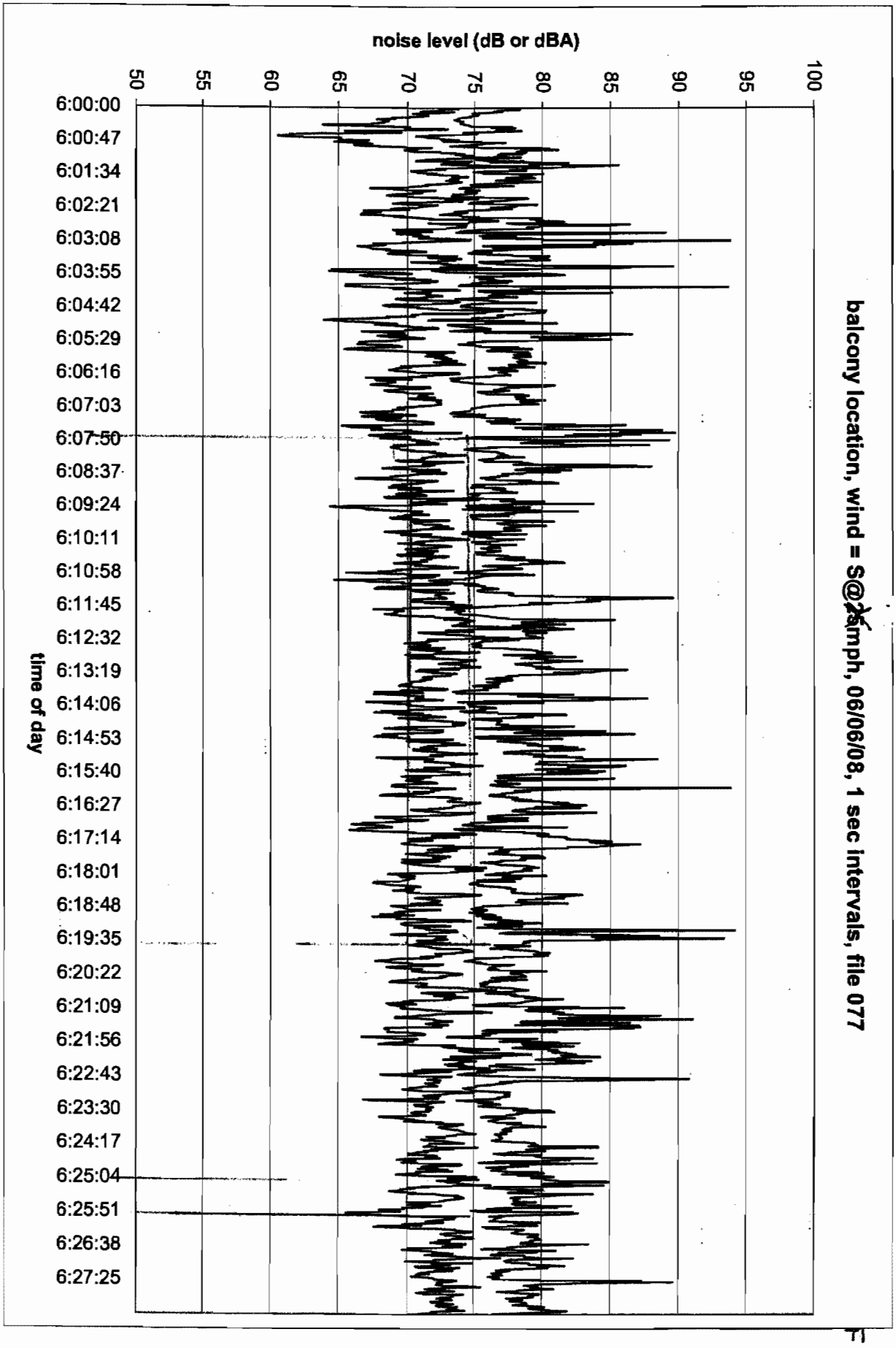
18:20:22
18:21:09
18:21:56
18:22:43
18:23:30
18:24:17
18:25:04
18:25:51
18:26:38
18:27:25
balcony location, wind = SSW@8mph, 06/05/08, 1 sec intervals, file 075


noise level (dB or dBA)
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time of day
6:00:00
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6:02:21
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6:04:42
6:05:29
6:06:16
6:07:03
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6:09:24
6:10:11
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6:14:06
6:14:53
6:15:40
6:16:27
6:17:14
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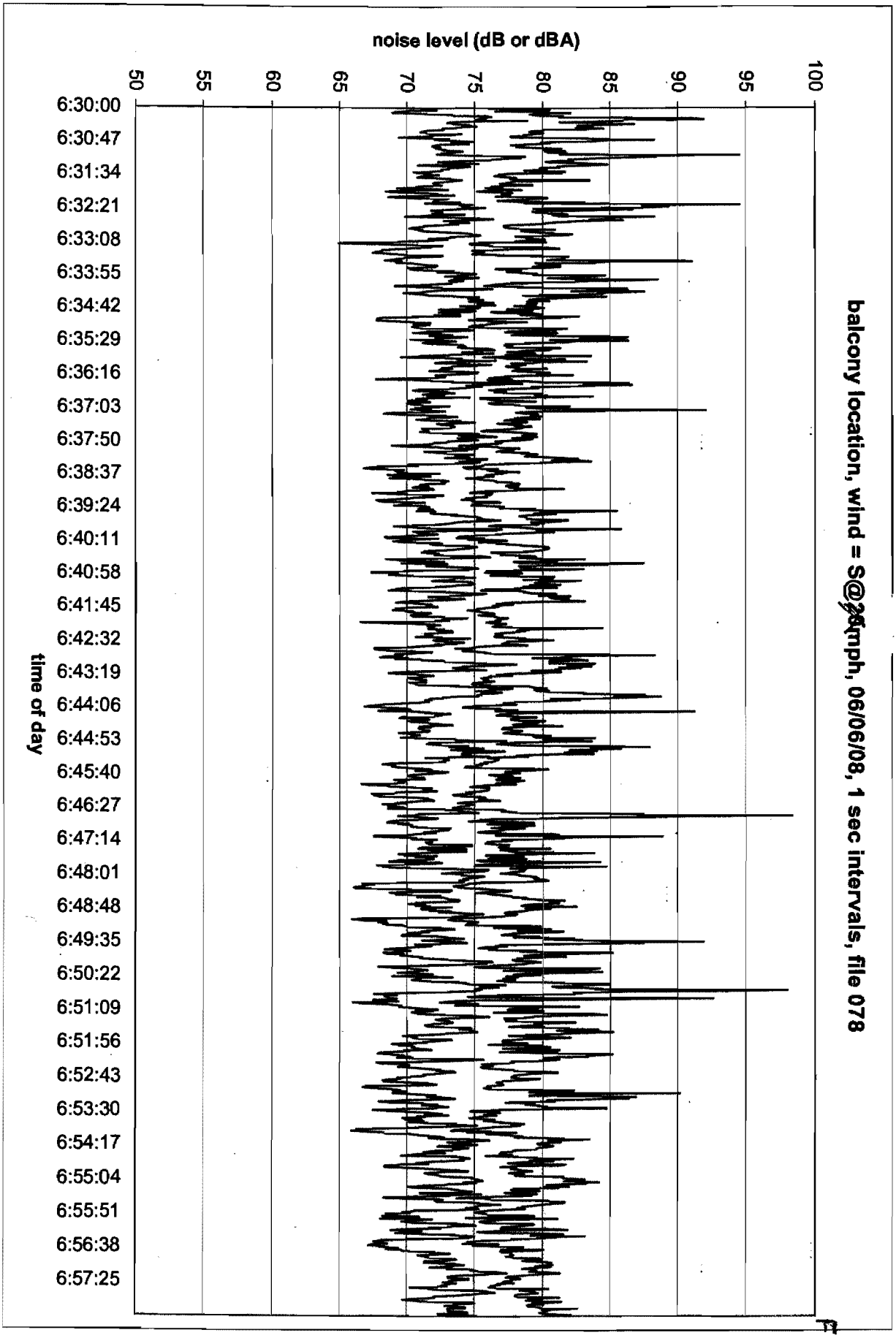
6:18:48
6:19:35
6:20:22
6:21:09
6:21:56
6:22:43
6:23:30
6:24:17
6:25:04
6:25:51
6:26:38
6:27:25
balcony location, wind = S@2[illegible]mph, 06/06/08, 1 sec intervals, file 077


noise level (dB or dBA)
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6:36:16
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6:40:11
6:40:58
6:41:45
6:42:32
6:43:19
6:44:06
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6:45:40
6:46:27
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6:50:22
6:51:09
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6:53:30
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6:55:04
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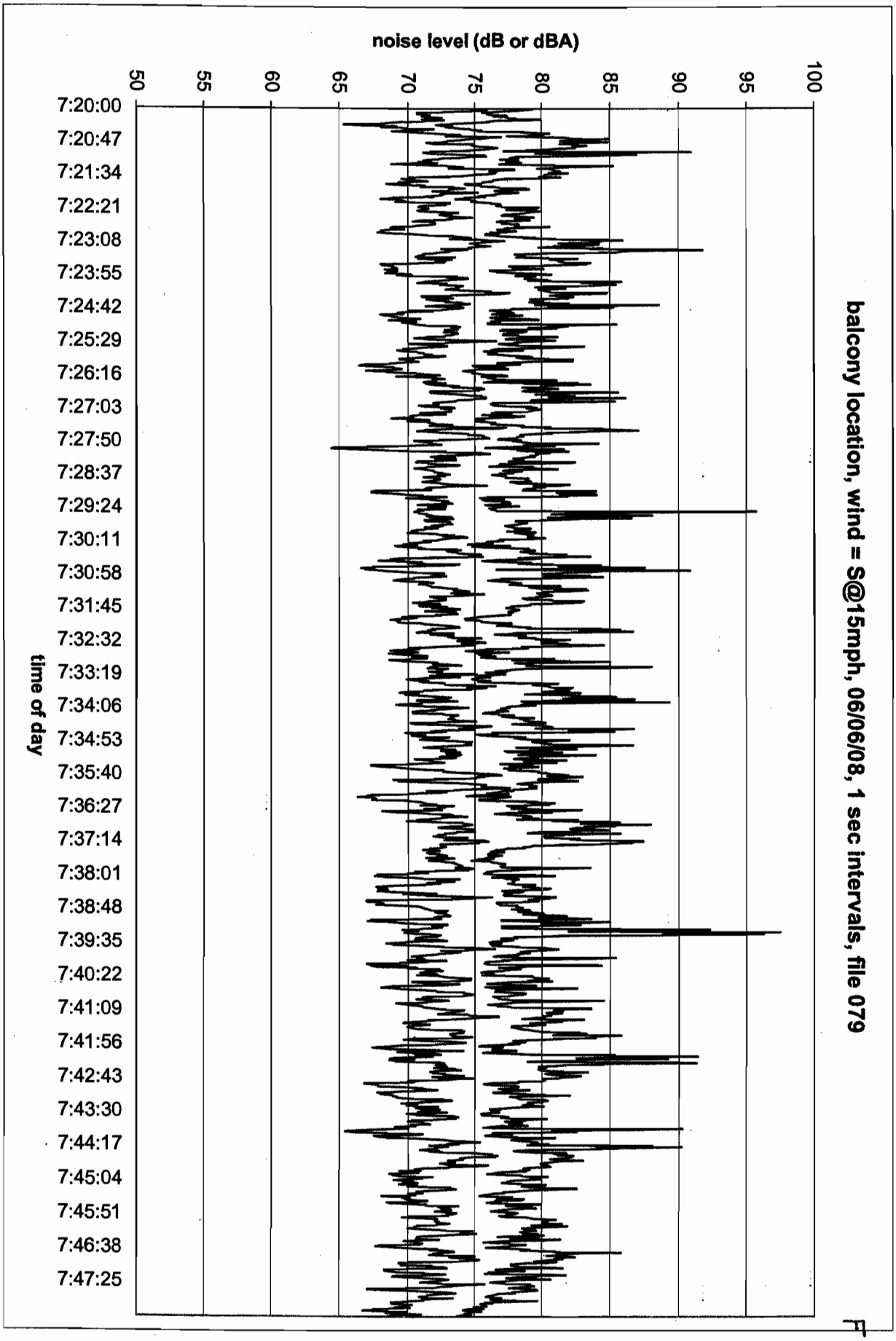
6:56:38
6:57:25
time of day
balcony location, wind = S@2[illegible]mph, 06/06/08, 1 sec intervals, file 078


noise level (dB or dBA)
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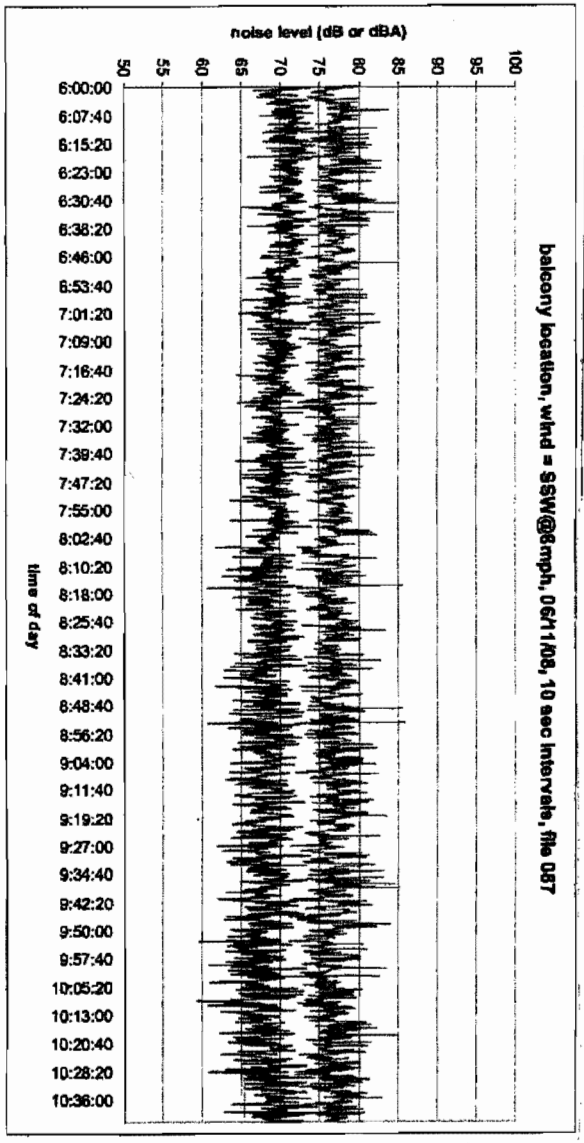
balcony location, wind = S@15mph, 06/06/08, 1 sec intervals, file 079


noise level (dB or dBA)
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time of day
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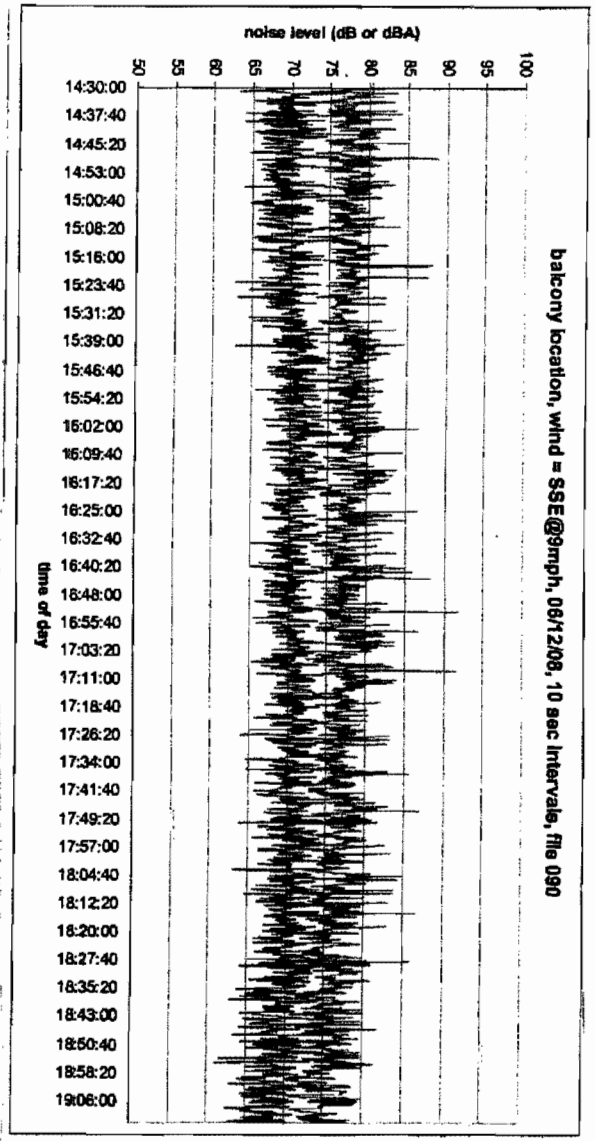
noise level (dB or dBA)
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time of day
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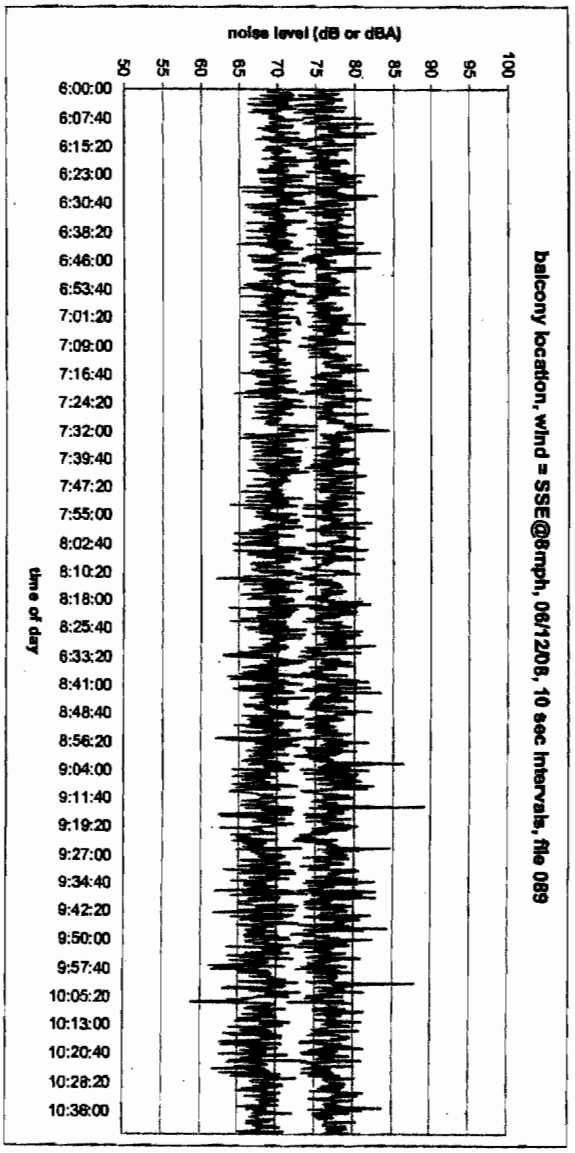
noise level (dB or dBA)
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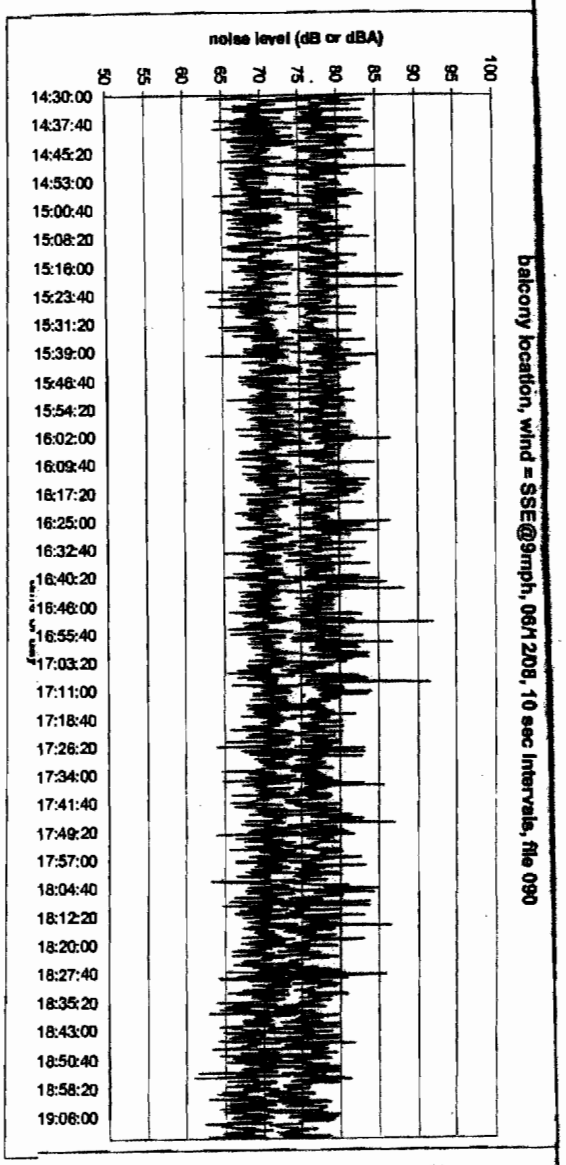
balcony location, wind = SSE@8mph, 06/12/08, 10 sec intervals, file 089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19:06:00
balcony location, wind = SSE@9mph, 06/12/08, 10 sec intervals, file 090

"Special efforts shall be made in the development of a project to comply with Federal, State, and local requirements for noise control; to consult with the appropriate officials to obtain the views of the affected community regarding noise impacts and abatement measures; and to mitigate highway-related noise impacts, where feasible and reasonable."

This policy statement sets forth the intent of the traffic noise analyses, the identification of traffic noise impacts, and the need to offer mitigation where reasonable and feasible criteria have been achieved.

2.3 Traffic Noise Impacts and Applicability

2.3.1 FHWA Regulations

Five separate ***Noise Abatement Criteria (NAC),*** based on land use, are used by FHWA to assess potential noise impacts as defined by 23 CFR 772. The FHWA considered several approaches to define impact levels, but generally based the criteria on noise levels associated with the interference of speech communication. The NAC are therefore a balance of what is desirable and what is generally achievable.[2]

A traffic noise impact occurs when noise levels approach, meet or exceed the NAC criteria listed in the following table or when the predicted noise levels are substantially higher than the ***existing noise level.***

TABLE 2-1
***FHWA NOISE ABATEMENT CRITERIA* - HOURLY WEIGHTED SOUND LEVEL**

Activity Category	L_{eq}(h), *dBA*	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Residences, picnic areas, recreation areas, playgrounds, active sports areas, parks, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	---	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.

FHWA has deferred to the State agencies to define the noise level that "approaches" the NAC and to define a substantial increase in traffic noise levels. It should be noted that the NAC are not used as goals for noise attenuation design criteria or design targets. Instead, the NAC are noise impact thresholds for considering abatement when they are approached, met, or exceeded. Noise abatement measures are required to be considered as part of the project if impacts are identified.

EXHIBIT "D"

Examples of Activity Category A include a monastery, an outdoor prayer area and an ampitheater. Activity Category B lists specific examples, but other land uses not specifically listed include cemeteries, campgrounds, and trails. Activity Category C examples include commercial and industrial land uses.

The NAC and noise procedure regulations apply to Type I and Type II (retrofit) projects only; however, the implementation of a Type II program is optional. ***Type I*** and ***Type II projects*** are defined as follows:

> *Type I projects.* A proposed Federal or Federal-aid highway project for the construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. Noise abatement is financed with funds appropriated for the proposed project.
>
> *Type II or Retrofit projects.* A proposed noise abatement project on an existing ***fully controlled-access State highway*** or Interstate in an urban area.

2.3.2 IDOT Noise Policy

The IDOT *Noise Policy* establishes the traffic noise analyses requirements for all Type I or Type II projects whether they are federally funded or State-only funded, which includes cost-sharing projects with local funds. The traffic noise impact determination is based on the FHWA NAC as set forth in IDOT's policy found in Chapter 26-6.05(c) (Analysis and Reporting) of the BDE Manual. IDOT has established the following criteria to define the occurrence of a traffic noise impact.

- ***Design year*** (typically 20 years into the future) traffic noise levels are predicted to approach, meet, or exceed the NAC, with approach defined as 1 ***dBA*** less than NAC

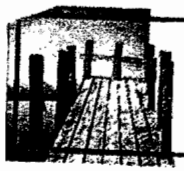
  Or,

- Design year (typically 20 years into the future) traffic noise levels are predicted to substantially increase (greater than 14 dBA) over existing traffic-generated noise levels

Based on the approach definition determined by IDOT, Table 2-2 provides the noise levels at which a traffic noise impact would occur and would require consideration of traffic noise abatement for the design year.

TABLE 2-2
IDOT TRAFFIC NOISE LEVELS WARRANTING ABATEMENT EVALUATION

Activity Category	L_{eq}(h), *dBA*
A	56 (Exterior)
B	66 (Exterior)
C	71 (Exterior)
D	---
E	51 (Interior)



Mr. Peter Arendovich
1388 Gordon Ln.
Lemont, IL 60439

7008 0500 0000 2982 4591

UNITED STATES POSTAL SERVICE

1000

60515

U.S. POSTAGE
PAID
LEMONT, IL
60439
SEP 09, '09
AMOUNT
$3.75

RETURN RECEIPT REQUESTED

ILLINOIS STATE TOLL HIGHWAY AUT.
2700 OGDEN AV.
DOWNERS GROVE ILL 60515
ATT. ROBERT T. LANE

UNITED STATES POSTAL SERVICE

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60515

U.S. POSTAGE
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State of Illinois)
) SS
County of DuPage)

AFFIDAVIT

I, Rocco J. Zucchero, having been duly sworn upon oath, depose and state:

1) I am authorized to and hereby make this Affidavit for and on behalf of the Respondent, the Illinois State Toll Highway Authority (hereinafter referred to as "Tollway").

2) I am of lawful age to execute this sworn Affidavit.

3) In 1992, I was hired by the Illinois Department of Transportation "IDOT" as an Engineering Technician.

4) From 1993 through 1998, I was an IDOT Environmental Specialist responsible for cultural resource management, socio-economic review, forest preserve/Section 4(f) coordination and bikeway coordination.

5) From 1998 through 2000, I developed IDOT public transportation projects throughout Northeast Illinois.

6) From 2000 to present, I have been employed by the Tollway as Planner/Deputy Chief Engineer for Planning. I am responsible for planning, permitting and environmental issues and particularly the development and implementation of the I-355 South Extension Project and the Tollway Congestion Relief Project.

7) I am currently, and have been since my hire at the Tollway, either directly or indirectly involved in Tollway sound wall and environmental matters.

EXHIBIT B

8) I have been directly involved and have personal knowledge of Peter Arendovich's noise complaints, his involvement in the planning process and the Tollway's remediation efforts.

9) I participated in the preparation of the Supplemental Environmental Impact Statement and was a primary Tollway representative in the I-355 Extension Project.

10) The Record of Decision "ROD" attached as Sub-Exhibit B-1 is a true and accurate copy that was prepared as a statutorily required (National Environmental Protection Act "NEPA") official governmental record as part of the I-355 Project.

11) The relevant sections of the Final Supplemental Environmental Impact Statement "SEIS" prepared as a necessary part of the NEPA approval process are attached as Sub-Exhibit B-2.

12) Despite the fact that the SEIS did not mandate a sound wall to be constructed near 135th street and the Arendovich property, on its own initiative, in 2004, the Tollway updated its traffic noise study and noise abatement recommendations to reflect 2030 traffic projections and a continuous six-lane corridor from I-55 to I-80.

13) The Tollway revised its plans and included a sound wall near 135th street as part of its updated traffic noise study. The proposed sound wall was 2,450 feet in length and 14 feet in average height.

14) The cost of the sound wall, included in the updated traffic noise study, was approximately $34,300 per benefited residence.

15) In part to satisfy the concerns of Peter Arendovich, the Tollway increased the size of the sound wall described in paragraphs 13 and 14 above to 2,560 feet and 15.8 feet in average height.

16) The enhanced sound wall was 72 feet longer and 2 feet higher (at the southern 300 feet of wall) and cost the Tollway an additional $57,879.46.

17) After constructing the enhanced sound wall, as a final effort to satisfy Mr. Arendovich, the Tollway once again continued the sound wall an additional 240 feet to the south. This wall addition was constructed on the 135th Street bridge. It is wooden structure, 10 feet tall and cost the Tollway and its patrons an additional $69,280.

18) Attached as Exhibit B-3 is a true and accurate photograph consisting of an aerial view of the sound wall and Complainant's home.

19) As part of the planning process conducted prior to initiating construction on the I-355 extension, the Illinois Department of Transportation "IDOT" and the Tollway conducted significant community outreach which included a series of public meetings designed to gauge local interest, or lack thereof, in the possible I-355 extension.

20) In addition, the Tollway assembled a Local Advisory Committee that met monthly to discuss potential concerns about the possible highway extension and Tollway concerns.

21) Peter Arendovich was present and was an active participant in many, if not most Tollway south extension public hearings and meetings.

22) Construction of all of the sound walls referenced in this Affidavit were, at least in part, constructed to satisfy the concerns of Peter Arendovich.

23) The Tollway's sound wall policy is attached as Exhibit B-4. While not expressly stated, the Tollway generally follows IDOT's economic threshold that the sound wall construction cost not exceed $24,000 per benefited residence.

24) There have been few complaints from the Tollway neighbors at or near 135th Street. Other than complaints submitted by Mr. Arendovich, the only other individual that raised noise concerns was a neighbor that attended a meeting with Mr. Arendovich.

25) Arendovich's neighbor voiced concerns about how the traffic noise might affect his Honey Bees. The Tollway never heard from him or any other neighbors again.

25) The distance from the south end of the existing sound wall near 135th street to Archer Avenue is approximately 1,200 feet.

26) Excluding costs associated with design, mobilization and maintenance of traffic, sound walls typically cost approximately $35 per square foot.

27) On average, each day 65,320 vehicles cross the 1.2 mile long bridge constructed as part of the I-355 South Extension Project.

28) That the matters set forth in the foregoing Affidavit are true and correct to the best of my knowledge and belief.

29) This Affidavit is made on personal knowledge. If sworn as a witness, I can and will testify competently to the foregoing facts.

Further affiant sayeth not.

Rocco J. Zucchero

Subscribed and sworn to
before me this 23 day
of December, 2010.

Nancy L. Cordero
Notary Public

OFFICIAL SEAL
NANCY L CORDERO
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:05/22/13

RECORD OF DECISION

FAP Route 340 (I-355 South Extension), Interstate Route 55 to Interstate Route 80, Cook, DuPage and Will Counties

FHWA-IL-EIS-93-03-FS/4(f)

February 25, 2002

I. BACKGROUND

The Proposed Action has been in the planning stage for 39 years. In 1962, FAP Route 340, then referred to as Federal Aid (FA) Route 61, was included in the Chicago area's first long-range transportation plan. The Proposed Action was included in subsequent plans, including the 1995, 2010, and 2020 plans. The Illinois Department of Transportation (IDOT) was the main project sponsor throughout the 1960's, 1970's, 1980's and early 1990's. A centerline was recorded in 1968, and engineering and environmental studies were conducted during those past decades. In July, 1993, the Illinois State Legislature passed legislation authorizing the Illinois State Toll Highway Authority (ISTHA) to examine the feasibility of constructing FAP Route 340 as a Tollway. ISTHA then began its participation in the Environmental Impact Statement (EIS) process as a cooperating agency.

In February 1996, IDOT completed a Final Environmental Impact Statement and Section 4(f) Evaluation (FEIS) which was then approved by the Federal Highway Administration (FHWA). In April 1996, the FHWA issued its Record of Decision (ROD) on the project. Through coordination with the Governor, ISTHA was identified as the Constructing Agency and was to have funded the project. Land was acquired for right-of-way and utilities were relocated. However, no construction contracts were awarded. In August 1996, the Illinois Chapter of the Sierra Club, et al. filed suit against the project in the U.S. District Court, Northern District of Illinois (Federal Court). On November 12, 1998, the Federal District Court amended its order of January 16, 1997, declaring that FHWA's approval of the proposed extension of Interstate 355 was invalid. In December 2000 IDOT published a Draft Supplemental EIS (Draft SEIS) that addressed the concerns of the Federal Court ruling. In February 2001 public hearings were held on the Draft SEIS. In September 2001, the Final Supplemental EIS (Final SEIS) was published. This ROD presents FHWA's decision addressing the Final SEIS. Currently, a Constructing Agency has not been identified and the project is not funded.

II. DECISION

The following sets forth the basis for selecting the Tollroad/Freeway Alternative for construction in Cook, DuPage and Will Counties. The Tollroad/Freeway Alternative involves constructing an approximately 20 kilometer (12.5 mile) Tollroad/Freeway facility on a 91 meter (300 foot) right-of-way on new alignment. The Tollroad/Freeway Alternative connects two major interstates (I-55 and I-80) in the Chicago area and will involve FHWA approval of new interstate access points at each connection. In consideration of the following, the FHWA has based its decision that the selected alternative 1) satisfies Purpose and Need, 2) poses the least impacts on the environment, 3) the process satisfies NEPA and other applicable requirements and 4) the project may be advanced.

The facility will be a fully access controlled, six-lane divided highway from I-55 to 127th Street and a fully access controlled, four-lane divided highway from 127th Street to I-80. Interchanges are planned at I-55, 127th Street, 143rd Street/IL Route 171 (Archer Avenue), IL Route 7 (159th Street), U.S. Route 6 and I-

80. A mainline toll collection plaza will be provided in the vicinity of Bruce Road in addition to any necessary ramp toll collection facilities, should the project be constructed as a tollroad.

The recommended alignment parallels Lemont Road from I-55 at the northern project terminus to the Des Plaines River, then shifts to the southeast, paralleling State Street approximately 1.2 kilometers (0.75 miles) to the west from 127th Street to 143rd Street. The alignment would then parallel Gougar Road and curve diagonally to the east and connect to I-80 approximately 0.4 kilometers (0.3 miles) east of Cedar Road.

The purpose of the Proposed Action is to provide a Transportation System Improvement that will improve north-south mobility between I-55 and I-80 to accommodate projected year 2020 travel demand within both the Project Corridor and northeastern Illinois. The Transportation System Improvement is needed to (1) Improve Access Between Residential Areas and Regional Job Centers, (2) Achieve Land Use Planning Goals, (3) Improve Regional Mobility, and (4) Address Local System Deficiencies.

The decision to build the Tollroad/Freeway Alternative is based upon full consideration of information contained in the Draft SEIS approved by the FHWA on December 20, 2000, public hearings held on February 8 and 14, 2001 and the Final SEIS approved by the FHWA on August 31, 2001. The FHWA decision is also based on public and agency comments pertaining to the Proposed Action, the other alternatives considered, the respective environmental consequences, and issues related to the Proposed Action.

The Proposed Action is described in greater detail in Section 3.2, and Section 5.4 of the Final SEIS. The Draft and Final SEIS are available for review at the Illinois Department of Transportation at 201 West Center Court, Schaumburg, Illinois 60196 and at the Illinois State Toll Highway Authority at 2700 West Ogden Avenue, Downers Grove, Illinois 60515.

III ALTERNATIVES CONSIDERED

Alternatives Selected for Evaluation in the Draft SEIS: Five alternatives were evaluated in the Draft and Final SEIS: 1) the No-Action (Baseline) Alternative; 2) a Mass Transit Alternative; 3) the Lemont Bypass Alternative; 4) the Enhanced Arterial Alternative, and 5) the Tollroad/Freeway Alternative. (See Section 3.2 of the Final SEIS for a full description of these alternatives.)

No-Action (Baseline) Alternative maintained existing roadways, included roadway capacity improvements, transit upgrades and TSM/TDM strategies recommended in the 2020 Regional Transportation Plan (RTP) and projects from the 1998-2002 Transportation Improvement Plan (TIP), minus the proposed Transportation System Improvement. The No-Action (Baseline) Alternative was developed in close coordination with area transportation providers and local officials. The No-Action (Baseline) Alternative also included a number of other roadway projects that are not currently funded, but anticipated to be constructed by the year 2020. Although not determined to meet the Purpose and Need for the project, this alternative was carried forward for evaluation in the Draft SEIS as the baseline for comparing other alternatives.

Mass Transit Alternative maintained existing service and implemented mass transit improvements recommended in the 2020 RTP, plus additional transit facilities and services not included in the 2020 RTP, but identified by local and transit agency officials as likely to be implemented by 2020. This Alternative alone was not found to meet the Purpose and Need for the project and was not carried forward. However, existing and planned mass transit services were included in the three roadway alternatives.

Lemont Bypass Alternative provided a new full access controlled divided highway on new alignment in the northern one-quarter of the Corridor and a new limited access controlled principal arterial on existing alignment in the Corridor's southern three quarters. The Alternative also included the No-Action (Baseline) Roadway Improvements, and mass transit and TSM improvements recommended in the 2020 RTP and projects from the 1998-2002 TIP. The Lemont Bypass Alternative was found not to meet the Purpose and Need for the project based on the findings of the performance analysis summarized in the next section.
Enhanced Arterial Alternative improved existing arterials and included the No-Action (Baseline) Roadway Improvements, and mass transit and TSM improvements recommended in the 2020 RTP and projects from the 1998-2002 TIP. The Enhanced Arterial Alternative was found not to meet the Purpose and Need for the project based on the findings of the performance analysis summarized below.

Tollroad/Freeway Alternative provided a new full access controlled divided highway on new alignment with improvements at intersecting roadways. The Tollroad/Freeway Alternative also included implementation of the No-Action (Baseline) Roadway Improvements, and mass transit and TSM improvements recommended in the 2020 RTP and projects from the 1998-2002 TIP. This is the selected alternative. As outlined in the performance analysis below, the Tollroad Freeway Alternative was superior and the only alternative to satisfy the Purpose and Need.

Performance Analysis: The Tollroad/Freeway Alternative outperformed the other alternatives in satisfying the four need criteria based on quantitative measures including land use and transportation plan consistency, safety performance, and year 2020 travel times. The performance analysis was based upon separate socioeconomic and travel demand forecasts for the No-Action (Baseline) Alternative and Build Alternatives. The No-Action (Baseline) Alternative was specifically developed as a land use scenario that did not include the Proposed Action.

Improve Access Between Residential Areas and Regional Job Centers: The No-Action (Baseline) Alternative travel times between the Project Corridor and regional job centers are projected to increase an average 43 percent and up to 55 percent by year 2020 under the No-Action (Baseline) Alternative scenario. The Tollroad/Freeway Alternative reduced these projected year 2020 travel times by 20 percent on average. This was a 33 percent improvement over the Lemont Bypass Alternative and a 185 percent improvement over the Enhanced Arterial Alternative.

Improve Regional Mobility: The No-Action (Baseline) Alternative travel times from the Project Corridor to over three quarters of the northeastern Illinois region are projected to increase from 12 to over 25 percent by the year 2020. The Tollroad/Freeway Alternative substantially reduced these projected year 2020 travel times and improved regional mobility to 144 percent more of the region than the Lemont Bypass Alternative and over 2,000 percent more of the region than the Enhanced Arterial Alternative.

Address Local System Deficiencies: The No-Action (Baseline) Alternative travel times for local travel within the Project Corridor are projected to increase 150 percent by year 2020. The Tollroad/Freeway Alternative reduced these projected year 2020 travel times by 13 percent overall. This was a 30 percent improvement over the Lemont Bypass Alternative and an 85 percent improvement over the Enhanced Arterial Alternative. The Tollroad/Freeway Alternative also provided the best safety performance. This performance was six times better than the Lemont Bypass Alternative and 45 times better than the Enhanced Arterial Alternative.

Achieve Land Use Planning Goals: The Tollroad/Freeway Alternative was ranked most consistent with the goals and objectives of municipal land use and transportation plans by professional land use planning staff of local governments within the Project Corridor. These planning goals and objectives were set forth by each local government in their respective plans and define each community's vision as to how their overall community should develop. Each Alternative received an overall score on a scale of one to five, with five being the most consistent with the goals and objectives of municipal land use and transportation

plans and one being least consistent. The Tollroad/Freeway Alternative received an overall score of 4.5 while the Lemont Bypass Alternative, Enhanced Arterial Alternative and No-Action (Baseline) Alternative received scores of 3.1, 2.3, and 1.5, respectively. A survey of mayors and county Board members representing municipal governments within the Project Corridor found overwhelming support for the Tollroad/Freeway Alternative. Ninety percent of these elected officials selected the Tollroad/Freeway Alternative as the alternative best suited to achieving the planning goals and objectives of their communities. None of the elected officials selected the Lemont Bypass Alternative and 10 percent selected either the Enhanced Arterial Alternative or the Mass Transit Alternative. Among the governmental agencies with land use planning authority, there was 100 percent support for the Tollroad/Freeway Alternative.

Alternatives Considered in the 1996 Final Environmental Impact Statement and Dismissed in the Draft SEIS: Alternatives considered in the 1996 FEIS, but not carried over to this analysis included the Transportation System Management (TSM) Alternative and Expressway Alternative, as well as the multiple alignment alternates of the Tollroad/Freeway Alternative. The 1996 FEIS found that the TSM and Expressway Alternatives lacked capacity to accommodate projected 2010 traffic and, therefore, did not satisfy Purpose and Need. The Final SEIS utilized updated year 2020 traffic projections, which were 41% higher than the 2010 traffic projections used in the 1996 FEIS. Since the TSM and Expressway Alternatives were found not to satisfy the capacity requirements of the Purpose and Need in the 1996 FEIS under lower traffic projections, the Alternatives would remain unsatisfactory under the higher traffic demand forecasted for year 2020 and, therefore, were eliminated from further consideration in this supplemental analysis.

As for the multiple alignment iterations of the Tollroad/Freeway Alternative, these iterations represented adjustments to the Tollroad/Freeway alignment to avoid and minimize direct impacts to parks, wetlands and other resources. However, the affected environment directly impacted by the Tollroad/Freeway Alternative did not change substantially between publication of the 1996 FEIS and this Final SEIS. Therefore, no new environmental issues were identified to warrant reconsideration of these alignment iterations.

Additional Analysis conducted after Circulation of the Draft SEIS: After review of the Draft SEIS, the U.S. Environmental Protection Agency (USEPA) commented that the environmental impacts of the Lemont Bypass Alternative should be evaluated. A comparative review of the environmental effects was performed for the three Build Alternatives. The findings of this review were presented in Final SEIS, Section 3.4.2. The review was GIS based and evaluated the comparative effects of the Tollroad/Freeway Alternative, Lemont Bypass Alternative and Enhanced Arterial Alternative on natural and social resources to an equal level of detail. The analysis found the environmental affects associated with each Build Alternative were not distinguishable. In a follow up letter commenting on the Final SEIS, the USEPA concluded that there is not a substantial difference between alternatives with regard to direct natural and cultural resource impacts.

Recommended Alternative: Following circulation of the Draft SEIS, public and agency comments were received and addressed, additional evaluation of the environmental effects of the alternatives was conducted and acknowledgement from the resource agencies on the need for the project was received. Based on the evaluation of alternatives, the Tollroad/Freeway Alternative was found as the only alternative to satisfy the Purpose and Need and was selected as the Recommended Alternative in the Draft and Final SEIS. This selection was based on:

- The Tollroad/Freeway Alternative maximized access to regional job centers by achieving the greatest reduction in year 2020 travel time from the Project Corridor to regional job centers. The Tollroad/Freeway Alternative surpassed comparable travel time reductions achieved by the Lemont Bypass Alternative by 33 percent and the Enhanced Arterial Alternative by 185 percent.

- The Tollroad/Freeway Alternative optimized regional mobility by reducing year 2020 travel times to 144 percent more of the region than the Lemont Bypass Alternative and over 2,000 percent more of the region than the Enhanced Arterial Alternative.

- The Tollroad/Freeway Alternative best addressed local system deficiencies and reduced year 2020 travel times within the Project Corridor, outperforming the Lemont Bypass Alternative by 30 percent and the Enhanced Arterial Alternative by 85 percent. The Tollroad/Freeway Alternative would save nearly $1 million/year through improved travel times and over $2 million/year in lost productivity attributed to the higher travel times associated with the Lemont Bypass Alternative and the Enhanced Arterial Alternative, respectively. Equally important, the Tollroad/Freeway Alternative had the best safety performance with a percent reduction in crashes that was six times better than the Lemont Bypass Alternative and 45 times better than the Enhanced Arterial Alternative.

- The Tollroad/Freeway Alternative also best enables local government to achieve overall land use planning, growth management and transportation goals. The Tollroad/Freeway Alternative was ranked most consistent with these goals and objectives by the municipal and county governments within the Project Corridor. Furthermore, a survey of elected officials representing Will County and project corridor local governments was conducted asking which Alternative would best aid in achieving land use and transportation planning goals. The survey achieved a 100 percent response rate. The Tollroad/Freeway Alternative was identified by 90 percent of the respondents as most consistent with local planning goals, 5 percent identified the Enhanced Arterial Alternative, 5 percent identified the Mass Transit Alternative, and 0 percent identified the Lemont Bypass Alternative. Among the governmental agencies with land use planning authority, there was 100 percent support for the Tollroad/Freeway Alternative. Therefore, the Tollroad/Freeway Alternative is most compatible with the growth management goals and objectives of county and municipal governments represented within the Project Corridor.

IV. SECTION 4(f)

A Section 4(f) Evaluation was included in both the Draft SEIS and the Final SEIS (Section 5). A comparative assessment was completed to determine which Section 4(f) properties would be used by each Alternative considered in the 1996 FEIS and the Draft SEIS. The comparative assessment disclosed that none of the build alternatives would completely avoid 4(f) impacts. The Tollroad/ Freeway Alternative is the only alternative that satisfies Purpose and Need. The Final SEIS concluded that there is no feasible and prudent alternative to the Tollroad/ Freeway Alternative that avoids the Section 4(f) impacts associated with the Tollroad/ Freeway Alternative.

The number and size of Section 4(f) properties impacted within the Project Corridor have not changed since publication of the 1996 FEIS. Likewise the Tollroad/Freeway alignment presented in the Final SEIS is the same as that defined in the 1996 FEIS after the alignment was modified to avoid and minimize impacts to Section 4(f) properties.

An intergovernmental agreement to mitigate Section 4(f) impacts to Keepataw Forest Preserve was negotiated in April 1995. This agreement was amended in March 2001. Both agreements are presented in Appendix A of the Final SEIS. An additional measure to mitigate Section 4(f) impacts consisted of the purchase of the entire Bluff Oaks Estates subdivision by IDOT as a buffer zone. A 300 foot swath purchased in the 1970's by IDOT bordering Black Partridge Nature Preserve will remain in public ownership as additional buffer zone to maintain the area's natural qualities. The FPDWC concurred with this buffer area in their comment letter (dated October 5, 2001) submitted in response to circulation of the Final SEIS.

Also, The Illinois Historic Preservation Agency reviewed project impacts to the I&M Canal and made a determination of no adverse effect for the Tollroad/Freeway Alternative in November 1993 (See 1996 FEIS, Chapter 6, Illinois Historic Preservation Agency). A Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (as amended) was developed to mitigate impacts to the Lustron House in July 1995 (See 1996 FEIS, Appendix B). ISTHA is implementing commitments associated with that MOA.

Finally, all possible planning to minimize harm to Section 4(f) resources was included in this action. Measures to minimize harm included use of a high level bridge crossing the Des Plaines River Valley from south of New Avenue to approximately 213 meters (700 feet) north of Bluff Road. The bridge spans Keepataw Forest Preserve, the I & M Canal and the Des Plaines River and therefore, avoids and minimizes impacts to associated floodplain, forest and wetland resources. The bridge was designed to minimize impacts to these resources and allow for continued recreational use. For example, bridge span lengths were lengthened to minimize the foot print of the bridge and reduce ground disturbance. Bridge piers were placed to allow continued unrestricted wildlife movement through the area while avoiding the dangers of wildlife/auto collisions on the roadway. Also, the bridge deck and related highway drainage was designed to be directed away from sensitive resources. Measures to minimize harm are further discussed in the Draft and Final SEIS, Chapter 5.0 (Section 4(f) Evaluation) and Chapter 6.0 (Coordination and Commitments).

V. MITIGATION AND COMMITMENTS

All practical measures to minimize the potential environmental impacts caused by the Tollroad/Freeway Alternative will be taken. The mitigation measures proposed for this project are described in Chapter 5 of the Draft and Final SEIS and Chapter 6 of the 1996 FEIS.

The centerline for a FAP Route 340 was recorded in DuPage and Will Counties in 1968. In the approximately 32 years since completion of the original design studies, a number of changes have occurred that required reevaluation of the selected design and alignment. More recently, a total of 10 individual alignment shifts were considered in the 1996 FEIS to avoid and minimize impacts. This alignment avoided and minimized impacts to the greatest extent practicable. This alignment was carried over to the Draft and Final SEIS and is the alignment for the recommended Tollroad/Freeway Alternative. Additional project modifications to avoid and minimize impacts included designing the proposed bridge over the Des Plaines River to reduce environmental, visual, and aesthetic impacts to the extent practicable and to accommodate wildlife and recreational corridors underneath the structure. In areas where impacts are unavoidable, best management practices (BMP) were incorporated into the road design.

Local Coordination: In response to the Proposed Action, local government entities formed the Heritage Corridor Planning Council (HCPC). This Council was charged with coordinating local government land use planning within the Project Corridor and aiding in addressing secondary and cumulative impacts. The HCPC published: I-355 Heritage Corridor: Cumulative Effects of Local Plans, May 1996 (revised October 1996) as part of executing its on-going charge.

Pursuant to Chapter 605 of the Illinois Compiled Statutes, Act 10 - Section 14, HCPC activities will be augmented by creation of a Local Advisory Committee by ISTHA if the Selected Alternative is constructed as a Tollroad. The Advisory Committee will work with ISTHA to address local issues related to facility construction. Finally, the Agency constructing the roadway (Constructing Agency) will send to the involved local municipal, township or county governments preliminary plans applying to their area prior to completing final design. The agencies will be invited to comment on the plans and indicate if they would be willing to participate in the costs of providing bicycle/multi-use trails, sidewalks, traffic signal modifications, lighting, widening, landscaping, etc. Local governments receiving the coordination will

include: the Villages of Woodridge, Lemont, New Lenox and Homer Glen; the City of Lockport; the Townships of DuPage, Lemont, Homer, and New Lenox; and the Counties of DuPage, Cook, and Will.

Wetlands: There were no alignments that avoided all wetland impacts. The Selected Alternative, a refinement of the original proposed alignment, was developed to minimize impacts to wetlands. The Selected Alternative fills approximately 3.93 hectares (9.7 acres) of wetland, all within the Des Plaines River watershed. Wetlands in the Des Plaines River Valley will be bridged to minimize the area directly filled and reduce changes in hydrologic characteristics of the affected wetlands. Due to various Federal and State requirements, this project requires 10.01 hectares (24.75 acres) credits of wetland compensation.

As committed to in the 1996 FEIS, wetland compensation will be derived from three sources; two locations along the Spring Creek floodplain and the Lockport Prairie Nature Preserve. The total mitigation acreage required has changed due to the decrease in the total wetland hectares (acres) impacted by the Selected Alternative and a change in the replacement ratios used to calculate total mitigation area.

The first area of mitigation is located along Spring Creek. It is 6.68 hectares (16.5 acres) in area and satisfies Section 404 of the Clean Water Act. This mitigation will replace the function and value of 3.93 hectares (9.7 acres) acres of impacted wetlands. Following acceptance of the created site by the U.S. Army Corps of Engineers (USACOE), the Spring Creek mitigation site will be transferred to the Forest Preserve District of Will County (FPDWC) as part of the Spring Creek Greenway, in fee. An approximate 30-meter (100-foot) buffer will be incorporated into the design of the site to allow for access, long term management and recreational trail development. The Spring Creek site has been acquired, but no mitigation has occurred.

The second area occurs within the Lockport Prairie Nature Preserve in the Des Plaines River Valley and satisfies agreements with the U.S. Fish and Wildlife Service (USFWS) and the FPDWC. Since publication of the 1996 FEIS, work on this site has been completed and approved by the USACOE, USFWS, and FPDWC for the restoration of the Lockport Prairie site. In a letter dated July 25, 1997 from the USACOE, 1.52 hectares (3.75 acres) of the 6.07 hectares (15.0 acres) site were credited for wetland mitigation.

The third site will satisfy regulations issued under the Illinois Interagency Wetland Policy Act of 1989. IDOT, ISTHA (if identified as the Constructing Agency), FPDWC, and the Illinois Department of Natural Resources (IDNR) have identified an acceptable site adjacent to the first site along Spring Creek. An additional 1.8 hectares (4.5 acres) has been located on FPDWC property along the Spring Creek Greenway. In consideration of the District providing land for the additional 1.8 hectares (4.5 acres) of wetland mitigation, the Constructing Agency will be committed to design and construct the Spring Creek Greenway Trail within the mitigation project area.

All three mitigation sites are located within the same watershed as the impacted wetlands. The Constructing Agency will coordinate with the USACOE and Illinois Environmental Protection Agency (IEPA) to determine actions to be taken on these permits to fulfill all Section 404 and 401 requirements.

Water Quality: Measures to protect water quality within the project corridor during construction of the Selected Alternative will include adherence to the Constructing Agency's standard specification for regulating sediment and erosion control. Measures provided will include preparation of an erosion control and stormwater pollution prevention plan. The plan will specify temporary runoff diversions with sedimentation controls to be used to capture sediment laden runoff during construction. Additionally, the Selected Alternative will bridge the Des Plaines River Valley and thereby minimize the wetland and floodplain area directly filled, thus reducing changes in hydrologic characteristics of the valley.

Stormwater generated on the bridge during operation will be collected and piped to a wet detention basin in the Des Plaines River Valley. Detention basins will also be provided at major stream crossings.

In addition, to minimize impacts to Black Partridge Nature Preserve and Creek, the roadway was moved approximately 107 meters (350 feet) west of the recorded alignment. This reduced proximity of the roadway to Black Partridge Nature Preserve and Creek and decreased potential salt transport. To further protect this resource, surface runoff generated south of Davey Road during operation will be collected, detained and discharged outside of the Black Partridge Creek watershed. This eliminates 3.7 kilometers (2.3 miles) or 22 percent of anticipated highway runoff to Black Partridge Creek. Monitoring of Black Partridge Creek has been ongoing since 1994 and continues in accordance with previous commitments. Previous commitments include conducting water quality monitoring prior to, during and after construction. Results of the monitoring will be coordinated with Cook, Will and DuPage counties.

Salt Spray: A road salt dispersion study was undertaken by the Illinois State Water Survey (ISWS) beginning in February 1996. This commitment satisfies concerns previously raised by US Department of the Interior, the FPDWC, and the Illinois Nature Preserves Commission. Key study components included evaluation of the mass emission to the atmosphere, the size distribution of the emitted salt droplets and the concentration and size of these droplets at varying distances from their source. The initial results of the study are presented in Section 4.16.2 of the Draft and Final SEIS. Detailed results are presented in the ISWS report titled "Atmospheric Dispersion Study of Deicing Salt Applied to Roads: First Progress Report" dated April 2000. Later phases of the study will develop an air dispersion model, which will predict the atmospheric dispersion of salt spray and its ultimate deposition.

Threatened and Endangered Species: The U.S. Fish and Wildlife Service provided an opinion in 1995 that the Selected Alternative would not affect the leafy prairie clover (Dalea foliosa). In November 1995, the Service concurred that the Selected Alternative would not likely adversely affect the Hine's emerald dragonfly (Somatochlora hineana). Concurrence on the Hines emerald dragonfly was predicated on dragonfly and salt spray studies which would be performed prior to, during, and after construction. The pre-construction phase of the dragonfly studies have been ongoing since 1995 and served as a basis for the 1999 Dragonfly Recovery Plan. The results of these studies are summarized in Section 2 of the 1996 FEIS. Detailed results are presented in the Dragonfly Recovery Plan (June 1999), follow-up Illinois Natural Historic Survey reports and the ISWS Report titled "Atmospheric Dispersion Study of Deicing Salt Applied to Roads (April 2000)". A pre-construction study of the Hine's emerald dragonfly re-confirmed that the Selected Alternative as planned would not adversely effect the Hine's emerald dragonfly. The Constructing Agency will continue study of the Hine's emerald dragonfly both during and post construction.

Regarding the Spotted turtle (Clemmys guttata) and Blandings turtle (Emydoidea blandingi), a herpetologist will be employed to determine if the primary range of the spotted turtle and Blandings turtle is outside the construction limits before construction begins. If spotted turtles are found within the construction limits, then appropriate action would be taken based on the herpetologist's recommendations. In addition, a biologist, botanist, and ornithologist will be retained by the Constructing Agency to observe construction startup activities adjacent to and within local forest preserves. The scientists will visit the site periodically and report all findings directly to the Constructing Agency.

Section 6(f): Keepataw Forest Preserve was purchased using Land and Water Conservation Funds (LAWCON). In an August 9, 1995 letter it is stated that the Constructing Agency requires a permanent easement of approximately 5.0 hectares (12.4 acres) and a temporary easement of approximately 1.2 additional hectares (3.0 acres) in land located in the Keepataw Forest Preserve for use in connection with FAP Route 340. Suggested replacement lands for LAWCON properties required for the project have been identified in coordination with the Forest Preserve District of Will County (FPDWC). This property has been appraised at $14,830 per hectare ($6,000 per acre). As substitution for this property the

Constructing Agency will provide what has been commonly referred to as the "Lockport Prairie East" site. This property was appraised at $365,000 and is approximately 11.7 hectares (29 acres) in size. The National Park Service (NPS) approved this transfer subsequent to FHWA's approval of the FEIS and issuance of a ROD. The IDNR indicated that the NPS is in agreement that the transfer would still be valid and will be reaffirmed following FHWA's approval of the Final SEIS and issuance of a ROD. The Constructing Agency will coordinate the re-affirmation of the Lockport Prairie East property transfer with the IDNR, FPDWC and NPS.

Coordination with the FPDWC has continued during preparation of the Final SEIS. At a meeting on June 20, 2000, the FPDWC reaffirmed its desire to maintain the proposed LAWCON replacement land as described in the Draft SEIS. Intergovernmental agreements addressing LAWCON replacement are presented in the Final SEIS, Appendix A.

Revegetation: During the design phase, tree mitigation plans will be submitted to the FPDWC for comment. Tree mitigation will consist of two components: the planting of replacement seedlings on property owned and managed by the FPDWC, and the planting of non-seedling trees along the corridor or crossroads as appropriate. The planting of seedlings is intended to eliminate edge effects by filling in gaps between forested tracts of land. This reduction of forest edge is a measure to reduce cowbird nest parasitism. Tree replacement species will be similar to the species lost if appropriate environmental conditions still exist to support the species.

Landscaping design plans for tree replacement will be distributed to local park and forest preserve districts for review prior to initiating the bidding process. Tree replacement to mitigate actual tree losses may occur in some of the agricultural, forbland, and shrubland areas associated with the forested tracts crossed by the preferred highway alignment. Tree replacement would occur along the edges of the right-of-way where feasible following the establishment of the final drainage grades. Approximately 16,500 trees will be removed due to the construction of the Selected Alternative. Replacement ratios will be 1:1 for non-seedlings and 3:1 for seedlings. The Constructing Agency will use native grass seed mixtures on the backslopes of ditches and in some interchange infields.

Decreasing existing fragmentation at sites in the area will mitigate fragmentation of forests to be caused by the project. This will be done by reforesting appropriate non-forested tracts of land in the area that are adjacent to or between existing (relatively) large forest tracts, so as to increase the total acreage of continuous forest and thus the acreage of forest interior habitat. The majority of the tree mitigation effort will involve the reforestation effort. The number of acres to be reforested will depend on the density of the plantings. Reforestation will occur on forest preserve property. The Constructing Agency will coordinate this effort with the FPDWC.

Protection and care will be provided for all existing trees and shrubs to remain within the project limits as referenced in IDOT's Special Provision for Protection and Care of Trees and Shrubs, which will be included in the job specifications. Existing trees and shrubs which are to remain will also be delineated on the plans as will those which are to be removed. Finally, native grass seed mixtures will be used as appropriate on the back slopes of ditches and the infields of interchanges. Mowing restrictions applying to the backslopes of ditches will be implemented adjacent to forested areas as a measure to minimize cowbird parasite activities.

Cultural Resources: A Memorandum of Agreement (MOA) signed in October 3, 1995 outlined the procedures for ISTHA to follow to address the impacts to the Lustron House. Avoidance of this architecturally significant structure was not feasible and prudent. In consultation with the Illinois State Historic Preservation Office (ISHPO), a mitigation plan to mitigate use of this property was formulated. In accordance with this plan, the Lustron House was to be recorded according to Historic American Building Survey (HABS) standards. The structure was marketed through advertisements with a plan to

move the Lustron House to a setting deemed suitable by the SHPO. A MOA (1996 FEIS, Appendix B) was drafted in an effort to formalize this mitigation plan and fulfill all requirements pursuant to 36 C.F.R. Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f). The Lustron House structure was inadvertently taken down prior to its HABS recording. Therefore, this stipulation of the MOA could not be satisfied. A meeting between ISTHA and the Illinois Historic Preservation Agency (IHPA) was conducted on August 17, 2000 to discuss the status of coordination for the Lustron House. The meeting focused on an October 7, 1998 letter from IHPA to ISTHA in which IHPA identified three options for ISTHA to satisfy Stipulation 3 of the MOA. ISTHA accepted Option 1: development of a good resource file for distribution (brochure) which could be distributed to Lustron owners or the general public to promote better awareness of this historic property type. At an August 17, 2000 meeting, FHWA concurred that if ISTHA proceeds with the above stated Option 1, Stipulation 3 of the MOA would be adequately addressed and the Section 106 process would be complete. ISTHA confirmed its Draft SEIS, Appendix D commitment to implementing Option 1 in a letter to IHPA dated August 28, 2000. ISTHA submitted a draft brochure to IHPA for review and conditional approval on October 10, 2001. The Draft SEIS, Appendix D and Final SEIS, Appendix A presents copies of the referenced letters, minutes of the referenced meetings, and applicable memoranda of agreement.

In addition, a Historic Marker commemorating the invention of the steel-tipped plow by John Lane was located on the northeast corner of 163rd Street and Gougar Road. This Historic Marker was relocated on the same property.

Air Quality: The Project Corridor is located within the Chicago metropolitan area. This region is classified as a "Severe" ozone non-attainment area of the National Ambient Air Quality Standard (NAAQS). The non-attainment area includes Cook, DuPage, Kane, Lake, McHenry, and Will counties, as well as the townships of Aux Sable and Goose Lake in Grundy County and Oswego Township in Kendall County.

The staff at the Chicago Area Transportation Study (CATS) performed an emission analysis for the Selected Alternative utilizing the same process that is used for the TIP and RTP air quality conformity analysis. The analysis found the impact on emissions from the Selected Alternative to be negligible for both VOC and NO_x. As such, CATS found the impact of the Selected Alternative on ozone levels in the northeastern Illinois area to be insignificant and no additional urban airshed analysis was determined to be necessary. The IEPA concurred with this finding in a letter dated December 6, 2000. A copy of this letter is presented in Draft SEIS, Appendix C. Therefore, further analysis with respect to ozone is not warranted or appropriate.

Noise: To minimize noise impacts from normal operations to sensitive areas, noise walls will be constructed where determined to be economically reasonable and feasible. These locations are identified in the Draft SEIS, Section 4.13.

Also, during construction of the Selected Alternative it will be the responsibility of all contractors to determine and comply with the limitations imposed by local ordinances with respect to construction operations, equipment noise and working time restrictions.

Pedestrian and Bike Trails: Ongoing coordination and planning is proceeding to accommodate a potential bikeway along the corridor of the Selected Alternative. Upon completion of the roadway project, the haul road and low level bridge across the Des Plaines River installed by the Constructing Agency will be given to the FPDWC with the Constructing Agency only retaining a right to use the bridge for inspection and maintenance purposes. The Constructing Agency will inspect the low level bridge and repair it as necessary after construction of the Selected Alternative to insure that it is in good working condition prior to transferring ownership to the FPDWC. At the request of the FPDWC, a box culvert will be constructed immediately north of Spring Creek for passage of horses, bicyclists or

pedestrians. A second box culvert will also be constructed south of Spring Creek for passage of bicyclists and pedestrians. Prior to construction of these structures, an agreement will be prepared that identifies the appropriate agency to assume jurisdiction of these structures including ownership, operation, maintenance and security.

Secondary and Cumulative Impacts: The Study Area is undergoing rapid population and employment growth. This growth is projected to continue to year 2020. County and municipal governments within the Project Corridor have planned for this growth and have adopted land use plans that designate over 75 percent of the Project Corridor for development. The remaining lands are protected park and preservation lands. The local governments have formed the Heritage Corridor Planning Council (HCPC) to coordinate planning within the Project Corridor to aid in managing secondary impacts of development.

The Selected Alternative combined with other federal actions and local economic development efforts would influence growth and development within the Project Corridor. However, the portion of future growth attributable to the Selected Alternative is low, amounting to 0.6 percent of population and 0.1 percent of employment growth within the Study Area (Draft SEIS, Appendix A - The Socio-Economic, Land Use and Accessibility Impacts of the Proposed I-355 Extension). The influence of the Selected Alternative on growth within the study area would be to consolidate growth closer to existing urban development and at higher densities along the alignment than would have occurred had the alternative not been selected. The key mechanisms providing authority for environmental resource protection within the Project Corridor include those listed in Table 2.

Permits: Construction of the Selected Alternative will involve wetlands, floodways, and waterways and will require both Federal and State permits. A joint application to the U.S. Army Corps of Engineers (USACE), Illinois Department of Natural Resources – Office of Water Resources (IDNR/OWR), and Illinois Environmental Protection Agency (IEPA) will be made during the design phase. The USACE issues Section 404 permits which fulfill their regulatory function over the "waters of the United States" which includes wetlands. IDNR/OWR issues permits for construction in floodways and for crossings of streams with more than 2.59 square kilometers (one square mile) of drainage area. The crossings include: the main channel of the Des Plaines River, the Chicago Sanitary and Ship Canal, the Illinois and Michigan Canal, the main channel of Long Run, the main channel of Fiddyment Creek, the main channel of Fraction Run, the south tributary of Fraction Run, the main channel of Spring Creek, and the tributary of Hickory Creek. IEPA provides water quality certification pursuant to Section 401 of the Clean Water Act. This certification is mandatory for all projects requiring a Section 404 Permit. The USACE permits construction within navigable waterways through Section 10 of the Clean Water Act. Section 10 permits will be obtained for work within and over the Des Plaines River and for crossing over the Chicago Sanitary and Ship Canal. The project will result in the disturbance of one or more acres of total land area. Accordingly, it is subject to the requirement for a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from construction sites in accordance with Section 402(p) of the Federal Clean Water Act as amended. Permit coverage for the project will be obtained either under the IEPA General Permit for Stormwater Discharges from Construction Site Activities (NPDES Permit No. ILR100000), or under an individual NPDES permit. Bridges across navigable waters of the United States are regulated by the U.S. Coast Guard under Section 9 of the Rivers and Harbors Act of 1899. A permit will be obtained from the U.S. Coast Guard for the crossing of the Chicago Sanitary and Ship Canal.

Construction: Construction measures will be implemented to minimize harm to water quality, sensitive resources, and threatened and endangered species. General construction mitigation measures will include erosion control procedures in conformance with the standard specifications of the Constructing Agency. This will include preparation of an erosion control plan that will identify erosion control measures to be implemented. These measures will include coordinating the grading to minimize the amount of exposed soil, stabilizing denuded areas and utilizing temporary erosion control measures with the specific objective of

retaining all silt on site to prevent silt from entering wetlands and streams. There will be a pay item in the construction contract for exploratory trenches, which will allow a contractor to locate drainage field tiles prior to major earthwork. "No Intrusion" fences will be erected to restrict construction activities between the Chicago Sanitary and Ship Canal and Bluff Road. A "No Intrusion" fence will also be used to prevent the contractor from operating outside the required right-of-way to protect the Black Partridge Nature Preserve. Similar fences will be used to prevent disturbance to other environmentally sensitive areas. FPDWC and Constructing Agency staff will work together to determine the placement of the fences.

VI. COMMENTS ON THE FINAL SEIS

The Notice of Availability (NOA) of the Final SEIS was published in the *Federal Register* on September 21, 2001. The notice specified October 15, 2001 as the end of the wait period, 24 days after the NOA was published in the *Federal Register*. FHWA submitted the original request for the NOA to appear in the September 14, 2001 *Federal Register* to allow for a full 30-day wait period. IDOT also distributed copies of the Final SEIS to all agency and public/private interests in advance of the intended September 14, 2001 notice. Due to the events that happened on September 11, 2001, the USEPA was unable to publish the NOA in the *Federal Register* until September 21, 2001. The USEPA stated in the notice that all comment and wait periods for EIS's originally submitted for filing in the September 14, 2001 publication were calculated from September 14, 2001.

Comments submitted are addressed below. Federal, State and Local Resource Agency comments are presented first (addressed individually) followed by local government and general public comments (categorized and addressed by category). Resource Agency comments were submitted by the USEPA, Will County Land Use Department, Forest Preserve District of Will County, and the Illinois Department of Natural Resources (IDNR) in response to circulation of the Final SEIS. Local Government and general public comments consisted of 25 letters.

U.S. Environmental Protection Agency (USEPA) Comments: The USEPA stated in their comment letter submitted after publication of the Draft SEIS that it concurred with the Purpose and Need criteria, that the need for the Build Alternative has been demonstrated, and that a sufficient range of build alternatives had been identified. The USEPA also commented that information presented in the Draft SEIS indicated that the Lemont Bypass Alternative may have met Purpose and Need and commented that the Draft SEIS should be supplemented with an evaluation of environmental impacts for the Lemont Bypass Alternative. After reviewing the Final SEIS, USEPA stated that based upon all four performance criteria, the Tollroad/Freeway Alternative appeared to perform substantially better than the Lemont Bypass Alternative and deferred to the conclusion of FHWA and IDOT that the Lemont Bypass Alternative was not viable enough across all four performance criteria to carry forward for full NEPA evaluation in the Draft and Final SEIS. The USEPA stated that concerns remain about the indirect effects of the project and the cumulative effects of development. The USEPA commented that, while the Selected Alternative will only act to promote less than one percent of the growth projected for the study area compared to the No-Action (Baseline) Alternative, growth projected for the No-Action (Baseline) Alternative is substantial. USEPA requested that information regarding local growth management and resource protection measures taken by the Heritage Corridor Planning Council and the respective municipalities be disclosed to the public.

Response to Comments: As pressure increases for land to be developed in the Project Corridor, the potential also rises for impacts to environmental features to occur. Historically, regulations and standards have been adopted by local municipalities and counties to assist in the protection and preservation of those natural resources. Table 1 includes a representative sampling of current ordinances or codes that have been established which provide the local governing agencies with methods of controlling land development. Note that the agencies listed in Table 1 were selected

as representative of those governmental agencies located in the Project Corridor. There are numerous additional similar control measures for other government agencies in the area.

Table 1
Representative Mechanisms for Controlling Development

Resource	Examples of Environmentally Related Controls in the Project Corridor	Ordinance or Code Number
City of Lockport		
The Development Code of the City of Lockport	**Land or Cash Contributions for Public Parks** – As a condition of approval of a final plat, each developer or subdivider will be required to dedicate land for park and recreational purposes to serve the immediate and future needs of the residents of the development, or cash contribution in lieu of actual land dedication, or combination of both, at the option of the City.	Chapter 153.30, Section 020
	Soil Erosion and Sedimentation Control – The purpose of this control is to safeguard persons, protect property, prevent damage to the environment, and promote the public welfare by guiding, regulating and controlling the design, construction, use and maintenance of any development or other activity which disturbs or breaks the topsoil and other conditions allowing the movement of sedimentation with the City.	Chapter 153.50, Section 020
	Drainage and Storm Water Management – This chapter requires each development, depending on size, to submit a drainage plan, in accordance with IDOT standards and requirements listed in the ordinance.	Chapter 153.50, Sections 040-060
	Bikepaths – This chapter requires bikepaths to be constructed in locations required by the Official Plan and shall comply with the requirements listed in the chapter.	Chapter 153.50, Section 090
	Landscaping – All subdivisions, whether public or private, shall provide for the landscaping of parkways, parks, open space areas, areas to be dedicated to the public, and other areas in accordance with this Chapter and other City ordinance.	Chapter 153.50, Section 120
	Development Activity in Adjacent Lowlands – This chapter's intent is to promote the health, safety and general welfare of the present and future residents of the City and downstream drainage areas by providing for the protection, preservation, proper maintenance, and use of Lockport watercourses, lakes, ponds, floodplains, and wetland areas.	Chapter 153.60, Section 040
	Hydrologic Controls and Drainage Control Plan Required – The drainage control plan shall identify appropriate measures, such as recharge basins and detention basins, which will limit the quantitative and qualitative effects of stormwater runoff to pre-development conditions.	Chapter 153.60, Section 050
	Natural Vegetation Buffer Strip Required – To minimize erosion, to stabilize the stream bank, protect water quality, maintain water temperature at natural levels, preserve fish and wildlife habitat, to screen man-made structures, and also to preserve aesthetic values of the natural watercourse and wetland areas.	Chapter 153.60, Section 060
	Vegetation and Revegetation Landscape Plan Required – A plan should be submitted with preliminary and final development plans for activity within Lowland Conservatory area and should describe existing vegetative cover and areas where the vegetation will be removed as part of proposed construction, as well as, a plan describing the proposed revegetation of disturbed areas specifying what material to be used.	Chapter 153.60, Section 070
	Watercourse Relocation and Minor Modifications – Generally this is not permitted, however under certain circumstances may be permitted where certain problems can be mitigated by relocation and/or minor modification.	Chapter 153.60, Section 080
	Conditions and Restrictions for Permitting Stream Modification/Relocation – This section lists the specifications, conditions and restrictions that must be followed to modify watercourses.	Chapter 153.60, Section 090
	Required Content of Stream Modification/Relocation Plan – This section lists criteria to be included in a watercourse modification/relocation plan that must be submitted in order to be considered for a watercourse modification.	Chapter 153.60, Section 100
	Criteria for Permitting Armoring of Channels and Banks – Armoring in the form of bulkheads, riprap or other materials or devices is not permitted except in the accordance of this section.	Chapter 153.60, Section 110

Table 1
Representative Mechanisms for Controlling Development

Resource	Examples of Environmentally Related Controls in the Project Corridor	Ordinance or Code Number
	Impact Assessment – This section requires that a report must be prepared by a qualified professional and approved by the City, which assesses the potential impacts of proposed development on a lake, stream, or wetland and associated environmentally sensitive areas, including loss of flood storage potential, loss of habitat, changes in species diversity and quantity, impacts on water quality, increases in human intrusion and impacts on associated streams, lakes, ponds, wetland or downstream areas.	Chapter 153.60, Section 130
Village of New Lenox		
Village Code	**Floodplain Management and Damage Prevention** – This chapter details specific standards that must be followed for review and approval of subdivisions and other development; and is applicable to all floodplain areas.	Chapter 46, Article II, Code 1981
	Administration and Enforcement of Floodplain Management and Damage Prevention – The village engineer is responsible for the general administration and enforcement of this code. The village engineer's responsibility is detailed in this division.	Chapter 46, Article II, Division 2
	Use of Flood Fringe Areas – This division details situations and requirements in which development in and/or filling of the flood fringe will be permitted as well as lists requirements for developments located within the flood fringe.	Chapter 46, Article II, Division 3
	Use of Identified Floodways – This division applies to proposed development, redevelopment, site modification or building modification within a regulatory floodway. Only those structures and uses will be permitted which meet the criteria in this division. This division minimizes the alteration to floodways.	Chapter 46, Article II, Division 4
	Use of Special Flood Hazard Areas Where Floodways are not Identified – This division requires that the cumulative effect of the proposed development in special flood hazard areas where no floodways are identified be evaluated and that the areas meet the criteria detailed in this division.	Chapter 46, Article II, Division 5
	Erosion Control – This article provides the minimum standards to safeguard persons, to protect property, to control the despoliation of the environment, and to protect public welfare by regulating and controlling developments or other activities which disturb or break the topsoil or otherwise result in the movement of earth or land situated in the village.	Chapter 38, Article II
	Stormwater Runoff Control – This ordinance regulates stormwater runoff quality and development activities, which could result in excess runoff to prevent adverse impacts.	Chapter 38, Article III
	Recommendation for Stream and Wetland Protection – This ordinance, the procedures, standards and requirements for protection detailed in this article, apply to all lots within wetlands and streams.	Chapter 38, Article IV
	Vegetation, Grading and Seeding Rights-of-Way and Other Public Use Areas – All improved areas within the dedicated street area or other public use areas shall be graded and seeded in an approved manner according to this ordinance.	Chapter 98, Article I, Ord. No. 1114
	Vegetation, Parkway Trees – All single-family detached and duplex residential subdivisions for which a final plat is applied for shall be required to have trees planted in the parkway in compliance with regulations of this ordinance.	Chapter 98, Article I, Ord. No. 1114
	Landscaping Requirements – This article is established to create uniform landscape, screening and tree preservation standards for developments.	Chapter 106, Article IX
	Noise Standards – This division sets noise level regulations for various development activities.	Chapter 106, Article VII, Division 5

Table 1
Representative Mechanisms for Controlling Development

Resource	Examples of Environmentally Related Controls in the Project Corridor	Ordinance or Code Number
Village of Lemont		
Village of Lemont Zoning Ordinances (02599 - Performance Standards, Section XI	**Noise Standards** – This section sets the required noise performance levels for various development activities. No operation or activity shall cause or create noise in excess of the sound levels detailed in this section.	B, page 79
	Earthborne Vibration Standards – This section sets the required vibration performance levels for various development activities. No operation or activity shall cause or create earthborne vibrations in excess of the displacement values listed in this section.	C, page 80
	Smoke and Particulate Matter Standards – This section states that all operations, activities and uses shall be conducted so as to comply with the performance standards governing fire and explosion hazards.	D, page 81
	Toxic Matter Standards – This section sets the levels of emitted toxic matter that operations and activities should not exceed.	E, page 83
	Odorous Matter Standards – This section states that no operation or activity shall cause or create the emission of odorous matter or vapor in amounts or quantities that exceed the levels prescribed for the zoning district in which the operation or activity is located.	F, page 83
Will County		
Water Resource Ordinances	**Flood Damage Prevention** – This ordinance works to maintain the County's eligibility in the National Flood Insurance Program; to minimize potential losses due to periodic flooding; and to preserve and enhance the quality of surface waters, conserve economic and natural values and provide for the wise utilization of water and related land resources.	Ordinance 98-22 (Zoning Ordinance Section 9)
	Soil Erosion and Sedimentation Control – The intent of this ordinance is to limit, as closely as possible, the delivery of sediment from sites affected by land disturbing activities to that which would have occurred if the land had been left in its natural undisturbed state.	Ordinance 98-23 (Zoning Ordinance Chapter 9)
	Stormwater Drainage and Detention – This ordinance regulates stormwater runoff quality and development activities, which could result in excess runoff to prevent adverse impacts.	Ordinance 98-24
	Stream and Wetland Protection – This ordinance provides for the protection, preservation, proper maintenance, and use of Will County watercourses, lakes, ponds, floodplain, and wetland areas.	Ordinance 98-25

Note: The resources used to create this table are the current editions in use as of December 2001.

Will County Land Use Department Comments: In their comment letter dated October 15, 2001, the Will County Land Use Department stated Will County supports construction of the Selected Alternative in the most expeditious manner. However, the Department commented that greater explanation was needed as to the standards for considering noise barriers. The Department commented that noise impacts for the Selected Alternative should be evaluated by combining the ambient noise levels with the added noise generated by the Selected Alternative. It was also stated as the Department's understanding that IDOT and ISTHA monitor road noise, and that Will County expects regular monitoring of noise levels.

Response to Comments: The Federal Highway Administration (FHWA) policies and procedures, 23 C.F.R 772, served as the procedural guidelines in the analysis. Incorporated into the regulations are Noise Abatement Criteria (NAC), which are based on the type of land use and activities performed at the respective sites. In implementing the FHWA 23 C.F.R, Part 772 regulations, the IDOT developed the current Noise Analysis Policy dated April 3, 2000. This

policy is Section 26-6 in the IDOT Bureau of Design and Environment Manual and defines traffic noise impacts to occur under the following circumstances:

1. Design-year traffic noise levels are within 1 dB(A) of or exceed the NAC.
2. Design-year traffic noise levels are greater than 14 dB(A) above existing traffic-generated noise levels.

Ambient noise monitoring was conducted within the Project Corridor to determine if design-year traffic noise levels would be greater than 14 dB(A) above existing traffic-generated noise levels (Criteria 2). The Draft and Final SEIS, Sections 2.14 and 4.13 discuss in detail the regulations, methods, and results of the noise impact analysis conducted for the project.

Although field noise measurements are not taken for every project, they are one way of examining potentially impacted sensitive receptors. Measurements are not necessary where it is clear that the existing levels are predominantly from an existing highway to be improved. In this case, existing levels can be satisfactorily estimated using the approved noise prediction methods. In the case of the Selected Alternative, the highway does not exist. Therefore, existing levels could not be satisfactorily estimated using the approved noise prediction methods and ambient monitoring was warranted.

An explanation of the noise level scale is provided to address the issue of evaluating noise impacts of the Selected Alternative by combining the ambient noise levels with the added noise generated by the Selected Alternative. The quantity normally measured when dealing with acoustic noise is sound pressure level measured in decibels. Because the decibel scale is logarithmic, the sum of two separate noise sources does not equal each part. The doubling of acoustic power yields an increase of only three decibels. This effect is also true of traffic noise, in that the number of vehicles on a traveled way would need to double to produce an increase of three decibels.

The noise analysis for the Selected Alternative in the vicinity of Illinois Route 7 depicts the concept of "masking". If a listener is simultaneously exposed to two different sound sources, it is a general experience that when one of the sources is very loud (existing traffic noise from Illinois Route 7), the second sound source (projected traffic noise from the proposed Selected Alternative) is "drowned out" and cannot be heard. The louder sound source is said to mask the other sound. The masking effect is explained as a shift in the hearing threshold caused by the louder sound and depends upon the frequency difference between the two sounds. In the case described here, the frequencies would be nearly identical (traffic noise), and thus the masking would be nearly complete.

As for on-going noise monitoring, IDOT does not implement a program to conduct on-going monitoring of highway noise. Per FHWA/IDOT policies and procedures, IDOT evaluates noise impacts of highway improvements to determine if the improvements warrant mitigation. As for the Selected Alternative, the Constructing Agency will re-evaluate the need for noise walls along the alignment during the design phase prior to construction letting.

Forest Preserve District of Will County (FPDWC) Comments: In their comment letter dated October 5, 2001, the FPDWC stated that concerns remain regarding the construction impacts of the Selected Alternative on surface water within the Project Corridor. The FPDWC commented that IDOT did not indicate in the Final SEIS if a surface water monitoring system and schedule will be established. Further, the FPDWC commented the Final SEIS is not clear as to actions to be taken by IDOT if waters do not meet general use water quality standards. The FPDWC also requested clarification as to what actions IDOT will take to monitor noise levels within Keepataw Forest Preserve and if IDOT will agree to take some type of agreed upon action to mitigate noise impacts if

future levels exceed Noise Abatement Criteria levels. The FPDWC also acknowledged its understanding that IDOT does not intend to transfer ownership of the buffer parcel along Lemont Woods and Black Partridge Preserves and concurred that as long as the parcel is in public ownership and protected through an appropriate management agreement, IDOT has satisfied the FPDWC's concerns.

Response to Comments: The Constructing Agency's standard specifications regulating sediment and erosion control will be followed during construction. Measures provided will include preparation of an erosion control and stormwater pollution prevention plan. The plan will specify temporary runoff diversions with sedimentation controls to be used to capture sediment laden runoff during construction. In addition, water quality monitoring of Black Partridge Creek will continue with on-going coordination with the Forest Preserve Districts of Cook, DuPage and Will Counties (refer to Draft SEIS, Section 6.5.2). If it is determined that general use water quality standards are not being met due to contaminants resulting from the Selected Alternative, the Constructing Agency will coordinate with the Illinois Environmental Protection Agency. Regarding noise, as referenced in the 1996 FEIS, traffic noise was modeled in Keepataw and predicted 2010 noise levels did not reach Noise Abatement Criteria levels. The analysis conformed to FHWA policies and procedures and IDOT Noise Analysis Policy. As for on-going noise monitoring, IDOT does not implement a program to conduct on-going monitoring of highway noise. Per FHWA/IDOT policies and procedures, IDOT evaluates noise impacts of highway improvements to determine if the improvements warrant mitigation. As for the Selected Alternative, the Constructing Agency will re-evaluate the need for noise walls along the alignment prior to construction letting.

Illinois Department of Natural Resources (IDNR) Comments: The IDNR, Office of Mines and Minerals stated in a letter dated September 28, 2001 that the Office had no comments regarding this project.

Local Government and General Public Comments: Letters and resolutions in support of the project were received from the Village of Bolingbrook, City of Joliet, Village of Lemont, Village of Mokena, Village of New Lenox, Village of Woodridge, the South Suburban Mayors and Mangers Association, US Representative Jerry Weller, the Will County Board of Commissioners and nine letters from private businesses.

Letters opposed to the project were received from a number of interest groups, including The Environmental Law and Policy Center (ELPC), the Business and Professional People for the Public Interest (BPI), Openlands Project, and private citizens. ELPC/BPI comments were accompanied by reports prepared by New Alternatives, Inc., and Resource Systems Group, Inc. The major comments addressed the Purpose and Need, range of alternatives considered, the evaluation of alternatives, and the public involvement process. Most of the issues raised in these comments were also raised after circulation of the Draft SEIS and, as such, were responded to in the Final SEIS. The major points made in these comments are summarized below.

Comments on Purpose and Need – comments identified the following issues: the Purpose and Need was considered too narrow because it contained language interpreted to limit alternatives; the justification for selecting the Regional Transportation Plan objectives comprising the Purpose and Need was considered inadequate; the Selected Alternative was considered not to be consistent with the NIPC growth strategy; and, new criteria considering regional growth policy was thought to have been added following publication of the Draft SEIS.

Response to Comments: The Purpose and Need is sufficiently broad, and is based upon a sound technical analysis of transportation needs and relevant criteria from the 2020 Regional Transportation Plan (RTP). The transportation needs were properly defined, and the resulting

Purpose and Need was formulated in a way that supported a broad range of alternatives. The Alternatives considered in the Draft and Final SEIS included transit, transportation system management, three roadway Build Alternatives and a No-Action (Baseline) Alternative. The roadway Build Alternatives represented a range of facilities, types and alignments and were developed to cover a range of build scenarios consisting of improvements to local arterials, a tollroad/freeway, and a combined tollroad/freeway and principal arterial. All roadway Build Alternatives included transit and transportation system management and a group of other local roadway improvements (No-Action –(Baseline) Alternative).

Regarding justification for selecting the Regional Transportation Plan objectives comprising the Purpose and Need, the RTP contains 39 criteria, each having a varying degree of relevance. The process to identify the four Purpose and Need criteria was based upon a detailed review of the goals and objectives of the 2020 RTP. Each goal and objective was carefully reviewed to determine its relevance to the identified needs[1].

The elements of the Purpose and Need regarding consistency with local planning are not circular. The tremendous growth in the study area, which has already surpassed the totals predicted for the year 2010, has occurred in the absence of the I-355 extension. As documented in the analysis performed by the Al Chalabi Group (Draft SEIS, Appendix A - The Socio-Economic, Land Use and Accessibility Impacts of the Proposed I-355 Extension), the I-355 proposal will chiefly influence the density of growth in portions of the study area. This technical analysis is consistent with the trends over the past decade and the reviews performed by the professional staff from each of the municipalities and Will County. With regard to the letter submitted from Homer Township, it should be noted that township governments have no land use planning authority. Among the governmental agencies that do have land use planning authority, there was 100 percent support for the I-355 proposal.

It was commented that the Selected Alternative fails to fulfill the environmental goals of the 2020 RTP. As documented in Table 3-3 of the Draft SEIS, all alternatives create impacts to sensitive resources. The Selected Alternative was developed in an environmentally responsible way that avoids, minimizes and mitigates impacts while still addressing the transportation needs of the region. The project is consistent with the environmental goals and objectives of the RTP.

Other comments suggested that the Purpose and Need criteria changed between the Draft and Final SEIS. These comments focused on additional discussion that was added to the Purpose and Need in the Final SEIS addressing the Northeastern Illinois Regional Planning Commission (NIPC) regional growth strategy. This additional text was added for clarity. The need criteria did not change between publication of the Draft and Final SEIS. Both the Draft and Final SEIS addressed the regional development goals of the NIPC. The Draft SEIS Purpose and Need stated that " Developing this area [Project Corridor] would be consistent with NIPC regional development goals" and growth within the project corridor "is consistent with regional, county and local plans". The Draft SEIS also included the NIPC regional growth strategy as an overall measure of plan consistency in the Alternatives Analysis. Discussion of the regional growth policy review presented in both the Draft and Final SEIS, Alternatives Analysis was added to the Purpose and Need of the Final SEIS for clarity and did not result in a change of the Purpose and Need criteria.

[1] FAP Route 340 SFEIS Purpose and Need 2020 RTP Goals and Objectives Technical Memorandum, July 2001

Comments on Alternatives – comments identified the following issues. The range of Alternatives was considered to be too narrow and excluded the Action Plan proposed by ELPC/BPI. Also, the performance analysis was considered not to be comprehensive enough because the plan consistency criteria was identified as circular due to a reliance on existing land use plans that may have considered construction of the Selected Alternative. Finally, the analysis of environmental effects was considered narrow, performed in a manner that underestimated direct impacts and did not consider secondary impacts.

Response to Comments: Concerning the range of Alternatives, as stated in the Final SEIS response to comments, the Alternatives analyzed in the Draft SEIS cover a 324 square kilometer (125 square mile) study area, and were multi-modal, with each including a network of roadway improvements, transit upgrades, and TSM/TDM strategies. The Action Plan proposed by ELPC/BPI was reviewed prior to the release of the Draft SEIS, and was found as clearly not an alternative to the Tollroad/Freeway proposal. As discussed in the response letter to ELPC/BPI dated December 22, 2000, the majority of the projects listed in the Action Plan proposed by ELPC/BPI are either already included in the No-Action (Baseline) Alternative or do not provide measurable regional travel benefits. The Action Plan proposed by ELPC/BPI represented an updated version of the No-Action (Baseline) Alternative, which would be constructed regardless of the I-355 South Extension. This point was confirmed by ELPC/BPI analysis that showed the travel benefits of the Action Plan proposed by ELPC/BPI to be essentially the same as the No-Action (Baseline) Alternative, and which show the Action Plan proposed by ELPC/BPI to generally perform worse than the Tollroad/Freeway Alternative. This was especially clear for trips that would likely be utilizing the I-355 South Extension.

Other comments on the Final SEIS suggested that the Lemont Bypass Alternative and Enhanced Arterial Alternative were "under designed", and indicate that the Action Plan proposed by ELPC/BPI is significantly different than the No-Action (Baseline) Alternative and the Build Alternatives in the Final SEIS. The range of alternatives evaluated in the Draft and Final SEIS are thorough and sound, as evidenced by their strong benefits to local travel and travel to regional job centers. Again, as stated above, the Action Plan proposed by ELPC/BPI is essentially an updated version of the No-Action (Baseline) Alternative.

Despite detailed responses in the Final SEIS, the same issues were raised regarding IDOT's travel demand model. IDOT utilizes state of the practice, Federally accepted, models in performing their regional air quality conformity analysis as well as the development of their Regional Transportation Plan. These models have been calibrated and validated, and have been in use for many years. With regard to travel time savings, modeling professionals accept that different processes will produce different results. The more important issue is the relative comparison of the Alternatives, which shows the I-355 South Extension to be superior. Results for the Action Plan suggested by ELPC/BPI show primarily single digit percentage changes in performance when compared to the No-Action (Baseline) Alternative. Consequently, the Action Plan proposed by ELPC/BPI can hardly be characterized as a "solution" or an alternative to the Tollroad/Freeway proposal, given the expected 150 percent worsening of local travel times over the next 20 years. Again, a majority of the Action Plan improvements will be constructed regardless of the I-355 South Extension proposal.

Concerning the plan consistency criteria being circular, professional planning staff of the planning departments of the communities within the Project Corridor reviewed the Alternatives for consistency with the broad goals and objectives of their applicable comprehensive plans. Planning goals and objectives articulated in each community's plan represent the expression of each community's vision and statement of intent. Goals are broad value statements and represent end desires of the community in the areas of growth, appearance, housing, economic

development, community facilities, open space and transportation. Objectives represent a means by which goals can be achieved. Land use maps are a synthesis of these goals and objectives and represent a desired means to achieve the goals and objectives. However, land use maps are living documents and are commonly revised based on changing conditions, such as the construction or lack of construction of a road. Moreover, while land use maps may change, the overriding goals and objectives articulated in each community's plan typically remain constant to ensure land use map changes are consistent with the respective communities' vision and intent.

The plan consistency review evaluated each Alternative for consistency with each jurisdiction's goals and objectives. Professional planning staff of each municipality within the Project Corridor and Will County conducted the plan consistency review to adopted land use plans. Alternatives reviewed consisted of the No-Action (Baseline) Alternative and the Build Alternatives presented in the Draft and Final SEIS. The professional planning staff ranked the Tollroad/Freeway Alternative as most consistent with their jurisdiction's goals and objectives as articulated in their respective land use or comprehensive plan.

It was commented that the Final SEIS was incorrect in stating that 100 percent of the Project Corridor "local governments" supported the Selected Alternative. A letter from Homer Township that did not support the Selected Alternative was referenced. Homer Township is a township government and therefore has no land use planning authority within the Project Corridor. Land use within Homer Township is regulated by the Will County Land Resource Management Plan. The Selected Alternative was ranked as most consistent with the goals and objectives of the adopted Will County Land Resource Management Plan by Will County planning staff. Likewise, the Selected Alternative was ranked as the Alternative most consistent with the goals and objectives of adopted municipal land use plans by 100 percent of the municipal governments within the Project Corridor.

While Homer Township was not included in the above plan consistency review due to its lack of land use planning authority, the opinions of Homer and five other township governments were included and given full consideration in an elected officials survey. The survey achieved a 100 percent response rate and asked which Alternative would best aid in achieving land use and transportation goals of their jurisdiction. The survey found 90 percent selected the Tollroad/Freeway Alternative, 5 percent selected the Enhanced Arterial Alternative, 5 percent selected the Mass Transit Alternative, and 0 percent selected the Lemont Bypass Alternative. The survey methods, survey form, governments surveyed and detailed survey results were presented in Draft SEIS, Appendix B and Table 3.4.2 in Section 3.4.2.

As for the analysis of comparative environmental effects across the Alternatives, this review was conducted in response to comments submitted by the USEPA after reviewing the Draft SEIS. The analysis was integrated into the plan consistency performance criteria because natural resource protection is a goal of the municipal and county plans for those jurisdictions within the Project Corridor. The evaluation was a GIS based, macro scale analysis that is an accepted standard and regular practice for reviewing environmental effects at the planning level. The environmental analysis was at the same level of detail for each alternative and considered the primary environmental effects of the Proposed Action incorporated into the Chapter 4, Environmental Consequences review of the Tollroad/Freeway Alternative. The alternatives were not changed between the Draft and Final SEIS. The Right-Of-Way (ROW) widths defined for each Alternative in the comparative review of environmental effects analysis reflects reasonable ROW widths for the proposed facilities and are consistently applied to the roadway type incorporated into each Alternative. The ROW widths presented in the Draft SEIS, Section 3.2, Alternatives Defined, were identified as minimum ROW widths for each facility. The analysis found no substantive difference in environmental effects between the Build Alternatives.

Detailed modeling and analyses necessary to address air quality and groundwater impacts was beyond the scope of a macro-scale review. However, these analyses were conducted for the Selected Alternative. These analyses determined that the Selected Alternative would not significantly impact these resources. Secondary and cumulative impacts to resources were not part of the analysis of environmental effects. However, county and municipal governments within the Project Corridor have planned for over 75 percent of the Project Corridor to be developed. The remaining lands are protected park and preservation lands.

The type and distribution of secondary growth will be influenced by the Proposed Action. The secondary growth effects of the Selected Alternative were addressed in detail in the Draft and Final SEIS. Draft SEIS, Appendix A presents an extensive technical report addressing this issue titled the Socio-Economic, Land Use and Accessibility Impacts of the Proposed I-355 Extension. The study found the Tollroad/Freeway Alternative will provide the most focus for which to influence growth by providing a single route accommodating high volumes of traffic along one corridor, and by providing limited and controlled access at specific interchanges. The Lemont Bypass Alternative would also focus high volumes of traffic along one corridor, but would provide less focus providing limited access control along the principle arterial portion, which comprises two-thirds of the alignment. The Enhanced Arterial Alternative, which improves existing roadways, would provide the least focus for development and promote more dispersed development patterns because it would increase traffic along a number of routes located throughout the Project Corridor.

In terms of secondary impacts, the Project Corridor is developing at a rapid pace. Between 1990 and 2000 the population of Will County increased 41 percent, ranking it the second fastest growing county in the State of Illinois. Demographic analysis presented in the Draft and Final SEIS found the Selected Alternative to contribute less than 0.6 percent of population and 0.1 percent of employment growth making the Selected Alternative inconsequential in stimulating this growth and its resultant secondary impacts. The SEIS did, however, find the Tollroad/Freeway Alternative to provide the greatest focus for development, and as such, would reinforce the growth management activities of local government and therefore, best reduce regional secondary growth impacts compared to the other alternatives. In terms of secondary impacts to biological resources associated with operation of each facility, the Tollroad/Freeway Alternative would focus traffic volumes along a single route, thus reducing traffic impacts elsewhere within the Project Corridor. The Tollroad/Freeway Alternative has also been designed to mitigate impacts to the greatest extent practicable. These measures were outlined in Section V, Mitigation and Commitments and are the result of extensive coordination with resource agencies. The Lemont Bypass Alternative would also focus traffic along a single route and create comparable secondary impacts related to operation. The Enhanced Arterial Alternative would disburse traffic volumes, add to existing secondary impacts of existing routes and distribute added secondary impacts across a larger geographic area. For example, the Enhanced Arterial Alternative crosses the Des Plaines River at three locations.

In sum, none of the Alternatives will eliminate secondary impacts, however, the Tollroad/Freeway Alternative will minimize impacts and was found to be most consistent with county and local planning goals and objectives. Therefore, the Tollroad/Freeway Alternative provides the best opportunity to work with local planning and regulatory mechanisms to manage cumulative impacts.

Comments on Environmental Consequences - comments identified the following issues. It was commented that additional Alternatives beyond the Selected Alternative should have been subject to detailed evaluation of the environmental consequences, the secondary and cumulative impacts

analysis was suggested to be inadequate, and it was considered that the impacts to ozone were not adequately addressed. Comments were also received regarding noise and salt impacts.

Response to Comments: The Lemont Bypass Alternative, Enhanced Arterial Alternative and Tollroad/Freeway Alternative were reviewed for comparative environmental effects as part of the alternatives analysis. That analysis found no substantive difference in impacts between the Alternatives. This finding, combined with the performance of the Lemont Bypass Alternative, Enhanced Arterial Alternative and Tollroad/Freeway Alternative in meeting the four performance criteria of the Purpose and Need, resulted in the finding that the Tollroad/Freeway Alternative was the only Alternative to meet Purpose and Need and therefore, the only Alternative to be reviewed in detail for environmental impacts.

NEPA requires a comparative analysis, at an equivalent level of detail, which was performed for each of the Build Alternatives in the Final SEIS. It is well established that NEPA does not require an excruciating level of detail for every alternative. Rather, a mechanism must be used to ensure that the best alternatives received the most consideration. The Draft and Final SEIS accomplish that objective. Further, the key environmental resources, which are located in the Des Plaines River Valley, would experience identical impacts for both the Tollroad/Freeway Alternative and Lemont Bypass Alternative. The roadway design and footprint would be exactly the same for both alternatives at this critical location.

With regard to comments that noise impacts should be measured from the edge of the roadway instead of the centerline of the facility, refer to Section 2.2.1 of the Stamina 2.0 User's Manual, April 1982 which states "A single roadway can be used to model a multi-lane highway using the geometric mean distance from source to receiver, DnDf, based upon the near-lane (Dn) distance and the far-lane distance (Df)." The noise models and analysis techniques are structured to measure impacts from the centerline of the roadway for a number of reasons, including the need to properly account for two-way traffic.

Regarding the analysis of secondary and cumulative impacts, the analysis was based upon a detailed analysis of the NIPC forecasts and conforms to the 11-step approach set forth in CEQ and FHWA guidance. The 11-step approach is a methodology developed by USEPA for identifying and evaluating secondary and cumulative impacts. The detailed analysis of secondary and cumulative impacts was documented in the Draft SEIS, Section 4.20 and Appendix A. Socioeconomic data from NIPC was carefully analyzed to identify the influence of transportation improvements upon population and employment growth. The major conclusion was that the most substantive growth would occur regardless of constructing the I-355 extension. This finding is consistent with past trends, which document tremendous growth in the study area in the absence of major transportation upgrades. In fact, Will County has already surpassed the population total predicted for the year 2010. This growth cannot be attributed to a roadway that has not been constructed.

As for salt impacts, IDOT is committed to the research of salt impacts and has funded research by the Illinois State Water Survey to study the salt impacts of the Selected Alternative. Field studies indicated a preponderance of salt tolerant species adjacent to the alignment of the Selected Alternative. Impacts to salt intolerant species, if present, may occur. Substantial measures have been taken to control and treat roadway runoff to reduce the impacts of salt and other potential roadway contaminants. Refer to Draft SEIS, Section 4.10 and Final SEIS, Chapter 6.0, Coordination and Commitments for detailed findings and comment responses concerning salt spray. Furthermore, if it is determined that general use water quality standards are not being met due to contaminants resulting from the Selected Alternative, the Constructing Agency will coordinate with the Illinois Environmental Protection Agency. The presence of the roadway will

not substantially impact the existing management plans of resource agencies for wetlands and other natural resources along the roadway. Nor will the Des Plaines River Valley bridge, being at an elevation of approximately 24 meters (80 feet) above the valley floor, create any shading impacts to the natural resources below. Measures to mitigate impacts to natural resources are presented in the Final SEIS, Chapter 6.0 Coordination and Commitments.

Concerning ozone, impacts of the Selected Alternative on ozone were addressed. CATS performed conformity modeling of the Selected Alternative's impact on VOC and NOx, the precursors of ozone. CATS found the emissions of VOC and NOx associated with the Selected Alternative would have a negligible impact upon ozone levels. In addition, the impacts of the I-355 extension have been accounted for in the Illinois EPA's State Implementation Plan (SIP) for the area, and will not hinder reaching attainment by the statutory deadline, 2007. The Illinois EPA stated in a December 6, 2000 letter that an analysis of ozone related impacts is not warranted.

Comments on Public Involvement – ELPC/BPI commented that the public involvement process was conceived and implemented in an open house manner that excluded the general public and IDOT was considered to have obstructed public participation. Also, it was commented that presenting statistics quantifying support for and against the Proposed Action was considered unjust, and that IDOT's response to comments presented in the Draft SEIS were perceived as incomplete and inadequate.

Response to Comments: The public was offered ample opportunities for meaningful participation, including meetings with local officials, community surveys, newsletters, and a pair of public hearings that resulted in thousands of comments. In addition, meetings were held with ELPC/BPI on three (3) separate occasions. Overall, this project has undergone significant public involvement for decades, including successive long-range transportation plan updates that date back to the 1960's. In addition, public informational meetings and hearings were held in 1987, 1988, 1991, 1994 and 2001.

With regard to the Action Plan proposed by ELPC/BPI, commentors presented details of this plan to the general public, elected officials and the media a full six months prior to the public hearings. Despite this well publicized effort, the Action Plan proposed by ELPC/BPI was not accepted by the general public as an alternative to the I-355 proposal. The Action Plan proposed by ELPC/BPI does not represent any new ideas—it's simply a repackaging of IDOT's current TIP, the majority of which will be constructed regardless of I-355 being implemented. Commentors suggestion that the public's support for I-355 is somehow based upon a lack of other choices is not supported by the facts—a number of alternatives were examined and presented to the public via meetings, newsletters, the Draft SEIS and the public hearings. Further, the summary of those supporting or opposing the I-355 proposal is a fundamental and appropriate element of any decision making process. The "substantive issues raised by hundreds" were carefully reviewed and have been addressed in the Final SEIS.

Commentors claim that the Final SEIS does not reproduce or respond to all comments is also unsupported. 40 CFR 1503.4(b) states that "All substantive comments received on the draft statement (or summaries thereof where the response has been voluminous), should be attached to the final statement...". The comments were indeed voluminous, but also referenced and summarized supporting technical studies. Therefore, the comments were published in an appropriate manner in the Final SEIS. All of the issues raised by commentors were carefully considered and each major point was addressed, in accordance with FHWA's technical advisory T6640.8A. Per this advisory, IDOT summarized the substantive comments on social, economic, environmental, engineering and other issues generated through the public hearings, circulation of

the Draft SEIS and other public involvement activities. IDOT responded to these comments by making indicated revisions to the Final SEIS, or by providing written responses in the Final SEIS.

Key elements of the overall project documentation such as the 1996 Final EIS and the 2020 Regional Transportation Plan were available to the public in advance of the Draft and Final SEIS. In addition, the Draft and Final SEIS documents were available in paper and CD ROM formats; the CD's contained the 1996 Final EIS as well as the Draft and Final SEIS, with "hot links" established between each of the documents. Other options for public review included 10 local libraries within the study area and an Internet web site. Overall, the record clearly demonstrates that the public was provided ample, innovative and manifestly reasonable access to the planning process and documentation.

VI. CONCLUSION

In consideration of all the above, the FHWA has based its decision that the selected alternative 1) satisfies Purpose and Need, 2) poses the least impacts on the environment, 3) the process satisfies NEPA and other applicable requirements and 4) the project may be advanced.

Original signed by:
Norman R. Stoner, P.E.
Division Administrator

02/25/02
Date

/s/ Norman R. Stoner
For the Federal Highway Administration

existing State Implementation Plan and the transportation-related requirements of the 1990 Clean Air Act Amendments.

4.12.3 Measures to Minimize Impacts

No substantive change has occurred to this resource since publication of the 1996 FEIS. Refer to 1996 FEIS, Section 4.12.5.

4.13 Noise

4.13.1 Introduction to Noise

One decibel (dB(A)) is the smallest change in sound level an average person can detect under ideal conditions. Usually, an observer cannot notice an increase in noise of 3 to 4 decibels if the increase takes place at a uniform rate over several years. To an average listener, a difference of 10 dB(A) is perceived half as loud or twice as loud.

The equivalent, steady-state noise level, L_{eq} is used to analyze traffic noise levels and identify noise impacts. L_{eq} is defined as the sound level which, in a stated period of time, contains the same acoustic energy as the time varying sound level during the same period.

4.13.2 Regulations and Policies

Federal Regulations

The Federal Highway Administration (FHWA) policies and procedures, 23 C.F.R 772, served as the procedural guidelines in the analysis. Incorporated into the regulations are Noise Abatement Criteria (NAC), which are based on the type of land use and activities performed at the respective sites.

State Policy

In implementing the FHWA 23 C.F.R, Part 772 regulations, the Illinois Department of Transportation developed the current Noise Analysis Policy dated April 3, 2000. This policy is Section 26-6 in the IDOT Bureau of Design and Environment Manual and defines traffic noise impacts to occur under the following circumstances:

- Design-year traffic noise levels are within 1 dB(A) of or exceed the NAC.
- Design-year traffic noise levels are greater than 14 dB(A) above existing traffic-generated noise levels.

Noise abatement must be considered at receptors where predicted traffic noise impacts occur. For this study, all development platted prior to April 1999 have been considered for analysis.

4.13.3 Traffic-Generated Noise Levels

A total of 70 receptors were selected as representing their surrounding area. The locations of these receptors are shown in Draft SEIS, Exhibit 2-14. These receptors represent farmhouses, single-family residences and areas in the Des Plaines River Valley. Noise levels obtained at these sites are used to assess impacts for nearby sites with similar characteristics (i.e. distance to the alignment, traffic volumes, location relative to Project Corridor).

Table E-1, Draft SEIS, Appendix E presents noise impacts. Several values for existing traffic noise exceeded the NAC. It can also be noted that there are several cases in which the modeled traffic noise is considerably less than the existing noise. These occurrences are due in part to the fact that existing noise measurements include background noise as well as traffic noise. TNM and STAMINA only model traffic noise. In some cases, traffic on the existing road is lower in future modeled current traffic because it is diverted to the Preferred Alternative.

4.13.4 Consideration of Abatement Measures

The Preferred Alternative is located in gently rolling terrain with the exception of the Des Plaines River Valley. Due to the level topography of the Project Corridor, it will be difficult to use natural terrain features as noise barriers. Every opportunity was made to depress the roadway to reduce traffic noise levels. The Preferred Alternative was depressed to an elevation within the limitations of positive drainage, stream crossings and grade separations. Deliberately depressing the roadway may be effective in reducing the sound levels by up to 5 to 10 dB(A).

Refer to Draft SEIS, Section 4.13.4 for a review of the noise abatement measures.

4.13.5 Noise Abatement Measures

See Draft SEIS, Table 4-6 for areas near the Preferred Alternative that were predicted to experience traffic noise impacts and were analyzed for noise abatement measures. See Draft SEIS, Exhibit 4-6 for barrier analysis regions grouped by receptors.

In the Project Corridor, noise abatement measures which are economically reasonable and feasible are considered likely for each impacted site. There are noise impacts for which no prudent solution is reasonably available.

Results of noise abatement analyses are presented in Draft SEIS, Appendix B, Table B-1. These preliminary indications of likely abatement measures are based on preliminary designs for barriers at height, length, cost and noise level reduction potential as given in Draft SEIS, Table 4-6. Refer to Draft SEIS, Exhibit 4-7 for location of noise abatement measures likely to be implemented. From Draft SEIS, Table E-1, Appendix E it can be noted that certain impacted receptors displayed no decrease in traffic noise levels when a barrier was in place (receptors 32, 44, 47 and 55). This is because those receptors were located closer to busy streets and intersections than they were to the Preferred Alternative. Thus, a barrier located along the Preferred Alternative would not substantially reduce noise levels experienced at those receptors.

There is a decrease of two barriers likely to be implemented from the 1996 FEIS using 2010 traffic and the Draft SEIS using 2020 traffic. The noise barrier in the Receptor Group Barrier A does not meet the cost per benefited receptor criteria as per the 2000 IDOT Noise Policy. The noise barrier in the Receptor Group Barrier C does not meet the 8 dB(A) noise reduction required per the 2000 IDOT Noise Policy.

This is due, in part, because the FHWA Transportation Noise Model provides better accountability for terrain information and acoustics. In addition, the 2010 noise levels predicted in the 1996 FEIS used STAMINA 2.0 which over-predicts traffic generated noise levels by 2 to 4 dB(A).

ABOUT THE TOLLWAY
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Noisewalls

Traffic Noise Study & Abatement Policy
Illinois Tollway

1.0 PURPOSE AND OVERVIEW

In 2004, the Congestion-Relief Program – *Open Roads for a Faster Future* was approved. In 2005, the Illinois Tollway launched the $6.3 billion program. The Tollway's Traffic Noise Study and Abatement Policy update provides an opportunity to evaluate traffic noise throughout the implementation of the CRP.

The Tollway's current policy addresses guidelines and procedures for initiating traffic noise studies and considering traffic noise abatement. The policy first establishes the eligibility requirements for a Traffic Noise Study. The policy then establishes the requirements for considering the construction of traffic noise abatement structures when they are feasible and reasonable.

The traffic noise analysis guidance provided in this policy is based largely on the regulatory material that is found in Title 23 Code of Federal Regulations Part 772 (23 CFR Part 772) entitled "Procedures for Abatement of Highway Traffic Noise and Construction Noise".

The initial traffic noise impact assessment for all projects will be a cursory review. This assessment would determine if noise sensitive receptors are within the project limits, if traffic noise impacts are already present, if future traffic noise levels are likely to increase and if future traffic noise impacts will occur. This review would include assessment of existing and proposed land use plans, review of aerial photography, a review of prior studies, and a representative number of short-term 15-minute Leq traffic noise measurements.

If initial traffic noise impact assessments indicate the possibility of future traffic noise impacts, then a Traffic Noise Study will be performed. A detailed technical memorandum will be prepared to document the assumptions, data, procedures, results and traffic noise abatement considerations and recommendations from the Traffic Noise Study.

2.0 DEFINITIONS

Approach - For the purpose of this policy, approaching means within 1 decibel (dBA) of the appropriate Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) as adopted by the Illinois State Toll Highway Authority.

dBA – A weighted decibel. The decibel is a unit of measurement on a logarithmic scale that describes the relative magnitude of sound levels with respect to a standard reference value.

Decibels are defined as ten times the base-10 logarithm of the square of the ratio of the mean-square sound pressure to the reference mean-square sound pressure of 20 micro-Pascals, the threshold of human hearing. The A-weighting network is an electronic filter defined by the American National Standards Institute (ANSI) and the International Organization for Standardization (ISO) that closely simulates the relative response of the human ear.

Date of Public Knowledge – This is the date that the Tollway's Congestion-Relief Program (CRP): Open Roads for a Faster Future was approved. This date, September 30, 2004, establishes the "Date of Public Knowledge" and determines when the Illinois Tollway is no longer responsible for providing noise abatement for new developments adjacent to projects included in the CRP.

Exterior Traffic-Generated Noise – This is traffic-generated noise that is measured on the exterior of the receptor as opposed to the interior. The noise model (TNM®) and Policy generally refer to exterior noise only.

Front Line Land Use – The first line land use that is immediately adjacent to Tollway highway right-of-way (ROW).

Insertion Loss – Is the difference in traffic noise level at a receiver resulting from the implementation of traffic noise abatement measures between the source and the receiver.

Leq – The Equivalent Sound Level is the steady-state sound having the same A-weighted sound energy as that contained in the time-varying sound over a specific period of time. The Leq correlates reasonably well the effects of noise on people.

Leq(h) – Is the Equivalent Sound Level over a one-hour period.

Noise Abatement – A structure, land configuration, or object that attenuates or is intended to attenuate traffic noise. Generally considered to be a barrier or wall, abatement could also be in the form of earth berms, landscaping, or any combination of the aforementioned.

Noise Sensitive Receptor – Receptor sites with identified outdoor human activity including: residences, picnic areas, recreation areas, playgrounds, active sports areas, parks, motels, hotels, schools, churches, libraries, and hospitals.

Receptor – A point used in a traffic noise study for which the traffic-generated noise level is determined. A receptor is generally placed in an area of active outdoor human use, assumed to be at a point five feet above the ground at the first floor-level. Normally, the areas of active outdoor human use include areas such as, patios, swimming pools, porches, balconies, etc. Sites considered include homes, condominiums, apartments, permanent mobile home communities and parks. The associated type of outdoor human activity and the sensitivity to traffic noise will define which parks are considered receptors.

Substantial Increase – Traffic noise levels that are predicted to be more than 14 dBA over existing traffic noise levels.

Through Lane – A roadway traffic lane exceeding 1.5 miles in length.

Traffic Noise – Noise generated from vehicles traveling on the roadway. Noise is usually generated at the tire/pavement interface, from vehicle / truck engines, and from heavy truck exhaust systems.

Traffic Noise Study – A study of traffic-generated noise to determine: the existing traffic noise level conditions at receptors representative of normal outside human activity at the first floor-level of receptors; potential future traffic noise levels; an assessment of traffic noise impacts; and consideration of potential, feasible and effective economically reasonable traffic noise abatement. The study is conducted through the use of computer modeling. These studies would

utilize the FHWA Traffic Noise Model (TNM® 2.5) or the most recent version. The methodology is consistent with 23 CFR 772 which explains processes to be followed in noise analyses and studies.

Type I Projects – A proposed project for the construction of a roadway on new location or the physical alteration of an existing roadway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes.

Type II Projects – A Community Noise Abatement Retrofit Project proposed for traffic noise abatement on an existing roadway which is not associated with any Type I improvement.

Undeveloped Properties – Property that is currently vacant or is likely to be redeveloped into an approved-for-construction land use by the local governmental body having jurisdiction. To be considered eligible for noise abatement the undeveloped property must have secured permits for construction by a governing body prior to September 30, 2004.

3.0 PROCEDURES FOR EVALUATING PROJECTS

The Tollway will review the project and evaluate the potential effects of the traffic noise on the environment. The following steps will be used to evaluate any traffic noise impacts:

3.1. Review existing and proposed land use plans, review aerial photography, review prior studies and any other pertinent information to identify potential noise sensitive receptors.

3.2. The Tollway, or a designated representative, will perform a qualitative assessment to evaluate traffic noise impacts on noise sensitive receptors. The assessment will determine qualitatively how implementation of the project will result in changes in traffic and typical roadway sections. Section 4.0 and the Illinois Tollway Noise Policy Generalized Traffic Noise Study and Abatement Decision Diagram in Appendix A provide details regarding the process and considerations for the evaluation. All viable alternatives for all study years (existing and design) will be examined using approved procedures incorporating the best available information and current professional judgment.

3.3. Determine if any of the factors in the qualitative assessment could likely cause an increase in traffic noise levels compared to the No-Action alternative. If it is determined a traffic noise impact can be reasonably expected, a Traffic Noise Study will be prepared. Some Tollway locations will involve existing traffic noise levels that already approach or exceed the noise abatement criterion (NAC). Under these conditions, even if the proposed project will not cause the traffic noise levels to increase substantially above existing levels, traffic noise abatement will be considered.

3.4. If, after preparing a computerized traffic noise modeling and the corresponding Traffic Noise Study, it is determined that traffic noise levels will approach or exceed the noise abatement criteria (NAC) or the project will cause a substantial traffic noise increase, then traffic noise abatement measures will be considered. The feasibility and reasonableness factors for noise abatement consideration are outlined in Section 4.3.

4.0 PROCESS FOR DETERMINING WHEN A TRAFFIC NOISE STUDY AND ABATEMENT WILL BE CONSIDERED

4.1. Sites Eligible for Traffic Noise Study A Traffic Noise Study is warranted when all of the following conditions are present:

4.1.1. When the Tollway undertakes engineering studies or projects that increase capacity on the mainline of a Tollway by: adding new through lanes; that propose new interchange ramps;

that add new toll collection facilities where they did not previously exist; that reconfigure a toll collection plaza by adding Open Road Tolling lanes or I PASS lanes; or that substantially reconfigure an interchange by bringing through lanes or ramps closer to receptors. Projects that do not meet the requirements noted above may be considered eligible if the original roadway project did not consider the affect of traffic noise and the traffic volumes have, or are projected to, substantially increase (double) from the initial construction.

4.1.2. When the front line land use consists of identified outdoor human activity, including: residences, picnic areas, recreation areas, playgrounds, active sports areas, parks, permanent mobile home communities, motels, hotels, schools, churches, libraries, and hospitals. Also considered are locations where undeveloped adjacent properties have secured permits for construction of the above outdoor human activity land uses by the jurisdiction or municipality having permit and zoning authority prior to September 30, 2004. Only locations where seventy-five percent (75%) or more of the existing noise sensitive receptors within 500-feet of the Tollway right-of-way are platted or approved prior to September 30, 2004 will be deemed eligible.

4.1.3. When the location of potential study is no more than 500-feet from the proposed or existing edge of shoulder.

4.2. Sites Not Eligible for Traffic Noise Study. A Traffic Noise Study is not warranted for sites meeting any of the following conditions:

4.2.1. Where the original design of the roadway provided traffic noise abatement and the design of the noise abatement considered the traffic-generated noise that would be created by planned future roadway widening.

4.2.2. Where traffic noise abatement already exists and no work as described in Section 4.1.1. is currently included in a planning or design study.

4.2.3. Where a Traffic Noise Study has already been completed and it was determined that traffic noise abatement is not warranted.

4.3. Traffic Noise Abatement Considerations Once a location has been studied, the following feasibility and reasonableness factors will be evaluated and considered to determine if traffic noise abatement is warranted.

Feasibility

Relationship of future levels to abatement criterion: Is the predicted future noise level from the project approaching or above 67 dBA Leq(h)? Will it be within 1dBA of the NAC or is it more on the order of 5dBA or more above the NAC? If the future levels are only expected to approach or barely exceed (1 to 3dBA above) the NAC, abatement may not be warranted as it would be if the impact were to be greater.

Insertion Loss (IL): The traffic noise abatement design goal will be 8dBA or more. However, the minimum acceptable insertion loss on the first row of receptors should be 5dBA. The more insertion loss achieved the better the traffic noise abatement, as long as the cost, visual impact, etc., do not become excessive. If a minimum 5dBA insertion loss cannot be achieved, a noise barrier may not be considered to be feasible.

Constructability: Can the noise barrier conceived actually be constructed using routine standard construction methods and techniques? Factors affecting this will include terrain, utilities, safety, bridges, overpasses, and similar difficulties.

Maintainability: Will the noise barrier be constructed in a location that inhibits or complicates proper maintenance?

Safety: A critical factor in determining whether abatement is viable is the impact it may have on safety.

Utilities: The impact of noise barriers on utilities and the reverse must be addressed early in the process. Overhead power lines, underground water, sewer, gas, oil, fiber optics, etc. can have a significant impact on costs and design options.

Drainage: One of the most important elements in the physical location and design of noise abatement is drainage. Directing water along, under, or away from a noise abatement structure can be expensive and cause construction and long-term maintenance problems.

Cost: Cost factors will include the cost of construction (material and labor), the cost of the ROW (including easements, etc.), and any other associated costs. Traffic noise abatement must be achieved in a cost-effective manner. The Traffic Noise Study will include a cost per benefited residence analysis that will be used to assist in the final determination of traffic noise abatement recommendations. If traffic noise abatement cannot be achieved in a cost effective and economically reasonable manner, traffic noise abatement will not be included in the project.

Reasonableness

Land Use Stability: Is the land use for the area expected to change in the future, and if so how? Land uses tolerant of traffic noise may not warrant traffic noise abatement. Land uses where visual exposure is integral to their existence and vitality may not warrant traffic noise abatement.

Local Controls: What has the local governing or jurisdictional body done to control noise sensitive land uses from building adjacent to the Tollway corridor or right-of-way? This implies that if no controls are used, traffic noise abatement is not a very high priority within the community.

Community Desires: Important in determining if traffic noise abatement should be built at any location is whether the affected community really desires abatement. This may require that a survey or community outreach efforts to be conducted to assess the community desires. If the community is not in favor of the noise abatement, the Tollway may choose not to build traffic noise abatement features. If access rights are required, the Tollway will attempt to determine if the affected property owners are willing to trade those rights for the abatement without any exchange of money.

Views of Local Officials: Consideration should be given to the views of the local representative authorities who may be asked to represent the views of the citizens.

Seasonal Usage: Is the site occupied or utilized year round? The evaluation will consider usage rates throughout the year.

Noise Level Changes from Future Build and No-Action Conditions: This implies that traffic noise levels will be very similar, whether or not the project is built. If the difference between the future No-Action and the future Build is 3dBA or less, most people will not notice the change. If the change is 5dBA or greater than, traffic noise abatement consideration should be given more weight.

Antiquity: Who was there first, the noise sensitive site or the roadway? How long has the noise sensitive site been there relative to elevated traffic noise levels? Is the Tollway dealing with original owners or recent purchasers? This implies that someone who builds or buys at a noise sensitive site along an existing roadway (or within the corridor where a roadway is planned for

construction) probably doesn't consider traffic noise a significant factor in their selection of the location.

Aesthetics: This refers to the physical appearance of the wall from both the roadway side and the community side. It also incorporates the landscaping concept, the opinions of the property owners and the local community desires.

Right-of-way Needs Including Access Rights, Easements for Construction and/or Maintenance, and Additional Land: Right-of-way (ROW) impacts can include the cost to obtain access rights, easements and land. It also includes the consideration of purchase, donation, etc. If access rights and easements are required, these will typically be by donation. This is in consideration of the construction of the traffic noise abatement wall for the benefit of the property owners.

Other Environmental Issues: This refers to impacts of traffic noise abatement installation that should be considered on a site-by-site basis. Examples include but not limited to unwanted reflection of sound, pedestrian, bicycle and trail disruption, wetland destruction, groundwater or surface water impacts, animal migration / flight paths, air quality, shading of vegetation, snow accumulation, etc.

5.0 Community Noise Abatement Retrofit Projects (Type II Projects)

The following establishes a cost-shared policy to consider requests for retrofitting noise abatement for projects that are not associated with any Type I improvement. Retrofit projects are subject to available funding and will be evaluated for their merits on a case-by-case basis.

In order for a retrofit project to be considered for Community Noise Abatement Retrofit Project (Type II) funding, the project must have a state or local government sponsor, i.e., a unit of government with the authority to levee taxes. This includes general-purpose units of local governments (e.g. cities, counties and townships) as well as specialized governing districts (e.g. sanitary districts, school districts, forest preserve districts, park districts, airport authorities and publicly owned universities or colleges).

For a project to be considered for Community Noise Abatement Retrofit Project (Type II) funding, the local agency sponsor must prepare documentation in accordance with the traffic noise impact assessment and Traffic Noise Study requirements outlined in Section 3.0 and 4.0 above. The local agency sponsor must pass local zoning ordinances regarding land use, provide all necessary right-of-way, demonstrate the ability and commitment to provide a minimum of 50% of the funding for the project, and agree to maintain the traffic noise abatement structure and right-of-way on the community side of the structure.

The Tollway will give priority consideration to those communities where the Tollway was constructed through an existing neighborhood and where seventy-five percent (75%) or more of the existing noise sensitive receptors within 500-feet of the roadway preceded the roadway. Developments platted or approved after September 30, 2004 will not be eligible for Community Noise Abatement Retrofit Project (Type II) funding consideration.

6.0 Traffic Noise Abatement Techniques

Means and methods for implementation of traffic noise abatement shall be considered based on effectiveness of traffic noise attenuation and cost.

Noise Walls: Noise walls are solid structures built between the highway and the noise sensitive receptors along the roadway. Noise walls are typically constructed of precast concrete panels, cast-in-place concrete, concrete masonry blocks, masonry or wood. Absorptive surfaces will also

be considered in areas where noise sensitive receptors may be affected by reflected noise on either side of the wall or in instances where wall heights can be reduced to provide comparable effectiveness. Noise walls can reduce traffic noise levels effectively.

Earth Berms: Traffic noise barriers can be formed from earth mounds along the road -typically called earth berms. Earth berms have a natural appearance and offer opportunities for landscaping; however earth berms can require a significant width across land to accommodate the height necessary to provide the amount of insertion loss required.

Vegetation: If high enough, wide enough, deep enough and dense enough (cannot be seen through), vegetation can decrease the highway traffic noise at a noise sensitive receptor. A 200-foot depth of effective dense vegetation can reduce noise by 10dBA, which can cut the noise volume in half. It is often impractical to plant enough dense vegetation along a road to achieve such reductions; however if dense vegetation is already present possibilities exist where it could be saved with some insertion loss achieved.

Encouraging Compatible Adjacent Land Use: Traffic noise compatible land use planning is a community planning method and proactive responsibility that helps reduce or eliminate traffic noise levels at noise sensitive receptors along roadways. This type of planning means considering land use options and traffic noise issues more effectively so that compatible developments are set up next to the Tollway. Municipalities and counties have the power to encourage traffic noise compatible land use planning by developing effective land use plans, zoning or other legal means (such as subdivision or development standards, building or housing regulations), land or easement purchases and community education to inform citizens, developers and local planners about traffic noise compatible land use planning.

Promote Tollway Policy and Encourage Local Governments: The Illinois Tollway encourages those who plan and develop land, and local governments controlling development or planning land use near existing or planned Tollway locations, to exercise their powers and responsibility to minimize the effect of roadway traffic noise on future sensitive receptors through appropriate land use control. Where such land use controls are not in place, municipalities, townships and counties may not be eligible for traffic noise abatement consideration for sensitive receptors by the Tollway.

Reduction of Traffic Noise at the Source: Reduction of traffic noise impacts by design or treatment of the road surface is the most cost-effective traffic noise control available to the Tollway. Within the group of traffic noise abatement methods that are feasible and reasonable, and after life-cycle cost analysis have selected a pavement type and other technical and financial constraints, the Tollway will use the quietest surface texture available when repaving or reconstructing a roadway in traffic noise sensitive areas.

Traffic Noise Abatement by Others: All future planned developments adjacent to the Tollway should include a provision in the Subdivision Plat approval requirements that mandates the developer to place a covenant running with the land notifying perspective purchasers that traffic noise abatement will not be provided by the Illinois Tollway. The Tollway encourages developers and local governments to coordinate their efforts to mitigate roadway traffic noise. This must be done without encroachment on the Tollway right-of-way, unless it is determined to be necessary, and authority granted to permit others to construct a sound barrier, berm or landscape in the Tollway's right-of-way. The design must meet the Illinois Tollway's geometric, structural, safety and maintenance standards. The Tollway shall assume no liability review authority or responsibility of any kind for the structural integrity or acoustical effectiveness of traffic noise abatement sound barriers constructed by others.

Noise Abatement Criteria (NAC)*
Hourly A-Weighted Sound Level - decibels (dBA)

Land Use Category	Leq(h) dBA	Description of Land Use Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E**	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

* Title 23 Code of Federal Regulations Part 772 (23 CFR Part 772)

** Use of interior noise levels shall be limited (on a case-by-case basis) to situations where exterior noise levels are not applicable, i.e., where there are no exterior activities to be affected by traffic noise, or where exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities.

Note: The Noise Abatement Criteria (NAC) are noise impact thresholds for considering abatement. (Abatement must be considered when predicted traffic noise levels for the design year approach [i.e., are within 1 decibel of] or exceed the noise abatement criteria, or when the predicted traffic noise levels are substantially higher [i.e., are more than 14 decibels greater] than the existing noise level.) The Noise Abatement Criteria are not attenuation design criteria or targets. The goal of noise abatement measures is to achieve a substantial reduction in future noise levels. The reductions may or may not result in future noise levels at or below the Noise Abatement Criteria.

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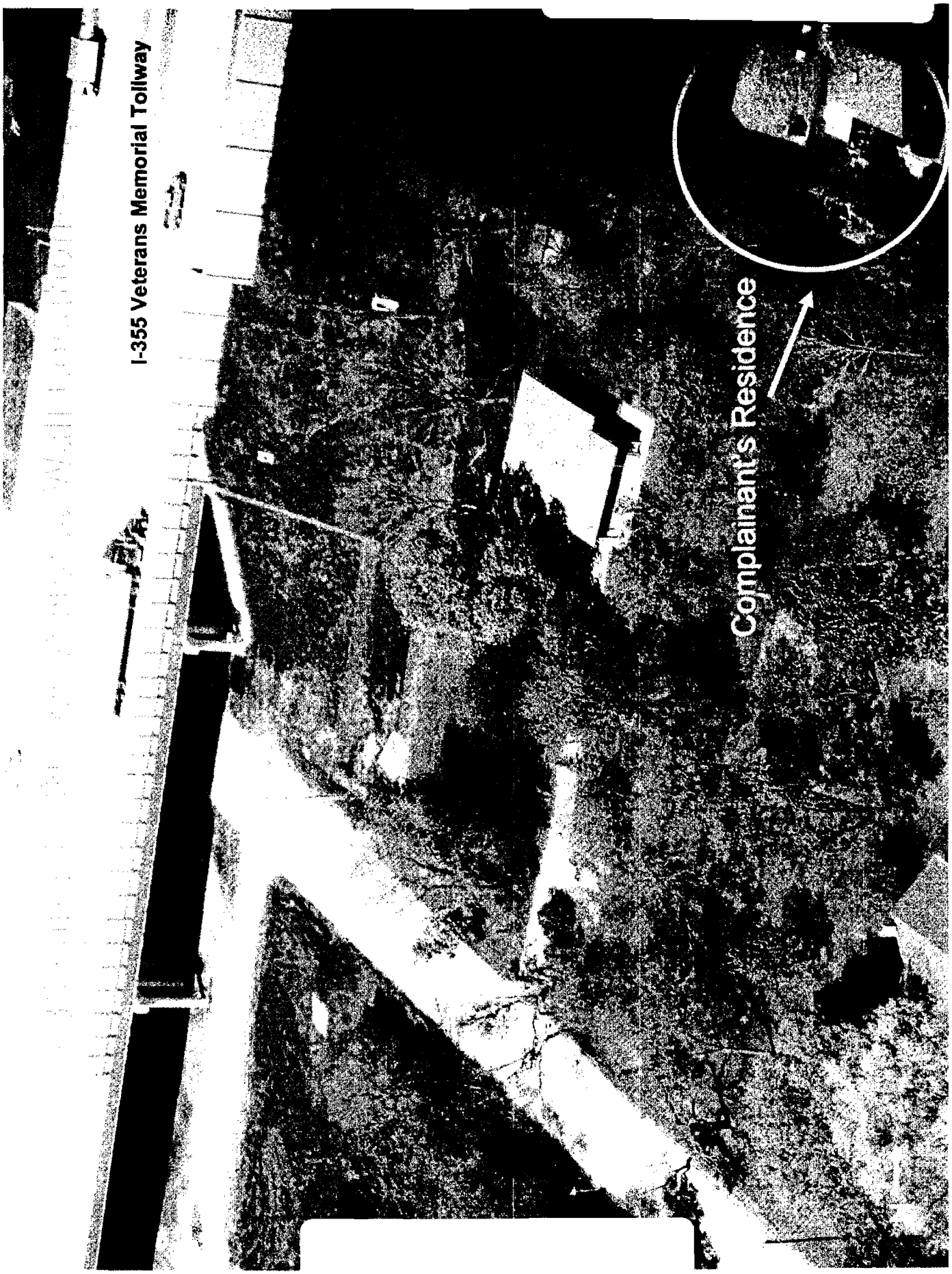

Exhibit B-4

STATE OF ILLINOIS
POLLUTION CONTROL BOARD

PETER ARENDOVICH,	)	
	)	
Complainant	)	
vs.	)	
	)	PCB 29009-102
ILLINOIS STATE TOLL HIGHWAY AUTHORITY,	)	
	)	
Respondent.	)	

Discovery deposition of PETER ARENDOVICH, called as a witness herein, pursuant to the applicable provisions of the Code of Civil Procedure of the State of Illinois and the rules of the Supreme Court thereof, taken before Rhonda Rae Carr, CSR No. 84-3371, on October 6, 2010, at 3:06 a.m., at 2700 Ogden Avenue, Downers Grove, Illinois.

EXHIBIT C

PRESENT:

Mr. Peter Arendovich,
1388 Gordon Lane
Lemont, Illinois 60439
Appeared Pro Se;

State Toll Highway Authority
Senior Assistant Attorney General, by
Mr. Robert T. Lane
2700 Ogden Avenue
Downers Grove, Illinois 60515
Appeared on behalf of Respondent.

ALSO PRESENT:

Mr. Matthew Karras.

- - -

(Witness sworn.)

PETER ARENDOVICH

called as a witness herein, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. LANE:

Q. Mr. Arendovich, as you know my name is Bob Lane. I'm an assistant attorney general. I represent the Illinois Tollway. And with me this afternoon is Matt Karras. He's a law clerk with the Tollway. And today we're going to take your deposition. So what I'm going to do is ask you a series of questions pertaining to your complaint. If you don't understand the questions, I would ask you to tell me and I'll try to repeat them so that you understand them. If you want to take a break at any time, let me know. We just ask that you wait until a question is answered and not take a break during a pending question.

A. Okay. Fine.

Q. If you answer the question, I'll assume that you understood it. Sound fair?

better for the tollway than affecting these houses. There was a whole bunch of houses built that were erased completely which were actually houses which had some historical value that you guys demolished it, and instead -- never mind. And some people wanted to take some of these houses there, and you guys demolished it and didn't give it to anybody. Okay? So -- and if you tell me as far as -- as far as the range, it would be much cheaper, again, I say again, than doing it the way as you did -- the way it was done.

If you tell me do I have study? No. Do you people have study? No, you don't have any. Because you guys haven't done any evaluation besides what -- what -- what's his name, IDOT, did in a quick from the airplane. That's what we want to go, that's what we're going to go.

Q. Are you aware or do you recall any public hearings that may have been conducted by the Tollway regarding the toll --

A. I was in all of them. Just about -- not all of them, just about.

Q. Okay. I'm sorry. I didn't finish the question. Is it accurate to say that you were at all of the tollway planning meetings with regard to the alignment of the south extension of I-355?

A. I was at the meeting that the Tollways offered in the town where I was, okay, in the town, and also when they offered a meeting at the -- in the -- New Lenox.

Q. Okay.

A. And I went -- I went in many more, okay, but generally speaking those.

Q. Okay. And those pertain to the alignment of the roadway; is that correct?

A. The alignment of the road was set on stone, and there was not, how should I say, there was -- the alignment wasn't what was done in what's 2000 -- it was done in 19 -- I have it on the map what was done, the final thing was done, was something in 1996 or something like that if not --

Q. Do you recall at those hearings if they had drawings of where the roadway was proposed to go, different alignments of where it might be

laid out?

A. Yes, I'm aware of those.

Q. And did you have a chance to share your concerns?

A. Yes, I have, and I -- and I mentioned my concern, yes.

Q. Okay. And the Tollway listened to your concerns?

A. If they listened, they filed it in the garbage right away.

Q. But in terms -- otherwise they listened to it?

A. Like you are listening to me now, and many things that I will say you will file in the garbage, just like that.

Q. Okay. But is it fair to say that you attended several of the public hearings and you had a chance to voice your concern at those hearings?

A. Yes, I did.

Q. Okay.

A. Now, let me add something else. Does the Tollway have checked all this contrary here -- contrary opinion that were submitted to

IDOT that have been filed and were disregarded? Do you know -- are you familiar on those?

Q. Well, that's my next question.

A. Okay.

Q. Did you submit any written comments?

A. Sure.

Q. And who did you submit those to?

A. It was written and submitted to whatever was necessary to send it.

Q. Was that the Illinois Department of Transportation and the FHWA?

A. That's your mother and -- that's your mother, yes.

Q. And was that pursuant to a study that they were conducting as to the appropriate -- the appropriateness of the roadway?

A. Rephrase that thing.

Q. That was a bad question. I strike the question.

Did you submit comments to the Illinois Department of Transportation and FHWA outlining your objections to this tollway?

A. Yes.

Q. Did they respond to you?

A. No.
Q. -- challenging the tollway?
Okay. When did you purchase your house?
A. I purchased -- I purchased my lot in 1988, I believe.
Q. And that's the house on Gordon Lane, right, the one --
A. That's the house on Gordon. I built it between -- between '89 and '90 -- '89 and '90. So '90 it would be ten. I'm there 20 years.
Q. And at the time you purchased the land, did you know that I-355 was going to be built?
A. No.
Q. When did you learn that I-355 would be constructed?
A. There was something about 1990 that it came some sort of meeting, 1990 or '89, something like that.
Q. Do you recall what kind of a meeting that was?
A. There was a meeting that, what's the name, the IDOT had for the people in the area.
Q. Do you know if that was the first

meeting that they had?

A. To be honest, I'm there since 1988. Before that, I don't know anything.

Q. Okay.

A. Are you going to tell me -- say that they -- that the road was 1963? Look. I can tell you say that my neighbor -- my neighbor built the house there in 1950s, and so there was no road there.

Q. Did the people you bought your house from tell you anything about I-355.

A. I didn't buy the house. I built the house.

Q. Okay. When did you buy the lot?

A. 1988.

Q. Who did you buy the lot from?

A. They are dead now.

Q. Who did you buy the lot from?

A. Some retired people. I don't know their name.

Q. Did the sellers tell you anything about I-355 being built?

A. No. There was nothing in talking about a 355 extension. There was nothing talking

A. There is a problem all the time, but the thing I said to what extent. As you have seen -- as you have seen on the graphs that we have given you, you have seen say it goes up, then it reaches some level, then can peak up again, then can drop off again.

Now, just look at this -- look over here. Are the trucks continuously? No. I mean, I see from one truck passes by. In the morning. Usually trucks are like a caravan running or at night.

Q. So what I'm asking is, the sound walls that have been built there, do they help?

A. Let me say it this way. Okay? You want to catch me on that. The one that is 16 feet is not as bad. But the one -- the wooden joke that they put in, that's a pretty joke, that thing doesn't do anything practically.

Q. Has the 16-foot sound wall solved the problem?

A. It does help. It does help. It's -- can be livable. It can be livable. Okay? But that -- that eight or ten feet that they put

Q. No.
A. So -- by the tollway?
Q. I don't live as close to the tollway as you do so...
A. Put it this way. How could Midway have been able to solve some problem?
Q. You know, let's not talk about Midway. Here's what I want to do --
A. Okay.
Q. -- is just find out what your story is and just make a record of it. Okay?
A. Okay. Fine. Fine.
Q. So the concrete wall or masonry wall that's there is sufficient. The wooden wall that's on the bridge is insufficient. And it's your testimony that you believe an 18-foot wall built the entire length of the bridge to Archer Avenue would solve the problem; is that correct?
A. Yes.
Q. If that road was built, do you know if you would be able to sleep at night?
A. If that thing would be built, if I would be able to sleep at night, I would tell you yes. You know, based on what? Based on

of trailers along here, and the trailers are about the height of the -- of the trucks and so on and let's see.

Q. Okay.

A. It would be very cheap, very cheap would be done. But the bloody guy since beginning he -- "Oh, we cannot do it, safety." Safety my foot.

Q. In addition to your home, how many other homes would benefit from the wall that you propose on the bridge?

A. I tell you one thing, there's one, two, three, four, five, six, seven, eight, nine. Nine houses. Now you're going to hit me with how many dollars for that thing. About $25,000 per -- per user, okay. Go on.

Q. Well, you've testified that you believe that the 18-foot wall, the entire length of the bridge to Archer Avenue, would cost approximately a million dollars; is that correct?

A. No, I didn't say that. I said one mile.

Q. Okay. Do you have an opinion as to how

mean, how should I say, it bothers me. Okay? Do I like it? This morning I woke up at 4:00. You know, the first thing I got mad about this bloody tollway, what can be done.

Q. Okay. Well, I know the tollway causes a lot of noise and keeps you up at night, but is it fair to say that thousands of cars and trucks travel on the tollway every day?

A. Is it what?

Q. Is it fair to say that thousands of trucks and cars travel --

A. Right.

Q. -- on I-355 every day?

A. Yeah. Quite a few, yes.

Q. And is it safe to assume that those folks are going to work or going to school or going to visit people?

A. It's -- it's a road that is -- the public uses, yes.

Q. And would it be fair to say that the I-355 south extension has resulted in reduced travel times on the local roads?

A. Through -- through Lemont Road, yes -- I mean, pardon me. Through State Street, yes.

127th Street is taking the slack. Okay?

Q. Is it fair to say that it's reduced the travel times on the north-south streets?

A. If it's fair -- let's say it's fair. Okay?

Q. So yes?

A. Say through Lemont, yes.

Let me as you this thing, put it into your writing. How much difference -- how much difference in money do you charge between a car and a truck?

Q. Now, the sound wall -- the 16-foot sound wall that you testified to, was that in the original plans to build the tollway?

A. The way as I have the plans, yes.

Q. Okay. Were there any subsequent plans that were developed after the initial plan that had the wall in it?

A. When you mean initial, what is meant by initial and so on? When is the initial?

Q. First there was an environmental impact study that included the sound wall in front of your house; is that correct?

A. Yes.

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

PETER ARENDOVICH,)
Complainant,)
vs.) No. PCB 29009-102
ILLINOIS STATE TOLL)
HIGHWAY AUTHORITY,)
Respondent.)

The discovery deposition of DAVID A. LARSON, taken in the above-entitled cause, before Dawn C. Evers a Notary Public of Cook County, Illinois, on August 25, 2010 at 2700 Ogden Avenue, Downers Grove, Illinois, pursuant to Notice.

Dawn C. Evers
License No.: 084-004459

APPEARANCES:

MR. PETER ARENDOVICH
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Appearing pro se.

OFFICE OF THE ATTORNEY GENERAL
BY: MR. ROBERT T. LANE
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rlane@getipass.com
Representing the Respondent.

ALSO PRESENT: Angela La Porte,
Senior Environmental
Planner.

Rocco J. Zucchero,
Deputy Chief of
Engineering for Planning.

the house. Somewhere in the house where the complainant says it's a bad spot in the house.

Q. And are there any journals, or statutes, or laws, or regulations that dictate where the microphone should be placed?

A. I believe there is. I believe the Noise Pollution Guidelines, Federal and State of Illinois, I believe they specify measurements at the property line. Sometimes I think it's referred to as the right-of-way.

Q. What specifically do they require, if you know?

A. To the best of my knowledge they simply require that you locate a microphone at the right-of-way.

Q. And is there any definition of where the right-of-way begins or ends?

A. I have to --

MR. ARENDOVICH: I object to this. One minute, okay?

MR. LANE: Let him answer the question.

MR. ARENDOVICH: No, no, no.

make repeatable measurements. Measurements at the property line, measurements at other locations that can be repeated, so that in the end when we do an analysis we have a high level of confidence that, yes, indeed these are the correct numbers within a given deviation.

Q. Are you aware of any Illinois regulation or treaties that discusses where the microphones should be placed?

A. Other than Illinois State Pollution Guidelines those are the only ones I'm aware of and I believe they speak about the property line.

Q. Okay. Do you recall what the Illinois State Regulations require in terms of the testing areas and the microphone placement?

A. I don't recall that.

MR. ARENDOVICH: Wait a minute. Hold on. The same horse all the time because you are trying to bombard him into some direction that you want. You are doing around, around, around. I know what you want to do. You are arguing

microphone before and after the measurements and verified that the entire measurement system is in good working order.

Q. And what were your results?

A. The results were always correct with plus or minus .2 decibels.

Q. What steps did you take to account for the noise that did not -- was not generated by the tollway?

A. [redacted] steps we [redacted] to account for them in the measurement side. Unfortunately, you know, a microphone measures all noise. So we oftentimes have to use our ears as a primary guiding tool and my recollection is that noise that I measured was from vehicle traffic.

However, when you make measurements late at night or when the road is not busy then you can assess what we call the background noise level. All the noises that we are not interested in. It could be anything from birds chirping, maybe a dog barking, or something like that. In my best professional opinion the noise data that

we measured is entirely dominated by the noise of traffic on 355.

Q. No steps were taken to eliminate or reduce the readings based on the background noise?

A. I don't -- I didn't take any steps. I know of no steps that you can do to separate the background noise from the noise you wish to measure.

Q. You didn't reduce the number at all based on just general background noise?

A. Now that's a sym-pulse processing that you can do and if you measure traffic noise in the presence of let's say a water pump or a sprinkler or something then indeed you can measure both of those independently and make adjustments. We did not have that situation.

Now the only background noise I recall is a very low level of what I call typical community noise, an occasional dog bark. Once in awhile you would hear a lawn mower, or voices, or birds chirping, but the background noise that I observed was

not significant relative to the traffic noise.

Q. So it's fair to say that the reading that appears, in your opinion in your report, was not adjusted based on background noise; is that correct?

A. That's correct.

MR. ARENDOVICH: Pardon me one minute here. One minute. We have records which indicate different timing.

MR. LANE: Mr. Arendovich, this is not your deposition. You are not here to testify. You can do that later. You can do that at the hearing, not today, okay? That's not what we are here for. If you have an objection, please state it, but if you want to clarify his answers or add to them it's not appropriate.

THE WITNESS: You should make notes on everything you want to, Peter.

MR. ARENDOVICH: When the traffic went down, okay, okay.

THE WITNESS: But make notes so you and I could talk when we are finished here.

5:00 and 6:00 p.m. time slots.

Q. Okay. In your conclusions you mention that the data shows that from Tuesdays through Fridays the noise generated by the highway is above the noise level indicated on Title 23. Is there any other statute or regulation that's violated by these decibel levels?

A. I'm going to have to tell you that I don't know the answer to that. I imagine that there is, but I'm an engineer. I'm not much on the statute side of things, so I don't know.

Q. Is it fair to say that your opinion is that Title 23, Sound Regulations, may be violated, but you are not aware of any other --

A. That's fair.

Q. Let me finish the question, if I may.

A. I'm sorry.

Q. But you are not aware of any other state, municipal, or federal regulation that might be violated by these sound levels?

A. That's fair to say.

Q. When did you reach your opinion?

A. In May of -- initially May of 2008.
Q. Were there any other facts that you haven't discussed so far that factored into your opinion?
A. No. No, there are not.
Q. Did you disregard any facts?
A. I did not disregard any facts.
Q. What was Mr. Arendovich's response to your findings?
A. I think he was encouraged that he now has some data with which to make his case.
Q. And other than Title 23, Mr. Larson, are you aware of any other treaties or statutes that support your opinion?
A. No, I am not aware of any, but that's not to say that they don't exist.
Q. What do you believe the proper remedy is here to resolve this problem?
A. I believe a continuation of the noise walls. You know the full length of 355 on both sides would be an appropriate remedy.
Q. On the side opposite Mr. Arendovich's

investigating on the suitability of the location of I-355 near Mr. Arendovich's property?

A. Would you say that again? Now the suitability of --

Q. Right.

A. -- location of the roadway?

Q. Correct.

A. No, I have done no studies whatsoever along those lines.

Q. Have you investigated any other studies that may have been performed on the suitability of the location of the roadway?

A. No, I have not.

Q. Are you aware that the tollway has a sound wall policy?

A. No. I would like to know about that though. I'm not aware they have a policy. I was under the impression they built sound walls on an as needed basis.

Q. So it seems obvious, but if you are unaware of the sound wall policy you are unaware of whether or not the tollway

complies with that policy or not; is that correct?

A. That's correct. I don't know if they comply with that policy or what that policy would be.

Q. Mr. Larson, have I now asked you for all of the opinions which you hold in this case and have you told me any opinions that you formulated with connection to this case?

A. Yes, you have.

Q. And would you like the opportunity to review this and sign the testimony?

A. Yes, I would.

MR. LANE: I don't think I have anything else.

MR. ARENDOVICH: Thank God. Oh man, oh man, oh man.

MR. LANE: Thank you.

THE WITNESS: You're welcome.

(FURTHER DEPONENT SAITH NOT.)