

1 ILLINOIS POLLUTION CONTROL BOARD

2 HEARING OFFICER: MS. CAROL WEBB

3 MICHAEL A. PETROSIUS and )  
4 DARLA G. PETROSIUS, )  
5 Complainants, )  
6 -vs- ) PCB 04-36  
7 THE ILLINOIS STATE TOLL )  
8 HIGHWAY AUTHORITY, )  
9 Respondent. )

10 VOLUME II

11 The continuation of the hearing in the  
12 above-titled cause, taken before Tamara Manganiello,  
13 RPR, a notary public within and for the County of  
14 Will and State of Illinois, at James R. Thompson  
15 Center, Room 8-031, 100 West Randolph Street,  
16 Chicago, Illinois, on the 6th day of December, A.D.,  
17 2005, commencing at 10:00 o'clock a.m.

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## 1   A P P E A R A N C E S:

2           LAW OFFICE OF SCOTT J. DWORSCHAK,  
3           1343 North Wells Street  
4           Chicago, Illinois 60610  
5           (312) 944-8200  
6           BY: MR. SCOTT J. DWORSCHAK,

7                   Appeared on behalf of the Complainants;

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9           OFFICE OF THE ATTORNEY GENERAL,  
10          STATE OF ILLINOIS,  
11          2700 Ogden Avenue  
12          Downers Grove, Illinois 60515  
13          (630) 241-6800  
14          BY: VICTOR F. AZAR,  
15               ASSISTANT ATTORNEY GENERAL,  
16               TOLL HIGHWAY AUTHORITY,

17                   Appeared on behalf of the Respondent.

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1                   HEARING OFFICER WEBB: Good morning.  
2                   We are continuing the hearing for PCB 04-36,  
3                   Petrosius versus Illinois State Toll Highway  
4                   Authority.

5                   Mr. Dworschak, you may call your  
6                   next witness.

7                   MR. DWORSCHAK: We call John Wagner.

8                   HEARING OFFICER WEBB: Mr. Wagner,  
9                   would you please have a seat up here and the  
10                  court reporter will swear you in?

11                  (Witness sworn.)

12                  WHEREUPON:

13                  JOHN WAGNER  
14                  called as a witness herein, having been first duly  
15                  sworn, was examined and testified as follows:

16                  DIRECT EXAMINATION

17                  By Mr. Dworschak

18                  Q.       Mr. Wagner, could you state your name  
19                  and spell it for the record, please?

20                  A.       John R. Wagner, W-A-G-N-E-R.

21                  Q.       And is it all right if I refer to you  
22                  as John?

23                  A.       Yes.

24                  Q.       Could you give me a little bit about

1 your educational background?

2 A. I have a bachelor of science degree in  
3 structural engineering from the Milwaukee School of  
4 Engineering.

5 Q. And your work experience?

6 A. I worked for 20 years with the  
7 Illinois Tollway -- the last 20 years. Prior to  
8 that I worked 13 years in the private sector at a  
9 consulting engineering firm as a design engineer,  
10 construction engineer.

11 Q. And you've worked for the Tollway for  
12 20 some years?

13 A. Yes, I have.

14 Q. And what positions have you held at  
15 the Illinois Tollway?

16 A. I've worked my way through project  
17 coordinator, through senior project engineer to  
18 project manager.

19 Q. And you were the engineer in charge of  
20 the Tri-State widening project that was conducted by  
21 the Tollway in the early 1990s?

22 A. I was the project manager, yes.

23 Q. Just so I don't have to say Tri-State  
24 widening project again, it's okay if I refer to it

1 as the project?

2 A. Yes.

3 Q. Could you give us a brief scope of  
4 what that project entailed?

5 A. The project consisted of basically  
6 about 17 miles of the central Tri-State between  
7 about 95th and the Kennedy Expressway and to the  
8 north, which was basically to reconstruct the  
9 existing three lanes of pavement and add a fourth  
10 lane of pavement in each direction.

11 Q. And so the road, in laymen's terms,  
12 was three lanes in each direction, you added a  
13 fourth and rehabilitated some of the existing  
14 roadway surfaces?

15 (Whereupon, an  
16 interruption was had in  
17 the deposition  
18 proceedings.)

19 HEARING OFFICER WEBB: Mr. Wagner,  
20 maybe you should turn that off.

21 THE WITNESS: Yes, I should.

22 HEARING OFFICER WEBB: Thank you.

23 MR. DWORSCHAK: Can you read the  
24 question back to me?

1 (Whereupon, the requested  
2 portion of the record  
3 was read accordingly.)

4 BY MR. DWORSCHAK:

5 Q. Is that correct?

6 A. That is correct.

7 Q. And could you give us, in ballpark  
8 terms, the final cost of that project?

9 A. Best I can remember it must have been  
10 around \$500 million.

11 Q. And did the Tollway board of directors  
12 approve this project?

13 A. Yes, they did.

14 Q. And aren't all Tollway construction  
15 contracts approved by the Tollway board of  
16 directors?

17 A. Yes, they are.

18 Q. Now, you were manager of this project.  
19 It was a large project. You, naturally, had a lot  
20 of people that you were in charge of; is that  
21 correct?

22 A. If you want to call it in charge of,  
23 yeah.

24 Q. You had a number of --

1           A.       I administered a number of contracts.

2           Q.       You had a number of engineers that  
3 worked for the Tollway, either as employees or as  
4 consultants, correct?

5           A.       That is correct.

6           Q.       Could you give the Court a brief  
7 explanation of how the planning, designing and  
8 building of this project proceeded?

9           A.       Okay. As in most projects, you have  
10 basically a three-phase operation. The first phase  
11 is to do the planning, which involved most of the  
12 collection of data, setting criteria, parameters.

13                   Second of all is to take all of  
14 those, develop a scope of work and then put it into  
15 Phase Two, which is the actual design, identifying  
16 and creating construction plans so that the project  
17 can be built following all of the guidelines and  
18 studies that have been done in Phase One.

19                   Then contracts are awarded to  
20 local contract bids to implement the construction of  
21 those Phase Two design plans. And then Phase Three.

22           Q.       And because this is a \$500 million  
23 project, the project itself was broken into several  
24 sections and multiple contracts for ease of building

1 it, correct?

2 A. For several reasons. Yes, that's  
3 correct.

4 Q. But that's a correct statement; it's  
5 broken up to make it easier to manage?

6 A. Well, to manage and to provide  
7 opportunity for the industry to take on the work,  
8 yes.

9 Q. Did the project include any new  
10 interchanges?

11 A. I don't remember any new interchanges.  
12 Oh, yeah, the one at 75th Street. That's correct.

13 Q. I'm going to show you Complainants'  
14 Exhibit --

15 MR. DWORSCHAK: Actually, Victor, I  
16 think that's one of our joint exhibits.

17 HEARING OFFICER WEBB: The photos?

18 BY MR. DWORSCHAK:

19 Q. Showing you Joint Exhibit No. 1, it's  
20 an aerial photograph.

21 A. Okay.

22 Q. Does that look familiar to you?

23 A. That is the interchange which you  
24 identified, yes.



1 Q. So that is the 75th Street  
2 interchange?

3 A. Yes.

4 Q. And that was built as part of the  
5 Tri-State widening project?

6 A. That is correct.

7 Q. Okay.

8 MR. AZAR: Can you circle that? It's  
9 not labeled on the map. Maybe you want to  
10 label it so it's clear for the Board?

11 HEARING OFFICER WEBB: Yes. Please  
12 do.

13 MR. DWORSCHAK: I'll just write 75th  
14 Street interchange next to it.

15 MR. AZAR: Just circle what he's  
16 talking about.

17 MR. DWORSCHAK: I'm circling the  
18 entire interchange.

19 BY MR. DWORSCHAK:

20 Q. Now, John, as the manager of  
21 construction, are you aware of the circumstances in  
22 which that interchange was built and the reasons why  
23 it was built?

24 A. Obviously, studies had indicated that

1 traffic projections and growth in the area identify  
2 the need to put an interchange in place in that  
3 particular location.

4 Q. I'm showing you Complainants' Exhibit  
5 No. 15 for display purposes. Would you take a look  
6 at that document, John, please, and tell me when  
7 you're ready.

8 (Witness peruses  
9 document.)

10 THE WITNESS: Okay.

11 BY MR. DWORSCHAK:

12 Q. Does this document look familiar to  
13 you?

14 A. I have seen it before, yes.

15 Q. Could you read the first couple of  
16 lines there, like the five lines in the heading?

17 A. Full interchange, Tri-State Tollway,  
18 294 at 75th Street, agreement among the Illinois  
19 Department of Transportation, Illinois State Toll  
20 Highway Authority and the village of Hodgkins.

21 Q. Okay. And it would be a fair  
22 assumption that this agreement was between those  
23 three parties in order to build the 75th Street  
24 interchange?



1 (Whereupon, Complainants'  
2 Exhibit No. 15 was  
3 admitted into evidence.)

4 BY MR. DWORSCHAK:

5 Q. Now, John, referring you back to  
6 the Joint Exhibit No. 1, which is a large aerial  
7 photograph of the area, much larger than --

8 HEARING OFFICER WEBB: I don't think  
9 that's 1. I think I put that note on the  
10 other -- it's Exhibit 3.

11 BY MR. DWORSCHAK:

12 Q. Exhibit 3. Referring you to Joint  
13 Exhibit No. 3, would you agree, John, it's a larger  
14 aerial view of the 75th Street interchange?

15 A. When you say a larger, you mean --

16 Q. A step back?

17 A. Yes.

18 Q. Expanded. Okay.

19 A. Yes.

20 Q. And in this photograph I think we can  
21 clearly see what's known as the UPS facility?

22 A. Yes.

23 Q. And you're aware of that facility?

24 A. Yes, I am.

1 Q. Okay. And one of the reasons for  
2 building that 75th Street interchange was to serve  
3 the UPS facility that was built concurrent with it?

4 A. Well, I could say yes, that it was to  
5 facilitate the use of the UPS facility.

6 Q. I understand you're not from UPS, you  
7 didn't build it, but you had knowledge --

8 A. Obviously, somebody --

9 Q. -- of its building while you were  
10 building the Tri-State?

11 A. It's just as there are a number of  
12 other developments in the area that created the need  
13 for expanded traffic movement.

14 Q. So there's a reasonable link between  
15 the UPS facility and the 75th Street interchange?

16 A. Yes.

17 Q. And that UPS facility provides -- if  
18 the UPS drivers access the Tollway, the Tollway  
19 makes money off of it, correct?

20 A. Yes.

21 Q. You charge tolls, you make money?

22 A. Exactly. They use the road, they pay  
23 for it.

24 Q. Okay. Going back to the designing and

1 construction of the Tri-State project, you testified  
2 that you would work-up design plans?

3 A. (Nodding.)

4 Q. And then you'd put them into contracts  
5 for construction, and then you'd bid those contracts  
6 out and individual private contractors would  
7 actually build separate sections of the roadway?

8 A. That's correct.

9 Q. And, also, the Tollway would hire an  
10 engineering firm to oversee those contractors,  
11 correct?

12 A. That is correct.

13 Q. And what would that individual be  
14 called?

15 A. Construction section engineer.

16 Q. And another layer of management, the  
17 Tollway would have Tollway engineers that would be  
18 in charge of those individual sections as well,  
19 correct, Tollway employees?

20 A. Those Tollway employees would  
21 administer those contracts.

22 Q. Right. So we had several layers of  
23 management, several layers of people checking to  
24 make sure other people are doing their work

1 correctly, that things are getting done, that  
2 services are being paid for and of the like; is that  
3 correct?

4 A. Exactly. Yes.

5 Q. And would it be -- has it ever  
6 happened that while you were making -- actually out  
7 there building the road that you came across  
8 conditions or design problems that you had to change  
9 on-site?

10 A. In any construction activity, there's  
11 always opportunity that you can come across changed  
12 conditions or unforeseen conditions.

13 Q. And sometimes that's a favorable  
14 change and sometimes that's an unfavorable change;  
15 is that correct?

16 A. It's, obviously, something that was  
17 not addressed in the original design.

18 Q. And those type of problems, a list of  
19 examples could be the soil conditions would be  
20 different than what you thought, the drainage  
21 conditions could be different than what you thought?

22 A. There's a wide variety of things that  
23 could happen.

24 Q. Could you name anything that maybe I

1 missed?

2 A. A number of things.

3 Q. Well, could you give me a couple that  
4 are -- give me the most important types of problems  
5 that you would encounter that I didn't mention.

6 A. Like I say, changed conditions.  
7 Anything when you're working subsurface, you're only  
8 taking a guess at what's below the top of the  
9 ground. Okay? So what you're always looking is  
10 there's possibilities of obstructions, types of  
11 physical situations that are of nature, and then  
12 there are man-made; utilities and all kinds of other  
13 things that have been placed in the ground that were  
14 never caught during the design. So there's always  
15 situations that you're coming around. When you  
16 start digging in the ground, you're going to come  
17 across things that you may not have come across.  
18 Those are the most common ones because they are out  
19 of sight.

20 Q. And in your 20 years-plus of  
21 construction engineering expertise, it's not  
22 uncommon to come across problems like that, correct?

23 A. No.

24 Q. And that's standard? It's a big



1 project, a lot of things happen.

2 A. It's going to happen.

3 Q. So if you came across a problem like  
4 this, what would you do to adjust for it?

5 A. Well, generally, you would identify  
6 what the particular situation -- what the problem  
7 was creating with the design and get all of that  
8 information and return it back to the original  
9 designer so that he could make the changes to his  
10 design to accommodate this discovery or this changed  
11 condition.

12 Q. And for the contractor on-site to make  
13 a change, you need to give him permission in a  
14 change order type document?

15 A. Well, the contractor doesn't change  
16 it, the designer changes it and then we would create  
17 a new work item for the contractor to perform that  
18 changed condition.

19 Q. And if that change order changed his  
20 contract, you would need to adjust his contract?

21 A. Generally, that's what you're doing is  
22 that he had a contract to perform certain work and  
23 now you're adding work to the contract, so yes.

24 Q. And if you change the contract, those

1 change orders go back to the Tollway board for  
2 approval or disapproval; is that correct?

3 A. Yes. Any time you change any  
4 contract, the board is required -- has the needed  
5 authorization to change the contract.

6 Q. Now, going back to the Tri-State  
7 project again, were contracts for noise abatement  
8 walls included within the scope of this project?

9 A. Yes, there were.

10 MR. DWORSCHAK: Give me a minute,  
11 John, to look for an exhibit.

12 HEARING OFFICER WEBB: Are you looking  
13 for the Respondent's exhibits?

14 MR. DWORSCHAK: Yes.

15 (Brief pause.)

16 BY MR. DWORSCHAK:

17 Q. I'm showing you, John, Respondent's  
18 Exhibit No. 14. Could you take a look at that for  
19 me for a minute and tell me when you're ready?

20 (Witness peruses  
21 document.)

22 THE WITNESS: Okay.

23 BY MR. DWORSCHAK:

24 Q. Does that document look familiar to

1     you?

2             A.       Yes.

3             Q.       And it shows the final cost for the  
4     noise wall for the Tri-State project; is that  
5     correct?

6             A.       It shows the final cost of a certain  
7     type of noise wall. Not the total. There were  
8     other types of noise walls on the project that were  
9     built besides this particular contract. But this is  
10    a contract with Prestress Engineering to put up  
11    concrete -- precast concrete noise walls.

12            Q.       And what was the cost of the concrete  
13    noise walls?

14            A.       You're really pushing me here today.  
15    I should have brought my glasses.

16                    MR. DWORSCHAK: I'll give you a  
17    minute.

18    BY THE WITNESS:

19            A.       Adjusted contract amount, \$11,318,000.

20    BY MR. DWORSCHAK:

21            Q.       So the contract spent \$11 million plus  
22    for concrete walls, and in addition there were some  
23    wood walls built by the Tollway?

24            A.       Yeah.

1           Q.       And you even had a section with  
2 composite rubber and plastic?

3           A.       Plastic walls, that's correct. There  
4 were several different types of walls.

5           Q.       And what was the -- and I know you  
6 don't have the document in front of you -- basically  
7 how many miles of noise wall were built in  
8 conjunction with the Tri-State widening project?  
9 And just give me what your estimate would be.

10          A.       I really -- I don't really remember  
11 what that was.

12          Q.       Would it be fair to say that --

13          A.       Obviously, we put --

14          Q.       -- between 15 and 20 miles of wall  
15 were put up?

16          A.       I was going to say that. That's  
17 probably a good guess.

18          Q.       Okay. Now, John, as an engineer,  
19 you're aware of how a noise wall should function or  
20 how it's intended to function; is that correct?

21          A.       I have an idea, yes. There are  
22 different types of noise walls that perform  
23 differently.

24          Q.       That's right, but what I want to do is

1 talk about how, in general, a noise wall would  
2 operate and things of that nature.

3                   So in a noise generator, such as a  
4 toll road, the vehicles on it generate different  
5 types of noises, correct?

6           A.       That's correct.

7           Q.       And those types of noises are the  
8 tires hitting the pavement?

9           A.       Yes.

10          Q.       The engine noise?

11          A.       Yes.

12          Q.       The exhaust, whether it's out of a car  
13 exhaust or an exhaust of a semi?

14          A.       Still can be considered engine noise,  
15 yes.

16          Q.       You also have noise of trucks hitting  
17 bumps in the road; that kind of noise?

18          A.       Again, it's pavement hitting -- I  
19 mean, tires hitting the roads, yes.

20          Q.       So would you agree with me that there  
21 are several types of noises that are generated by  
22 vehicles driving on the Tollway?

23          A.       I think you've named most of them, but  
24 yes.

1                   THE COURT REPORTER: You need to let  
2                   him finish his question before you answer so  
3                   I can get it down. Thank you.

4                   THE WITNESS: I'm sorry.

5 BY MR. DWORSCHAK:

6                   A.       In terms of noise abatement, where is  
7                   the best place to put a noise wall to reduce noise  
8                   coming from the roadway from -- I mean, reducing the  
9                   amount of noise coming from the roadway off the  
10                  roadway?

11                  MR. AZAR: I'm going to object to this  
12                  question. There's no foundation as to his  
13                  knowledge of this. He testified he's a  
14                  structural engineer and worked as a  
15                  construction engineer. He hasn't articulated  
16                  any expertise in design and placement of  
17                  sound walls. I don't believe that's a fair  
18                  question to ask.

19                  HEARING OFFICER WEBB: Would you like  
20                  to establish foundation?

21                  MR. DWORSCHAK: I'll establish  
22                  foundation.

23 BY MR. DWORSCHAK:

24                  Q.       One of your jobs, John, during the

1 Tri-State widening project was overseeing a noise  
2 wall contract installation, correct?

3 A. Uh-huh.

4 THE COURT REPORTER: Is that yes?

5 THE WITNESS: Yes.

6 BY MR. DWORSCHAK:

7 Q. And one of your jobs was attending  
8 public functions for communities adjacent to the  
9 Tri-State project to explain the noise walls to  
10 them, correct?

11 A. Yes.

12 Q. So you answered questions from the  
13 public about the noise wall placement and how the  
14 noise wall, in general, would work, correct?

15 A. Only to the regard of deciphering the  
16 construction plans to the people who were asking  
17 questions.

18 Q. But you have a general knowledge of  
19 the noise walls and, as an engineer, you have a  
20 general knowledge of noise -- you're not a noise  
21 expert. I never said you were.

22 A. And what does general knowledge mean?  
23 I don't know.

24 Q. Well, as an engineer, you oversaw the

1 project. Part of the project was the noise wall  
2 installation and you had certain knowledge of how  
3 that wall was designed and built, correct?

4 A. Yeah.

5 Q. So you have general knowledge of it?

6 A. Okay.

7 MR. AZAR: I don't believe that's  
8 sufficient. I sense that he's having a  
9 reluctance to testify to these questions  
10 because these are design issues and that's  
11 not his area of expertise. He never claimed  
12 to be. He simply articulated what has been  
13 drawn down on the plans, but not how it was  
14 designed. That's someone else's function. I  
15 don't think it's fair to ask him questions on  
16 that design.

17 HEARING OFFICER WEBB: I'm not sure  
18 how much he understands of it either. But  
19 I'm willing -- if you'd like to ask him some  
20 more questions.

21 MR. DWORSCHAK: Well, I think I've  
22 laid the foundation that he oversaw the noise  
23 wall contracts. So he had a knowledge of  
24 that enough to approve a contract. He



1           certainly wouldn't approve something he  
2           doesn't know anything about.

3                   THE WITNESS: First of all, I didn't  
4           approve it. Okay?

5 BY MR. DWORSCHAK:

6           Q.       You oversee them?

7           A.       Again, I only administered contracts.

8           Q.       John, we've established the Tollway  
9           board approves them, not you. I'm not trying to say  
10          you approve them.

11                   HEARING OFFICER WEBB: Well, if I may  
12          ask a direct question? Do you understand how  
13          the noise wall works? And understanding  
14          you're not an expert, generally -- you're a  
15          scientist, you're an engineer -- do you have  
16          a basic understanding of the function of the  
17          noise wall?

18                   THE WITNESS: Yes.

19                   HEARING OFFICER WEBB: Okay.

20                   THE WITNESS: And that's the extent.  
21          But to sit there and say that I was teaching  
22          or explaining to third people this particular  
23          design, I'm only reflecting what is shown on  
24          somebody else's design.

1                   HEARING OFFICER WEBB:   Okay.  I don't  
2                   recall what your question was.

3                   MR. DWORSCHAK:   We were talking about  
4                   the types of noise coming from the Tollway,  
5                   how it was generated.  We are now talking  
6                   about how a noise wall would function to  
7                   reduce that noise.

8                   MR. AZAR:   And then you were getting  
9                   beyond that to how it works while it's in  
10                  place and that's why I objected because  
11                  that's a design issue.

12                  MR. DWORSCHAK:   Okay.

13                  HEARING OFFICER WEBB:   Okay.  Well, is  
14                  that what you asked, how it was decided where  
15                  it was placed?

16                  MR. DWORSCHAK:   I'm looking at my  
17                  notes.

18                  HEARING OFFICER WEBB:   Or would you  
19                  want to start over?  Do you want to start  
20                  this line over?

21                  MR. DWORSCHAK:   Okay.

22                  BY MR. DWORSCHAK:

23                  Q.       I believe I did ask what was the most  
24                  effective placement of noise walls and you feel

1     you're not qualified to answer that?

2                     HEARING OFFICER WEBB:   You do not  
3             know?

4                     THE WITNESS:   No.

5                     HEARING OFFICER WEBB:   If you  
6             don't know --

7                     THE WITNESS:   I don't know.

8                     HEARING OFFICER WEBB:   Okay.

9     BY MR. DWORSCHAK:

10            Q.       In general terms, would it be better  
11     to have the wall closer to the noise generator or  
12     farther away from the noise generator?

13            A.       Well, let me ask you this:   What type  
14     of wall are you talking about?

15            Q.       I'm talking about a noise wall.

16            A.       And there are different types of noise  
17     walls.

18            Q.       Okay.   I'm talking about a concrete  
19     noise wall.

20            A.       Yes.

21            Q.       And I'm saying is it better to have  
22     the concrete noise wall closer to the noise  
23     generator source or farther away from the noise  
24     generator source?

1                   MR. AZAR: I'm going to object to  
2                   this. He's asking for an opinion from a  
3                   professional engineer. I think he's  
4                   established he's not qualified. If he's  
5                   asking for a layman's opinion with some  
6                   knowledge in the area, that's different. I  
7                   think you have to make it clear to the Board  
8                   what kind of opinion he's eliciting if he's  
9                   asking for an opinion. It's clear he's  
10                  trying to use Mr. Wagner's P.E. status to  
11                  bolster an opinion that he's not comfortable  
12                  rendering as an engineer, but I think he's  
13                  asking for a layman's opinion.

14                 HEARING OFFICER WEBB: Well, I agree  
15                  that he's not a layman, but I would suggest  
16                  that if you don't know, simply respond that  
17                  you don't know or you're not sure or you need  
18                  more information such as -- that's  
19                  acceptable.

20                 THE WITNESS: Okay. Let me explain.  
21                  I mean, as I stated, there are always lots of  
22                  different types of designs and all designs  
23                  are project- or location-specific. And  
24                  depending on the types of wall that you're

1           designing for, the conditions, you cannot  
2           just make a general statement.

3                   HEARING OFFICER WEBB: Well, can we --  
4                                   (Simultaneous colloquy.)

5                   THE WITNESS: To state that --

6                   MR. DWORSCHAK: I'm going to move on.

7                   THE WITNESS: -- this is where it  
8           should be, everything is project-specific.  
9           Okay?

10                   HEARING OFFICER WEBB: Okay.

11 BY MR. DWORSCHAK:

12           Q.       John, how did the Tollway determine  
13   where the noise walls would be built on the  
14   Tri-State project? How did you determine that?

15           A.       We hired a firm to do studies which  
16   identified the needs and the types and the locations  
17   that barriers would need to be placed.

18           Q.       And what was the name of that company?

19           A.       Versar.

20           Q.       And, in general terms, what did Versar  
21   do to determine where noise walls should or should  
22   not be placed on the Tri-State widening project?

23           A.       Well, they used a method of setting  
24   out doing physical evidence of putting out certain

1 receptors that would identify particular noise  
2 levels as they existed prior to any of the  
3 implementation of any changes to the situation. And  
4 then used computer modeling based upon estimated  
5 projections and a number of other information to put  
6 into that modeling to come up with recommended  
7 locations of putting -- locating barriers to reduce  
8 the sounds to areas that were identified as needing  
9 some type of compensation to reduce those projected  
10 noise levels.

11 Q. Okay. Thank you. So, in general  
12 terms, the Versar Company would create a computer  
13 model, they would place projected traffic into that  
14 model, and that model would generate a certain level  
15 of noise, correct?

16 A. Yes.

17 Q. And then they would apply that  
18 computer model to the topography of the Tri-State  
19 widening project, correct?

20 A. You can say that, yes. Okay.

21 Q. And then they determined from the  
22 computer model where 67 decibels would -- a line of  
23 67 decibels would be created from that computer  
24 model based upon the topography of that area,

1 correct?

2 A. That's correct.

3 Q. And when that 67 decibel line came in  
4 contact with a residence, that's when they  
5 determined that a noise wall may be appropriate?

6 A. That's correct.

7 Q. And then once they determined the  
8 noise wall would be appropriate, the next step was  
9 to determine how high the wall needed to be to  
10 reduce that noise, correct?

11 A. That's true. Yes.

12 Q. Okay. And the next thing they had to  
13 do was figure out where to put the wall, correct?

14 A. Well, putting the wall and determining  
15 the height work together, basically.

16 Q. But it's not simple to say you put an  
17 eight-foot wall up and everything is good because it  
18 depends where you put that wall, correct?

19 A. That's what I said, yes.

20 Q. So in areas where the roadway -- the  
21 pavement is in relation the same as the adjacent  
22 property, putting a wall in that area is a little  
23 easier, correct, in terms of noise abatement? I'm  
24 sorry. Let me rephrase that.

1           A.       Please.

2           Q.       You have varying -- the road and the  
3   adjacent property through the Tri-State widening  
4   project area varies considerably, correct?

5           A.       (Nodding.)

6           Q.       There are places when the road is high  
7   and the homes or adjacent properties are low, and  
8   there's times when they're the same, and there's  
9   times when the adjacent property is higher than the  
10  road, correct?

11          A.       Yes.  You have all types of  
12  conditions.

13          Q.       That's right.  So if you had an area  
14  where the road was below the level of the adjacent  
15  properties, the change in topography itself already  
16  created some type of noise abatement, correct?  You  
17  had a variation, you had either a berm or you had a  
18  change in height, correct?

19          A.       I guess what I think you're asking is  
20  is that you have to realize that you're trying to  
21  abate the noise to some location.  Okay?  And,  
22  basically, the best way to mitigate or abate this is  
23  to put some type of construction between the source  
24  of the sound and the receptor of that sound.



1                   So if the topography was that you  
2    had where it was coming from and between it over  
3    some type of a barrier, obviously, at that point,  
4    the noise abatement was already in place. Okay?

5           Q.       John, what --

6           A.       I don't understand what you're trying  
7    to --

8           Q.       -- I'm trying to establish is that the  
9    conditions and the elevations changed throughout the  
10   project. And based upon several factors, the Versar  
11   Company determined where the best place to put a  
12   wall was based upon all those factors. It's not as  
13   simple as saying everybody gets eight feet of wall,  
14   correct?

15          A.       Well, they basically made a model and  
16   made recommendations about where and what types of  
17   barriers -- that barriers should be put in place.  
18   But that information was given to the designers who  
19   had to then actually physically create the plans  
20   that would interpret -- you know, that would try to  
21   meet the findings of the study. They did not  
22   basically say, this is what you had to do, they just  
23   identified the need.

24          Q.       And were all the recommendations of

1 the Versar Company incorporated into your actual  
2 final design and construction plans?

3 A. I think they were, yes.

4 Q. Did you or the Tollway ever make any  
5 changes to the Versar recommendations that you're  
6 aware of?

7 A. No. We would not -- we hired them.  
8 We don't have any expertise to change them.

9 Q. Now, John, are you familiar with the  
10 subject of today's hearing?

11 A. Just based upon what was in the  
12 deposition.

13 Q. Do you know we're here for a property  
14 located in Countryside that had a complaint about  
15 noise from the Tollway?

16 A. That's my understanding, yes.

17 Q. And let me show you, again, Joint  
18 Exhibit No. 3. I think you saw this before. This  
19 is the -- another aerial shot, the 75th Street  
20 interchange. And you can see the circle here,  
21 that's the property in question for today's hearing.

22 A. Okay.

23 Q. Does that give you a little  
24 familiarity with the area?

1 A. Yes.

2 Q. Have you ever been to that residence?

3 A. Have I ever been to that residence?

4 Q. Yeah.

5 A. No. I can't really say that I have.

6 Q. But that section of the Tri-State  
7 you're very familiar with?

8 A. I'm familiar with all of the  
9 Tri-State, yes, since I've looked at the plans.

10 Q. John, I'm showing you Complainants'  
11 Exhibit No. 16 for exhibition purposes. Could you  
12 take a look at that, please?

13 (Witness peruses  
14 document.)

15 THE WITNESS: Okay.

16 BY MR. DWORSCHAK:

17 Q. Does that document look familiar to  
18 you?

19 A. It looks like it's a sheet out of one  
20 of our --

21 Q. I think, John, if you go through it  
22 you'll have the actual cover sheet. They're a  
23 little bit out of order, but does that help you?

24 A. Okay.

1           Q.       Can you read the title of the  
2 document, please?

3           A.       It says the Illinois State Toll  
4 Highway Authority, furnish noise abatement wall,  
5 Station 1090 to Station 2297+23.

6 BY MR. DWORSCHAK:

7           Q.       And this is a type of contract  
8 document you're familiar with?

9           A.       Yes. This is a title sheet that's  
10 typical of many of our construction plans.

11          Q.       And I'm aware that it's been a number  
12 of years since that was built, but you remember this  
13 project, correct?

14          A.       Yes.

15          Q.       And this document is a fair  
16 representation of that contract?

17          A.       Yes.

18                 MR. DWORSCHAK: Your Honor, I ask that  
19 Exhibit No. 16 be entered into evidence.

20                 MR. AZAR: No objection.

21                 HEARING OFFICER WEBB: Exhibit 16 is  
22 admitted.

23                                 (Whereupon, Complainants'  
24 Exhibit No. 16 was

1 admitted in to  
2 evidence.)

3 BY MR. DWORSCHAK:

4 Q. Now, John, I'm going to ask you to go  
5 through this document with me, so bear with me.

6 A. Okay.

7 Q. What I'd like to do is determine the  
8 conditions next to the property in question as I  
9 showed you from Joint Exhibit No. 3 as it relates to  
10 the contract.

11 A. Uh-huh.

12 Q. If you'll notice here, you'll see the  
13 ramp coming from the 75th Street interchange onto  
14 the Tri-State main line. Does that show a  
15 resemblance to the page in Exhibit 16 that you're  
16 looking at?

17 A. Yes. I would say they're the same  
18 location.

19 Q. Okay. And could you help me -- I know  
20 the Tollway not only uses mile markers, but being  
21 more specific, you use what's called station  
22 numbers, correct?

23 A. Yes, we do.

24 Q. And station numbers are a more

1 accurate way of determining the roadway's position  
2 for construction and other types of activities,  
3 correct?

4 A. Yes. It's a good reference point.

5 Q. Could you help me -- the property in  
6 question is circled here, which is the same as I  
7 circled on Exhibit No. 3.

8 A. Okay.

9 Q. Joint Exhibit No. 3.

10 A. Uh-huh.

11 Q. Could you tell me the station number  
12 that's closest to the property in question?

13 A. I would say it's about --

14 Q. 1345-ish, in there?

15 A. I would say about 1347 probably is the  
16 closest.

17 Q. All right. Now, I'll give you a  
18 minute. Looking at this contract, this Exhibit  
19 No. 16, you can determine where the wall was built  
20 in this area, as well as its height, correct?

21 A. From this plan?

22 Q. No. There's other documents in this.

23 A. Okay.

24 Q. And is that true?

1           A.       Well, let me look to see what other  
2 plans we have in here.

3           Q.       All right.

4                               (Witness peruses  
5                               document.)

6 BY THE WITNESS:

7           A.       What did we say, 1347? It would be  
8 Station 1347.

9 BY MR. DWORSCHAK:

10          Q.       Okay. So that would tell you the  
11 height of the wall? What is that page showing you?

12          A.       Are you referring to the height of the  
13 wall or the top of the elevation of the wall?

14          Q.       Well, I'll ask you both. I want to  
15 make sure we're on the right page.

16          A.       I just want to make sure I'm answering  
17 the right question.

18          Q.       This page of the exhibit helps you  
19 determine what?

20          A.       Well, actually this particular project  
21 that you've done is to furnish wall.

22          Q.       Okay.

23          A.       So this was the basis that the  
24 contractor had to do to provide wall to fill in the

1 area that is shown in here.

2 Q. Okay. And then according to this  
3 contract, what was the height of the wall installed  
4 near Station Number 1347?

5 A. Based on this, this shows a proposed  
6 grade at the noise wall. And if we're looking at  
7 1347, it looks like we're just at about elevation  
8 six. Probably it looks like about 624 and a half.  
9 According to this here, this shows to be at around  
10 638. So we're talking about a 13 -- I would say  
11 it's about a 13-foot high wall.

12 Q. Okay. And if you move a little bit to  
13 the left, the next section of roadway -- next  
14 section of wall, what is the height of this section?

15 A. Okay. That, again, it looks like at  
16 that point it's about 621 to 635, so it's about  
17 14-foot.

18 Q. The wall itself?

19 A. Yeah.

20 Q. Now, this document also determines  
21 what's called a profile grade, correct?

22 A. Yeah.

23 Q. And what is a profile grade?

24 A. A profile grade in this particular



1 case is the grade that is the profile that's been  
2 identified along the pavement -- the edge of the  
3 pavement.

4 Q. So that's basically the height of the  
5 pavement, correct?

6 A. At that location.

7 Q. At that location?

8 A. Yes.

9 Q. Okay. And the difference between the  
10 profile of grade and the height of the wall at this  
11 location is what?

12 A. The height -- you want the difference  
13 in height?

14 Q. We talked about the height of the  
15 wall. Now we're talking about the height of the  
16 wall in relation --

17 A. To the roadway?

18 Q. -- to the roadway?

19 A. Okay. And according to this, go back  
20 to 1347, it shows at about 632 to 638, so that's  
21 about eight feet.

22 Q. Okay. And if you move further to the  
23 left to Station 1345, do you see that?

24 A. Uh-huh.

1           Q.       And would it be fair to say that the  
2   profile grade and the wall height are meeting at  
3   that spot?

4           A.       They're about the same elevation at  
5   about 1345.

6           Q.       And for a little bit there actually  
7   the profile grade is higher than the wall?

8           A.       It really doesn't show that.

9           Q.       If you look at the line -- I'm looking  
10  at profile grade and see that line right there  
11  (indicating)?

12          A.       Maybe for about a foot.

13          Q.       Okay. And then for several distances  
14  they're even. You can't even tell the difference  
15  between the wall height and the road itself?

16          A.       Okay.

17          Q.       Correct?

18          A.       That's what it shows.

19          Q.       Okay. John, I'm showing you  
20  Complainants' Exhibit No. 7 (sic) for exhibition  
21  purposes. I'll give you a minute to take a look at  
22  that document.

23                   MR. AZAR: Seventeen maybe?

24                   MR. DWORSCHAK: I'm sorry. Seventeen.

1 (Witness peruses  
2 document.)

3 THE WITNESS: Okay.

4 BY MR. DWORSCHAK:

5 Q. Does that document look familiar to  
6 you?

7 A. Yes.

8 Q. And what is that document?

9 A. It looks like it's part of a table  
10 that came out of the Versar study even though it  
11 doesn't say anything -- doesn't indicate Versar on  
12 it. But it's a type of study that was in the Versar  
13 study.

14 Q. And that's the type of study we talked  
15 about earlier in your testimony about how Versar  
16 determined and then recommended various wall  
17 heights; is that correct?

18 A. Uh-huh.

19 MR. DWORSCHAK: Your Honor, I move  
20 that Complainants' Exhibit No. 17 be admitted  
21 into evidence.

22 MR. AZAR: No objection.

23 HEARING OFFICER WEBB: Exhibit 17 is  
24 admitted.

1 (Whereupon, Complainants'  
2 Exhibit No. 17 was  
3 admitted into evidence.)

4 BY MR. DWORSCHAK:

5 Q. Now, John, referring you to the  
6 station numbers we were talking about earlier, can  
7 you find the 1345 vicinity for me on this?

8 (Witness peruses  
9 document.)

10 BY MR. DWORSCHAK:

11 Q. Would it be fair if I pointed it out  
12 to you?

13 A. Okay.

14 Q. So there's a chart on this,  
15 Complainants' Exhibit No. 17, which exhibits the  
16 area of 1345 in relation -- in terms of this  
17 document, it says between 1362 and 1343; is that  
18 correct?

19 A. Yes.

20 Q. Okay. And what is the recommended  
21 wall height above the road on this document?

22 A. It hasn't --

23 MR. AZAR: Objection to that  
24 characterization. That is not what it says.

1 BY THE WITNESS:

2 A. That isn't what it says.

3 BY MR. DWORSCHAK:

4 Q. Well, no. It says, barrier height  
5 above road in feet, correct?

6 A. Yeah. But it also states that --  
7 there's a little asterisk on there. It says barrier  
8 height above road --

9 Q. Just read what it says.

10 A. It says 18.

11 Q. And there's an asterisk next to it,  
12 correct?

13 A. That is correct.

14 Q. Okay. So, in general terms, that  
15 means the wall height should be 18 feet above the  
16 road at this location -- let me finish.

17 A. Okay.

18 Q. But there is an asterisk, right?

19 A. Yes.

20 MR. AZAR: I'm going to object again.

21 That is not what the document says. It says  
22 barrier height, not wall height. If he wants  
23 to ask him about what the barrier height  
24 should be, that's -- he's starting to put

1 words into the document that aren't there.

2 THE WITNESS: That's correct.

3 BY MR. DWORSCHAK:

4 Q. Okay. What is the difference between  
5 barrier height and wall height?

6 A. Again, I don't understand, myself, if  
7 you're talking the actual physical height of the  
8 wall or the relative elevation of the top of the  
9 wall.

10 Q. I believe I'm talking about the --

11 A. I mean, it's --

12 Q. -- the elevation. I believe this  
13 document helps the Tollway or recommends to the  
14 Tollway how much barrier should be between the road  
15 and the adjacent properties, whether in terms of  
16 wall height or a combination of wall height and  
17 terrain; would that be correct?

18 A. Not necessarily.

19 Q. And where am I wrong?

20 A. As I stated, there is information  
21 that's not shown on here. You're just looking at a  
22 table. You need to have an interpretation of the --  
23 there should be an explanation of all of this.

24 Q. Okay. John, I'm going to go back to

1 your deposition testimony.

2 A. Okay.

3 MR. DWORSCHAK: Page 23, Victor.

4 BY MR. DWORSCHAK:

5 Q. And this same kind of discussion came  
6 out in your deposition, correct?

7 A. Okay.

8 Q. And we were looking at that time, as  
9 well, what that asterisk represented, correct? Do  
10 you remember that?

11 A. I don't remember that, no.

12 Q. All right. I'm going to read my  
13 question to you and then your answer.

14 A. Okay.

15 Q. I asked you: Perhaps could you look  
16 at the document -- since you have the original  
17 document, could you look and see if you can find  
18 what the asterisk may reference? And your answer  
19 was: Total barrier height above road needed a  
20 25-foot barrier, equals a ten-foot barrier on a  
21 ten-foot right-of-way or a 50-foot higher  
22 right-of-way will achieve similar results.

23 Do you remember saying that?

24 A. I don't think that's something I would

1 say. I would have probably been reading that from  
2 something, I would assume, because I wouldn't know  
3 what that means other than an asterisk would have to  
4 have a definition, and I wouldn't be able to come up  
5 with that. I would have to have read what that  
6 means.

7 Q. Okay. And we went on further.

8 MR. DWORSCHAK: Page 24, Victor.

9 BY MR. DWORSCHAK:

10 Q. I asked you: Could you give me an  
11 explanation based upon your expertise what, in fact,  
12 it means? And your answer was: What it means is  
13 that it has nothing to do with the height above the  
14 roadway. It just indicates that the elevation  
15 identified can be achieved by a combination of wall  
16 height plus the elevation of the ground at the  
17 location where the wall goes in, meaning if the  
18 ground elevation is where they're putting the wall  
19 in it means the elevation that is recommended at the  
20 height of the barrier, no wall is necessary.

21 Now, I know that was a little bit  
22 confusing. I'm reading your words. So I went on  
23 and -- I'm continuing on the same page. I said:  
24 And correct me if I'm wrong, in laymen's terms, if



1    you had a 12-foot barrier at this location above the  
2    roadway surface, you would only require an  
3    additional six feet of noise wall to reach the  
4    18 feet recommended; is that correct:

5           A.       Okay.  So what did I say?  I said  
6    if --

7           Q.       Well, I know it's difficult.  I'm  
8    going to let you read this.  I know it's difficult  
9    for you to hear me talk and try to understand.  So  
10   I'm going to give you a minute to refresh your  
11   memory.

12          A.       Where are we looking?

13          Q.       That was the last question I read and  
14   that was your answer (indicating).

15                    Let me know when you're  
16   comfortable.

17                               (Witness peruses  
18                               document.)

19                   THE WITNESS:  Okay.

20   BY MR. DWORSCHAK:

21          Q.       So further on in your testimony I  
22   asked you:  So the asterisk is just saying that a  
23   combination of factors can reach an 18 feet  
24   mitigation?  And your answer was:  That's that.

1                   And I further went on to say: But  
2 18 feet of mitigation is required; is that correct?  
3 And you answered: I would have to say that's  
4 probably what it says there, yes.

5           A.       Okay. As I'm stating, I'm just  
6 looking at this, no expert on it, I'm interpreting  
7 what it stated. It shows an asterisk. There is a  
8 comment here that says, switch from shoulder to berm  
9 at right-of-way. Okay? So that would generally  
10 give you the indication that it's a combination of  
11 the wall height plus the berm height.

12          Q.       And earlier in this testimony we went  
13 through the wall that you put in, and I believe your  
14 comments were between 13 and 14 feet of wall,  
15 correct?

16          A.       Yes.

17          Q.       And in your testimony we also talked  
18 about the profile grade. And we showed that at  
19 times the profile grade was actually above the wall,  
20 other times it was equal to the wall, other times it  
21 was slightly below the wall.

22          A.       Okay.

23          Q.       Is that correct? Is that what you  
24 said in your testimony?

1           A.     Yes.

2           Q.     Okay.

3           A.     As I interpreted the plan --

4           Q.     Okay.

5           A.     -- that you showed me, yes.

6           Q.     So do you believe, based upon that

7 testimony, that the Tollway installed 18 feet of

8 mitigation in the area in question?

9           A.     I'm only saying we installed what our

10 designer told us to install. You're asking me to

11 interpret the design and I'm only telling you what I

12 read in the study. Okay? What you're -- I can't

13 speak for the designer.

14          Q.     And I'm not asking you to.

15          A.     Well, you're asking me what it shows

16 on here and I'm just telling you that's all I can

17 see. I've read the plans that somebody else

18 designed. Okay?

19          Q.     And I'm asking you to interpret

20 documents that were submitted to the Tollway to

21 assist you in building the noise wall, then I asked

22 you how the Tollway built the wall. We looked at

23 the contract. And I asked you where that wall

24 height was. That's what my questions were.

1           A.       And I'm only repeating what I see on  
2 the plans or the documents that you show me.

3           Q.       And I understand that. I'm asking  
4 you: Do you believe that based upon the  
5 recommendations from Versar did the Tollway build in  
6 the area in question from Station Number 1345 what  
7 was recommended?

8           A.       No. I am going by we built what the  
9 designer --

10          Q.       It's a yes or no question, John.

11          A.       You asked me and I'm interpreting that  
12 we built what the designer said we should build. We  
13 didn't build what Versar said we were supposed to.  
14 We're supposed to build what the designer said we  
15 were to build.

16          Q.       But earlier in your testimony you told  
17 me that Versar made recommendations and you weren't  
18 aware of any changes you made to that and you built  
19 what they recommended.

20          A.       No. I said the designer used their  
21 study to come up with their design.

22                    I'm hoping that somebody  
23 understands. I did not -- we did not use Versar for  
24 the design, we used it for the basis for the design.

1 And you're showing me plans of what we built. Okay?

2 And we built it to what was shown in the plan.

3 Q. And earlier -- and I'll have her go  
4 back if we need to. I asked you: Based upon the  
5 process, Versar made recommendations as to the  
6 location and height of the noise wall, correct? And  
7 you said, yes. And these conditions were  
8 incorporated into the roadway design plans? You  
9 answered yes.

10 A. Yes.

11 Q. So where was the change?

12 MR. AZAR: I'm going to object. The  
13 problem I have with this line of questions is  
14 he's trying to get Mr. Wagner to say the  
15 design was improperly done. That's what he's  
16 trying to do in a roundabout way. He refused  
17 to do that because he didn't design it and  
18 doesn't have the competency to testify to  
19 that.

20 If he wants to do an attack of the  
21 design, which is what he's trying to do, he  
22 should have hired an expert to attack the  
23 design. He's trying to get someone who  
24 managed the construction project to attack

1           the design based on planning documents, and I  
2           don't think that is a proper foundation to  
3           attack the design. That's ultimately what  
4           he's trying to do and Mr. Wagner is saying  
5           I'm not going to do that.

6                   HEARING OFFICER WEBB: Well, I think  
7           that the question really goes to Mr. Wagner's  
8           personal opinion and does he believe. He's  
9           not stating -- asking him for the fact of  
10          whether this was done, but do you believe it  
11          was done and what is your personal opinion?  
12          You're an engineer. We know you're not the  
13          designer. You clearly established that. But  
14          you're a man of science, you're an engineer  
15          and you've looked at these plans. What is  
16          your personal opinion? I think that's the  
17          question that's been asked several times.

18   BY MR. DWORSCHAK:

19           Q.       That's correct.

20           A.       And I have stated that I -- to the  
21   best of my knowledge, that the designer utilized the  
22   Versar study and met the recommendations that were  
23   provided by Versar.

24                   HEARING OFFICER WEBB: So you believe

1           the recommendations were met? Is that  
2           your --

3                   THE WITNESS: I am saying that I would  
4           assume that the designer did meet those.  
5           Yes.

6 BY MR. DWORSCHAK:

7           Q.       Are you aware of any changes to the  
8           noise wall that the Tollway made during -- before or  
9           during the construction of the Tri-State widening  
10          project?

11          A.       What kind of changes?

12          Q.       Okay. You said that Versar developed  
13          where the wall should be, the designer took those  
14          recommendations and gave you a product where they  
15          thought walls should be.

16          A.       That is correct.

17          Q.       And the Tollway, once they received  
18          those documents, did they make any changes to it?

19          A.       We would not make changes to the  
20          document. The designer would make them because we  
21          paid for the design. The designer would have  
22          to make the changes.

23          Q.       But the question was: Did the Tollway  
24          make changes?

1 A. No.

2 Q. And, obviously, your answer is no  
3 then.

4 A. No.

5 Q. John, after the completion of the  
6 Tri-State widening project, what was your next job  
7 at the Tollway? Were you manager of construction?

8 A. Yeah. I continued providing the same  
9 services I did before, just at a different location  
10 on the system.

11 Q. And as manager of construction, all  
12 roadway contracts would be under your jurisdiction?  
13 And say you approved them, they'd go through your --

14 A. That's what I did. We administered  
15 construction contracts, yes.

16 Q. And noise wall contracts on the  
17 roadway are construction contracts, right?

18 A. That's correct.

19 Q. Okay. I'm showing you Complainants'  
20 Exhibit No. 14. I'll give you a minute to take a  
21 look at that document, John.

22 A. Okay.

23 Q. Tell me when you're ready.

24



1 (Witness peruses  
2 document.)

3 THE WITNESS: Okay.

4 BY MR. DWORSCHAK:

5 Q. Does this document look familiar to  
6 you, John?

7 A. Not really. I mean, it's a Tollway  
8 document -- I mean, a set of plans.

9 Q. It's a construction document that  
10 would go through your jurisdiction as the Tollway's  
11 construction manager, correct?

12 A. I guess. It shows that it was issued  
13 for construction on July 1st of '98.

14 Q. And on July 1st of 1998 you were  
15 manager of construction for the Tollway?

16 A. I guess I was.

17 Q. And I'm aware that you handled  
18 hundreds of contracts as the manager of  
19 construction, so I'm aware that you may not remember  
20 every single one when they're shown before you.

21 A. Okay.

22 Q. So that's why I gave you a minute to  
23 take a look at it.

24 Could you do me a favor and just

1 read the title of the document, what the contract  
2 consists of? It's on the front page there.

3 A. Okay. Sure. It says, Illinois State  
4 Toll Highway Authority, noise abatement walls,  
5 contract MIP-97-5500, issued for construction  
6 July 1st, 1998, East-West Tollway, milepost 148.1 to  
7 milepost 148.9, which is also interpreted as Station  
8 7655+87 to Station 7695+28. And then also a noise  
9 abatement wall for the Tri-State Tollway, milepost  
10 25.5 to milepost 29, southbound Tri-State at 31st  
11 Street, southbound Tri-State at 55th Street.

12 Q. And based upon your reading of that  
13 contract, would it be fair to assume that this was a  
14 contract for two pieces of noise wall to be  
15 installed on the Tollway?

16 A. It looks about three sections of wall,  
17 yes.

18 Q. Three sections. And are you aware of  
19 the reason for those walls being put up?

20 A. No.

21 Q. Are you aware that there was a Versar  
22 study done before you put these walls up?

23 A. I don't know.

24 Q. And are you aware of any accidents

1     that may have happened in those areas that may have  
2     required a noise wall?

3             A.       No, I can't -- I don't.

4             Q.       And if I could refer you to certain  
5     pages. Hold on here. Let me look at my notes.

6                             (Brief pause.)

7     BY MR. DWORSCHAK:

8             Q.       John, I'll refer you to Page 7 of the  
9     document -- I'm sorry, 15. Could you explain -- or  
10    I'll tell you what, I'll read it for you. This  
11    says, drawing 15 of 67 for contract MIP 97-5500 and  
12    it shows -- strike that. Here we are. Okay.

13                             I'm looking at drawing 22 of 67,  
14    contract MIP 97-5500, noise abatement wall plan at  
15    31st Street; is that correct?

16             A.       Okay. Uh-huh.

17             Q.       And does that depict the wall that was  
18    put in at 31st Street?

19             A.       I would assume it did, yes.

20             Q.       And would that show where the wall was  
21    added?

22             A.       It showed where --

23             Q.       Put in?

24             A.       -- it was installed, yes.

1           Q.       Okay. And does that page also depict  
2       that there was an existing noise wall there at the  
3       time, as well?

4           A.       I can't tell from this drawing if  
5       there was an existing wall where that wall was at.

6           Q.       No. But there was -- in terms of this  
7       document, there's a line that says existing noise  
8       wall?

9           A.       Exactly.

10          Q.       And it looks like there was an add-on  
11       piece; is that a fair assumption?

12          A.       That I'd agree with, yes.

13          Q.       All right. And you stated earlier you  
14       don't know the reason why this additional piece was  
15       put on?

16          A.       No.

17          Q.       John, I will show you Complainants'  
18       Exhibit No. 5. This exhibit depicts the property in  
19       question looking from the property towards the  
20       Tollway at roughly Station Number 1345.

21          A.       Okay.

22          Q.       And can you see traffic on the roadway  
23       in this picture?

24          A.       Yes.

1           Q.       And is that traffic above the height  
2 of the noise wall?

3           A.       Well, actually the traffic I see is  
4 not -- there is no noise wall there.

5           Q.       This is the wall (indicating).

6           A.       That's the noise wall? That's not the  
7 noise wall, is it?

8           Q.       Yes, it is. That's a concrete wall.

9           A.       Okay. If it is, it is, I guess.

10          Q.       So you can see traffic above that  
11 wall?

12          A.       You're putting words in my mouth. I  
13 can't tell that's a noise wall.

14          Q.       Okay.

15          A.       The walls do not necessarily have to  
16 be identified as noise walls.

17          Q.       John, if we went back into the design  
18 plans we could show you --

19          A.       Okay.

20          Q.       -- the Tollway put walls up.

21          A.       That's fine. Okay. I will say yes, I  
22 can see traffic above that wall.

23          Q.       Okay.

24                   MR. DWORSCHAK: No further questions.

1 HEARING OFFICER WEBB: Okay.

2 MR. AZAR: Are you going to admit  
3 that?

4 MR. DWORSCHAK: Yes. I move to admit  
5 Complainants' Exhibit Number 14.

6 MR. AZAR: I would object to the  
7 relevance of it. I think we're --

8 HEARING OFFICER WEBB: I'm still not  
9 entirely sure what it is being moved to  
10 demonstrate.

11 MR. DWORSCHAK: It demonstrates -- he  
12 testified that the Tollway took  
13 recommendations from the Versar Company and  
14 then built walls based upon those  
15 recommendations. This contract shows that  
16 the Tollway came back a number of years later  
17 and added to the wall.

18 And his earlier testimony was, we  
19 took the recommendations and that's what we  
20 built. And this contract shows that they, in  
21 fact, added to it later.

22 THE WITNESS: You're looking at two  
23 different locations.

24 MR. DWORSCHAK: But it's still on the

1           Tri-State, though. I agree it's not the area  
2           at 75th Street, it's a different area.

3           THE WITNESS: Okay.

4           MR. DWORSCHAK: But it's the same  
5           roadway. It's in the same parameters as the  
6           Tri-State widening project.

7           THE WITNESS: It's miles apart.

8           MR. DWORSCHAK: It's still in the same  
9           project.

10          THE WITNESS: Okay.

11          HEARING OFFICER WEBB: Well, what page  
12          was it that you were looking at that showed  
13          the existing -- where they added?

14          MR. DWORSCHAK: I believe it was 22.

15          THE WITNESS: Yeah. I think it was  
16          22.

17          HEARING OFFICER WEBB: So in this  
18          Complainant Exhibit 14 on the page of drawing  
19          22 of 67, you were looking at the original?

20          MR. DWORSCHAK: This original piece of  
21          wall that was located -- that was constructed  
22          there and tied into an existing noise wall.

23          HEARING OFFICER WEBB: Well --

24          MR. DWORSCHAK: Your Honor, it's also

1 a regular business document. He --

2 HEARING OFFICER WEBB: Yeah. I think  
3 I'll go ahead and admit it for that purpose.  
4 Complainants' Exhibit 14 is admitted.

5 (Whereupon, Complainants'  
6 Exhibit No. 14 was  
7 admitted into evidence.)

8 MR. DWORSCHAK: Victor, your witness.

9 MR. AZAR: Just a second.

10 CROSS EXAMINATION

11 By Mr. Azar

12 Q. Mr. Wagner, you testified that the  
13 Tollway utilizes a three-phase construction program?

14 A. Right.

15 Q. Okay. Phase One is the planning where  
16 data is gathered, records are provided,  
17 environmental impact statements are assessed and  
18 approvals are gotten from governmental agencies that  
19 approve --

20 A. Yes.

21 Q. And then a scope of work is produced?

22 A. That's correct.

23 Q. And then with all that data it is sent  
24 to the design engineer, correct?



1           A.       Yes.

2           Q.       And the design engineer is how -- do  
3 you know what qualifications the Tollway looks for?

4           A.       Design engineers for the Tollway have  
5 to be prequalified with the state of Illinois to  
6 practice design engineering.

7                       We provide the scope of services  
8 through bulletins identifying the need to provide a  
9 consultant who provides the design services based  
10 upon their expertise and their experience.

11                      They are selected through those  
12 bulletins to provide those services and then the  
13 contract is negotiated to provide those services.

14          Q.       And 668 ABC (sic) was designed by  
15 Alfred Benesch & Company?

16          A.       Could I see the document here? It  
17 should state on the coversheet the designer of  
18 record. Because you do have to realize that  
19 particular -- the document you're looking at there  
20 was a furnished contract.

21                      HEARING OFFICER WEBB: And let's talk  
22 about which exhibit and which page, as well.

23                      THE WITNESS: Exactly. I would  
24 appreciate that.

1 BY MR. AZAR:

2 Q. We're looking at Exhibit --  
3 Complainants' Exhibit No 16, the second page of the  
4 document, the designer listed there.

5 A. Yeah. This shows the designer of  
6 record for this set of plans as Alfred Benesch &  
7 Company.

8 Q. And they're a licensed, professional  
9 engineer in the state of Illinois?

10 A. That is correct.

11 Q. And they are approved to do business  
12 with the Department of Transportation, the Tollway  
13 and various other state agencies?

14 A. That's correct.

15 Q. And that is who took all of this  
16 planning information and instilled it into plans?

17 A. No.

18 Q. Explain what they do.

19 A. Okay. This is a particular different  
20 situation in that as we stated -- that's why I  
21 looked at the coversheet here -- this particular  
22 contract shows a -- this shows noise wall, abatement  
23 wall, and as best as I recall we -- as we stated  
24 before, we had different designers for different

1 sections of the Tollway. And then they did the  
2 actual design of the physical wall that was put in  
3 place.

4 But then what had happened, we did  
5 hire for this particular type of situation because  
6 you have similar types of wall in different  
7 sections. It was much more economically feasible to  
8 go ahead and combine that particular element of each  
9 design into a purchase and installation contract so  
10 that we didn't have each piece a different type of  
11 wall.

12 So they basically have  
13 incorporated -- and there's a possibility that they  
14 just took the designs and took those plans and put  
15 them into a purchase and installation contract. So  
16 I can't say for exact. They were the designer, but  
17 somebody did -- they were -- somebody did the design  
18 and put these plans together so we could get it  
19 built.

20 Q. And they're certified by a  
21 professional engineering --

22 A. Yes, they are.

23 Q. Okay. And you rely on that in the  
24 regular course of Tollway business to design all

1 your roads, correct?

2 A. Most certainly.

3 Q. And the Versar study you referred to,  
4 which is Complainants' Exhibit No. 17, they talk  
5 about a berm; is that correct? In the document  
6 there you said there's a switch from the shoulder to  
7 the berm, a berm to the shoulder.

8 A. Yes. It says shoulder to berm.

9 Q. I'll show you what's been marked as  
10 Respondent's Exhibit No. 12. Do you recognize that,  
11 12 and 11, which are the photographs of the roadway?

12 A. Okay. I'm taking it that these are  
13 from the areas shown on these plans here?

14 Q. Yes. Do you see any berm there, or is  
15 that a drainage ditch?

16 A. Well, yeah, that's a drainage ditch.

17 Q. So is there any berm to be seen there?

18 A. I guess it depends on what you define  
19 a berm as.

20 Q. Okay? But is there actually a -- do  
21 you see a berm?

22 A. I could see a grade change between the  
23 bottom of the ditch to the line of where the wall  
24 sits on. To say that that's a berm, I don't know if

1     you'd interpret it as such.

2             Q.       So when the designer looked at this,  
3     they actually went to the topography of the scene  
4     and looked at a more detailed topography, correct,  
5     than the Versar study? That would have been just  
6     a -- someone went out there with a --

7             A.       Exactly.

8             Q.       -- noise meter, correct?

9             A.       That's correct.

10            Q.       And these guys had the actual  
11    topography of the entire area, hydrology, drainage  
12    issues; everything was considered when they built  
13    those plans?

14            A.       Most certainly.

15            Q.       And they designed them to meet the  
16    specifications in the design documents?

17            A.       That's correct.

18            Q.       So if the Versar -- if they were  
19    looking for the results of the noise of the  
20    Tollway -- they were going for the Tollway's  
21    objectives in the noise policy or to follow verbatim  
22    what Versar did or is there a difference?

23            A.       Well, as I said, and we've stated,  
24    they made recommendations to meet the criteria. It

1 was the designer's responsibility to incorporate all  
2 aspects of the design, not just the wall, but  
3 drainage and the roadway and everything else that  
4 needs to be coordinated.

5 Q. And based on the design, the Tollway  
6 spent eleven-plus million dollars relying on those  
7 designs, correct?

8 A. Well, to purchase and build that wall,  
9 yes.

10 MR. DWORSCHAK: Objection. The \$11  
11 million is for construction, not for the  
12 design.

13 BY THE WITNESS:

14 A. That's what I said, the purchase and  
15 the construction of the wall.

16 BY MR. AZAR:

17 Q. So on the reliance on the designs from  
18 the designer, we contracted and spent \$11 million  
19 plus?

20 A. Yes.

21 Q. Okay. Now, are you familiar with the  
22 height of the walls throughout the Tri-State in the  
23 system?

24 A. Again, you're talking physical --

1           Q.       Generally, the physical height.

2           A.       The distance between the bottom of the

3 wall and --

4           Q.       Yes.

5           A.       -- the top of the wall?  Yes.

6           Q.       What is the maximum height the Tollway

7 uses?

8           A.       We don't go over 25 feet.  We

9 recommend not really going much more than 20 feet.

10          Q.       Okay.  Are there feasibility issues

11 with that?

12          A.       Most certainly.  You start reaching

13 the point -- a free-standing wall at a certain

14 height becomes very expensive --

15          Q.       What about the --

16          A.       -- and unreasonable in many cases in

17 terms of --

18          Q.       How about the tactical issues of

19 maintenance of, say, a 30, 45 foot wall?  Do those

20 cause problems on a Tollway?

21          A.       Yes, they would.  First of all, just

22 the components to build such a wall would have to be

23 very thick, a lot of intermediate supports.  Who's

24 to say what it would take to create that type of a

1 barrier --

2 Q. Is that something --

3 A. -- and maintain it.

4 Q. And is maintenance of a wall an issue  
5 that the Tollway has to deal with?

6 A. Oh, certainly.

7 Q. How about the impacts for maintenance  
8 around the wall for a wall that big? Is that also  
9 an issue that limits the size of the walls?

10 A. What type of maintenance are you  
11 talking about?

12 Q. Cleaning it or if it gets damaged; are  
13 those problems that the Tollway has to deal with?

14 A. Yes.

15 Q. And those are issues that have to be  
16 thought about before they're actually built?

17 A. Yes. You're correct.

18 Q. So that goes to the feasibility of  
19 whether or not a wall goes over 20 feet; is that  
20 correct?

21 A. Yes, that's correct.

22 Q. So as the height -- just so it's  
23 clear, as the height gets taller it becomes less  
24 feasible for the Tollway to do?



1 A. That's correct.

2 Q. Now, going to Exhibit No. 15, which is  
3 the intergovernmental agreement between the Tollway,  
4 the Department of Transportation and the village of  
5 Hodgkins.

6 A. Okay.

7 Q. In that agreement, all three, the  
8 Tollway, the Department of Transportation and the  
9 village of Hodgkins entered into this agreement,  
10 correct?

11 A. Uh-huh.

12 Q. You need to answer yes or no.

13 A. Yes.

14 Q. Thank you. And it was for the benefit  
15 of all three communities, correct?

16 A. Agencies you mean?

17 Q. Agencies.

18 A. Yes.

19 Q. And particularly the community of  
20 Hodgkins?

21 A. I would assume so, yes.

22 Q. So both the local and state  
23 governments got together and proposed this roadway,  
24 correct?

1 A. That's correct, yes.

2 Q. And the Tollway, being not directly in  
3 the line of the governor's office, but run by the  
4 board, agreed to the agreement and terms, correct?

5 A. Yes.

6 Q. Any funds that would have been  
7 allocated from the Department of Transportation came  
8 from the general revenue funds, correct?

9 A. Yes.

10 Q. And any monies from the village of  
11 Hodgkins came from the village of Hodgkins'  
12 taxpayers, correct?

13 A. I would assume so, yes.

14 MR. AZAR: I have no further  
15 questions. Thank you.

16 HEARING OFFICER WEBB: Thank you.

17 Mr. Dworschak?

18 FURTHER DIRECT EXAMINATION

19 By Mr. Dworschak

20 Q. John, as an engineer, you're aware of  
21 what an ADT, average daily traffic, chart shows?

22 A. Uh-huh.

23 Q. You have to answer yes or no, John.

24 A. Yes.

1           Q.       I'm showing you Complainants' Exhibit  
2 No. 11, which is a chart of the ADTs for the area in  
3 question. Does that document look familiar to you?

4           A.       It's a document that's usually  
5 provided to the Tollway to show ADTs.

6           Q.       And ADTs are average daily traffic?

7           A.       Yes.

8           Q.       And average daily traffic is an  
9 average of the number of vehicles the Tollway can  
10 expect on a certain section of roadway, correct?

11          A.       Yes.

12          Q.       And the document I'm showing you shows  
13 the Willow Springs Road interchange, also known as  
14 the 75th Street interchange.

15          A.       Okay.

16          Q.       As well as a section of the Tri-State  
17 Tollway.

18          A.       Okay.

19          Q.       As well as the ramp from the Tri-State  
20 Tollway to I-55; is that correct? And I'm asking  
21 that just so you can kind of put this map in  
22 reference to Joint Exhibit No. 3, which is an aerial  
23 which I showed you earlier.

24          A.       Yes. This is the interchange -- the

1 same interchange.

2 Q. And that would be north moving that  
3 way (indicating); is that correct?

4 A. Yes. That would be traffic moving  
5 north in that direction.

6 Q. So in the area in question, the home  
7 we circled is there (indicating). So you can get a  
8 feel for that.

9 A. Yeah.

10 Q. So we're looking at this area for the  
11 home; would that be correct?

12 A. Well, yeah. You're adding this piece  
13 onto here?

14 Q. Yes.

15 A. Yes. It's over here (indicating).

16 Q. Okay. Could you read to me the  
17 numbers -- this document has a number of pages and a  
18 number of years. I'm showing you the traffic  
19 drawing ten of 18, dated 1988. It's the same area,  
20 although, John, there is no interchange.

21 A. Correct.

22 Q. That would be the area as the same in  
23 question, is that true, that we referred to at

24 Page --

1 A. As far as the main line, yes.

2 Q. Okay. Could you read the ADT for 1988  
3 for the northbound traffic for that area  
4 in question?

5 A. It shows 50,630.

6 Q. And for the southbound traffic?

7 A. 46,030.

8 Q. Now, referring back to the year 2003  
9 numbers, can you read the same numbers for the  
10 northbound traffic in the area and location?

11 A. 77,010.

12 Q. And the northbound traffic?

13 A. 71,650.

14 Q. Thank you. So based upon those  
15 numbers that you read, John, it would be fair over  
16 the past 15 years that this section of the roadway  
17 has experienced about a 50 percent increase in  
18 traffic?

19 MR. AZAR: I'm going to object to this  
20 line of questioning. It's not going to -- in  
21 regards to my questions. It's beyond the  
22 scope of the cross examination. It's now  
23 going to another issue entirely, which was  
24 covered yesterday by another witness who

1           actually has more first-hand knowledge than  
2           this witness. Unless he's trying to impeach  
3           the credibility or respond to something that  
4           he's testified to, I think it's beyond the  
5           scope.

6                       HEARING OFFICER WEBB: I don't  
7           remember what --

8                       MR. DWORSCHAK: That's fine. I'll let  
9           the numbers stand for themselves.

10                      HEARING OFFICER WEBB: He doesn't need  
11           to interpret.

12   BY MR. DWORSCHAK:

13           Q.       John, now, the noise walls that were  
14   built with the Tri-State project were built in '93,  
15   '94 and '95 roughly, correct?

16           A.       Yes.

17           Q.       So it's been almost ten years since  
18   those walls have been installed. And as your  
19   experience of manager of construction for the  
20   Tollway, have you experienced or have you known of  
21   any problems with those walls? Have you had any  
22   physical problems with the wall heights? Have they  
23   fallen over? Have they had excessive maintenance  
24   problems?

1           A.       I don't keep track of the maintenance  
2 records of the inventory of our walls, but I'm not  
3 aware of significant problems with our walls.

4           Q.       But if you had a major problem and it  
5 would need to be rebuilt, it would have to go  
6 through your jurisdiction, correct?

7           A.       I'm no longer the manager of  
8 construction.

9           Q.       When were you no longer the manager?

10          A.       A couple of years ago.

11          Q.       But for a time did you serve as acting  
12 chief engineer?

13          A.       As acting, yes.

14          Q.       So for a time your were in charge of  
15 the entire department?

16          A.       I served as the acting chief engineer.

17          Q.       So in your time as manager of  
18 construction and acting Tollway engineer, are you  
19 aware of any problems with the noise wall you  
20 already put up?

21          A.       No. I can't say that I recall any.

22          Q.       All right. Now, referring back to the  
23 area in question, the 75th Street area, it was your  
24 testimony that the wall height as constructed was

1 14 feet; is that correct?

2 A. Best I can remember, yes.

3 Q. Okay. And we also talked about that,  
4 at times, the roadway profile, the pavement of the  
5 road, was actually equal to or above the top of the  
6 wall at certain portions, correct?

7 A. Yes.

8 Q. Okay. So do you feel if you have a  
9 14-foot wall and you can see pavement above the  
10 wall, is the area getting 18 feet of mitigation?

11 MR. AZAR: I'm going to object.

12 That's beyond the scope of the cross  
13 examination and, again, it's calling for him  
14 to render an opinion that is second-guessing  
15 the design. And that's -- again, we're going  
16 to what he's trying to attack, the design  
17 documents, which he said that he relies upon  
18 and accepts as being properly designed.

19 HEARING OFFICER WEBB: Yeah, I mean,  
20 he did ask him -- Mr. Azar did ask about the  
21 presence of the berm, but I'm not quite  
22 sure where your testimony is going.

23 MR. DWORSCHAK: Okay. Then I'll  
24 revert my question.



1 HEARING OFFICER WEBB: Okay.

2 BY MR. DWORSCHAK:

3 Q. You looked at Respondent's Exhibit 12  
4 and 13, is that correct, John, and maybe even 11, 12  
5 and 13?

6 A. Okay.

7 Q. And there was some discussion in your  
8 cross examination about a berm; is that correct?

9 A. Yes.

10 Q. And we've decided there was no berm  
11 there, there was a drainage ditch?

12 A. On that side of the wall that we're  
13 looking at, yes.

14 Q. So there is no berm there to affect  
15 the height, is there?

16 A. Again, how you interpret what a berm  
17 is, is --

18 Q. Well, I'm asking you. You're the  
19 engineer.

20 A. No. It's -- you're asking me to  
21 interpret how --

22 Q. I'm following up on your testimony  
23 when you said you didn't see a berm.

24 A. A berm could be one foot high, a berm

1     could be 100 feet high.  Okay?

2             Q.       But when Victor asked you, you said  
3     you didn't see a berm.

4             A.       No.  I said it's relative.  It's the  
5     top of a ditch.  That could be interpreted as a  
6     berm.

7             Q.       So it could or could not be a berm?

8             A.       I can't really tell because I don't  
9     know what's on the other side of that wall.

10            Q.       But from that picture, you can't tell?

11            A.       No.

12                    MR. DWORSCHAK:  No further questions.

13                    HEARING OFFICER WEBB:  Mr. Azar?

14                    FURTHER CROSS EXAMINATION

15                    By Mr. Azar

16            Q.       You testified that you experienced no  
17     problems with the walls, is that correct, that  
18     you're aware of?

19            A.       I mean, again, what kind of problems  
20     are you looking for?  Yes, we have walls that get  
21     crashed into.  We have walls that get graffiti on  
22     them.  We have walls that sometimes may lean a  
23     little bit.  Okay?

24                    But to say that there's been a

1 failure, no, I can't really say I'm aware of any.

2 Q. And is that based on the designs --  
3 the plans that are submitted to you?

4 A. Yes.

5 Q. And their conformity to feasibility of  
6 the design?

7 A. Yes.

8 Q. So you trust the designers to design  
9 you a proper wall, to make sure they don't have any  
10 problems?

11 A. Right.

12 MR. AZAR: I have no further  
13 questions.

14 MR. DWORSCHAK: Nothing further.

15 HEARING OFFICER WEBB: Thank you very  
16 much, Mr. Wagner.

17 THE WITNESS: Okay.

18 HEARING OFFICER WEBB: We'll take a  
19 recess.

20 (Whereupon, after a short  
21 break was had, the  
22 following proceedings  
23 were held accordingly.)

24 HEARING OFFICER WEBB: We will go back

1           on the record. Mr. Dworschak, you may call  
2           your next witness.

3                   MR. DWORSCHAK: We offer Greg Zak.

4                   HEARING OFFICER WEBB: Mr. Zak, would  
5           you please have a seat up here and the court  
6           reporter will swear you in.

7                   (Witness sworn.)

8   WHEREUPON:

9                   GREG ZAK

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

12                   DIRECT EXAMINATION

13                   By Mr. Dworschak

14           Q.     Mr. Zak, could you state your name and  
15   spell it for the record, please?

16           A.     My name is Greg Zak, G-R-E-G, Z-A-K.

17           Q.     And is it all right if I refer to you  
18   as Greg?

19           A.     That's fine.

20           Q.     Greg, could you tell us some of your  
21   educational background?

22           A.     My educational background pertinent to  
23   the noise field began in the United States Marine  
24   Corps. I spent one year with intensive training in

1    basic electronics and radar.  I spent one year in  
2    the field working in the repair and calibration of  
3    radar.  And then I spent one year teaching basic  
4    electronics and radar in the United States Marine  
5    Corps.

6                                After that I went to San Diego  
7    State University where I obtained a bachelor of  
8    science degree in biology.

9                                And after I obtained employment  
10   with the Illinois EPA in 1972, I went to the  
11   University of Illinois at Springfield and obtained a  
12   master's degree in public administration.

13                              And after that, I attended several  
14   dozen seminars in sound measurement, sound control  
15   engineering and related areas of acoustics.

16            Q.       And you mentioned you worked for a  
17   state agency.  Which state agency was that?

18            A.       That was the Illinois Environmental  
19   Protection Agency.

20            Q.       And what did you do for them?

21            A.       I was their noise advisor.

22            Q.       And how long were you in that  
23   position?

24            A.       I was in that position for the last

1 14 years of employment there. Previous to that, I  
2 worked as the regional manager for noise. And  
3 previous to that, I was a noise technician.

4 Q. And how are you employed now?

5 A. I am the president of Noise Solutions  
6 By Greg Zak, Inc.

7 Q. And are you a member of any noise  
8 institutes or organizations?

9 A. Yes. I'm a member of the Institute of  
10 Noise Control Engineering.

11 MR. DWORSCHAK: Your Honor, I move to  
12 offer this witness as an expert on noise.

13 MR. AZAR: No objection.

14 HEARING OFFICER WEBB: So deemed.

15 BY MR. DWORSCHAK:

16 Q. Greg, can you tell us as an expert in  
17 noise your interpretation of the noise statutes of  
18 the Illinois Environmental Protection Agency? And  
19 I'm referring to Section 24 of the Act.

20 A. Section 24 of the Act is the Illinois  
21 Pollution Control Board's enabling act or statute  
22 that enables the Board to promulgate noise  
23 regulations. And from that springs the regulations  
24 for both nuisance noise and what I would call

1 numeric noise, where the noise is actually measured.

2 Q. And could you tell us what a noise  
3 nuisance is?

4 A. Noise nuisance under the Board  
5 regulations would be a Section 900.102.  
6 Specifically, that would be a noise that  
7 unreasonably interferes with a person's enjoyment of  
8 life or the use of their property.

9 Q. And in your position with Noise  
10 Solutions By Greg Zak, you've prepared numerous  
11 noise studies; is that correct?

12 A. That's correct.

13 Q. And what are the kind of protocols or  
14 conditions under which you must prepare a proper  
15 noise study for the hearing such as we're here for  
16 today?

17 A. Well, if measurements are involved, we  
18 would very carefully follow all the Board's  
19 requirements for taking noise measurements, as far  
20 as the type of equipment used, how the equipment is  
21 used, how long the measurements are taken for. And  
22 there's a rather long-involved list of things we  
23 look for. I take it at this time you don't want me  
24 to go through the long list.

1           Q.       No.  Would it be fair to say that  
2   they're very involved and you need a trained person  
3   in order to conduct a proper noise study?

4           A.       Yes.  There's very few trained people  
5   in Illinois that can do it.

6           Q.       And, Greg, you're aware of the reason  
7   for the hearing here today correct?

8           A.       Yes, I am.

9           Q.       It involves a property located at 7335  
10  Maridon Road; is that correct?

11          A.       Yes.

12          Q.       Have you ever been to that property?

13          A.       Yes, I have.

14          Q.       I'm going to show you some pictures  
15  that were brought out as exhibits previous to your  
16  testimony to kind of refresh your recollection of  
17  the area.  I'm showing you Complainants' Exhibit  
18  No. 1, No. 2, 3 and 4, 5 and 6, 7, as well as Joint  
19  Exhibit No. 1.

20                   I'll give you a minute to take a  
21  look at those and just let me know when you're  
22  ready.

23                                   (Witness peruses  
24                                   document.)



1 THE WITNESS: I'm ready.

2 BY MR. DWORSCHAK:

3 Q. Do these exhibits depict a fair  
4 representation of the types of things you saw when  
5 you visited the property?

6 A. Yes, it does. The only one that's  
7 somewhat different than when I visited the property  
8 would be the Joint Exhibit No. 1. I never --

9 Q. Which is the aerial shot?

10 A. I never saw an aerial shot of the area  
11 before.

12 Q. But the aerial shot gives you  
13 familiarity of the area which you visited?

14 A. Yes, it does. But, again, since I  
15 have not seen a previous aerial shot, I really  
16 haven't had time to interpret the aerial shot and  
17 put it together in my experience of the other  
18 photographs here.

19 Q. Okay. And what was your analysis of  
20 the conditions of the property? You looked around  
21 the neighborhood, you heard noises; what did you  
22 learn from your visit?

23 A. Well, the area itself comprises of  
24 what I would call a somewhat upscale residential

1 development, nice area, large lots. As far as the  
2 noise environment, however, the noise environment  
3 was very noisy due the presence of Tollway noise.

4 Q. And were you retained by Mr. Petrosius  
5 to do a noise study of the property?

6 A. Yes, I was.

7 Q. And did you conduct such a study?

8 A. Yes, I did.

9 Q. Showing you Complainants' Exhibit  
10 No. 18 for identification, I would like you to take  
11 a minute to look at it.

12 (Witness peruses  
13 document.)

14 THE WITNESS: Okay.

15 BY MR. DWORSCHAK:

16 Q. Is that a true and accurate copy of  
17 your noise study?

18 A. Yes, it is.

19 MR. DWORSCHAK: Your Honor, I move to  
20 have Complainants' Exhibit No. 18 moved into  
21 evidence.

22 MR. AZAR: I'm going to object subject  
23 to cross examination. I mean after his  
24 examination because there's so many

1 conclusions I don't think should be -- that I  
2 would ask be stricken.

3 HEARING OFFICER WEBB: Would you  
4 like -- should we discuss the admission of  
5 this exhibit after your cross examination?

6 MR. AZAR: Yes.

7 HEARING OFFICER WEBB: Is that what  
8 you're asking?

9 MR. AZAR: Yes.

10 MR. DWORSCHAK: That's fine.

11 MR. AZAR: Thank you.

12 HEARING OFFICER WEBB: Okay.

13 BY MR. DWORSCHAK:

14 Q. And what date did you conduct this  
15 noise emission study?

16 A. It was performed on March 16th, 2005.  
17 And there was also a previous one incorporated in  
18 there that was done December 19th of 2003.

19 Q. Could you explain the conditions and  
20 circumstances in which you conducted this noise  
21 study? How did you go about doing this study?

22 A. Well, the first one that was done in  
23 2003 was a very brief measurement of the sound from  
24 the Tollway done in conjunction with the

1 complainant, Mr. Petrosius. He used a RadioShack  
2 sound level meter and I used a precision noise  
3 analyzer. We compared readings and his measurements  
4 tended to be about one decibel lower than mine,  
5 which is quite good considering the fact that the  
6 instrumentation he was using cost a fraction of what  
7 mine cost.

8 Q. So the better equipment, the better  
9 kind of real analysis you will receive?

10 A. Yes. Our instrumentation meets all  
11 the Board's standards and criteria for taking noise  
12 measurements.

13 Q. Could you tell us a little bit about  
14 how you performed the study? I mean, you came to  
15 the property. What do you do to set up, how do you  
16 measure, what types of things do you look for; that  
17 kind of thing?

18 A. I could kind of give you a sketch of  
19 the general methodology we use. We would arrive in  
20 the area, do a brief walk-through of the area and  
21 then set up our weather instrumentation to monitor  
22 wind speed, temperature, humidity, barometric  
23 pressure. We would sketch the area and draw what we  
24 call a map or a sketch of the area. The placement

1 of the measuring microphone.

2 Q. Greg, I'm going to stop you right  
3 there. You're referring to a sketch of the area.  
4 Is that on Page 5 of your report? Would that be a  
5 fair representation?

6 A. Yes.

7 Q. Okay. I'm sorry. Continue.

8 A. We would place the microphone in a  
9 position where reflective sound was either minimized  
10 or totally eliminated.

11 In this particular case, we set up  
12 our microphone at a 45-degree angle to the corner of  
13 the house in order to eliminate sound reflection.

14 Q. Greg, I'm going to stop you right  
15 there for a minute. That would be -- the location  
16 of your sound instrument would be displayed here in  
17 Complainants' Exhibit No. 5?

18 A. Yes. And that would be accurate for  
19 both the December measurements that were taken in  
20 2003 and the March measurements in 2005.

21 Q. And if you look at Page 3 of your  
22 report there shows a picture kind of looking -- the  
23 first picture of Photograph 2 kind of looks towards  
24 the Tollway. Photograph 1 looks back so you can see

1 the home in question; is that correct?

2 A. That's correct. The photographs were  
3 taken 180 degrees apart. In other words, one  
4 photograph would be looking at -- aligning up the  
5 microphone with the house and then I would turn  
6 around 180 degrees and take a photograph of the --  
7 from the corner of the house there showing the  
8 microphone setup and the Tollway area.

9 Q. And why would you take pictures of  
10 your sound recording instrument?

11 A. It's a Board requirement.

12 Q. Okay. And it helps not only to  
13 determine where you took your study, but gives a  
14 layman feel for what you did; is that correct?

15 A. Yes.

16 Q. I'm sorry. Did you mention what type  
17 of equipment you used for this?

18 A. It's in the report.

19 Q. Could you read it to me?

20 A. On Page 6 of 8 of the report we used a  
21 Larson Davis for laboratories Model 2800 realtime  
22 analyzer. The microphone used with that is a  
23 precision microphone and a precision preamplifier.  
24 The combination is in strict compliance with ANSI,

1 American National Standards Institute requirements  
2 for a Type I sound level meter and instrumentation.  
3 The entire system that we use for microphone,  
4 preamplifier, cabling and analyzer, again, is all in  
5 compliance with ANSI requirements for precision  
6 measurements Type I and also the Board requirements  
7 for measurements that require the instrumentation be  
8 all Type I.

9 Q. And what types of noise did you  
10 encounter during your noise study?

11 A. Various types. The preponderance of  
12 the noise was from the Tollway area, consisting of  
13 heavy trucks, motorcycles, cars, car tires, truck  
14 exhaust noise, motorcycle exhaust noise, very little  
15 car exhaust noise. There was one or two cars that  
16 had bad mufflers, but in general the exhaust noise  
17 was more -- would be more oriented toward the trucks  
18 and the motorcycles.

19 There were times when the trucks  
20 would use their jake brakes, J-A-K-E, brakes, and  
21 that would create quite a noise impact. Especially  
22 on those trucks that had bad mufflers or improperly  
23 functioning muffler systems on the engine.

24 Another source of -- a very

1 significant source of noise were the truck tires,  
2 which makes kind of a singing sound. If I could,  
3 going back to, like, for example, the jake brakes,  
4 you have a very loud, rapping exhaust noise from  
5 jake braking.

6                   The normal exhaust on the trucks  
7 that were not jake braking ran anywhere from  
8 virtually inaudible to very loud, depending upon the  
9 condition of the muffler.

10                   Tire noise from the trucks was  
11 very noticeable. And the motorcycles going by,  
12 quite a few motorcycles had virtually no mufflers on  
13 them and that added to the noise environment.

14                   The tire noise from virtually all  
15 vehicles except the motorcycles was a problem. The  
16 trucks being the biggest problem. And the cars  
17 probably being about 10 percent of the truck  
18 problem.

19                   I would say about 85 to 90 percent  
20 of the noise impact was either from truck tires,  
21 truck engines, jake brakes, trucks hitting holes in  
22 the road that would cause the trailers to clang and  
23 bang, loose metal fixtures on the trucks that would  
24 also clang and bang.



1                   And that would kind of be a  
2   general sketch of the noise in the area. As far as  
3   other noise sources in the area, there were several  
4   airplane flyovers.

5           Q.       I'm sorry. What do you mean by  
6   airplane flyovers?

7           A.       An airplane flyover would be air  
8   traffic from either Midway or O'Hare, and we'd be  
9   talking about large commercial jets.

10                   The jets were audible when they  
11   flew over, but the Tollway noise was such an  
12   amplitude. As a matter of fact, it's the loudest  
13   measurement I've taken since I've been doing private  
14   consulting. The noise was loud enough from the  
15   Tollway that the when the jets flew over, the  
16   instrumentation did not register the jets flying  
17   over. It can hear them but, again, the Tollway  
18   noise was greater in amplitude than the jet noise  
19   was.

20                   And there were other sources of  
21   noise. I believe there was a little bit of train  
22   noise in the area. But, again, any other sources of  
23   noise other than the Tollway were really dwarfed in  
24   amplitude by the preponderance of the Tollway noise.

1           Q.       Now, referring you back to Joint  
2 Exhibit No. 1, which is the aerial shot of the area.  
3 I'm also going to show you Joint Exhibit No. 3,  
4 which is maybe a little larger pictures of the area.  
5 In Joint Exhibit 3 you can see a UPS facility, a  
6 canal and a railroad marshalling yard. Do you see  
7 those?

8           A.       Yes.

9           Q.       And bisecting this area is the  
10 Tri-State Tollway; do you see that?

11          A.       Yes.

12          Q.       Now, in your expertise on noise, if  
13 the Tri-State Tollway is generating noise of a large  
14 volume, could the noise from these other areas reach  
15 the property in question?

16          A.       It's very unlikely. I believe you  
17 described one as a UPS facility, and I've heard it  
18 described as that. A trucking facility such as that  
19 normally doesn't generate enough sound to rise to  
20 the level of exceeding the sound levels of the  
21 Tollway.

22                       My experience in being in the area  
23 and also my experience over the last 33 years would  
24 lead me to believe that even though there's a UPS

1 facility close by and there are other facilities  
2 close by that the Tollway noise would be so dominant  
3 as to make any operations at the adjacent facilities  
4 virtually inaudible.

5 Q. Okay. Referring you back to Page 7 of  
6 your noise study, you have a chart which shows some  
7 of the noise meter readings you collected?

8 A. Yes.

9 Q. Could you expand upon those for us,  
10 please?

11 A. Looking at Table 2, the first --  
12 actually it would be the second row. The first row  
13 is the heading. The second row would indicate an  
14 I-294 ramp measurement time span of 67.8 seconds.  
15 That was done December 19th of 2003. And we have  
16 our octave band level that we measured at that time  
17 along with a dBA equivalent on the extreme  
18 right-hand side.

19 Q. I'm sorry to interrupt. That's the  
20 first time you came out to the residence; is that  
21 correct?

22 A. That's correct. It was our first  
23 visit.

24 Q. I'm sorry. Continue.

1           A.       As to the additional measurements,  
2 beginning with a measurement time span in seconds,  
3 we have 60. And down below 60 we have 600, 1200,  
4 1800, 2400, 3000, 3600 representing a one hour Leq  
5 broken down into generally ten-minute periods.  
6 Except for the first one, which is obviously a  
7 one-minute period.

8                       Then on March 16th of 2005. And  
9 that particular measurement was done in strict  
10 compliance with all Board measurement requirements  
11 for taking precision sound level measurements. And  
12 the result on that was an exceedance at most of the  
13 frequencies regulated by the Board. The first one,  
14 being 63 hertz, they were over by two decibels,  
15 which is not a great exceedance, but it is. The 125  
16 hertz was over by one decibel, which is still in  
17 exceedance.

18                      But the exceedance at 500 hertz  
19 through 4000 hertz are much more serious. That  
20 particular area of the spectrum is where the human  
21 ear is very sensitive and we see exceedances there  
22 of up to 19 decibels to 2000 hertz. And the 19  
23 decibel exceedance would represent nearly 100 times  
24 the sound energy that you would have at a level of

1 compliance, which would be under the Board  
2 regulation 901.102(a). And the level that is  
3 allowed there would be 47 DB at 2000 hertz.

4 Q. Now, Greg, I know you're a noise  
5 expert, but can you, kind of in laymen's terms,  
6 explain the difference, what these hertz do to the  
7 way humans interpret noise or how it affects them?  
8 Is that a fair question?

9 A. Yes, it's a fair question. And,  
10 again, if we look at the Board rules, specifically  
11 901.102(a), and then we look at the measurements we  
12 obtained on March 16th and also on December the  
13 19th, the levels measured in the higher frequency  
14 range, which would be akin to where the human ear is  
15 very sensitive, for example, it would be in examples  
16 of sounds in, say, between 500 hertz to 1000 is  
17 largely the speech area. Once you get above 1000 we  
18 get into the 2000 to 4000, then we're looking at  
19 2000 hertz, a lot of, for example, bird songs or  
20 bird tweeting, that typically occurs around 2000  
21 hertz. And at 4000 hertz we would hear crickets  
22 creating sounds at 4000 hertz.

23 By seeing these large exceedances  
24 at those particular frequencies, that would then

1 support the statements made by the Petrosiuses as  
2 far as the severity of the noise impact from the  
3 Tollway operation.

4 Q. And referring to decibels, isn't it  
5 true that the decibel scale is not like a  
6 temperature scale? In fact, it's logarithmic. So  
7 when you go from 68 to 72 decibels, you're not  
8 talking a simple four-degree change, you're talking  
9 a compounded increase in noise; would that be  
10 correct?

11 A. Yes, that would be correct. It's very  
12 much like the Richter Scale for earthquakes. It's a  
13 logarithmic scale. And, for example, if we -- just  
14 to draw up an example -- if we take 50 decibels and  
15 we increase that to 60 decibels, we actually  
16 increase the amount of noise by tenfold. Again,  
17 taking the 50, if we increase the 50 to 70, we then  
18 increase the sound level 100-fold, and so forth.

19 And so when we see an exceedance  
20 here of, like, 19 decibels, again, we're seeing  
21 almost 100-fold increase in sound over what the  
22 Board would allow.

23 Q. And how did the numbers you recorded  
24 compare to other studies you've done on potential

1 noise problems?

2 A. As I stated earlier, it would compare  
3 in that as a private consultant for the last  
4 four years and having done over 60 studies that this  
5 was, by far and away, the loudest noise I measured  
6 in the last four years.

7 Q. And do you believe that these levels  
8 of noise create a nuisance as determined by Section  
9 900.102(a)?

10 A. Yes. Very much so.

11 MR. AZAR: I'm going to object to  
12 that. That's -- there's no evidence to  
13 support the nuisance. The nuisance factors  
14 are -- he's not substantiated any of the  
15 nuisance factors other than the noise  
16 amounts. And the regulations are it's a  
17 nuisance when there are multiple factors,  
18 33(c), which he hasn't even discussed. So I  
19 don't think he's laid a foundation.

20 MR. DWORSCHAK: I'll back up.

21 HEARING OFFICER WEBB: Okay.

22 BY MR. DWORSCHAK:

23 Q. How does the noise levels that you  
24 recorded affect human activity near them?





1                   MR. DWORSCHAK: He knows what a  
2 nuisance is because's he's a noise expert.  
3 He knows how noise affects human activity.

4                   MR. AZAR: Well, ultimately, it comes  
5 down to we're asking him to render an  
6 opinion. That's the Board's decision.  
7 That's an issue --

8   (Simultaneous colloquy.)

9 BY MR. DWORSCHAK:

10           Q.       -- noise expert, not as an attorney,  
11 not as the Board?

12           A.       Yes. In my opinion as a -- based on  
13 my experience.

14                   MR. AZAR: I would object.

15                   HEARING OFFICER WEBB: Well, I --

16                   MR. AZAR: That's the ultimate issue  
17 of the Board and I'd ask that that testimony  
18 be stricken.

19                   HEARING OFFICER WEBB: Yeah. I'm not  
20 sure how we're using the term nuisance here,  
21 if the witness really understands the legal  
22 definition we're using here or if, you  
23 know -- I mean, use a different word besides  
24 nuisance.

1 BY MR. DWORSCHAK:

2 Q. Okay. Would noise that affects the  
3 use of your yard affect the quality of your life?

4 A. Yes.

5 Q. And would noise that wakes you up when  
6 you sleep affect the quality of your life?

7 A. Yes.

8 Q. And that would be an adverse effect;  
9 is that correct?

10 A. Very much so.

11 Q. Okay. And would noise that is so loud  
12 that you keep your windows closed more than you'd  
13 like, would that be a nuisance? Would that be an  
14 effect to your quality of life?

15 A. Yes. Based on my experience, it would  
16 be.

17 Q. So do you believe based upon the study  
18 that you performed and your discussions with the  
19 Petrosiuses that the noise levels they're receiving  
20 are adversely affecting their quality of life?

21 A. Very much so. Again, like I said,  
22 these were the highest levels I measured in the last  
23 four years.

24 Q. And could you talk a little bit about

1    how you think these noises have adversely affected  
2    their quality of life?  Is there anything I haven't  
3    mentioned?

4            A.        Yes.  The use of a telephone outdoors  
5    would be virtually impossible.  Even indoors the  
6    impact would still be fairly severe at these type of  
7    levels as far as watching television.  But, again,  
8    any type of outdoor activity where one had to hear  
9    something would be difficult, if not impossible, and  
10   would have, I think, a very severe impact as far as  
11   the noise is concerned.

12           Q.        Now, as an expert in noise, are you  
13   aware of how noise mitigation can be undertaken?

14           A.        Yes.

15           Q.        In what ways can you reduce noise  
16   coming from a generation source such as a roadway?

17           A.        Such as a roadway, the most typical  
18   way to do that is use of a noise barrier.  Other  
19   alternate ways, I don't think are really applicable  
20   in this case, would be control the type of traffic  
21   using the roadway, speed limits, mufflers, things  
22   like that.

23                            But, in general, to protect the  
24   residential area, the common way to approach this

1 type of a problem is the use of a noise wall of  
2 sufficient height to bring the noise level down to  
3 meet either local or state criteria or limits.

4 Q. And in your professional opinion, how  
5 does a noise wall work to reduce the noise?

6 A. The noise wall works to reduce noise  
7 by blocking a portion of it. It's not 100 percent  
8 effective because you do have noise that does go  
9 over the top of the wall. And if the wall is not  
10 sufficiently long, the noise can go -- can come  
11 through the sides of the wall.

12 The two typical ways that a wall  
13 will fall somewhat short is noise going over the top  
14 of it and noise going around the side of it.

15 But, again, your question was how  
16 do you mitigate or reduce the noise impact and the  
17 typical way to do that would be using a noise wall.

18 Q. Would it be fair to state that the  
19 noise wall works to reflect sound and sound energy  
20 back? It doesn't necessarily absorb the noise?  
21 Most of the noise is reflected back?

22 A. It does reflect back. I think that we  
23 might want to say that it's more of a blocking  
24 effect more so than a reflecting effect.

1           Q.       When you talk about noise coming over  
2 the top of the wall, what do you mean by that?

3           A.       Typically, we refer to that as  
4 refraction. And what that is is the sound that's --  
5 as we look at the, say, the noise source as being  
6 the tollway and the vehicles on the tollway and the  
7 noise receiver being the Petrosius residence, if we  
8 look from the residence toward the tollway, if the  
9 wall is low enough that it doesn't block what we  
10 call line of sight -- in other words, we can see  
11 what's obviously making the noise -- the  
12 effectiveness of a short wall is minimal. It's  
13 absolutely necessary in order to get a significant  
14 noise reduction to bring the wall height up to the  
15 point where we can no longer see the noise source.

16                       And the physics that are taking  
17 place there is the sound waves are traveling from  
18 the noise source to the noise receiver, with a wall  
19 in between, the sound waves hitting the wall are, in  
20 essence, stopped. However, there are sound waves  
21 that will go over the top and that's where we heard  
22 the refraction. And the sound waves then can --  
23 will bend back down toward the ground and impact the  
24 residential area.

1                   The higher the wall, the less the  
2   refractive effect and the less noise impact there is  
3   on the residence.

4           Q.       And, in fact, the noise that's coming  
5   over the wall creates maybe a shadow effect in terms  
6   of noise, not in terms of light?

7           A.       Well, the shadow effect would actually  
8   be the wall itself blocking the sound. And the  
9   sound coming over the top could be described as a  
10  shadow effect, but typically in my experience with  
11  noise barriers we didn't refer to it as a shadow  
12  effect.

13          Q.       In terms of noise wall effectiveness,  
14  would it be true to state that the closer the wall  
15  is to the noise source the better noise abatement  
16  you'll receive?

17          A.       Yes.

18          Q.       Now, we talked earlier about your  
19  visit to the Petrosius residence and you looked at  
20  some exhibits, which gave you familiarity of the  
21  area. On your visit did you see any noise wall  
22  adjacent to the property in question?

23          A.       On the south end of the property there  
24  was a wall that ran at various heights. Again, the

1 heights on the wall varied, depending upon what area  
2 one observed the wall.

3 Q. I'll refer you to Complainants'  
4 Exhibit No. 5, which I believe is one of the  
5 photographs that you, yourself, took.

6 A. Yes, it is.

7 Q. I believe in the background you can  
8 see a noise wall of two different heights?

9 A. Yes.

10 Q. Would that be correct?

11 A. That's correct.

12 Q. And from this picture can you see the  
13 Tri-State Tollway?

14 A. Yes, I can.

15 Q. And what do you see on the Tri-State  
16 Tollway?

17 A. I can see cars and trucks.

18 Q. And could you see the roadway  
19 pavement?

20 A. I can see the pavement, yes.

21 Q. And can you see the complete either  
22 truck or car?

23 A. Yes, I can.

24 Q. Now, you stated earlier that one of

1 the ways a noise abatement wall can reduce noise is  
2 line of sight?

3 A. A break in the line of sight.

4 Q. Yeah, breaking the line of sight. So  
5 does the picture of Complainants' Exhibit No. 5  
6 depict a break in the line of sight from the Tollway  
7 to the residence in question?

8 A. If we look at the left-hand side of  
9 the photograph we can see -- clearly see the cars  
10 and the trucks, and then on the right-hand side of  
11 the photograph the wall becomes somewhat higher and  
12 we don't readily see any cars or trucks, which would  
13 somewhat illustrate the effect of a breaking of a  
14 line of sight.

15 In other words, breaking a line of  
16 sight means that we cannot see the noise source.  
17 Whereas, on the left-hand side of the photograph we  
18 can see the entire noise source. So the effect of  
19 the wall on the left-hand side would be minimal, at  
20 best.

21 Q. And based upon your noise report of  
22 the area, what was your recommendations to reduce  
23 the noise levels in that area?

24 A. My recommendation was to go with a



1 noise wall of approximately 18 feet in order to  
2 break the line of sight to the Tollway area, and  
3 also go with a length of approximately a quarter of  
4 a mile in length. Again, in order to break the line  
5 of sight from the residential area that we're  
6 talking about to the Tollway area.

7 Q. And when you mean -- refer to as  
8 length, I'm referring back again to Complainants'  
9 Exhibit No. 5, you refer to -- I'm sorry -- you  
10 referred to height as extending both these walls in  
11 height?

12 A. Yes.

13 Q. Okay.

14 A. From memory, it seems to me that the  
15 higher wall was something, like, eight or nine feet  
16 high, and the lower wall was approximately six feet  
17 high. And those would have to be extended upward  
18 considerably. Again, my recommended height would be  
19 around 18 feet in order to minimize the noise impact  
20 on the Petrosiuses and also on the other neighbors  
21 in the area.

22 Q. And when you refer to lengthening, you  
23 actually mean to the south or to the left of the  
24 picture, Complainants' Exhibit No. 5; is that

1 correct?

2           A.       Well, what I'm referring to there  
3 would be a wall of approximately 18 feet high that  
4 would extend in such a manner as to block the  
5 majority of the Tollway noise. It would start, to  
6 some extent, where we see a white car parked on the  
7 right-hand side of the picture we would start  
8 probably a little bit to the right of there and then  
9 extend that 18-foot wall for a distance of  
10 approximately a quarter of a mile. And, again, to  
11 achieve maximum blockage of the Tollway sound from  
12 the residential area.

13           Q.       And based upon your recollection of  
14 the area and, again, referring to the Complainants'  
15 Exhibit No. 5, the walls we're looking at in this  
16 picture are concrete; is that correct?

17           A.       Yes.

18           Q.       And farther to the south the shorter  
19 concrete wall ends and then there's a wood wall; do  
20 you remember that?

21           A.       I don't remember that to be honest  
22 with you.

23           Q.       Okay. But there's some type of wall  
24 past it in concrete; do you remember that?

1           A.       There very well could be, yes.

2           Q.       Now, referring back to your noise  
3 study that you conducted on March 16th, we've talked  
4 about several parts of it. Your experience was  
5 that -- were there other homes in the area?

6           A.       Yes, there were.

7           Q.       And how many other homes were there?

8           A.       I didn't carefully count them, but I  
9 would say that the area consisted of about a half a  
10 dozen homes.

11          Q.       And if the noise wall were extended  
12 and heightened, would other residences in the area  
13 feel a reduction in noise as well?

14          A.       Yes, they would.

15                 MR. AZAR: I'm going to object to  
16 that. He didn't -- there is no foundation  
17 for any noise measurements at these  
18 residences or the topography of the  
19 residences. He's just speculating there may  
20 be a benefit. There is no evidence to  
21 support his conclusion. He's just  
22 speculating at this point.

23                 HEARING OFFICER WEBB: Would you like  
24 to have any background?

1 MR. DWORSCHAK: Yeah.

2 BY MR. DWORSCHAK:

3 Q. Greg, when you did your study, did you  
4 go around the neighborhood besides the property in  
5 question?

6 A. Yes, I did.

7 Q. And did you observe noise at other  
8 locations besides the property in question?

9 A. Yes, I did.

10 Q. And what were your observations of  
11 noise other than the property in question?

12 A. I believe I show a couple of more  
13 residences on my diagram just for when the  
14 measurements were taken and we can look at that.

15 Q. And when you say that, you're  
16 referring to Page 5?

17 A. Page 5 of 8, correct.

18 Q. Okay.

19 A. And if we look to the west of the  
20 Petrosius residence, there's a residence located on  
21 the other side of Maridon Road and, I believe, just  
22 a little bit higher elevation than the Petrosius  
23 residence, a few feet higher. And, again, they  
24 would receive virtually the same beneficial results

1 of an 18-foot wall as the Petrosiuses would.

2                   The house that would be located  
3 north of the Petrosius', again, that was at an  
4 elevation of several feet higher than the Petrosius'  
5 elevation, but they also would receive at least a --  
6 having a reduction by one half of the sound impact  
7 that they're currently receiving.

8                   And not shown in the drawing are  
9 other houses that would be a little further north of  
10 the Petrosius residence. And they, again, would  
11 also receive a very beneficial reduction in noise  
12 due to the presence of an 18-foot wall.

13           Q.       And, in fact, your diagram on Page 5  
14 of your report you actually measured the distance in  
15 feet between your noise receptor and two other  
16 homes; is that correct?

17           A.       That's correct. We used a laser range  
18 finder to establish the distances for our  
19 measurements south to the point of the measurement  
20 site, labeled on the diagram, to the Tollway wall  
21 shown in the photograph in question. And then also  
22 distances to the house on the west as 156 feet from  
23 the measurement point, and the house on the north  
24 being 258 feet from the measurement site.

1           Q.       And, Greg, if you did the -- if your  
2   receptor was on the property in question, how do you  
3   know how the noise affects other properties in the  
4   area?

5           A.       Based on having taken tens of  
6   thousands of measurements over a period of 33 years.  
7   There's been many times I've taken measurements at  
8   multiple residences and seen the impact not only on  
9   one residence, but at quite a few residences. And  
10   looking at the hand-drawn map there, again, the  
11   reduction noise impact for those houses as  
12   illustrated would be extremely significant.

13                               (Whereupon, a discussion  
14                               was had off the record.)

15   BY MR. DWORSCHAK:

16           Q.       Back to your study, could you explain  
17   to us what an ambient noise is?

18           A.       Ambient noise is normally the sound  
19   that creates a background for the area where a  
20   measurement is being taken. In your typical noise  
21   survey you measure the noise source of interest, in  
22   this case the Tollway. At the same time, you've got  
23   other noises that are taking place in the area that  
24   may or may not impact your measurement of the noise

1 source of interest. In this situation here the  
2 ambient is such that we really can't measure any  
3 ambient because the Tollway is so predominant as far  
4 as the noise source.

5                               And ANSI, American National  
6 Standards Institute, recognized this and has a  
7 procedure whereby we can estimate an ambient sound  
8 in order to make the ambient corrections that are  
9 required by the Illinois Pollution Control Board.

10                              In this particular instance here,  
11 since it was not possible to actually measure the  
12 sound because the Tollway is not something we can  
13 turn on and turn off, it's there 24 hours a day, we  
14 then used an estimating methodology used by the  
15 Pollution Control Board and also ANSI in order to  
16 estimate what the ambient background would be in the  
17 area, again, to comply with the Board's requirement  
18 that we make an ambient correction.

19                              The ambient that was estimated was  
20 very low compared to the high levels measured, so  
21 the impact of any background sound, in theory, would  
22 be no effect. And in actual practice, when we were  
23 taking the measurements and we had a jet aircraft  
24 flying overhead and the instrumentation would not

1 monitor or register the jet overflight, that proves  
2 that not only by theory but also by measurement that  
3 the ambient is not impacting the sound source of  
4 interest, in this case the Tollway.

5 Q. And referring back to your study that  
6 you did in March, is there anything that you'd like  
7 to talk about that we haven't already discussed  
8 referring it -- referring to your study?

9 A. Again, the March study followed up on  
10 the December 19th, '03 study that was a much, much  
11 shorter measurement period designed to demonstrate  
12 the 900.102 exceedance.

13 The March '05 study was done to  
14 demonstrate an actual exceedance of the Board's  
15 numeric standards.

16 The December 19th of 2003 study  
17 was a follow-up to a videotape that Mr. Petrosius  
18 sent me to view. And I had viewed the tape and  
19 formed an opinion that was based on the meter  
20 readings he was getting on the tape that the noise  
21 impact in the area was severe.

22 Q. And when you say videotape, what do  
23 you have? Did you use a videotape to help you form  
24 your professional opinion?



1           A.       Yes. Mr. Petrosius, through my  
2 instruction, had used a camcorder and a RadioShack  
3 sound level meter to substantiate what the sound  
4 levels were from the Tollway and on his property  
5 and he sent me the tape and I observed the tape both  
6 daytime and nighttime for the noise impact that he  
7 was receiving.

8                         And based upon that, I then  
9 decided it was definitely worthwhile to take  
10 measurements on the property to further substantiate  
11 his claim.

12           Q.       And I'm presenting Complainants'  
13 Exhibit Number 19, which is a copy of a videotape  
14 you used for your professional opinion; is that  
15 correct? I'm sorry. Did you have an opportunity to  
16 recently look at that so you know it's the tape that  
17 you used to form your professional opinion?

18           A.       Yes. I used it for my professional  
19 opinion and taking the sound level measurements back  
20 in 2003 and I, again, viewed the tape this afternoon  
21 at lunchtime to basically refresh my memory and  
22 ensure that it was, in fact, the same tape that I  
23 observed two years ago, and it is.

24                         MR. DWORSCHAK: Your Honor, I move to

1           have Complainants' Exhibit No. 19 offered  
2           into evidence.

3                   MR. AZAR: I'm going to object again.  
4           It was never disclosed. It's never mentioned  
5           in the report as being part of the formation  
6           of his opinion. As part of the request that  
7           all the information relied upon in forming  
8           his opinion it was never disclosed and it was  
9           never disclosed in the report as being relied  
10          upon.

11                   HEARING OFFICER WEBB: I'm going to  
12          agree with Mr. Azar. Would you like to make  
13          an offer of proof?

14                   MR. DWORSCHAK: Yes. That's what I  
15          was going to do.

16                   HEARING OFFICER WEBB: So Exhibit 19  
17          is not admitted, but I will accept it as an  
18          offer of proof.

19 BY MR. DWORSCHAK:

20           Q.       And, Greg, could you tell us what you  
21          saw in the videotape?

22           A.       Yes. The tape consisted of both  
23          daytime and nighttime measurements taken by  
24          Mr. Petrosius. He took a videotape of the

1 RadioShack meter being held in the foreground with  
2 the Tollway in the background. The appearance of  
3 the cars and trucks was plainly visible on the tape,  
4 along with the sounds generated by the Tollway, the  
5 cars, trucks and various vehicles on the Tollway.  
6 The RadioShack meter was registering sound levels at  
7 about the mid 70s range. I would say from around 72  
8 to 76 dBA.

9                               There were daytime and nighttime  
10 measurements both taken. And also, in addition to  
11 that, he did take some measurements inside his  
12 house, both with the windows closed and the windows  
13 open.

14                               With the windows closed, I believe  
15 the levels were around the mid-50 decibel range.  
16 And then with the windows open it would be in the  
17 mid-60s. Again, well above Pollution Control  
18 Board's standards for noise impacting a residence.

19               Q.       And do you believe that tape  
20 accurately portrays conditions on the property in  
21 question?

22               A.       Yes. My subsequent visits, two visits  
23 after having viewed the tape, corroborated exactly  
24 what was on the tape. I have seen the same images,

1 the same traffic -- same types of traffic, the  
2 sounds on the tape sounds very, very similar, if not  
3 exactly similar, to the sound that I heard when I  
4 was there and that I measured with my precision  
5 instrumentation.

6 Q. Anything else you'd like to add about  
7 your viewing of this tape?

8 A. No.

9 MR. DWORSCHAK: Nothing further on my  
10 offer of proof.

11 HEARING OFFICER WEBB: Thank you.

12 BY MR. DWORSCHAK:

13 Q. Greg, based upon your study of the  
14 area, your visits to the area, your looking at the  
15 wall, looking at the home, do you believe that  
16 there's -- I'm sorry -- how many feet of mitigation  
17 do you believe the current noise wall is offering  
18 the area?

19 A. I think it's negligible. The wall is  
20 so low that it would impact what we call a ground  
21 wave, the sound that travels along the ground. But  
22 as far as breaking the line of sight, it obviously  
23 does not do that.

24 Failing to break the line of sight

1 exposes the Petrosiuses and their neighbors to  
2 levels that are 19 decibels above the Board  
3 regulations for C to A noise, specifically  
4 901.102(a), and the Board's rules.

5 THE WITNESS: Could you repeat the  
6 rest of the question? I'm sorry.

7 MR. DWORSCHAK: Can you read it back?  
8 I've even forgot.

9 (Whereupon, the requested  
10 portion of the record  
11 was read accordingly.)

12 BY THE WITNESS:

13 A. Again, to elaborate a little bit on  
14 that, it would be negligible really. Those points  
15 where there is no breaking of line of sight, the  
16 very short wall provides little, if any, relief in  
17 order to provide significant relief. We, again,  
18 need to break the line of sight.

19 And, actually, to provide the  
20 level of protection I feel is necessary, we would  
21 want to not only break the line of sight, but also  
22 have the wall several feet higher than necessary to  
23 break the line of sight to gain a little bit of  
24 additional noise reduction.

1 BY MR. DWORSCHAK:

2 Q. Thank you. Do you have any other  
3 observations or recommendations you haven't already  
4 testified to?

5 A. I do have one observation and that is  
6 that even putting in an 18-foot wall, the area is  
7 still going to exceed the Board's sound limits. But  
8 the introduction of an 18-foot wall, or higher  
9 possibly, but at least an 18-foot wall would give  
10 the Complainants' and their neighbors a very  
11 significant reduction in sound. It would more than  
12 cut the sound in half from what it is right now, but  
13 it would still be -- it would be much better than it  
14 is now, but it would still exceed the Board limits.

15 Q. But it would be much better?

16 A. It would be much, much better.

17 Q. And it would assist in their quality  
18 of life?

19 A. Very much so.

20 MR. DWORSCHAK: Thank you. Nothing  
21 further.

22 HEARING OFFICER WEBB: Thank you. Mr.  
23 Azar?

24 MR. AZAR: Thank you.

1 CROSS EXAMINATION

2 By Mr. Azar

3 Q. Mr. Zak, in regards to -- let's start  
4 with the ambient noise, the background noise. How  
5 was that determined? Was that taken from a table?

6 A. Yes.

7 Q. Did you measure -- you indicated in  
8 your report that you were taking that number based  
9 upon the usage of the area, correct?

10 A. Yes.

11 Q. And that is a moderate residential  
12 area?

13 A. I don't understand what you mean by  
14 moderate residential area.

15 Q. Well, those are the exact words you  
16 used. Hold on a second.

17 (Brief pause.)

18 BY MR. AZAR:

19 Q. You depicted it as a Category 3, a  
20 moderate residential area, Page 4 of your report,  
21 last paragraph.

22 A. Yes. That is correct.

23 Q. Now, in regards to looking at Joint  
24 Exhibit No. 3, in light of the fact that the house

1 is nearby some serious industrial area, being the  
2 UPS facility, the rail facility and the highway,  
3 does that change your opinion as to that being a  
4 moderate residential area?

5 A. No.

6 Q. So the fact that there is an adjoining  
7 highway, one of the largest truck facilities in the  
8 country and an intermodal railroad facility would  
9 not change your opinion as to whether that is a  
10 moderate residential area?

11 A. No, it would not.

12 Q. So the ambient noise you got is the  
13 background noise. Now, did you do an -- normally,  
14 the ambient noise would be the background noise,  
15 correct?

16 A. That's correct.

17 Q. And so if you're, say, for example,  
18 looking at a waterfall that's 78 decibels and  
19 someone was complaining about the waterfall, that's  
20 the background noise. That's the way it's always  
21 been, right?

22 A. That's correct. And it's not  
23 regulated.

24 Q. Well, so -- then it's not a nuisance?



1           A.       Again, the Board does not regulate  
2 waterfalls, so that would not fall under that  
3 category. It would not be considered a nuisance.

4           Q.       So if it's not regulated by the Board,  
5 it's not a nuisance? So the same thing with an  
6 airport next door, correct. That's regulated by the  
7 Federal Highway Administration -- or the Federal  
8 Aviation Administration.

9                   MR. DWORSCHAK: I'm going to object  
10 now. He's asking him legal interpretation.

11                  MR. AZAR: He's already said it's not  
12 regulation, therefore, it's not something you  
13 deal with. So I want to -- and that's a  
14 natural waterway.

15                  MR. DWORSCHAK: Well, he objected to  
16 him offering what a nuisance was, but he  
17 allows him now to say --

18                  HEARING OFFICER WEBB: That's true.  
19 I'm a little confused. Can you back up a  
20 little bit?

21                  MR. AZAR: Okay.

22 BY MR. AZAR:

23           Q.       The background noise of a waterfall  
24 wouldn't be regulated, right? That's what you

1 testified to, correct?

2 A. That's not totally correct. As far as  
3 the question is concerned, I think you need to  
4 clarify that. And that is the waterfall would  
5 probably be categorized as sound as opposed to  
6 noise, noise being unwanted sound. And your  
7 waterfall, as far as most people are concerned, it  
8 would probably be considered a desirable sound and  
9 it would not be considered noise.

10 Q. But it wouldn't -- if it exceeded that  
11 73 decibel average, it exceeds -- would it exceed  
12 regulations?

13 A. I am not aware of anybody that  
14 regulates the waterfall, so I would say no.

15 Q. Okay. So then it wouldn't be -- it  
16 can't be construed as a nuisance?

17 MR. DWORSCHAK: Asked and answered.  
18 He already said no.

19 BY MR. AZAR:

20 Q. Okay. Then let's go to the other  
21 issue, an airport. Is that -- is an airport  
22 regulated by regulations by the Board?

23 A. No.

24 Q. How about as a nuisance?



1           he's qualified to testify to that because  
2           he -- my understanding is that he was -- he  
3           participated in the writing of some of these  
4           regulations.

5                     HEARING OFFICER WEBB: But your  
6           objection was to the fact that he was not --

7                     MR. AZAR: No. He's making a legal  
8           conclusion.

9                     HEARING OFFICER WEBB: Well, right.

10                    MR. AZAR: And here he's making a  
11           conclusion that the regulations don't cover  
12           that based upon, you know, his experience as  
13           a regulator.

14                    HEARING OFFICER WEBB: Well, I think  
15           the objection is based on the  
16           characterization of the word -- of whether  
17           that is a nuisance. I mean, you can ask him  
18           what the regulations cover, but --

19                    MR. AZAR: Right. Okay.

20                    HEARING OFFICER WEBB: -- the question  
21           is is he then qualified to make that  
22           particular legal interpretation of whether  
23           that qualifies as a nuisance, if I'm not  
24           misquoting you.

1 BY MR. AZAR:

2 Q. Well, does the Board's regulations --  
3 does the Board -- your understanding of Board's  
4 regulations -- let me back up. You participated in  
5 the drafting of some of these regulations, correct?

6 A. Yes.

7 Q. And the numerical sound limits --

8 A. Yes.

9 Q. -- you participated in? And also in  
10 the regulations for 901.102, correct?

11 A. Yes.

12 Q. So that's the one that we're operating  
13 under and you participated in writing those and  
14 you're familiar with them?

15 A. Yes.

16 Q. From both an enforcement and referral  
17 from the administrative agency?

18 A. Yes.

19 Q. Okay. So if the sound or the noise  
20 category is not regulated by the Board, is it within  
21 your understanding of the regulations that it would  
22 be subject to the nuisance provisions of the Board?

23 A. It could be, depending upon the nature  
24 of the source.

1 Q. So the airport?

2 A. No.

3 Q. A waterfall?

4 A. Because of the federal preemption.

5 Q. Okay. How about the waterfall?

6 Someone made an amusement park 50 years ago with a

7 waterfall and the neighbors now don't like it?

8 A. That could be regulated then, yes.

9 Q. How about the railroads?

10 A. If the railroad came under the control

11 of the Federal Railroad Administration, no, due to

12 preemption. If, however, there is an amusement park

13 and somebody had constructed a -- set up a small

14 railroad that was not controlled by the federal

15 regulations, then the Board could have control of it

16 through either a nuisance or even potentially

17 numerical regulations.

18 Q. So the noise regulations that you're

19 referring to are 901.101 and 901.102, correct?

20 A. No. It would be 900.102 and

21 901.102(a) and (b).

22 Q. Okay.

23 A. Specifically in this case (a) because

24 we're looking at daytime.

1           Q.       Okay. Let me show you what we've  
2 marked for identification purposes as Respondent's  
3 16, the regulations, specifically 102. Do you  
4 recognize that document?

5           A.       Yes. It's a copy of the Board's  
6 regulations -- noise regulations. It is a  
7 document -- it is a copy of a portion of the  
8 Pollution Control Board's noise regulations.

9           Q.       Now, the regulations that are set  
10 forth there specify in 102 what categories of land  
11 are regulated?

12          A.       Yes.

13          Q.       And then it defines which -- what it  
14 encompasses with land categories from the Federal  
15 Highway Administration?

16                   MR. DWORSCHAK: I'm sorry. What page  
17 are you on?

18                   MR. AZAR: I don't know. He has it in  
19 front of him. I'm looking at, 901.101,  
20 Paragraph C.

21                   MR. DWORSCHAK: Okay.

22 BY MR. AZAR:

23          Q.       That defines what is a Category C  
24 property; is that correct?

1           A.       It states the sound level limits for a  
2   Class C property. But I don't believe it defines  
3   Class C property, per se.

4           Q.       That's in reference -- that's found  
5   in -- let me back up.

6                    The regulations state that a Class  
7   C property shall include all land used as specified  
8   in the SLUCM Codes, 211 through 299 inclusive, 311  
9   through 396 inclusive, 399, 411 except 4111, 412  
10   except 4121, 421, 422, 429, 441, 449, 460, 481  
11   through 499 inclusive, 7223, 7311 used for  
12   automobile and motorcycle racing, and 811 through  
13   890 inclusive. Is that accurate that those  
14   categories are covered, what is considered a Class C  
15   piece of property?

16          A.       It gives the exceptions and, again,  
17   the only thing that I'm not -- one thing I'm not  
18   100 percent certain of is whether the regulations  
19   you have here are current or not.

20          Q.       Okay.

21          A.       But if they are current, that's  
22   correct.

23          Q.       Okay. Let me show you what's been  
24   marked as No. 17, which is part 901, Appendix A. Do



1 you recognize that document?

2 MR. DWORSCHAK: Do you have a copy?

3 MR. AZAR: It's the regulations.

4 MR. DWORSCHAK: Okay. I got it.

5 MR. AZAR: Appendix A.

6 BY THE WITNESS:

7 Q. Okay. Under Appendix A, you've got  
8 old rule numbers referenced.

9 BY MR. AZAR:

10 Q. Right. And new rules?

11 A. Well, mine says -- it says in here,  
12 Appendix A, old rule numbers referenced.

13 Q. Right. And then in the next paragraph  
14 over it references the new rules. It's the new  
15 numbers.

16 A. All right. Yes.

17 Q. Now, are you familiar with those  
18 regulations?

19 A. Yes.

20 Q. Okay. Drawing your attention --  
21 they're not paginated, so I'm looking at code number  
22 41. So in the document it has code numbers  
23 designated to what the document is.

24 A. Are you on Appendix B or Appendix A?

1           Q.       It's the one I gave you. Well,  
2       there's Appendix A and Appendix B. Appendix B is --  
3       it's from the website. Is it Appendix B we're  
4       looking at now?

5           A.       Well, I'm not sure. That's what I'm  
6       asking you. Are you in Appendix A?

7           Q.       We're looking at Appendix B.

8           A.       Okay.

9           Q.       That document discloses the code,  
10       category and land class for each piece of property  
11       designated in that document, correct?

12          A.       Yes. This is the old SLUCM code. I  
13       noticed there's a date on here of 1983. I know the  
14       Board is in the process of updating that. I'm not  
15       quite certain at this point whether this is current  
16       or the newer classification is current.

17          Q.       Okay. Well, going off of this  
18       document because that's all that's available that  
19       I'm aware of that I was able to find, was that in  
20       place in 1993 (sic) when this complaint was filed or  
21       were the new rules in place by then?

22          A.       The --

23                   MR. DWORSCHAK: 2003, the complaint  
24       was filed. You said 1993.

1 MR. AZAR: I know.

2 BY MR. AZAR:

3 Q. 2003.

4 A. Well, the measurements we had taken  
5 were in 2005 and we based that upon our copy of the  
6 Board's revision to the rules and that would not  
7 include the -- they basically revised this land use  
8 coding system in the copy that we used.

9 Q. Is that the final rules or the ones  
10 that are pending?

11 A. Again, I'm not sure what the current  
12 status is, if it's still pending or if it's been  
13 passed. And there was there was some back and forth  
14 on that and we assumed that at the time we did our  
15 survey that the new rules to be applicable.

16 Q. Okay. So in the regulations are the  
17 numbers -- the codes still the same?

18 A. No.

19 Q. Are they all revised?

20 A. They're revised.

21 Q. All right. Going by -- I'm just going  
22 to tell you this is from the Pollution Control  
23 Board's website or the website maintained by the  
24 IEPA and the Pollution Control Board. This is their

1 regulations that are posted. Going to Category 45,  
2 highways, streets, right-of-way.

3 MR. DWORSCHAK: Do you have a page  
4 number, Victor?

5 MR. AZAR: No. It's not paginated.

6 BY MR. AZAR:

7 Q. Did you find that?

8 A. Yes.

9 Q. How are highways and streets and  
10 right-of-ways categorized as a land class?

11 A. Unclassified.

12 Q. So that's not a C?

13 A. No.

14 Q. So the --

15 A. It's using the old rule.

16 Q. Okay. When the road was built, was  
17 there a -- in 1995, were these the rules in place?

18 A. Yes.

19 MR. DWORSCHAK: The road was built in  
20 1995?

21 MR. AZAR: The expansion.

22 BY MR. AZAR:

23 Q. So these were -- this was the rules  
24 that were followed at the time?

1           A.       You said 1995, and in 1995 these were  
2     the rules that were followed.

3           Q.       Okay. So the new rules, according to  
4     your understanding, makes a roadway commercial  
5     property?

6           A.       No. It lists it as a Class C property  
7     and we cite that on Pages 4 and I believe --

8                   HEARING OFFICER WEBB: Page 2 of your  
9     report?

10    BY MR. AZAR:

11           Q.       Page 4, second paragraph, it says --

12                   MR. DWORSCHAK: The bottom of Page 4  
13     has a discussion about it, as well.

14    BY THE WITNESS:

15           A.       Okay. Yes, Madam Hearing Officer,  
16     it's Page 2. We used the Board's Land Base  
17     Classification Standards, LBCS, and under that we  
18     feel the Tollway ramp would fall under the  
19     description of transportation services, Code 4100,  
20     specifically Code 4130, road, ground passenger and  
21     transit transportation, with a designation of Class  
22     C under 35 IAC 901 land class.

23    BY MR. AZAR:

24           Q.       Which page are you on?

1 A. Page 2.

2 MR. AZAR: I never got Page 2. You  
3 never gave it to me. You refused to give me  
4 Page 2. You gave me Page 4. Hold on, maybe  
5 I misspoke.

6 HEARING OFFICER WEBB: Mr. Azar, do  
7 you want to take my copy?

8 MR. DWORSCHAK: I've entered it all  
9 into evidence. You're welcome to look at it.

10 MR. AZAR: Yes. I would appreciate it  
11 since this is the first time ever disclosed  
12 to me. I've got Page 3 and onwards. The  
13 rest was refused to me as disclosed.

14 BY MR. AZAR:

15 Q. Now, is that in the -- referring to --  
16 just so I'm clear here. Okay. So that's the 901  
17 regulations that would be in here, 901, correct? Is  
18 that what you're referring to?

19 A. We're referring to -- yes, it would be  
20 under 901.

21 Q. Where is that found in there, in this  
22 document? If you refer here, where is that in the  
23 document?

24 A. Well, this appears to be an older

1 document. What you have here is not a recent  
2 document.

3 Q. Are you going off of -- well, I guess  
4 I can only go by what's posted by the --

5 A. I think you've got July 30th of 2004  
6 and we got our information in 2005.

7 Q. Now, is that from where?

8 A. From the Board.

9 Q. Is that the current rules or is that  
10 the proposed rules?

11 A. That would be -- our understanding of  
12 that was at the time that the rules were very close  
13 to passage and we used I think what you're referring  
14 to as the proposed rules.

15 Q. So do you know if they've been passed  
16 or not?

17 A. I do not know.

18 Q. Okay.

19 A. But the judgment called for time and  
20 we -- it looked like they were very close to being  
21 passed so we used the newer standards for writing  
22 our report.

23 HEARING OFFICER WEBB: I can find out  
24 at our next recess.

1                   MR. AZAR:   Okay.   You know, I am going  
2                   to object at this point to the report being  
3                   admitted on the fact that Pages 1 and 2 were  
4                   not disclosed.

5                   HEARING OFFICER WEBB:   Were you under  
6                   the impression that you had the complete  
7                   report?

8                   MR. AZAR:   I was under the impression  
9                   that I was not going to get Pages 1 and 2.

10                  MR. DWORSCHAK:   Because I believe they  
11                  were attorney/client privilege information.  
12                  He discussed the basis for our case, which I  
13                  didn't think I had to provide to the other  
14                  party when it's attorney/client discussions.

15                  MR. AZAR:   Now, he's introducing it  
16                  into evidence.

17                  HEARING OFFICER WEBB:   Yeah.

18                  MR. AZAR:   It seems kind of improper.  
19                  I think that should just negate -- the report  
20                  should not be admissible because that creates  
21                  a problem.

22                  HEARING OFFICER WEBB:   Well, I was  
23                  thinking it was maybe a clerical error.   But  
24                  if you had withheld it -- if you deliberately



1 withheld it --

2 MR. DWORSCHAK: I'm checking.

3 HEARING OFFICER WEBB: Okay. I'll let  
4 you check.

5 (Brief pause.)

6 MR. AZAR: For the record, I did not  
7 have this at the time of the deposition.

8 HEARING OFFICER WEBB: Which pages?

9 MR. AZAR: One and 2.

10 HEARING OFFICER WEBB: But you had all  
11 the other ones?

12 MR. AZAR: I had the rest. Should we  
13 go on while you're looking for that.

14 MR. DWORSCHAK: Yeah. Go ahead.

15 MR. AZAR: All right.

16 BY MR. AZAR:

17 Q. Now, you indicated that the Board has  
18 category -- the current rules categorize it as a  
19 Category; C is that correct?

20 A. That's correct.

21 Q. Now, are you aware of any Federal  
22 Highway Administration regulations that apply to the  
23 building of noise walls?

24 A. No.

1           Q.       Would regulations directed to agencies  
2 building highways from the Federal Highway  
3 Administration be relevant to the study of this  
4 issue?

5           A.       Again, not -- with a little more  
6 information I could answer that yes or no, but the  
7 information you gave me so far I really can't  
8 honestly give you a yes or no answer.

9           Q.       Showing you what's been previously  
10 marked as Respondent's Exhibit 7, are you familiar  
11 with those?

12          A.       I would be aware of their existence,  
13 but I would not be aware of the details. What you  
14 have evidently here is 23 CFR 772.

15          Q.       Now, since you're not familiar with it  
16 let me ask you a question: If the regulations in  
17 23 CFR 772 from the Federal Highway Administration  
18 indicates a threshold approaching 67 decibels,  
19 wouldn't exceed the 61 decibels in your 901.102(a)?

20          A.       Yes.

21          Q.       Aren't they inconsistent? Wouldn't  
22 they be inconsistent?

23          A.       I would say so, yes.

24          Q.       So what is the state agency supposed

1 to do, follow the federal regulations or the state  
2 regulations?

3 A. Well, during my 29 years with the  
4 Illinois EPA, it would be a question of who has the  
5 authority, the federal government or the state  
6 government.

7 Q. So if the federal government is paying  
8 the check for sound walls, are they the one who's in  
9 control?

10 A. I think it gets to a legal question  
11 and I don't really feel that I'm in a position to  
12 answer a legal question as far as absolute authority  
13 in that situation.

14 Q. Okay. But its clear that the two  
15 regulations are inconsistent?

16 A. Agreed.

17 Q. One is a more lenient standard and one  
18 is a more stringent standard?

19 A. That's correct.

20 Q. Okay. Who builds roads in the state  
21 of Illinois? Are you familiar with that?

22 A. In my experience with the Illinois  
23 EPA, the primary road builder was the Illinois  
24 Department of Transportation.

1 Q. Okay.

2 A. Or IDOT.

3 Q. Okay. IDOT. Is road building part of  
4 their statutory function?

5 MR. DWORSCHAK: Objection. He doesn't  
6 work for IDOT.

7 MR. AZAR: Okay.

8 HEARING OFFICER WEBB: Well, you can  
9 answer if you know.

10 BY THE WITNESS:

11 A. I don't know for certain. I know that  
12 from my experience with EPA they were the primary  
13 road builder. We worked with them numerous times.  
14 That would be pretty much the limit of my knowledge  
15 as far as their road building is concerned.

16 BY MR. AZAR:

17 Q. Now, the Environmental Protection Act,  
18 in particular, Section 23, which is the -- of  
19 Title VI, that talks about the purpose of the title,  
20 being the noise title, is to prevent noise which  
21 creates a public nuisance?

22 A. Yes.

23 Q. So the purpose of the statute is aimed  
24 at a public nuisance, correct?

1 A. Yes.

2 Q. Let me back up a second. Do you have  
3 any knowledge as to how the noise wall was designed  
4 that was in place? What was the design criteria?

5 A. The one in question here at the  
6 hearing?

7 Q. The one involved in the Petrosius's  
8 house, that's currently in place?

9 A. No, I do not.

10 Q. Do you know whether or not it complied  
11 with federal regulations or not?

12 A. No, I do not.

13 Q. Assuming for the sake of discussion it  
14 is in compliance with federal regulations built  
15 ten years ago, is there a cut-off in which the  
16 enforcement of the Act applies to it for nuisance  
17 purposes?

18 A. Now, by the term cut-off could you  
19 elaborate a little more on that?

20 Q. The time period. So it's built ten  
21 years ago where someone's been talking about I-55 or  
22 any road in the state, is there any regulatory  
23 mechanism by which a nuisance claim can be barred  
24 that you're aware of?

1           A.       I would interpret that as being a  
2 question as to whether or not the Board has  
3 authority to regulate it as a nuisance and, again, I  
4 think that's a legal question and not really a noise  
5 question.

6           Q.       Let me back up. Did you ever do  
7 enforcement actions at the EPA against pre-existing  
8 structures that were in existence for ten, twenty  
9 years?

10          A.       Yes.

11          Q.       Were they publically owned noise  
12 generators?

13          A.       Both public and private.

14          Q.       Okay. Have you ever filed enforcement  
15 actions against the Department of Transportation?

16          A.       Yes.

17          Q.       And what for?

18          A.       Again, using my experience at the EPA,  
19 the problems with IDOT were both noise related and  
20 also related to solid waste.

21          Q.       Okay. We're talking just sound.

22          A.       Just sound? There was a -- I assisted  
23 a private citizen under my functioning as the  
24 advisor for Illinois EPA regarding a noise problem

1 with an IDOT facility.

2 Q. Would that be the maintenance yard?

3 A. Yes.

4 Q. Are you aware of any actions against a  
5 right-of-way or is this the first one you're aware  
6 of?

7 A. Now, by the first time I'm aware of,  
8 are we talking about the case at issue today?

9 Q. Yes.

10 A. This is the first one that I'm aware  
11 of.

12 Q. And you've been there since -- you  
13 were with the IEPA since 1979?

14 A. 1972.

15 Q. Almost from the very beginning?

16 A. Yes.

17 Q. So in, what, 30 years no one's ever  
18 challenged a road as being noisy or a nuisance?

19 A. We get complaints on roads. And,  
20 typically, what we would be able to do would be  
21 refer it to IDOT and IDOT would usually be able to  
22 work out a solution that was satisfactory to the  
23 complainants.

24 Q. Okay. Now, let's go to your

1 methodology of your study. You picked one location,  
2 correct?

3 A. Correct.

4 Q. Now, is that the -- is that location  
5 dictated by policy or did you choose that?

6 A. It was dictated by the general  
7 measurement requirements of the Pollution Control  
8 Board.

9 Q. Okay. So you looked at the  
10 regulations. It doesn't say you have to be "X"  
11 number of feet from the noise source at "X" angle  
12 from the noise source, correct?

13 A. That's correct.

14 Q. You used your experience as a noise  
15 expert to place the camera and the microphone and  
16 the noise equipment, correct?

17 A. Yes.

18 Q. Now, based on the topography of the  
19 area, the noise reads could vary within five feet,  
20 couldn't they?

21 A. Only so much as the reflectivity of  
22 the house is concerned. Other than that, plus or  
23 minus five feet in any direction would not have any  
24 effect.



1           Q.       I'm looking in particular at your  
2 drawing on Page 5. If you moved five feet to the  
3 west towards Maridon Road, you'd be moving away from  
4 that gap in the wall as it's stepping down, correct?

5           A.       The movement would be really  
6 insignificant. A five-foot movement, again, as far  
7 as the measurement is concerned, would be  
8 imperceptible on the instrumentation.

9           Q.       How about if you're moving up a hill?

10          A.       How far?

11          Q.       Five, ten feet, five feet?

12          A.       Again, the effect would be negligible.  
13 When we're talking about a distance here of 135 feet  
14 from the Tollway wall to the measurement site,  
15 plus or minus five feet, given the grade there,  
16 would be insignificant.

17          Q.       When would it become perceptible, ten,  
18 15 feet?

19          A.       I would say probably 25 feet.

20          Q.       So if you moved closer to the wall or  
21 moved over towards the backyard, the noise  
22 differences could be substantial or noticeable?

23          A.       If one moved close enough to the wall,  
24 yes. And we did take measurements. We did check

1 the backyard. We didn't record it -- we didn't  
2 write it down. But in an attempt to get the ambient  
3 or background sound we tried to take it in the back  
4 of the house and the sound levels were very, very  
5 close to what we had in the front of house. So we  
6 were unable to get an ambient which, again, would, I  
7 think, answer the question of what happens if you  
8 move to the back of the house, we'd still have  
9 very -- extremely high sound levels. And they're  
10 still being generated by the Tollway.

11 Q. Now, the sounds that are generated by  
12 the roadway are generated by the users of the  
13 roadway, correct?

14 A. Yes.

15 Q. So trucks are regulated by -- are they  
16 regulated by the department of -- or any rules as to  
17 the amount noise they can generate?

18 A. I don't quite understand the question.  
19 Can you elaborate?

20 Q. Let me back up. There are, at the  
21 Pollution Control Board and EPA, regulations that  
22 govern the amount of noise that can be generated by  
23 specific vehicles, correct?

24 A. Yes.

1           Q.       So trucks could only go to so many  
2       decibels before it would be subject to a noise  
3       violation for that vehicle, correct?

4           A.       Not really.   The Board has not used  
5       those regulations for over 20 years.

6           Q.       But they exist on the books?

7           A.       But I believe they do exist on the  
8       books, yes.

9           Q.       And, actually, part of the regulations  
10      were changed because of General Motors' petition to  
11      the Board, if you recall?

12          A.       I recall it very clearly, but it was  
13      not regarding truck noise.

14          Q.       No?

15          A.       It had nothing do with trucks.

16          Q.       It was vehicle noise, right?

17          A.       My recollection on that was that the  
18      GM challenge was to our measurement procedure and --  
19      we're talking about 1987?

20          Q.       Yeah.

21          A.       Okay.   In 1987 GM approached the Board  
22      and wanted to change the measurement procedures from  
23      what we call a fast measurement to a one hour Leq.  
24      And numerous hearing were held and the Board did

1     adopt the GM recommendation of a one hour Leq.

2             Q.       Was that for vehicles or for roadway  
3     noise?

4             A.       That was for noise in general.  It  
5     really was not pertinent to vehicles at all.

6             Q.       Okay.  Now, there are a separate set  
7     of regulations that are on the books for vehicles,  
8     corrects?

9             A.       Very old ones that have not been used  
10    for many, many years.

11            Q.       They're still on the books, though?

12            A.       To my knowledge, they are.

13            Q.       Okay.  And they regulate the amount of  
14    noise legally generated by a car exhaust, motorcycle  
15    exhaust, truck exhaust, et cetera?

16            A.       Yes.

17            Q.       Now, any one vehicle driving down the  
18    Tollway, if it's in compliance with those  
19    regulations, wouldn't be a noise impact at the  
20    house, would it?

21            A.       It could very much so because --

22            Q.       They're within the statutory  
23    regulations.

24            A.       But they're subject to more than that

1 one regulation. They're also subject to the  
2 stationary regulations.

3 Q. Okay. That's what I meant. So the  
4 regulations that are involved here are the vehicle  
5 emissions, the individual noise emissions from a  
6 vehicle, correct?

7 A. No. I think we need to clarify this a  
8 little bit.

9 The vehicle regulations are for  
10 individual vehicles that are moving.

11 Q. Right.

12 A. The stationary regulations are not for  
13 vehicles per se, but for what's considered a  
14 stationary noise source.

15 Historically, the Board has -- and  
16 quite a few trucking cases adopted a methodology of  
17 looking at the case saying that even though the  
18 truck is on the property of the alleged noise  
19 violator, the noise source itself is a stationary  
20 noise source, and it falls under the stationary  
21 noise regulations, specifically the 901 regulations  
22 we're discussing here.

23 Q. Okay. So if they're on a private  
24 property, Class C property, you're saying they're

1 regulated?

2 A. They would be regulated on either  
3 Class A, B or C property as a stationary noise  
4 source as long as the truck is not ingressing or  
5 egressing.

6 Q. Okay. On to a highway? That's the  
7 distinction?

8 A. Correct.

9 Q. Okay. Now, the person who is  
10 receiving the noise, such as the Petrosiuses or the  
11 resident beforehand, the effect of the noise is  
12 subjective to their -- to them isn't it? They hear  
13 the noise, whether it bothers them, it differs from  
14 person to person, correct?

15 A. That's correct.

16 Q. So the previous resident may have had  
17 no problems with the noise, correct?

18 A. It's possible, but doubtful.

19 Q. Okay. Now, do you know what kind of  
20 noise wakes up the Petrosiuses at night?

21 A. They have told me the traffic noise  
22 does.

23 Q. Now, is it just the tire noises or is  
24 it the impact noises from the banging of trucks and

1 the revving of the engines?

2 A. They may have told me specifically  
3 that it was one particular type of noise out of the  
4 large variety of sounds that come from the Tollway.  
5 And I don't really specifically remember what. If  
6 they did say it was a banging noise or a tire noise  
7 or a horn honking or what it was, my memory just is  
8 of one, that they are wakened up by sounds from the  
9 Tollway.

10 MR. DWORSCHAK: I'm going to object to  
11 this line of questioning. We've already had  
12 direct testimony from the Petrosiuses on the  
13 type of noise that awakens them. And he's  
14 only referring on what they told him.

15 MR. AZAR: That was part of his  
16 analysis in the last section of his report  
17 and it relates to what's going there and I'm  
18 trying to address on Page 8 he talks about  
19 what noises are bothering them, so I want to  
20 know --

21 HEARING OFFICER WEBB: That's true.

22 MR. AZAR: -- based -- he formed an  
23 opinion based on what they complained of and  
24 I need to find out.

1 HEARING OFFICER WEBB: Go ahead.

2 BY MR. AZAR:

3 Q. All right. So the noises that were --  
4 did they ever indicate to you that there were  
5 certain noises that kept them up or woke them up or  
6 it's just the noise in general that bothered them?

7 A. I believe they mentioned a number of  
8 things that bothered them as far as the noise is  
9 concerned from the Tollway. But my memory is not so  
10 good that I can tell you, well, the clanging,  
11 banging bothered them greatly, but the jake brakes  
12 didn't bother them at all. It was more of a general  
13 impression of all the various sounds, the heavy  
14 trucks tire noise, the clanging and banging, the  
15 jake brakes, things of that nature.

16 Q. Based upon your experience, isn't it  
17 usual for people to be awakened at night from  
18 atypical noises? You fall asleep to the roar of the  
19 tires and you hear a truck clanging or a siren go  
20 off, that usually wakes you up and not the regular  
21 roar of the traffic?

22 A. It varies from individual to  
23 individual. People that I've interviewed -- I've  
24 have interviewed thousands of people with noise



1 problems over the last 33 years. While in a lot of  
2 cases it would be impulsive-type noise, say clanging  
3 or banging or a sudden change in noise level, that  
4 isn't always the case. There are quite a few cases  
5 where just noise, in general, even though the noise  
6 background doesn't change very radically that the  
7 sensitive person will be wakened up by noise in  
8 general. It isn't specifically the volume or the  
9 loudness of the noise in the background.

10 Q. Now, there are there certain  
11 frequencies -- noise frequencies, that require  
12 taller walls to mitigate the noise?

13 A. Yes.

14 Q. That would be low frequency, long  
15 waves?

16 A. That's correct.

17 Q. And those tend to be associated with  
18 the engine revving, jake braking? Aren't those  
19 lower frequency?

20 A. The low frequency sounds I wouldn't  
21 say so much would be engine acceleration normally.

22 Engine acceleration typically  
23 would occur around 125 hertz, which is hitting a  
24 little bit to your lower frequency end. But, for

1 example, let's say you have a pothole and you have  
2 large semis that are hitting the pothole such that  
3 the whole truck vibrates from the impact of the  
4 pothole, that's going to generate a fairly low  
5 frequency pulse that can be very penetrating of a  
6 residence, and also very difficult to control with a  
7 noise wall.

8 Q. So if the Petrosiuses are being  
9 wakened up at night by these banging of trucks, is  
10 this noise wall going to help them at all?

11 A. Oh, it will help, but it won't be a  
12 complete solution to the problem.

13 Q. But will it wake them up? If their  
14 problem is being wakened up by the banging from  
15 these trucks, is this solution going to let them  
16 sleep?

17 A. I think it will.

18 Q. But those noises will be coming over?

19 MR. DWORSCHAK: Asked and answered.

20 BY MR. AZAR:

21 Q. I understand that those noises are  
22 coming over and they're more distinct?

23 A. They will be coming over, but to a  
24 much less extent or an intenerated amount. In other

1 words, a reduced amount because of the presence of a  
2 18-foot or higher noise wall.

3 Q. Now, did you do any field studies out  
4 there to see -- in regards to topology, the  
5 groundwork, to see whether a wall of 18 to 20 feet  
6 could be even built there?

7 A. No.

8 Q. Is it feasible actually to build a  
9 wall out there that you're aware of?

10 A. Based on my experience over the last  
11 30 some odd years, I would say that yes because of  
12 the fact that there's an existing wall there right  
13 now.

14 Q. But by your own reports, eight to  
15 13 feet, correct?

16 A. How many feet?

17 Q. Eight to 13 feet? I think your report  
18 says it's -- I thought you said it was eight feet in  
19 height or you don't know what the height is?

20 A. I'm sorry. What page of the report  
21 are you on?

22 Q. I misread a number. Do you know what  
23 the heights are, let me ask you that, that are  
24 currently out there?

1           A.       I can estimate it. I estimated a  
2   portion of it at approximately six to eight feet and  
3   another portion appeared to be, say, a couple of  
4   feet higher than that. So it would probably be  
5   eight to nine feet.

6           Q.       Okay. And there's a drainage ditch  
7   there, isn't there?

8           A.       I don't remember the drainage ditch.  
9   I was on the residential side of the noise wall.

10          Q.       So you don't know the impact of the  
11   drainage ditch on your proposed design?

12          A.       No.

13          Q.       So we're back to the question: Are  
14   you certain this thing is even feasible to be built?

15                   MR. DWORSCHAK: Objection. He's not  
16   an engineer.

17                   MR. AZAR: He's making a  
18   recommendation to the Board that this thing  
19   should be built and part of the consideration  
20   is feasibility.

21                   HEARING OFFICER WEBB: Feasible to  
22   build or would it solve the problem?

23                   MR. AZAR: Well, first as feasible --  
24   he addressed the issue of feasibility. But

1           the problem is whether it's feasible to be  
2           built is another issue. If you can't build  
3           it, and there's the two prongs of the  
4           analysis, feasibility, which I understand  
5           could be whether it could be built, as well  
6           as economic feasibility.

7                     HEARING OFFICER WEBB: Do we have any  
8           foundation that he would have any knowledge?

9                     MR. AZAR: Well, he's making a  
10          recommendation to the Board that something  
11          should be built. I mean, if he doesn't have  
12          a foundation he shouldn't even be able to  
13          make that recommendation to the Board.

14                    MR. DWORSCHAK: He can make a  
15          recommendation what walls are necessary to  
16          reduce the noise without being a structural  
17          engineer who decides how to build it.

18                    MR. AZAR: Yeah. Well, I guess it  
19          would come down -- then you're making a  
20          recommendation to the Board blind and the  
21          Board has to make a decision that's based on  
22          nothing. If you build a 100-foot wall --

23   (Simultaneous colloquy.)

24                    MR. DWORSCHAK: -- his recommendation

1 is nothing.

2 MR. AZAR: Well, if he's unable to  
3 answer -- there's no foundation for his  
4 opinion. You can put up a wall to solve the  
5 problem, but can you actually build it is the  
6 question.

7 MR. DWORSCHAK: And he's offered no  
8 evidence it's not buildable.

9 MR. AZAR: Well, he's making the  
10 recommendation. I'm not. The burden is on  
11 him -- on the plaintiff to show that this is  
12 feasible.

13 HEARING OFFICER WEBB: Well, I'm not  
14 aware that this witness would have any  
15 knowledge of that. If you have any knowledge  
16 of that, you can answer.

17 BY THE WITNESS:

18 A. Well, if I could, Madam Hearing  
19 Officer, based on my experience of having observed  
20 noise walls used in highway applications, several  
21 hundred locations over 33 years, I see no reason why  
22 the recommendation I recommended could not be done.

23 BY MR. AZAR:

24 Q. Now, what the is the height

1 recommendation -- total height of the wall  
2 considering the topography out there?

3 A. From the wall I observed when there,  
4 we would be looking at probably adding something on  
5 the order of 12 feet, ten feet to the existing wall  
6 that's there.

7 Q. Do you have -- are you familiar with  
8 any circumstances where walls are added to or do the  
9 old walls have to be torn down and new walls put in?

10 A. I think they typically tear down the  
11 old wall and build a new wall.

12 Q. Do you have an estimate as to the  
13 economic reasonableness of that?

14 MR. DWORSCHAK: I'm going to object.  
15 BY THE WITNESS:

16 A. Well, not knowing the finances of the  
17 Illinois State Toll Authority --

18 MR. DWORSCHAK: He's a noise expert,  
19 he's not an economist.

20 HEARING OFFICER WEBB: Speak one at a  
21 time, please.

22 MR. DWORSCHAK: I'm going to object.  
23 He answered a question about economics. He's  
24 testified that he's a noise expert, not an

1           economist or a structural engineer so the  
2           dollar figures are not in his realm of  
3           expertise.

4                   MR. AZAR:  Then I'll withdraw the  
5           question.  If the objection is he's not  
6           qualified to testify the cost, that's fine.

7  BY MR. AZAR:

8           Q.       Now, Mr. Zak, when you came to the  
9           property did you notice the sound right -- the noise  
10          right away?

11          A.       Yes.

12          Q.       Did you ever sleep there before you  
13          figured that you heard the noise?

14          A.       No.

15          Q.       It was readily apparent?

16          A.       Yes.

17                   MR. AZAR:  No further questions.

18                   HEARING OFFICER WEBB:  Thank you.

19          Mr. Dworschak?

20                   FURTHER DIRECT EXAMINATION

21                   By Mr. Dworschak

22          Q.       Greg, when you visited the property in  
23          question you weren't there to buy the house, were  
24          you?



1           A.       No.

2           Q.       You were there to do a study, correct?

3           A.       That's correct.

4           Q.       And in terms of your methodology, it

5           is correct to use a single-noise source gathering

6           spot versus multiple, correct?

7           A.       Yes. That's the normal procedure for

8           before the Board is normally one point is

9           measured -- one point is used for measuring the

10          sound.

11          Q.       And, to your knowledge, the Tollway

12          charges vehicles to use their system, correct?

13          A.       Yes. I've paid the charge many times

14          myself.

15          Q.       And, hypothetically, if a bar lets in

16          a band to play music and the music is too loud,

17          whose responsibility is that for that noise

18          generation?

19          A.       The land owner where the music is

20          taking place.

21          Q.       So it's not the musicians, it's the

22          land owner, correct?

23          A.       Correct.

24          Q.       And could you give us your definition

1 of a moderate residential area?

2           A.       Again, using the Board's own  
3 description there and the ANSI description, it's an  
4 area that has some background sound. I'm basically  
5 relaying this from memory as opposed to going back  
6 and reading the exact definition, so if you'll bear  
7 with me on that. But a moderate area would be one  
8 that's a little bit -- has a little bit of  
9 background noise. It's a little bit noisier than  
10 where I would normally characterize the area that  
11 the Petrosiuses live.

12                   That type of a development  
13 typically has a little bit quieter background. But  
14 when we had to estimate the ambient sound there, we  
15 basically gave the Tollway the benefit of the doubt  
16 and said let's go ahead and bump it up one and  
17 consider it a little bit noisier area than we  
18 normally would.

19           Q.       And in your knowledge of the EPA  
20 regulations and the Pollution Control Board  
21 regulations, are toll roads exempt from nuisance  
22 violations?

23           A.       I don't know.

24                   MR. AZAR: I'm going to object. It's

1           the exact same question that I asked and he  
2           objected to me asking it. And he's asking  
3           the question as to the toll road so I don't  
4           know why --

5                       MR. DWORSCHAK: I'll withdraw.

6                       HEARING OFFICER WEBB: Thank you.

7 BY MR. DWORSCHAK:

8           Q.       Greg, in your experience driving the  
9           Tollway system, you've seen the Tollway erect noise  
10          walls of 18 feet or higher, correct?

11          A.       That's correct.

12          Q.       And you earlier testified this is the  
13          first time you've seen a noise case against the  
14          Tollway in terms of noise; is that correct?

15          A.       Yes. In terms of the Pollution  
16          Control Board taking a case relative to a road, this  
17          is the first I have ever seen the Board take this  
18          type of case.

19          Q.       But the question of whether it took  
20          20 years for someone to spend the money and take the  
21          time and go through the hoops to do this doesn't  
22          affect whether their residence has experienced noise  
23          from the Tollway, does it?

24          A.       I'm not quite following that question.

1 Can you rephrase that?

2 Q. Yeah. You were questioned earlier  
3 about that you never heard a noise nuisance  
4 violation going this far before the Pollution  
5 Control Board?

6 A. That's correct.

7 Q. And there's been some reference it's  
8 been a number of years and this is the first?

9 A. That's correct.

10 Q. But it really doesn't matter whether  
11 this is the first or the 30th, does it?

12 A. No, I really don't think it does.  
13 It's a case that's being seriously considered by the  
14 Board.

15 Q. If the residents of the home feel  
16 there's a violation, then they have the right to  
17 pursue it, correct?

18 A. Yes.

19 MR. DWORSCHAK: Your Honor, I move,  
20 and based upon his exceptions, to enter Pages  
21 3 through 8 of Mr. Zak's Noise Emissions  
22 Report, Complainants' Exhibit No. 18.

23 MR. AZAR: I'm going to object to its  
24 admission. One, that it was not fully

1 disclosed. Second, on the grounds that the  
2 opinions rendered have -- are not supported  
3 by any anything other than recommendations.

4 There is no clear testimony that  
5 this will solve the problem. It will help  
6 the problem is all he says. And he says that  
7 he doesn't know whether this is technically  
8 feasible. He thinks it is. And I don't  
9 think that's enough to go to the Board.

10 HEARING OFFICER WEBB: I'm going to  
11 admit Pages 3 through 8 of the report. Would  
12 you like to make an offer of proof with  
13 respect to Pages 1 and 2? I'm not sure  
14 that -- you know, I don't want to admit them  
15 because Mr. Azar didn't receive them.

16 MR. DWORSCHAK: I understand.

17 HEARING OFFICER WEBB: But in as much  
18 as they may help the Board follow the report  
19 I will allow you to make an offer of proof.

20 BY MR. DWORSCHAK:

21 Q. Greg, I'd like to make an offer of  
22 proof on what Pages 1 and 2 of your noise study --  
23 if you were able to testify, what you would say.  
24 And I'll give you a minute to read them again to

1 refresh your memory.

2 MR. AZAR: Your Honor, I'm going to  
3 object to that simply because he didn't even  
4 reference it in his case in chief. It was  
5 only brought up in cross examination. So he  
6 didn't really use those things for the  
7 opinion. He started to reference -- most of  
8 his testimony is independent of Pages 1 and  
9 2. I don't know what more they would add.

10 MR. DWORSCHAK: But I introduced it as  
11 evidence, the entire document as an exhibit.

12 HEARING OFFICER WEBB: Right. Well,  
13 and it's not being admitted, but I'm going to  
14 allow him to make the offer of proof.

15 MR. AZAR: Okay.

16 MR. DWORSCHAK: Let me know when  
17 you're ready, Greg.

18 (Witness peruses  
19 document.)

20 THE WITNESS: Okay. Could you repeat  
21 the question?

22 BY MR. DWORSCHAK:

23 Q. Greg, look at Pages 1 and 2 of your  
24 noise report of the property in question. Looking

1 at Section 1, Introduction, if you were allowed to  
2 testify what would you say regarding that  
3 introduction portion?

4 A. Well, I would say that the  
5 introductory portion there describes our  
6 investigation of the Petrosius' complaint, the  
7 rationale behind our measurements with an  
8 explanation that we were complying with the Board's  
9 well-established measuring procedures that are  
10 rather complicated and arduous, but necessarily so,  
11 in taking sound level measurements.

12 In this particular case, the  
13 Tollway complaint, we basically addressed it two  
14 ways. One, as the nuisance, which I've always  
15 addressed all noise cases in the last 33 years as a  
16 nuisance and in some cases as a numerical violation.  
17 And we felt the numerical violation would apply  
18 based upon the Board's own published regulations  
19 that we were basically using this year of the  
20 expectation that they would be in place or adopted  
21 possibly before our report even was published.

22 If we were to take the old  
23 regulations, there would be a question then of a  
24 901.102, but I still think we firmly established a

1 900.102 even under the old regulations that the  
2 Board was using.

3 Q. So basically Pages 1 and 2 give the  
4 characterization of the current statutes and  
5 regulations that would apply in a nuisance  
6 complaint?

7 A. Yes. I think it reflects the thinking  
8 that we've read from numerous Board cases regarding  
9 noise.

10 Q. Anything else to add?

11 A. Well, again, we do feel that the  
12 information on Pages 1 and 2 would be very helpful  
13 to the Board in deciding this case.

14 MR. DWORSCHAK: Nothing further.

15 HEARING OFFICER WEBB: Thank you.

16 MR. AZAR: Just one question.

17 FURTHER CROSS EXAMINATION

18 By Mr. Azar

19 Q. The numerical violations that you  
20 assumed that were going to be published and adopted,  
21 were they in place when the complaint was filed?

22 A. No.

23 MR. AZAR: No further questions.

24 MR. DWORSCHAK: Nothing further.



1                   HEARING OFFICER WEBB: Thank you very  
2 much, Mr. Zak. I would suggest we take a  
3 short recess.

4                                 (Whereupon, after a short  
5 break was had, the  
6 following proceedings  
7 were held accordingly.)

8                   HEARING OFFICER WEBB: We'll go back  
9 on the record. Mr. Dworschak, do you have  
10 any further witnesses to call?

11                   MR. DWORSCHAK: No, I don't, your  
12 Honor.

13                   HEARING OFFICER WEBB: So you've  
14 concluded your case? You don't have any more  
15 exhibits to offer?

16                   MR. DWORSCHAK: I will reserve the  
17 right to check at the end of the proceedings  
18 to make sure what I offered were entered into  
19 evidence without any objections. I'll  
20 reserve that right.

21                   HEARING OFFICER WEBB: Okay.  
22 Mr. Azar, you may present your case.

23                   MR. AZAR: I would like to get in an  
24 exhibit before I proceed. It was Exhibit 8.

1           It was conditional --

2                   MR. DWORSCHAK: That is the Versar  
3           report?

4                   MR. AZAR: Yes. The Versar field  
5           report.

6                   MR. DWORSCHAK: Yes. That's fine.

7                   HEARING OFFICER WEBB: Okay.

8           Respondent's Exhibit 8 is admitted.

9                   (Witness sworn.)

10   WHEREUPON:

11                   WILLIAM BARBEL

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

14                   DIRECT EXAMINATION

15                   By Mr. Azar

16           Q.       Will you state your name please and  
17   spell your last name for the record?

18           A.       My name is William Barbel,  
19   B-A-R-B-E-L.

20           Q.       Mr. Barbel, where are you currently  
21   employed?

22           A.       I'm employed with CTE Engineers in  
23   Chicago.

24           Q.       And how long have you been working for

1 CTE?

2 A. Six years. A little better than  
3 six years.

4 Q. What do you do there?

5 A. I work on environmental documents  
6 under the National Environmental Policy Act and  
7 environmental impact statements.

8 Q. And where did you work before that?

9 A. State of Illinois, the Illinois  
10 Department of Transportation.

11 Q. And how long did you work for the  
12 Department of Transportation?

13 A. A little better than 35 years.

14 Q. And what did you do at the Department  
15 of Transportation?

16 A. I was involved and headed the  
17 environmental studies unit for the six county  
18 Chicago metropolitan area.

19 Q. Now, in regards to your work on the  
20 environmental issues at CTE and IDOT, what areas of  
21 environmental issues would you address? What types  
22 of environmental issues?

23 A. Biology issues, noise issues,  
24 air-quality issues, wetlands, threatened and

1 endangered species, trees, vegetation, soil and  
2 erosion, U.S. Army Corps of Engineers, permits, IEPA  
3 water quality permits, air quality permits and so  
4 forth.

5 Q. And have you done noise studies for  
6 the Illinois Department of Transportation and CTE  
7 pursuant to those policies?

8 A. Yes.

9 Q. And what regulations do you follow?

10 A. We follow the federal guidelines, the  
11 federal regulations, 23 CFR 772, that's the federal  
12 highway regulations. And when we're working with  
13 the Tollway, we follow the same regulations,  
14 whatever the Tollway does, their policy and their  
15 reference to those regulations.

16 Q. How long have you been doing noise  
17 studies?

18 A. Since -- let's see, the first noise  
19 wall went up in '75. Probably since about the early  
20 '70s.

21 Q. So approximately 30 years?

22 A. Yes.

23 Q. Where did you get your education?

24 A. University of California, Berkeley.

1 Q. And what was your degree in?

2 A. I do not have a degree.

3 Q. What was your -- did you concentrate  
4 in any studies?

5 A. It was civil engineering and other  
6 noise studies were through the Federal Highway  
7 Administration Transportation Research Board and so  
8 forth.

9 Q. Now, you indicated you went to  
10 seminars and classes put on by the Federal Highway  
11 Administration?

12 A. Yes.

13 Q. And those were relating to conducting  
14 noise studies in compliance with federal  
15 regulations?

16 A. Correct.

17 Q. And transportation issues?

18 A. Correct.

19 MR. AZAR: At this point, I would  
20 tender Mr. Barbel as an expert.

21 MR. DWORSCHAK: No objection.

22 HEARING OFFICER WEBB: I will deem  
23 Mr. Barbel an expert.

24

1 BY MR. AZAR:

2 Q. Now, Mr. Barbel, you indicated that  
3 there is a federal regulation on governing the  
4 construction -- noise for highways; is that correct?

5 A. Yes.

6 Q. And what are the noise criteria set  
7 forth by the federal government?

8 A. The federal regulations look at  
9 determining whether there's an impact from traffic  
10 noise when a highway is built and what that impact  
11 is and how to abate that, if at all feasible.

12 Q. Okay. And that's in the Code of  
13 Federal Regulations that you cited?

14 A. Correct.

15 Q. Now, does the -- who pays for it --  
16 let me back up.

17 Who pays for the majority of the  
18 road-building expenses and reconstructions that go  
19 with the Department of Transportation in Illinois?

20 A. The Federal Highway.

21 Q. So if any roads are being built or  
22 expanded, funding has to come from the Federal  
23 Highway Administration if they're going to be built?

24 A. Not in every case, no. But in most

1 cases, yes.

2 Q. So those criteria -- is there a  
3 criteria for funding for noise walls from the  
4 Federal Highway Administration?

5 A. Yes.

6 Q. Okay. And that is the federal  
7 government will pay for part of the costs of the  
8 noise walls if the noise studies are followed?

9 A. Correct.

10 Q. If they're not followed, there won't  
11 be any funding?

12 A. Correct.

13 Q. Now, what is the dBA for the decibel  
14 levels criteria set forth by the Federal Highway  
15 Administration for impact for noise from a highway?

16 A. It varies on the land use category.

17 Q. Okay.

18 A. For residents, it's approach or exceed  
19 67 dBA Leq.

20 Q. Okay. And before the Federal Highway  
21 Administration would authorize payment or authorize  
22 contributing to installing a noise wall, is there  
23 any criteria to be met or put for the effectiveness  
24 of those walls that are designed or proposed?

1 A. The effectiveness of the wall?

2 Q. Yeah.

3 A. Yeah. The Federal Highway normally  
4 will not pay for any noise wall that does not  
5 provide at least 5 dBA reduction.

6 Q. Okay. Will the Federal Highway  
7 Administration regulations consider noise sources  
8 that are 66 or below dBA?

9 A. I don't understand that question.

10 Q. All right. Let me go on. That's all  
11 right.

12 Now, when you conduct a noise  
13 study, what phase of the construction are you  
14 involved in? Is that the planning stage?

15 A. Yes. The very preliminary planning  
16 stage, yes.

17 Q. So a route is determined?

18 A. Yes.

19 Q. And you're trying to -- what are you  
20 trying to ascertain from the noise study?

21 A. Whether there's an impact as a result  
22 of building that highway or facility, and what that  
23 impact is, and if it can be abated if the noise  
24 reduction can be accomplished.



1           Q.       Okay. Now, do you have a -- as the  
2 noise person or the noise consultant -- is that what  
3 you serve as?

4           A.       Yes.

5           Q.       As the noise consultant, you actually  
6 design the noise walls?

7           A.       No.

8           Q.       Do you actually determine whether a  
9 noise wall is feasible?

10          A.       Yes.

11          Q.       Okay. And what do you look at for  
12 feasibility?

13          A.       Whether noise can be abated and what  
14 the minimum elevation of the noise wall -- the top  
15 elevation of the noise wall in relation to the  
16 pavement grade line needs to be for the actual  
17 structure designer to work his magic and build a  
18 noise wall of whatever materials.

19          Q.       So for the sake of discussion, if you  
20 come to the conclusion that a 50-foot wall is  
21 necessary, and the designer comes back and gets  
22 those numbers and says, we can't do it, is that  
23 something that happens because of the topography or  
24 other conditions?

1 A. It could happen, yes.

2 Q. So just because you indicate a noise  
3 wall would be appropriate doesn't necessarily mean  
4 it could be designed?

5 A. Correct.

6 Q. Who determines the feasibility or the  
7 actual constructibility?

8 A. The designer.

9 Q. And what are the factors that the  
10 designer, to your knowledge, looks at?

11 A. Soils, soil strength, drainage, type  
12 of materials that are available to build it and  
13 that's pretty much it. You know, it's a structural  
14 problem.

15 Q. Okay. So that's a separate  
16 individual?

17 A. Entirely separate.

18 Q. That's a separate phase of the  
19 construction project?

20 A. Entirely separate.

21 Q. Now, you were retained by the Tollway  
22 to conduct a noise study at the Petrosius residence  
23 on Maridon Street?

24 A. Correct.

1 Q. And that was at 7335 Maridon Road?

2 A. Yes.

3 Q. And you went there on August 2nd of  
4 2005?

5 A. Yes.

6 MR. AZAR: At this point -- this is  
7 just for reference so he can follow along  
8 with it, Respondent's Exhibit No. 18.

9 BY MR. AZAR:

10 Q. Do you recognize that document?

11 A. I do.

12 Q. What is that?

13 A. That's the report that we prepared.

14 Q. Who did you go with on the 2nd of  
15 August to the Petrosius residence?

16 A. I went with an engineer from our  
17 office. Her name was Lisa Sagami (phonetic).

18 Q. And she assisted you in conducting the  
19 study, correct?

20 A. Yes.

21 Q. Who did you meet there?

22 A. I met Mr. Dworschak and the owner of  
23 the property.

24 Q. Okay. So you were there with their

1 permission and conducted your study with them  
2 present?

3 A. Yes.

4 Q. Okay. Now, what kind of equipment did  
5 you bring with you to conduct your test?

6 A. We brought a noise meter.

7 Q. And what brand was that or what model?

8 A. It was a Quest, model Q300 noise  
9 dosimeter, Type II sound level meter.

10 Q. Now, is that something used in  
11 accordance with the federal regulations?

12 A. Yes. It can be used, yes.

13 Q. Is there any difference between the  
14 federal regulations and state regulations as to  
15 noise meters and noise studies?

16 A. I'm not that familiar.

17 Q. Okay. So you run on an entirely --  
18 you maybe run on an entirely different standard?

19 A. Type I or type II is acceptable.

20 Q. And this was a Type I?

21 A. Type II.

22 Q. Type II. Okay. It's right there.

23 And what were you looking to examine at the  
24 residence?

1           A.       To see if the existing noise walls  
2       provided a noise reduction, if they were effective  
3       for providing a noise reduction.

4           Q.       Now, backing up a second, you  
5       conducted some noise studies -- some noise numbers  
6       and you did a background noise, correct?

7           A.       Correct.

8           Q.       What is the difference between an  
9       ambient sound and a background sound so it's clear  
10      how these terms are being used by you?

11          A.       Okay.  An ambient -- in the biological  
12      sense, there's the word ambient and in the acoustics  
13      sense there's the word ambient and they're entirely  
14      different.

15          Q.       Okay.

16          A.       In the acoustics sense, ambient would  
17      be a measurement at that point in time at a  
18      particular place.  Where ambient in the biological  
19      would be, like, ambient air quality throughout the  
20      area, throughout the city of Chicago, something like  
21      that.

22          Q.       So when this noise wall was built and  
23      an ambient sound from the roadway was taken, it  
24      reflected the sound at the highway at a given moment

1 in time, correct?

2 A. I would assume so. I don't know if an  
3 ambient was taken at that time.

4 Q. Let me back up. If any sound was  
5 taken, the validity of any sound recording is valid  
6 for that point in time, correct?

7 A. Correct.

8 Q. And that doesn't necessarily apply to  
9 the next day even?

10 A. Correct.

11 Q. And what do you use to extrapolate  
12 that piece of data from that one day to the bigger  
13 context of a roadway construction project? Do you  
14 use a traffic modeling system?

15 A. Yes. It's a traffic modeling system  
16 because the major source of noise that we're dealing  
17 with is traffic. It's not a dog barking in a  
18 backyard or the squeaking of a swing set next door  
19 or things like that. It's a traffic-generated noise  
20 from the roadway. And so we use the traffic model  
21 to ascertain the values.

22 Q. And who developed this traffic model  
23 that you employed?

24 A. The Federal Highway Administration.

1           Q.       So this is something provided to the  
2 public by the Federal Highway Administration to  
3 assist in designing plans to their specifications?

4           A.       Correct. It's required by the Federal  
5 Highway Administration.

6           Q.       Okay. So this is a study -- this is  
7 the methodology that's used for highways?

8           A.       Correct.

9           Q.       And, specifically, for highways  
10 building walls, correct?

11          A.       Yes.

12          Q.       Did you select various sites at the  
13 Petrosius residence to take noise readings?

14          A.       Yes.

15          Q.       And what was the basis for your  
16 selection?

17          A.       Since the purpose was to see if there  
18 was a reduction, we wanted to see what the noise was  
19 without the barrier, which is kind of difficult to  
20 do since the barrier is there.

21                    So we put the instruments above  
22 the barrier, outside the influence of the barrier,  
23 to try and figure out what was coming without the  
24 barrier influence. And then we went lower in the

1 same general location to see what the barrier was  
2 having an effect on. We looked at Mr. Zak's general  
3 location and put a site there. And under --

4 Q. Before you go on, were you able to  
5 ascertain exactly where he was located?

6 A. No, I did not. We did not.

7 Q. Okay. His drawing wasn't specific  
8 enough so you could locate exactly where he was?

9 A. Correct. We just got within what we  
10 felt was a reasonable location.

11 Q. Okay.

12 A. And on our criteria, the way that we  
13 normally would look at noise, we put a receptor site  
14 at the site of normal human activity.

15 Q. And what did you base normal human  
16 activity from?

17 A. The backyard, the swing set, the  
18 children's play equipment, the back of the house  
19 had, like, a three-season room back there. So we  
20 kind of took a general area on the lowest level of  
21 the ground behind the house.

22 Q. Okay. Now, did you take any other  
23 readings?

24 A. We took some to either end -- well,



1   towards the one end of the wall.  Where is that?  To  
2   the south, I believe.

3           Q.       Closer to the ramp?

4           A.       Yeah.  Closer towards the plaza.

5           Q.       Got it.

6           A.       Yes.  Towards the plaza, which was to  
7   the east.  I'm sorry.  To the east.

8           Q.       Okay.  And then didn't you take  
9   another one?

10          A.       Yeah.  We took one in between where  
11   the road -- the street comes down and meets the  
12   wall, from between the end point of the noise wall  
13   and about midway or so.

14          Q.       Okay.  Did you go also to get a -- did  
15   you try to get ambient or background noise?

16          A.       Yes.  I went up to the end of the  
17   street where it Ts into -- I can't remember the name  
18   of the cut-off or whatever it is.  And I sat there  
19   and took the reading just to see what it would be  
20   without -- you know, we really couldn't hear any big  
21   disturbances going on and there was no traffic on  
22   the cut-off at the time I took the measurement and  
23   it was in the low 60s.

24          Q.       Okay.  Now, does the topography change

1 by the Petrosius house? Is the ground going up or  
2 down, sloping up or down?

3 A. From the noise wall, the street slopes  
4 up, away from the noise wall, the house is set up on  
5 a mounded area, and the surrounding ground around  
6 the house is lower. But, in general, the terrain  
7 rises away from the highway.

8 Q. Now, have you been trained on how to  
9 use the Q300 sound meter?

10 A. Specifically on that meter, no.

11 Q. Have you been trained how to use a  
12 sound meter?

13 A. Yes.

14 Q. And how long have you been using a  
15 sound meter?

16 A. Twenty-five years.

17 Q. And did you calibrate the machine  
18 before using it?

19 A. Yes.

20 Q. And how often do you calibrate it when  
21 you're taking your readings?

22 A. We did it before and after.

23 Q. After each reading?

24 A. No.

1 Q. Before?

2 A. Before and after we check the  
3 calibration. We did not calibrate it, we just  
4 checked the calibration and it was --

5 Q. Got it. Okay. Now, going  
6 specifically to your measurements on Page 7.

7 A. Okay.

8 Q. What time of day did you start your  
9 readings?

10 A. It was in the morning. It's on the  
11 data sheets. We started around 7:20, I believe, in  
12 the morning.

13 Q. Okay. And it went through --  
14 basically you were looking at peak rush hour?

15 A. In general. The peak traffic hours  
16 are about a two-hour period in there.

17 Q. Okay. Now, is there federal criteria  
18 as to when you're supposed to be taking these  
19 readings?

20 A. Well, normally, where the traffic  
21 noise is the greatest. And around the Chicago  
22 metropolitan area under free-flowing conditions,  
23 usually in the rush hour as long as -- you know, at  
24 that period of time you have the most traffic. And

1 if it's moving along and there's no accidents or  
2 anything, it's usually about the highest, a.m. or  
3 p.m. peak hour.

4 Q. Did you notice any obstructions or  
5 flow problems with traffic at the times you were  
6 taking your test?

7 A. No. We did not notice anything.

8 Q. Was traffic flowing as you expected it  
9 to for a peak flow period?

10 A. As far as we could tell, yes.

11 Q. So that was probably measuring one of  
12 the highest traffic noise events of the day?

13 A. It could have been, yes.

14 Q. Okay.

15 A. But -- yes.

16 Q. So you measured the morning, that's  
17 the rush hour -- is that the rush hour side for the  
18 morning in that area?

19 A. Well, the way the roadway is there,  
20 it's not like traveling Interstate 80 across the  
21 country, there's no big median and the lanes are all  
22 together. It really wouldn't make any difference  
23 whether it was or not. I mean, it's all confined.  
24 It doesn't make any difference if the traffic was on

1 the inbound or the outbound. It was so close  
2 together, it really doesn't make that much  
3 difference.

4 Q. So all eight lanes are equally  
5 contributing to the noise?

6 A. They're contributing, yes.

7 Q. Okay. Now, can you describe where you  
8 put your Site One?

9 A. Site One was at the -- near the noise  
10 wall at the end of the street. It was above the  
11 noise wall. That was Site One.

12 Q. Okay. So just so it's clear, that  
13 is --

14 A. Unobstructed by the noise wall.

15 Q. So that was getting the full noise  
16 from the wall?

17 A. No. It was getting the full noise  
18 from the traffic.

19 Q. Traffic. I'm sorry. The full noise  
20 from the traffic; is that correct?

21 A. Correct.

22 Q. Okay. So that would have been --  
23 that's the noise generated by the road at the point  
24 of the wall?

1           A.       Right.

2           Q.       Okay. In regards to location number  
3 two, why did you select that one?

4           A.       That was directly in -- you know,  
5 perpendicular to the wall and it was on the property  
6 owner's side, next to the fire hydrant, in general.  
7 And that was, like, five feet above the ground  
8 surface elevation just to see generally in that area  
9 how much difference there was with and without the  
10 wall.

11          Q.       So what was your reading at the noise  
12 wall when you were at the wall?

13          A.       It was around at 69 dBA. Did I read  
14 that right? No.

15          Q.       How about at the wall?

16          A.       I'm sorry.

17          Q.       Number One?

18          A.       Number One, 69.

19          Q.       Okay. And what about at Number Two?

20          A.       Let me clarify it. We did multiple  
21 readings. We had the meter at Number One and we  
22 also took a reading simultaneously at Number Two.  
23 We also took a reading simultaneously at Number  
24 Three. And we also took a reading simultaneously at

1 Number Five. So there were more than one reading at  
2 Number One. The first reading at Number One at the  
3 same time we did reading Number Two was 69 decibels.

4 Q. So those are simultaneous?

5 A. Simultaneous readings.

6 Q. Okay.

7 A. It wasn't taking a reading, turning  
8 off the machine, climbing down or whatever, and then  
9 taking a reading at Number Two. So we did one at  
10 Number One and we also did one at Number Two at the  
11 same time.

12 Q. Okay. So just so we're clear, on  
13 Page 7 where you're talking about Table Two, it's a  
14 field monitor, you have --

15 A. At site one.

16 Q. So Site One is -- the baseline is  
17 being -- these are simultaneous noise readings,  
18 correct?

19 A. Correct.

20 Q. So you're finding out at .2, one meter  
21 is at .2 on the map and one is at .1?

22 A. Correct.

23 Q. And then at Three, the next one you  
24 have one at Site Three and one at Site one

1 simultaneously and that's the way you did all your  
2 studies for run one?

3 A. Run one? For Site One.

4 Q. For Site One. I'm sorry. So your  
5 first run, Site One, you did that?

6 A. Right.

7 Q. So these are all simultaneously  
8 figuring out what the noise wall is doing at that  
9 moment in time?

10 A. Correct.

11 Q. Okay. Then you went to Run Two?

12 A. Correct.

13 Q. And Run Two compared what?

14 A. It compared Site Number Five with  
15 Number Three and Site Number Five with Number Four.

16 Q. And Site Number Five is along the  
17 ramp, correct?

18 A. Yeah. That's the one way to the east.

19 Q. Just so we're clear, you also added a  
20 difference line, correct?

21 A. Correct. Between the two because they  
22 were simultaneous readings.

23 Q. So you had -- on Number Five there's a  
24 correction on the document because the math was done



1 wrong?

2 A. For Run One, Site One and Site Five  
3 there is a correction. If you look at the table, it  
4 says 75 and 77, the difference is not minus three.  
5 It's minus two.

6 Q. All right.

7 A. There was a typo there.

8 Q. Now, with this data, did you -- then  
9 you did a background run?

10 A. Yeah. That was up at the intersection  
11 up there.

12 Q. And that came out to be 62 decibels  
13 you said?

14 A. I believe. Yes, 62.

15 Q. Okay. Now, with this information, did  
16 you run a traffic noise simulation in the computer?

17 A. Yes.

18 Q. Okay. And did you compare the impact  
19 of the wall, the effectiveness of the wall based on  
20 the model?

21 A. Based on the computer model, yes.

22 Q. Based on your data, did you find any  
23 reduction in noise from the wall?

24 A. Yes. From the measurements, as well

1 as the computer, both of them said that the noise  
2 did provide reduction of noise.

3 Q. And it actually ranged anywhere  
4 between one decibel and 11 decibels, depending on  
5 where you're sitting?

6 A. Yes.

7 Q. Is that fair?

8 A. Yes.

9 Q. So the wall performs its function, it  
10 reduces the noise?

11 A. It provides noise reduction, yes.

12 Q. Okay. Now, in regards to the  
13 effectiveness of a noise wall in general, the noise  
14 wall reduces all sounds that are coming across?

15 A. At varying degrees, yes.

16 Q. All right. So is there any problems  
17 that develop from your experience from having noise  
18 reductions of all the sounds that people complain to  
19 you about?

20 A. We have had some instances in that  
21 regard.

22 Q. Can you give us an example of what  
23 you're talking about?

24 A. The Interstate 290 extension that

1 parallels 294 through Addison and Elmhurst, the  
2 Department of Transportation put up noise walls  
3 along the extension there on the west side of the  
4 roadway. And after that was up, a year or so after  
5 that, we had some occasion to talk to some of the  
6 residents that we had been acquainted with previous  
7 to putting the noise wall up in regards to some  
8 issues on some park property that the city was  
9 looking for some extra help on some noise reduction  
10 near Route 64. And the citizens -- a couple of them  
11 said that they used to sit and watch their TV -- sit  
12 in their house, hear that lousy traffic noise, but  
13 when we put up the wall, they ended up sitting and  
14 watching the TV and all of a sudden they're sitting  
15 there, there goes plane one, there goes plane two.  
16 He said, now I'm counting planes.

17                   The noise was masked and now they  
18 started hearing the planes going into O'Hare. And  
19 he says, now I start counting planes. He said, it's  
20 like counting sheep. He says, it just bugs me.  
21 But, you know, he says I have to live with it. It  
22 was a lot better than not having the noise wall.  
23 But he was counting planes.

24           Q.       So there are -- so the -- how would

1 you describe the characteristic of the roadway  
2 noise. How would you describe that?

3 A. A steady hum. A steady repetition of  
4 noise.

5 Q. So does that mask other noises?

6 A. It can.

7 Q. Okay. And other noises, because of  
8 the reduction, are accentuated, correct?

9 A. It very well can cause somebody to  
10 identify some other noises, yes.

11 Q. Now, in particular, with impact sounds  
12 like banging from trucks, correct? Are you familiar  
13 with those?

14 A. Yes.

15 Q. Are you familiar with the sounds from  
16 jake braking?

17 A. Yes.

18 Q. Now, are those sounds different from  
19 the regular hum of the road?

20 A. Yes.

21 Q. And what are the characteristic of  
22 those sounds?

23 A. They're more -- the banging and the  
24 exhaust pulsations from the jake braking are impulse

1 noises, more of a pulsating thing rather than a  
2 general hum like you're hearing outside right now.

3 Q. Okay. And how do those travel?

4 A. They all travel line of sight. They  
5 all travel the same.

6 Q. Okay.

7 A. Omnidirectional.

8 Q. So when they encounter a wall because  
9 of their wavelength, do they act the same as short  
10 frequencies?

11 A. If they're lower frequencies, they're  
12 going to need a high wall to attenuate them. If  
13 they're high frequencies, they're going to be  
14 attenuated very quickly by a wall.

15 Q. So the lower the frequency, they're  
16 going over the wall, aren't they?

17 A. Larger wavelengths are going to walk  
18 right over the wall.

19 Q. So then with a noise wall that's not  
20 sufficiently high, you can get those noises -- the  
21 masking sound is gone, but those impact noises are  
22 going right over the wall?

23 A. Correct.

24 Q. Okay. Now, did you examine in your

1 addendum the types of noises that Mr. Petrosius was  
2 complaining about, specifically the jake braking and  
3 banging?

4 A. A little, yes.

5 Q. Okay. Do those types of noises  
6 require higher wall?

7 A. Yes.

8 Q. Actually, a substantially higher wall?

9 A. Very well could be, yes.

10 Q. Okay. And you indicated in there it  
11 may have to be up to 45 feet? On Page 3.

12 A. Yes. On Page 2 I said somewhere  
13 between 20 and 30 feet above the pavement grade  
14 line.

15 Q. Okay.

16 A. And, of course, the base of the wall  
17 there at this location is lower than the pavement.  
18 So physically, the physical height of the wall would  
19 have to be greater than 20 or 30 feet, possibly up  
20 to the 45-foot bracket.

21 Q. So that type of wall would be -- how  
22 much would that cost to install a wall that large,  
23 if physically possible?

24 A. In my opinion, based on \$30 a square

1 foot, about \$1.3 million.

2 Q. Okay. How about an 18-foot wall? How  
3 much would that cost?

4 A. I don't know. I'd have to do the  
5 computations.

6 Q. Would it be significant?

7 A. It would be -- well, we're at \$1.3  
8 million. Probably an 18-foot is about, say, half of  
9 that, yeah, probably about half of \$1.3 million.

10 Q. \$700,000?

11 A. \$700,000 or \$800,000 probably.

12 Q. Okay. Are you familiar with what  
13 criteria the Department of Transportation uses for  
14 cost thresholds per residence?

15 A. Yes. For the Illinois Department of  
16 Transportation?

17 Q. Yes.

18 A. Yes.

19 Q. And what is that?

20 A. About \$24,000 per resident.

21 Q. So would the Department of  
22 Transportation spend \$700,000 to build a wall?

23 A. Not for a single receptor, no.

24 Q. Now, at 18 feet, you would still have

1 all those impact noises coming over the wall or some  
2 of those impact noises coming over the wall?

3 A. Yes.

4 Q. And if those are the ones that  
5 Mr. Petrosius complains about, and his wife  
6 complains about, are those being ameliorated  
7 substantially?

8 A. Substantially?

9 Q. Yeah.

10 A. I don't know. They may be reduced  
11 some, but they're still going to be evident.

12 Q. So if that's what's waking them up,  
13 they're probably going to be waking up -- would you  
14 know if they're going to wake up afterwards or you  
15 wouldn't know?

16 A. I wouldn't know. It's a possibility.  
17 I mean, everybody is different.

18 Q. Okay. Are there certain people who  
19 are more sensitive to different kinds of noises  
20 through your experience?

21 A. Yes.

22 Q. Are you familiar with anybody who  
23 moves into an area and they miss the truck sounds?

24 A. Yes.



1 Q. Can you explain that?

2 A. It's a personal experience where I --

3 MR. DWORSCHAK: Your Honor, I'm going  
4 to object. I don't know where we're going  
5 with this.

6 MR. AZAR: Well, I'm trying to  
7 establish, based on his experience, that  
8 there are subjective natures to the sounds  
9 and if a particular person has a particular  
10 problem with this particular kind of sound,  
11 that if that's not addressed, then it's  
12 pointless to put up a wall.

13 HEARING OFFICER WEBB: I'll allow it.

14 BY THE WITNESS:

15 A. My personal experience is where I  
16 lived 18 years ago in the spring of the year. The  
17 subdivision was near the East-West Tollway. The  
18 East-West Tollway was not a noise issue.

19 These people moved across the  
20 backyard from me in the spring from a truck route --  
21 they lived on a truck route through downtown Aurora.  
22 They moved in the spring, they vacated the house and  
23 sold it in the fall. They could not sleep. The  
24 crickets were driving them crazy.

1 BY MR. AZAR:

2 Q. So a person comes into the Tollway  
3 from the city not accustomed to the banging of  
4 trucks, that's going to bother them?

5 A. Truck traffic, yes. And it had  
6 bothered them. I thought that's -- that was their  
7 experience and that's what they said. And you know,  
8 the crickets were there, but to me it wouldn't  
9 bother me. It has never bothered me.

10 Q. Is that why the federal government  
11 goes by a threshold criteria and feasibility issues  
12 with their standards to get rid of this objective?

13 A. They set their 67 decibel criteria for  
14 residential based on communication between human  
15 beings essentially sitting around at six, seven feet  
16 apart if it disrupts human communication. That's  
17 essentially around 67 decibels.

18 Q. So that's a fixed number to avoid  
19 subjective issues?

20 A. Yes.

21 MR. AZAR: I would ask that the  
22 exhibit be admitted.

23 HEARING OFFICER WEBB: Mr. Dworschak,  
24 do you have any objection to the admission of

1 Respondent's Exhibit 18?

2 MR. DWORSCHAK: No, your Honor.

3 HEARING OFFICER WEBB: Okay. Exhibit  
4 18 is admitted. Please proceed.

5 MR. DWORSCHAK: Good afternoon, Mr.  
6 Barbel. My name is Scott Dworschak and I'm  
7 representing the Petrosiuses in this matter.  
8 Is it all right if I call you Bill?

9 THE WITNESS: Sure.

10 CROSS EXAMINATION

11 By Mr. Dworschak

12 BY MR. DWORSCHAK:

13 Q. Bill, have you ever produced a noise  
14 study for the Illinois Pollution Control Board?

15 A. No.

16 Q. And do you feel that your report as  
17 entered as Respondent's Exhibit No. 18 follows the  
18 rules under which you're required to perform a  
19 proper Illinois Pollution Control Board study?

20 A. No because I'm not familiar with the  
21 Illinois Pollution Control Board regulations.

22 Q. Now, we had some discussion in your  
23 testimony about federal guidelines and the federal  
24 guidelines for noise abatement, correct?

1 A. Correct.

2 Q. And when you worked for IDOT, the  
3 Illinois Department of Transportation, those rules  
4 from the federal government were in effect because  
5 IDOT takes federal money for their projects,  
6 correct?

7 A. Correct.

8 Q. And the Tollway, to the best of your  
9 knowledge, uses toll revenue, not federal money, for  
10 their projects, correct?

11 A. Correct.

12 Q. And isn't it true that the federal  
13 regulations are not regulations per se, they are  
14 guidelines, and they have the force when you accept  
15 the federal money. If you don't accept the federal  
16 money, they have no effect?

17 A. Yes.

18 Q. Now, Bill, you mentioned earlier  
19 you're not a professional engineer, correct?

20 A. Correct.

21 Q. And you testified earlier about the --  
22 going back to the federal guidelines, this 67  
23 decibel level.

24 A. For a residential land use category.

1           Q.       That's right. And based upon your  
2 expertise in noise, could you tell us if you can  
3 conduct a conversation, just hypothetically, in an  
4 outside yard when the level is 67 decibels if you're  
5 more than five feet apart?

6           A.       If you're more than five feet apart?

7           Q.       More than five feet.

8           A.       It's likely you can, yes.

9           Q.       So 67 decibels isn't perfect, but it  
10 still would impact some people's ability to  
11 understanding other people in close proximity?

12          A.       It's a threshold, yes.

13          Q.       So it's a standard, but it's not great  
14 for everybody, it's not bad for everybody?

15          A.       Correct. It's a compromise that was  
16 reached with US EPA, the Federal Highway, IDOT and  
17 so forth?

18          Q.       Bill, before you there's a number of  
19 exhibits. I'm going to show them to you. So you  
20 said you went to the Petrosius's residence. I'm  
21 going to show you Complainants' Exhibit No. 1, No.  
22 2, 3, 4, 5,6 and I'm also going to show you Joint  
23 Exhibit No. 1. And No. 1 is an aerial view. The  
24 other ones are pictures.

1 A. Correct.

2 Q. I'm going to give you a minute to take  
3 a look at them and refresh your memory and just tell  
4 me when you're ready.

5 (Witness peruses  
6 document.)

7 THE WITNESS: Okay. I'm done.

8 BY MR. DWORSCHAK:

9 Q. Do these pictures demonstrate the  
10 conditions that you saw when you went to the  
11 property in question?

12 A. Physically, this one does not.

13 Q. And you're referring to Complainants'  
14 Exhibit No. 5?

15 A. Right.

16 MR. DWORSCHAK: And I will acknowledge  
17 for the Court that Complainants' Exhibit  
18 No. 5 comes from the report prepared by  
19 Mr. Zak.

20 BY MR. DWORSCHAK:

21 Q. In some of these pictures, I believe,  
22 Complainants' Exhibit No. 4 and Complainants'  
23 Exhibit No. 6 come from your report, which was  
24 recently entered as Petitioner's Exhibit No. 18?

1 A. Correct.

2 MR. AZAR: Respondent's 18.

3 MR. DWORSCHAK: Respondent's 18. I  
4 apologize.

5 BY THE WITNESS:

6 A. Correct.

7 BY MR. DWORSCHAK:

8 Q. Now, referring to Complainants'  
9 Exhibit No. 2, does that look familiar to you?

10 A. Yes.

11 Q. And comparing Complainants' Exhibit  
12 No. 2 to Complainants' Exhibit No. 5, do you see a  
13 relationship between these two pictures?

14 A. A relationship?

15 Q. In that they are generally shot facing  
16 the Tollway from maybe 40 feet back from the  
17 property line?

18 A. Yes.

19 Q. Okay. And if I refer to you to  
20 Complainants' Exhibit No. 2, you can see a row of  
21 trees, correct?

22 A. Correct.

23 Q. And I believe this picture was taken  
24 notice springtime or summertime and, naturally, the

1 trees have leaves, correct?

2 A. Correct.

3 Q. All right. I refer you now to  
4 Complainants' Exhibit No. 5, which is, again, as we  
5 talked about, generally same type of picture facing  
6 the Tollway 40 or 50 feet back from the property  
7 line. Do you notice the same trees?

8 A. Yes.

9 Q. And this picture was taken in, I  
10 believe, March, so, naturally, the trees don't have  
11 any leaves on them, correct?

12 A. Correct.

13 Q. So in Complainants' Exhibit No. 5, can  
14 you see traffic on the roadway surface from the  
15 pictures as positioned?

16 A. Yes.

17 Q. And can you see traffic in  
18 Complainants' Exhibit No. 2?

19 A. Yes.

20 Q. Okay. And would leaves on a tree make  
21 any difference towards how noise is responded to by  
22 human activity on the non-Tollway side of the  
23 property?

24 A. Yes, they can.



1 Q. And how would that affect it?

2 A. It can act like little mirrors and  
3 actually reflect noise more to the property.

4 Q. So in a way, it could hurt?

5 A. And it did in Minnesota. They took  
6 down noise barriers because of that.

7 Q. But it also affects line of sight; is  
8 that correct?

9 A. Yes.

10 Q. And for some people, not all people,  
11 some people, line of sight to a traffic generator  
12 makes a difference as to how the noise affects them;  
13 is that correct?

14 A. It could, yes.

15 Q. Okay. Now, referring you back to  
16 Joint Exhibit No. 1, which is an aerial shot, I  
17 think you can see the 75th Street interchange, the  
18 Tri-State Tollway, and if you look hard you'll see  
19 the property in question is circled right there  
20 (indicating).

21 A. Right.

22 Q. Would that be a correct  
23 representation?

24 A. Yes.

1           Q.       Okay.  And are there other homes in  
2   the neighborhood besides the property in question?

3           A.       This aerial does not show one thing  
4   that I can see.

5           Q.       All right.

6           A.       At least --

7           Q.       Well, I'll tell you what, I'll  
8   rephrase.

9                         Based upon -- you were out there,  
10  you drove on Maridon Road?

11          A.       Uh-huh.

12          Q.       Did you see other homes besides the  
13  property in question?

14          A.       Yes.

15          Q.       And would it be fair to assume that  
16  based upon your expertise if the noise wall in the  
17  area in question was either lengthened or heightened  
18  it would not only affect the property in question,  
19  but also affect some other nearby homes?

20          A.       Very likely.

21          Q.       Okay.  Now, referring to the study you  
22  did, Respondent's Exhibit No. 18, you mentioned that  
23  you came out between -- what times were you out  
24  there?

1           A.       I think from around 7:00 o'clock  
2 physically until --

3           Q.       Would 7:00 to 9:00 be a fair  
4 assumption?

5           A.       Yes.   Until about quarter to 10:00.

6           Q.       And you testified at 7:00 to 9:00 at  
7 that location is rush hour, correct?

8           A.       In general, yeah.   Heavy traffic.

9           Q.       And based upon your perception there,  
10 I believe you testified that traffic was moving  
11 okay, slowly?   I'm not sure which word.

12          A.       It was free-flowing.

13          Q.       It was flee-flowing.   That was the  
14 first time you had been out to the property; is that  
15 correct?

16          A.       Yes.

17          Q.       So you don't know if other times there  
18 is congestion; is that correct?

19          A.       That's correct.

20          Q.       Okay.   And, in fact, isn't it true  
21 that rush hour traffic tends to be a little quieter  
22 because the traffic is moving slower because of the  
23 volume of traffic on the road and that's why they  
24 call it rush hour, because there's more volume out

1     there?

2             A.       Correct.  More volume.

3             Q.       And more volume tends to slow down  
4     vehicles, correct?

5             A.       Correct.

6             Q.       And a slower vehicle produces less  
7     noise?

8             A.       Slower vehicle produces less noise?  
9     Yes, a slower vehicle produces less noise.

10            Q.       Okay.  Now, earlier Victor asked you  
11   some questions about, I believe, impulse noise?

12            A.       Yes.

13            Q.       And impulse noise, what was your  
14   definition of it again?

15            A.       Sporadic, pounding, banging, pulsating  
16   from jake brake exhaust.

17            Q.       And do you know what the Illinois  
18   Pollution Control Board's regulations are on impulse  
19   noise?

20            A.       No.

21            Q.       Now, on your visit to the property for  
22   the noise study you conducted, you testified you  
23   heard several types of noise; is that correct?

24            A.       Correct.

1           Q.       And you heard tires hitting the  
2 pavement, you heard engine noise, exhaust noise.  
3 Did you hear some jake braking?

4           A.       No.

5           Q.       Did you hear any kind of unordinary  
6 sound, a truck hitting a bump in the road, a loud  
7 motorcycle?

8           A.       I don't recall.

9           Q.       Okay. But you could have?

10          A.       It's possible.

11          Q.       Okay. So there was a possibility that  
12 if you were in the side yard, which is depicted in  
13 Complainants' Exhibit No. 1, you would have heard  
14 both banging and a roar; is that correct?

15          A.       Yes.

16          Q.       And a roar would interrupt someone's  
17 quality of life in terms of their ability to conduct  
18 speech with another human, correct?

19          A.       It very well could be, yes.

20          Q.       And a banging is something that kind  
21 of catches someone off guard, it's a little  
22 different noise than they're used to, correct?

23          A.       Correct.

24          Q.       Now earlier in your testimony you

1     talked about how some people had a wall -- or didn't  
2     have a wall, got a wall put up and then they started  
3     hearing either the birds or planes or it affected  
4     them somehow?

5             A.       Correct.

6             Q.       But you're also aware of people who  
7     got a wall and are very happy; is that correct?

8             A.       Correct.

9             Q.       And isn't it true that really the  
10    effect of noise on a person depends on the person?  
11    There's no standard to go by?

12            A.       That's true.

13                    MR. DWORSCHAK:  Can you give me a  
14    minute?

15                    HEARING OFFICER WEBB:  Sure.

16                                   (Brief pause.)

17                    MR. DWORSCHAK:  Nothing further, your  
18    Honor.

19                    HEARING OFFICER WEBB:  Thank you.

20                    Mr. Azar?

21                    MR. AZAR:  Just a couple of questions.

22                    FURTHER DIRECT EXAMINATION

23                                   By Mr. Azar

24             Q.       Mr. Barbel, in regards to the effect

1 of trees, they provide a visual satisfaction, but  
2 they don't necessarily stop the noise, correct?

3 A. Correct.

4 Q. So it's a psychological benefit?

5 A. Correct.

6 Q. Does the Federal Highway  
7 Administration care about the psychological benefits  
8 or do they care about actual numbers?

9 A. They care about actual numbers.

10 Q. Okay.

11 MR. AZAR: No further questions.

12 HEARING OFFICER WEBB: Anything  
13 further?

14 MR. DWORSCHAK: One final question.

15 FURTHER CROSS EXAMINATION

16 By Mr. Dworschak

17 Q. Again, referring to Respondent's  
18 Exhibit No. 18, your noise study, you recorded  
19 several numbers, I believe all in the 65, 67 range,  
20 some higher, some lower?

21 A. Yes.

22 MR. AZAR: I'm going to object. This  
23 is going beyond the scope of redirect. All I  
24 asked about was the trees. He's just now

1 continuing his cross examination.

2 MR. DWORSCHAK: I'll withdraw.

3 HEARING OFFICER WEBB: Thank you.

4 MR. DWORSCHAK: Nothing further. We  
5 have one rebuttal witness.

6 MR. AZAR: Okay.

7 HEARING OFFICER WEBB: Okay. You have  
8 no further witnesses or exhibits?

9 MR. AZAR: No further witnesses.

10 HEARING OFFICER WEBB: Okay.

11 MR. AZAR: Everything else has been  
12 admitted.

13 HEARING OFFICER WEBB: Okay. Thank  
14 you very much.

15 MR. DWORSCHAK: We recall Mr. Greg  
16 Zak.

17 HEARING OFFICER WEBB: Mr. Zak, you  
18 may resume your seat and I will remind you  
19 that you are still under oath.

20 THE WITNESS: Yes, your Honor.

21 WHEREUPON:

22 GREG ZAK

23 called as a rebuttal witness herein, having been  
24 previously duly sworn, was examined and testified as



1 follows:

2 DIRECT EXAMINATION

3 By Mr. Dworschak

4 Q. Mr. Zak, you've just heard the  
5 testimony of the Respondent's noise expert,  
6 Mr. Barbel, correct?

7 A. That's correct.

8 Q. And you've also reviewed his noise  
9 study that's Respondent's Exhibit No. 18?

10 A. Yes, I have.

11 Q. And did you find any flaws with that  
12 noise study?

13 A. In reference to the Board's  
14 measurement procedures, one point that was obvious  
15 to me was the fact that the instrumentation used was  
16 Type II and the Board will only accept Type I  
17 instrumentation for measurement.

18 Q. And what difference would that  
19 classification make?

20 A. It's not unusual to see a one or two  
21 decibel difference between Type I and Type II  
22 instrumentations.

23 Q. And is there anything else you noticed  
24 in his report that would be incorrect or not

1 conforming to the regulations of the Illinois  
2 Pollution Control Board?

3 A. Well, there's probably quite a long  
4 laundry list we can go through as far as the Board's  
5 procedure for taking measurements. There's a --  
6 it's a very complex procedure as far as weather is  
7 concerned and as far as instrumentation setup is  
8 concern, and as far as instrumentation type is  
9 concerned. So if you're looking for a long answer,  
10 I can give you a long answer.

11 Q. Why don't you give me highlights of  
12 what you think is important?

13 A. Well, again, what the Board would  
14 consider important would be weather information  
15 taken at the actual site itself as far as wind  
16 speed, as far as temperature, humidity, barometric  
17 pressure, as far as drawing a map of the area with  
18 measurements to be exactly where everything is  
19 located as far as the measurements are concerned.

20 The other possible problem here  
21 with the Board's measurement procedures would be  
22 taking measurements in the backyard would introduce  
23 the reflection of sound off the house, and also the  
24 house could be -- depending upon where one was

1 located, the house could act as a barrier to some of  
2 the sound.

3                               So, again, that would -- the Board  
4 would require those measurements to be qualified.  
5 And by qualification, I mean the person taking the  
6 measurements would have to demonstrate to the Board  
7 the effect or impact of reflection off the house  
8 and/or any barrier effects that the house may have.

9               Q.       And of your knowledge of the Illinois  
10 Pollution Control Board regulations on what a  
11 nuisance noise is, what is that number in terms of  
12 decibels?

13              A.       There really is not a specific number  
14 as such.

15              Q.       What does the Board use as a  
16 guideline?

17              A.       A guideline for daytime noise would be  
18 around 61 dBA for a steady-state noise. For  
19 impulsive noise, the Board would use 56 dBA  
20 specifically under rule 901.104. And that would be  
21 referenced in regard to any impulsive noise. If it  
22 exceeded 56 dBA, then it would exceed the 104 rule.

23              Q.       Let's go back a little bit to clarify  
24 your last answer. You were talking about impulse

1 noise, correct?

2 A. That's correct.

3 Q. And impulse noise is jake braking or  
4 that type of noise? I'm sorry. I'll rephrase.

5 How would you classify impulse  
6 noise?

7 A. It might be easier to go through an  
8 example and then explain a little bit. A hammering  
9 sound, gunfire, say a truck hitting a pothole and  
10 the bed of the truck making a real loud clanging  
11 sound, a sudden sound. It's a sudden,  
12 short-duration sound. It can be a series of  
13 short-duration sounds, but there has to be enough  
14 separation from the sounds that they can be plainly  
15 distinguished.

16 In other words, jake braking under  
17 the Board's rules would not really fall under  
18 impulsive noise simply because each of the exhaust  
19 sounds from the jake brake would be so close  
20 together that they would not really qualify under  
21 the Board's rules as an impulsive sound.

22 Q. So could you tell me what type of  
23 noise coming from a tollway or a car or truck  
24 traveling on the tollway would constitute an impulse

1 noise?

2 A. Okay. A clanging and banging from  
3 hitting potholes, possibly some very short duration  
4 of horn honking. Those would be the general types.

5 Q. In layman's terms, would you classify  
6 them as kind of odd noises?

7 A. Yes, I would. I would say that there  
8 is certainly not the characteristic of the toll road  
9 or even a roadway in general. When we took our  
10 measurements, we didn't really notice a sufficient  
11 amount of impulsive noise over the two hours we were  
12 there to even attempt to quantify the impulsive  
13 noise.

14 Q. And what is the Illinois Pollution  
15 Control Board's limit in terms of decibels for  
16 impulse noise?

17 A. For a Class C property impacting Class  
18 A property, the Board's limit would be 56 dBA.

19 Q. And referring back again to  
20 Respondent's Exhibit No. 18, you had a chance to  
21 take a look at it. You previously testified that  
22 the Pollution Control Board's nuisance number is  
23 roughly 62 decibels; is that correct?

24 A. Well, for a daytime --

1 Q. For daytime?

2 A. -- Class C to Class A, approximately  
3 61 dBA.

4 Q. Okay. And in terms of a nuisance  
5 level, what would that decibel range be?

6 A. Well, 61 dBA would be the limit for  
7 daytime.

8 Q. And, in general terms, because I know  
9 there's a number of charts in Respondent's Exhibit  
10 No. 18, but you looked at it, correct?

11 A. Yes.

12 Q. Could you give me a ballpark average  
13 of the noise decibel level that they collected in  
14 their own study?

15 A. The levels were somewhat similar to  
16 the levels that we collected. They were a couple  
17 decibels lower but, in general, they were pretty  
18 close to our numbers.

19 Q. And could you give me a ballpark  
20 number?

21 MR. AZAR: I'm going to object. I  
22 don't think that's an accurate representation  
23 of what's going on. I mean, I don't know if  
24 there's a foundation laid that you can

1           average numbers to figure out what's going on  
2           and each is a discrete location. And you  
3           can't say, oh, the front yard or the back  
4           yard --

5                       MR. DWORSCHAK: All right. I'll  
6           withdraw.

7 BY MR. DWORSCHAK:

8           Q.       Greg, referring you to Page 7 of the  
9           Respondent's Exhibit No. 18, and I believe it shows  
10          some of the numbers they collected on their own  
11          field monitoring. Can you see that?

12          A.       Yes.

13          Q.       Could you read number two, three, four  
14          and five for me?

15                     MR. AZAR: I'm going to object.  
16          That's -- if he wants to read from the  
17          document, then that was something Mr. Barbel  
18          could have done. If he wants to ask a  
19          question about the document that he knows of,  
20          then he should ask the question. I don't  
21          think it's appropriate to be reading someone  
22          else's report and making comments on it  
23          unless there's a specific question that  
24          should be preceding it as laying the basis

1           for the opinion.

2                   MR. DWORSCHAK: I will withdraw.

3   BY MR. DWORSCHAK:

4           Q.     In order to refresh your memory, would  
5   you look at Page 7 and look at the sites that were  
6   used for noise collection by the Respondent two,  
7   three, four and five? Do you see those numbers?

8           A.     Yes.

9           Q.     And are all those numbers above 62  
10   decibels?

11          A.     Yes.

12                   MR. DWORSCHAK: Thank you. Nothing  
13   further.

14                   HEARING OFFICER WEBB: Mr. Azar?

15                   CROSS EXAMINATION

16                   By Mr. Azar

17          Q.     What is a Type I sound instrument used  
18   for?

19          A.     Taking sound level measurements that  
20   are considered precision.

21          Q.     And are those mainly used for impulse  
22   noises?

23          A.     They can be used for impulse noise,  
24   steady-state noise, octave band, third octave band,



1 et cetera, type sounds.

2 Q. Are you familiar with the Federal  
3 Highway Administration's regulations on how to do a  
4 traffic study?

5 A. Only in very general terms.

6 Q. Okay. So safe to say that you don't  
7 know exactly what the Federal Highway requires  
8 transportation agencies to follow, correct?

9 A. Again, in general terms, I've worked  
10 with IDOT on a couple of projects and I maybe was  
11 exposed to it, but I do not show myself as an expert  
12 on their procedures.

13 Q. Are they different?

14 A. Yes.

15 Q. So IDOT should disregard Federal  
16 Highway's rules and follow IEPA's rules? Is that  
17 what your position is?

18 A. Only in regard to a measurement that  
19 would be presented to the Pollution Control Board.

20 Q. But what if the issue is highway noise  
21 dealing with the Federal Highway Administration's  
22 regulations?

23 A. Then they would follow their own  
24 standards.

1           Q.       And that's what we're talking about  
2 here, isn't it?

3                   MR. DWORSCHAK: I'm going to object.  
4 We're talking before the Illinois Pollution  
5 Control Board.

6                   MR. AZAR: We're talking about Federal  
7 Highway Administration's regulations and how  
8 a wall is designed.

9                   MR. DWORSCHAK: But a wall is under  
10 the jurisdiction of the Illinois Pollution  
11 Control Board, not the federal government.  
12 We're here at the State of Illinois Building.

13                   MR. AZAR: I think that's part of  
14 issue here.

15                   HEARING OFFICER WEBB: Well, I think  
16 we're talking about what standards someone  
17 needs to follow, period, right?

18                   MR. AZAR: Well, my position is that I  
19 think there is a highway here, we have  
20 regulations dealing specifically with  
21 highways and he's using the regulations of  
22 somebody else.

23                   HEARING OFFICER WEBB: Go ahead.

24

1 BY MR. AZAR:

2 Q. So the transportation agency dealing  
3 with roadways should be following the Federal  
4 Highway Administration regulations?

5 A. I would say if they're being presented  
6 in a federal matter, yes. And in a situation like  
7 we have here where it's presented to the Pollution  
8 Control Board, one would follow the Board's rules.

9 Q. What if they're different?

10 A. Then I would say that, again, the  
11 venue I see here is a Pollution Control Board venue  
12 and you would follow the Board's rules before the  
13 Board.

14 Q. So one state agency, in designing,  
15 building a multi-billion dollar road system follows  
16 Federal Highway Administration's rules, and that's  
17 proper, correct?

18 A. Yeah.

19 MR. DWORSCHAK: I'm going to object.

20 He's already asked and answered that.

21 BY MR. AZAR:

22 Q. We're looking at the federal versus  
23 state. And then if there's an action in front of  
24 the Pollution Control Board over those same

1 decisions, they follow a complete new set of  
2 regulations; is that what you're saying?

3 A. I'm saying that, again, the  
4 measurements would need to comport with the Board's  
5 requirements for taking them.

6 Q. So if the proper measurements are from  
7 Federal Highway, then Illinois EPA's regulations  
8 aren't applicable?

9 A. Well, the Illinois EPA doesn't have  
10 regulations.

11 Q. Okay. The Pollution Control Board  
12 regulations that we're talking about here, the  
13 procedures.

14 A. Yes.

15 Q. Are those the ones -- those are what  
16 you're saying are applicable?

17 A. Yes.

18 Q. So the same -- the agency follows one  
19 set of rules and then it has to follow another set  
20 of rules and numbers, one which is five decibels on  
21 their face different from each other?

22 A. Yes.

23 Q. So by following the federal  
24 regulations, IDOT is, per se, in violation of state

1 rules, right?

2 MR. DWORSCHAK: I'm going to object.

3 He's not a representative of the federal  
4 government. He's here to testify about the  
5 Illinois Pollution Control Board rules, not  
6 the federal rules.

7 MR. AZAR: He's rendered an opinion  
8 that says you have to follow both of them,  
9 which is --

10 MR. DWORSCHAK: He's rendered opinions  
11 that we're before the Illinois Pollution  
12 Control Board and that those rules are the  
13 subject and type of jurisdiction of this  
14 hearing.

15 HEARING OFFICER WEBB: I believe that  
16 more accurately characterizes it.

17 BY MR. AZAR:

18 Q. But before he said they should build  
19 according to Federal Highway Administration rules,  
20 correct?

21 A. Well, in the situation here you asked  
22 me regarding the data, and the data that's presented  
23 to the Pollution Control Board needs to follow the  
24 Board's measurement procedures in order to satisfy

1 the Board requirements.

2 Q. So let's say we're talking here where  
3 the regulation says follow 67 decibels. And then  
4 immediately upon completion of following federal  
5 regulations --

6 (Whereupon, an  
7 interruption was had in  
8 the deposition  
9 proceedings.)

10 BY MR. AZAR:

11 Q. Let me back up. If you're following  
12 the 67 decibels, you're, per se, in violation of the  
13 62 decibels regulations, correct?

14 A. Not necessarily. Are you saying that  
15 your design criteria is 67 and no lower?

16 Q. At 67. If it's at 67 you don't have  
17 to mitigate. That's what the testimony was. So  
18 taking that for -- 67, 66, and you have to put it at  
19 62, how does the state do that, follow one  
20 regulation then turn around and immediately upon  
21 completion of your work you're in violation?

22 MR. DWORSCHAK: I'm going to object  
23 again. I believe this has already been asked  
24 and answered.

1                   HEARING OFFICER WEBB: I think you're  
2                   getting a little argumentative. I mean, I  
3                   think he's answered to the point that he's  
4                   looking at this from the Pollution Control  
5                   Board's perspective. If you have a different  
6                   question. I think we're just getting a  
7                   little argumentative here.

8                   MR. AZAR: Okay.

9 BY MR. AZAR:

10                  Q.       Now, you indicated that you base this  
11                  on 62 decibels -- or 61 decibels; is that correct?

12                  A.       Yes, 61. Correct.

13                  Q.       And that is the steady-state for a  
14                  commercial to C to an A residence, correct?

15                  A.       And that's also a little massaging  
16                  there because if you look at the 901.102(a), C to A,  
17                  that regulation is written in terms of octave band.  
18                  And in order to come up with a single dBA number,  
19                  some filtering and some calculations have to be  
20                  performed on the octave band data to produce the dBA  
21                  number.

22                                So it's a little bit of an  
23                  extraction process. The actual -- and that  
24                  extraction process has been used in the past for

1 determining whether or not there is a nuisance  
2 problem.

3 Q. But that is based on the proposed  
4 changes in the regulations, correct?

5 A. No. The dBA --

6 Q. The C Category -- excuse me. The C  
7 Category is what is proposed to be put in place.  
8 The current regulations have it as unrestricted;  
9 isn't that correct?

10 A. Unclassified, I believe, is the term.

11 Q. Unclassified?

12 A. And, again, I'm not quite sure where  
13 we stand on that, to be operating under the old  
14 regulation or operating under the new regulation.  
15 What the old regulation would be is unclassified,  
16 and the new regulation would be Class C, so --

17 Q. Okay. If it's unclassified, there's  
18 no restrictions on it?

19 A. There's no restrictions as far as  
20 numerical is concerned, but there would still be the  
21 nuisance.

22 Q. I understand. Okay. Now, so if the  
23 regulations are, when this thing was built and the  
24 complaint was filed, was unrestricted, there is no



1 numerical violation, correct?

2 A. That's correct.

3 Q. Okay. Now, you indicated that an  
4 impulse noise is an unusual sound. Would you  
5 describe it as an atypical sound, a sound that is  
6 distinct from everything else, a steady-state sound?

7 A. It's somewhat atypical, let's say, for  
8 a tollway or a roadway. In other applications, say  
9 for a gun club, the gun club would be an impulsive  
10 sound. So it depends upon, you know, if the noise  
11 source was controlled by -- I assume here we're just  
12 talking about a roadway or a tollway and the  
13 impulsive sound is sporadic and present there, but  
14 it's not the dominant noise source.

15 Q. So if the predominant problem the  
16 Petrosiuses complain about is inability to sleep  
17 because of these banging noises, these aren't very  
18 frequent sounds then from what you're testifying to,  
19 correct?

20 A. I'm saying --

21 MR. DWORSCHAK: Objection. He wasn't  
22 there at night.

23 MR. AZAR: And that's what I'm trying  
24 to get at. Either he knows or he's just

1           speculating.

2                   MR. DWORSCHAK: Well, he already  
3           testified that he talked to the Petrosiuses  
4           about the types of noise they hear. He just  
5           didn't sleep there himself to hear it  
6           directly.

7                   MR. AZAR: And my questions deals with  
8           how we apply his testimony at this point in  
9           time that these things he did not hear.

10                   HEARING OFFICER WEBB: What was your  
11           question again?

12   BY MR. AZAR:

13           Q.       The question is: You didn't hear any  
14           noises -- any of these impulse noises, jake braking,  
15           revving, banging while you were there, correct?

16           A.       That's not correct. I heard all those  
17           sounds when I was there --

18           Q.       They weren't very frequent, though?

19           A.       -- but my answer to that was that they  
20           were not the predominant noise.

21           Q.       Okay.

22           A.       They were secondary to the primary  
23           noise, which would have been the exhaust noise, tire  
24           noise, things like that.

1                   But as I testified earlier, there  
2   were sounds of trucks hitting potholes, there were  
3   horns honking. There was a presence of impulsive  
4   noise, but it was secondary to the steady-state  
5   sound that I described as 901.102(a).

6           Q.       You don't know what it's like at  
7   night, correct?

8           A.       That's correct.

9           Q.       And the night noises tend to be  
10   quieter as traffic increased?

11           MR. DWORSCHAK: He just testified  
12   doesn't know.

13           MR. AZAR: Well, I'm asking from his  
14   experience.

15   (Simultaneous colloquy.)

16           MR. AZAR: If he doesn't know, he  
17   doesn't know. He can answer.

18           HEARING OFFICER WEBB: You can answer.

19   BY THE WITNESS:

20           A.       Again, in answer, looking at the  
21   Petrosius' tape of nighttime, I did get some sense  
22   of the night sound. And the levels were slightly  
23   lower, but only slightly lower.

24

1 BY MR. AZAR:

2 Q. And that's using a Board-approved  
3 RadioShack meter, right?

4 A. Yes.

5 Q. That's a Board-approved meter?

6 A. The Board has accepted the RadioShack  
7 meter in several cases.

8 Q. Okay.

9 MR. AZAR: That's fine.

10 HEARING OFFICER WEBB: Mr. Dworschak?

11 MR. DWORSCHAK: I'll be very brief.

12 FURTHER DIRECT EXAMINATION

13 By Mr. Dworschak

14 Q. Greg, you heard testimony from  
15 Mr. Barbel just within the past 20 minutes when I  
16 asked him whether the federal noise guidelines apply  
17 to the Tollway if they don't accept federal money;  
18 is that correct?

19 A. Yes.

20 Q. And do you remember what his answer  
21 was?

22 A. I believe his answer was that since  
23 they don't accept federal money for it, that it's a  
24 guideline and not a requirement.

1           Q.       And going back to the whole reason why  
2 we're here today, do you believe that we're here  
3 today for an Illinois Pollution Control Board matter  
4 and not a federal matter?

5           A.       Yes.

6           MR. DWORSCHAK:   Okay.   Thank you.

7           HEARING OFFICER WEBB:   Okay.   Thank  
8 you very much, Mr. Zak.

9           MR. AZAR:   I just have two questions  
10 for Mr. Barbel.

11          HEARING OFFICER WEBB:   Okay.

12          Mr. Barbel, I'll remind you that you're still  
13 under oath.

14          WHEREUPON:

15                       WILLIAM BARBEL

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

19                       DIRECT EXAMINATION

20                       By Mr. Azar

21          Q.       Mr. Barbel, in regards to Federal  
22 Highway Administration guidelines, are you familiar  
23 with those?

24          A.       Yes.

1           Q.     And your testimony is that they don't  
2 necessarily apply to the Tollway?

3           A.     Correct.

4           Q.     Without those, would there be any  
5 regulation on the Tollway noise that you're aware  
6 of?

7           A.     That I'm aware of, no.

8           Q.     So that's a voluntarily administered  
9 program that imposes a substantial burden on the  
10 Tollway to alleviate noise, correct?

11          A.     Correct. They essentially adopted  
12 those and wrote a policy to consider those.

13          Q.     And that is something approved by the  
14 Tollway board, correct?

15          A.     Correct.

16          Q.     Now, in regards to your use of the  
17 Type II noise equipment, why did you use that as  
18 opposed to a Type I?

19          A.     Federal guidelines say Type II or  
20 better.

21          Q.     And why did you use the Type II?

22          A.     It was available and we didn't see any  
23 reason to use a Type I. We weren't out there for  
24 precision measurements. We were looking for was

1     there a reduction as a result of the barrier.

2             Q.       What are Type Is usually used for in  
3     your experience?

4             A.       Something of very precision  
5     requirements, like machinery bearings, things like  
6     that. And sometimes impulse or vibratory noises and  
7     so forth.

8                     MR. AZAR: That's all I have. Thank  
9     you.

10                    HEARING OFFICER WEBB: Thank you.

11             Mr. Dworschak?

12                    MR. DWORSCHAK: One last question.

13                             CROSS EXAMINATION

14                             By Mr. Dworschak

15             Q.       Bill, do you believe that the Illinois  
16     Pollution Control Board rules govern the Illinois  
17     tollways?

18             A.       Do I believe the Illinois Pollution  
19     Control Board --

20             Q.       As a noise expert, do you believe  
21     that?

22             A.       No.

23                     MR. DWORSCHAK: Okay. Thank you  
24     nothing further.

1 MR. AZAR: Nothing.

2 HEARING OFFICER WEBB: Thank you  
3 Mr. Barbel.

4 THE WITNESS: Thank you.

5 HEARING OFFICER WEBB: Okay. Let's go  
6 off the record to discuss some administrative  
7 matters.

8 (Whereupon, a discussion  
9 was had off the record.)

10 HEARING OFFICER WEBB: We're back on  
11 the record to take care of one administrative  
12 matter. We discovered that Respondent's  
13 Exhibits 16 and 17 had not been admitted, at  
14 least as far as anyone can recall. Mr. Azar,  
15 would you like to move to admit those  
16 exhibits?

17 MR. AZAR: Yes. I would ask those to  
18 be admitted into evidence.

19 HEARING OFFICER WEBB: And there's no  
20 objection to that, Mr. Dworschak?

21 MR. DWORSCHAK: Those are the  
22 Pollution Control Board guidelines and  
23 regulations?

24 HEARING OFFICER WEBB: Yes.



1 MR. DWORSCHAK: No objection.

2 HEARING OFFICER WEBB: Okay.

3 Respondent's Exhibits 16 and 17 are admitted  
4 into the record.

5 The parties have agreed to a  
6 briefing schedule as follows: The transcript  
7 of these proceedings will be available from  
8 the court reporter by December 19th, 2005,  
9 and will be posted on the Board's website.

10 The public comment deadline is  
11 January 19th, 2005. Public comments must be  
12 filed in accordance with Section 101.628 of  
13 the Board's procedural rules.

14 The Complainants' brief is due by  
15 February 6th, 2006. Respondent's brief is  
16 due by March 27th, 2006. And Complainants'  
17 reply brief, if any, is due by April 17th,  
18 2006. And the mailbox rule will apply.

19 Mr. Dworschak, would you like to  
20 make a closing argument?

21 MR. DWORSCHAK: I reserve my closing  
22 argument for my brief, your Honor.

23 HEARING OFFICER WEBB: Okay. Mr.  
24 Azar, would you like to make a closing

1 argument?

2 MR. AZAR: I will reserve it for the  
3 same way.

4 HEARING OFFICER WEBB: Okay. I will,  
5 again, ask if there are any members of the  
6 public present to make statements on the  
7 record? I assume, ma'am you're with Mr. Zak?

8 UNIDENTIFIED SPEAKER: Yes.

9 HEARING OFFICER WEBB: Okay. So we  
10 have no members of the public present. I  
11 will proceed to make a statement as to the  
12 credibility of the witnesses testifying  
13 during this hearing.

14 Based on my legal judgment and  
15 experience, I find all of the witnesses  
16 testifying to be credible. At this time, I  
17 will conclude the proceedings. We stand  
18 adjourned and I thank all of you for your  
19 participation.

20 (Which were all the proceedings  
21 had in the above-entitled cause  
22 on this date.)

23

24

1 STATE OF ILLINOIS )

2 ) SS.

3 COUNTY OF WILL )

4

5

6 I, Tamara Manganiello, RPR, do hereby

7 certify that I reported in shorthand the proceedings

8 held in the foregoing cause, and that the foregoing

9 is a true, complete and correct transcript of the

10 proceedings as appears from my stenographic notes so

11 taken and transcribed under my personal direction.

12

13

\_\_\_\_\_  
TAMARA MANGANIELLO, RPR  
License No. 084-004560

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19 SUBSCRIBED AND SWORN TO  
before me this \_\_\_\_ day  
20 of \_\_\_\_\_, A.D., 2005.

21

22 \_\_\_\_\_  
Notary Public

23

24