

TOWNSHIP OF CHATHAM
ZONING BOARD OF ADJUSTMENT

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IN THE MATTER OF: :
 : TRANSCRIPT
CASE NO. BOA 15-83-3, : OF
NEW YORK SMSA, LIMITED, : PROCEEDINGS
VERIZON WIRELESS :
BLOCK: 83, LOT: 3 :

Wednesday, April 13, 2016
Municipal Building
54 Fairmount Avenue
Chatham, New Jersey 07928
Commencing at 7:40 p.m.

BOARD MEMBERS PRESENT:

TONY VIVONA, Chairman
MICHAEL HYLAND
GERGORY BORSINGER
JON WESTON
WILLIAM STYPLE
TINA ROMANO
RICK WILLIAMS
DENNIS NEWMAN
JOHN C. HURRING, JR.

ALSO PRESENT:

MARGARET SMITH, Secretary
ROBERT A. MICHAELS, Planner
ROBERT S. O'BRIEN, P.E., CME
BRUCE EISENSTEIN, Ph.D., P.E.

ALISON GULINO, CCR, RPR
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A P P E A R A N C E S :

STEPHEN H. SHAW, ESQ.
Counsel for the Board

FERRARO & STAMOS, LLP
22 Paris Avenue, Suite 400
Rockleigh, New Jersey 07647
BY: FRANK FERRARO, ESQ.
Counsel for the Applicant

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1 CHAIRMAN VIVONA: BOA 15-83-3, New
2 York SMSA d/b/a Verizon Wireless, Pine Street.

3 MR. FERRARO: Good evening, Mr.
4 Chairman, members of the Board. Frank Ferraro of
5 Ferraro & Stamos, attorney for the applicant,
6 Verizon Wireless.

7 This is a continuation from our last
8 meeting on February 10th, at which time the
9 applicant put on the radio frequency engineer. Mr.
10 Pierson got through 95 percent of his testimony.
11 There was a couple of issues that were left open
12 when we adjourned. Unless there's any initial
13 questions or comments from the Board, we would bring
14 him back up and pick up where we left off.

15 CHAIRMAN VIVONA: Okay.

16 MR. FERRARO: Glenn Pierson is our
17 radio frequency engineer.

18 G L E N N P I E R S O N, 63 Beaver Brook Road,
19 Suite 201, Lincoln Park, New Jersey 07035, having
20 been previously sworn, testified as follows:

21 DIRECT EXAMINATION BY MR. FERRARO:

22 Q. Mr. Pierson, when we were last here,
23 there were questions regarding the population
24 statistics that you were referring to. Have you
25 brought additional information with respect to that

1 topic?

2 A. Yes. I went into the mapping tool
3 that we have and highlighted the population data.
4 The USGS comes out and has a dot based upon a given
5 location and it sums up the pops in that particular
6 area and what the tool does is, I can select the
7 dots that are in the area of the coverage or
8 whichever area that you need to at the time. So
9 what I did was, go back into the tool. It doesn't
10 create a good presentation piece but it's labeled
11 "Table, Block, Pops" and there's two images to it.
12 I'll pass those around.

13 Q. So can we call this a population map?

14 A. Yes. Two populations maps.

15 (Exhibit A-23, two population maps, was
16 marked for Identification.)

17 Q. You remain under oath. You understand
18 that, correct?

19 A. Yes.

20 Q. Now, A-23 was created, basically, in
21 response to some of the questions of the Board
22 members?

23 A. Yes. There was a question, "How do
24 you come up with 3,472 pops when Chatham does not
25 have that many?" So there was the question, "Where

1 are those people?" So the left side shows the
2 coverage of the proposed site, which you have in an
3 8-1/2-by-11, and I have selected all the -- there's
4 little black dots and black dots with red squares.
5 That means they are selected and the table in the
6 bottom left-hand corner sums up all the pops from
7 the census from 2010 and just says that is how many
8 are in the census in that entire area and I included
9 only areas where the proposed site coverage is and
10 creating new coverage. So if there's overlapping
11 coverage, I didn't take the overlapping coverage
12 because it's already covered by existing.

13 The right side shows, basically, this
14 tan overlay, a layer. This is a layer of the
15 township. So I brought that as an upper layer and
16 laid it on top of the proposed coverage and had it
17 only select the blocks that were in the township and
18 in the proposed coverage and it tells you how many
19 are in the township, which is 1,302, and the
20 remainder are in Chatham Borough, most likely, maybe
21 a little of Madison.

22 Q. Just to reiterate, these are population
23 calculations that you are quoting, correct?

24 A. Yes. You can get the information
25 online and you can download it and bring it into a

1 GIS type program.

2 Q. Do these numbers translate to cell use
3 and/or traffic, though?

4 A. Sometimes. It depends on the
5 penetration of the particular carrier in that
6 particular area of how many people that would have
7 cell phones in that area.

8 Q. As far as determining whether there's
9 an area of need, would you typically rely on the
10 existing data network, the network from the data --
11 I mean, the data from the network -- I'm sorry -- to
12 determine if there's a need in a particular area as
13 far as capacity?

14 A. Yes. We would take that and we
15 presented the LTE data and what the surrounding
16 sites are doing that are pointed towards the
17 proposed site and the fact that those are running
18 out or near exhaust at this point, that's really a
19 measurement of how many -- what's going on, how many
20 people are trying to use the network in that
21 particular area.

22 Q. As well as the propagation maps that
23 you removed last time?

24 A. Between all three, you can put
25 together how many people live there and how much

1 data is being consumed and what's the area of
2 coverage for each of the particular sites.

3 Q. Also, since we were here last time,
4 Verizon has been informed by PSE&G that's there's a
5 restriction with the number of cables that PSE&G is
6 allowing on their newer towers; is that correct?

7 A. Yes.

8 Q. I'm going to mark as Exhibit A-24 --
9 this is an e-mail from Anthony Suppa, Jr., from
10 PSE&G, a project manager, with respect to the new
11 restrictions that PSE&G put in place. I will pass
12 it around.

13 (Exhibit A-24, PSE&G restrictions e-mail,
14 was marked for Identification.)

15 CHAIRMAN VIVONA: Your system requires
16 24 cables?

17 MR. PIERSON: We have four frequency
18 bands and we have four antennas on each sector.
19 Each needs two lines to it so that gives us the 24
20 lines and the restriction and why that's really
21 important in this particular case is, with PSE&G
22 towers, getting up there to do maintenance if you
23 have a failure is very difficult. Sometimes it
24 could take six months to a year for them to
25 schedule. Sometimes you need to shut it down

1 sometimes. PSE&G is very safety conscious and we
2 might not be able to get a crew up to repair or
3 replace an antenna or a line so that, if something
4 goes bad, you could combine things and reduce a
5 little coverage and get by for a little amount of
6 time. If you reduce the lines, the antennas to
7 three per sector and then we had a failure, then
8 it's a much, much greater impact and we lose, one,
9 because of the ability to access it.

10 So given the number of frequency bands
11 that Verizon has and the obviously large customer
12 base in the area based upon the data consumption
13 that we have shown and that would be a degradation
14 to the network if we had to cut back to less
15 antennas, less lines and then a failure occurs, then
16 there's going to be a definite reduction in services
17 until that can get fixed. Whereas, if we have the
18 24 lines and 12 antennas, which is the norm for
19 Verizon, the degradation, if we lose one, it would
20 be minimal.

21 Q. So just to clarify A-24, A-24 basically
22 states that PSE&G will not allow more than 42
23 coaxial cables on the towers as long as both
24 carriers would require a total of 48 cables, 24
25 each, that would not meet with PSE&G requirements

1 for collocation on our towers. From your review of
2 the approved AT&T plans at the alternative tower
3 8/21, are they proposing 24 cables?

4 A. I believe so, yeah. There's 12 on the
5 northeast leg and 12 on the southeast face and then
6 plus 6 more of the control cables. So there's
7 actually 30 that they have.

8 Q. You're referring to the AT&T drawings
9 last dated January 11, 2016?

10 A. Yes.

11 Q. Okay.

12 A. Page C-2.

13 MR. FERRARO: I'll mark these A-25.
14 That's the tower that AT&T was approved on by this
15 Board.

16 (Exhibit A-25, AT&T drawings, was marked
17 for Identification.)

18 Q. It's the tower that the Board was
19 inquiring about last meeting.

20 A. We are 8 over 2. They are numbers.
21 It's Line Number 8, Tower Number 2 and the one to
22 the north would be Tower Number 1. The "-1" means
23 it's the replacement set. The lattice towers didn't
24 have a "-1."

25 Q. And Verizon is proposing how many

1 cables in the installation?

2 A. 30 plus 24.

3 Q. I know it's over 42. It's 54 cables.
4 So in your opinion, based upon this restriction,
5 could that alternative AT&T tower accommodate our
6 proposed facility?

7 A. No. It will not. I thought it had
8 more like 24 so that reduced it a lot.

9 CHAIRMAN VIVONA: So most carriers are
10 going to have similar systems where they have a
11 similar setup?

12 MR. PIERSON: I don't recall what T-
13 Mobile came in for the tower at Spring Street with.

14 CHAIRMAN VIVONA: 24.

15 MR. PIERSON: It used to be 3 per
16 sector antenna and they vary a little bit. With the
17 latest 700 megahertz license they have, they run 24
18 now. Sprint is the other one. Sprint sometimes
19 varies. I'm not sure exactly what they are doing
20 today; they changed their designs around. It could
21 be the same 24. It could be less. I'm not sure.

22 CHAIRMAN VIVONA: So it's going to be
23 very difficult to collocate on any PSE&G property.

24 MR. PIERSON: With those rules, yeah,
25 on the monopoles. The lattice towers were easier.

1 MR. HURRING: You are saying the
2 antennas still work. It's the capacity is reduced
3 by having less cables going up. So you could still
4 transmit but you can't feed the antenna?

5 MR. PIERSON: Right. Having 12
6 antennas is no good if I can only feed six or eight
7 of them.

8 MR. HURRING: So you would have to
9 reduce the number of antennas?

10 MR. PIERSON: You might as well
11 because if I cannot feed them, there's not a lot of
12 point. There's so many different frequencies bands
13 and you need to get them up to the antennas and I
14 don't have the conduit to get in there.

15 MR. BORSINGER: If this new
16 information says you can't collocate, why do you
17 need extra room down below for collocation?

18 MR. PIERSON: This is new. So
19 technically --

20 MR. BORSINGER: You could reduce the
21 size of the box.

22 MR. FERRARO: The only equipment that
23 we are designing for is our own in this application.

24 MR. BORSINGER: I thought there was
25 extra space that -- you said there was extra space

1 for potential collocation.

2 MR. FERRARO: Not on our site. We are
3 only fencing in our equipment as well as -- our
4 engineer will testify to this -- the base of the
5 tower itself. That was in order so that our cable
6 wiring would not be visible from the outside.
7 That's why we wound up extending the fence compound
8 a little further to mask that. The engineer can get
9 into why we felt that was the best alternative.

10 This is fairly new information and
11 these towers are fairly new. As we get further and
12 further into collocating on them, PSE&G is learning
13 what kind of impact the facilities have on their
14 maintenance and their ability to manage these poles.

15 MR. PIERSON: I probably designed 100
16 PSE&G towers. Almost every one is a lattice. The
17 last few years, they have been replaced with
18 monopoles so they are changing the rules because,
19 before, you had a four-legged structure and there
20 was only one climbing leg. If I stayed away from
21 it, I was fine. So you had three legs to put cables
22 up. Now, you don't have that anymore.

23 Q. As we touched on before, there's a
24 restriction with the number of antennas that are
25 allowed above these new poles as well as far as

1 arrays?

2 A. Yeah. Usually only one set above the
3 steel of the pole of the structure. They allow one
4 set above and that's it. That's standard.

5 MR. NEWMAN: Is PSE&G allowing your
6 antenna to go above the top? Do you remember that?
7 They had to be below those two ground wires, three
8 below and one above, right?

9 MR. PIERSON: There are two possible
10 locations above the static lines, the tallest two
11 lines. They don't carry any power. They allow one
12 above and one between the static line and the first
13 arms that hold the power lines and then your next
14 spot is all the way down X-amount of the feet below
15 the lowest power conductor.

16 MR. FERRARO: There was a comment in
17 one of the review letters that we received today.
18 It notes a variance as to antenna height or antenna
19 size, I should say. The applicant has taken the
20 position that that variance is not required. In the
21 ordinance, the conditional use section of the
22 ordinance, it states that an antenna can't be more
23 than 5 feet high. Our particular antennas that are
24 proposed here are 6.06 feet. The engineer can
25 confirm that. There was a variance noted for that.

1 We believe that those are conditional use standards.
2 Since we are a use variance, they don't apply to
3 this application but since Mr. Pierson is here...

4 Q. Could you elaborate on the need of the
5 size of that particular antenna?

6 A. The taller you have an antenna, the
7 more focusing of the radio wave you have and
8 especially with the lower frequencies, the LTE
9 frequencies and 7 and 800 megahertz frequencies,
10 getting a narrow beam is very important to control
11 the signal and it puts less signal to the ground.
12 It puts less signal up above it. So it keeps
13 focused beam that you can put out at about 2,000
14 feet from the site, which would be your main --
15 that's about where your reach is going to be. So
16 you want to focus the beam out to there so you can
17 get a maximum coverage at that point and you reduce
18 a lot of coverage directly underneath in the first 5
19 feet or so. The higher you get, the more focusing
20 you get. So if I have a short antenna that's 3 or 4
21 feet tall, my beam is going to be about 30 degrees
22 high. The angle of the energy would be about 30
23 degrees plus or minus 15 from the horizon. As you
24 get smaller, you get to about 12 to 15 degrees,
25 which gives us a lot better control, more gain, more

1 range and more coverage, with a taller antenna. So
2 in order -- we know we are on a hill and we need to
3 control where the signal is going and control the
4 interference. So the 6-foot antenna is required to
5 get that and to be able to maximize the coverage,
6 trying to reduce the number of sites with a taller
7 antenna. That is why Verizon is going with the
8 6-foot antennas.

9 MR. FERRARO: Mr. Chairman, that's all
10 the additional testimony that we had planned for Mr.
11 Pierson. Are there additional questions of the
12 Board and public?

13 CHAIRMAN VIVONA: The next tower up,
14 that's the AT&T tower?

15 MR. PIERSON: Yes.

16 CHAIRMAN VIVONA: Then the tower after
17 that, that's the one by the railroad tracks.

18 MR. PIERSON: The next one is the
19 church and that has Wetlands around it.

20 CHAIRMAN VIVONA: The following one
21 coming down next to the railroad tracks?

22 MR. PIERSON: Madison Avenue? What's
23 the street down there?

24 CHAIRMAN VIVONA: That's Kings Road.

25 MR. PIERSON: You have 124 Main Street

1 that goes east-west. As you go south, there's
2 another street with a tower on each side of that.

3 CHAIRMAN VIVONA: That's Kings Road.

4 MR. PIERSON: I don't know how many
5 are between that one and the one north of Shunpike.
6 That's all coming down that side. You are getting
7 yourself down in that area to the north more towards
8 Chatham Borough and it will do well covering that
9 lower area but we wouldn't be able to cover well the
10 top of the hill. So where we are at is the top of
11 the hill. We are going to pull ourselves away from
12 the high school and that's going to pull that
13 coverage away and that's the coverage that we
14 showed. If we go further north, then we are opening
15 this gap on the top of the hill which, right now, we
16 showed the future coverage for the Chatham 3 down at
17 Southern. If we move our particular tower further
18 north, you are going to open a gap between the two.

19 CHAIRMAN VIVONA: A significant gap?

20 MR. PIERSON: Yes. The high school
21 there, that alone is more than 1,000 people or
22 students and faculty.

23 MR. HURRING: Do we know -- aside from
24 the high school, do we know how many it's impacting?

25 MR. PIERSON: Well, I'm not sure which

1 structure. It's completely redesigned. You are
2 getting a lot closer to the existing Florham Park
3 sites and then you are having a lot of redundant
4 overlap in coverage and that's not good as well.

5 MR. FERRARO: Do you know where that
6 would be on here?

7 MR. PIERSON: I don't know how far the
8 Wetlands goes and where the one finally gets out of
9 Wetlands but -- I believe -- I don't know if -- I
10 think there's a reservation on one of the towers
11 down there or a plan for one of the towers down at
12 the next --

13 CHAIRMAN VIVONA: On the other side of
14 124, I thought?

15 MR. PIERSON: On the south side but so
16 there is one tower that someone is going on or
17 looking at. Anyway, this map doesn't have the name
18 of the street.

19 CHAIRMAN VIVONA: The cross streets,
20 you have 124, then Kings Road, then Woodland Avenue.

21 MR. PIERSON: Woodland.

22 CHAIRMAN VIVONA: The next one over is
23 Pine Street.

24 MR. PIERSON: There's another Pine
25 Street then. Our Pine Street?

1 CHAIRMAN VIVONA: Your Pine Street.

2 MR. PIERSON: I mean, you are moving
3 over a tower. You move over to the AT&T tower, it
4 starts pulling apart and makes the overlap between
5 our Chatham 3 site and the AT&T tower a little
6 marginal. We lose the coverage to the west because
7 we are losing elevation and it starts to pull things
8 away from the high school and we know we have to
9 skip, at least, one, if not two, because of
10 Wetlands. That's another 900 to 1800 feet above the
11 almost 900 feet. Now, you are looking at 2,400,
12 3,000 feet away. That's the radius of our standard
13 coverage in many cases. So that's -- you are
14 getting towards another site, which means we go down
15 there, and then, eventually, we will be back here.

16 CHAIRMAN VIVONA: Well, it's a much
17 less populated area and as far as the high school,
18 is there not some sort of additional thing that we
19 can adhere to the high school or on the high school
20 grounds that would service the high school? I mean,
21 no one lives at the high school. So by moving it
22 further away, you are still getting the coverage.
23 The thing you seem to be worried about is the high
24 school, losing the high school. Isn't there like a
25 substation or a repeater that we could put near the

1 high school that could service the high school?

2 MR. PIERSON: It comes into non-radio
3 frequency issues with what you can and can't do
4 there. There's all residences around the high
5 school as well so I'm not sure what the difference
6 is from one to another but from a radio frequency
7 perspective, we are trying to do continuous coverage
8 and do the best we can and make things match up. If
9 we go north, we are not doing anything for the
10 Chatham site for offload because we are on the other
11 side of the hill and that's the one that needs to
12 get fixed today, the one at the police station, and
13 we already know that the Chatham 3 site has its
14 environmental items so that's still a --

15 So if we go further north, we don't do
16 anything for the Chatham site, which means we can't
17 maintain the greatest service to the customers.
18 That's exhausted, as we went through the chart last
19 time, and that was two months ago or three maybe.

20 CHAIRMAN VIVONA: February.

21 MR. PIERSON: Going north isn't
22 helping that at all; it's not addressing that at
23 all. If it takes us a year to get through the
24 environmentals for Chatham 3, that's designed only
25 to take a portion of that traffic off, not all of

1 it, and it doesn't help the network.

2 MR. SHAW: Is there booster equipment
3 available to be located at the school that might
4 enhance coverage at this location?

5 MR. PIERSON: There are booster
6 systems that are available if the high school was
7 interested in something like that and would allow
8 something like that but we also still need a good
9 enough signal from the outside world in order to
10 boost. So if I don't have something that gives a --

11 As opposed to an in-building signal,
12 it has to be relatively strong. If I'm down at
13 Kings Street, I'm not going to have any kind of
14 usable signal at the high school because the hill
15 comes up and flattens off and the high school, you
16 pass Lafayette going southwest from Kings Street and
17 then the high school is down in a little dip there
18 almost below grade from Lafayette. So there's not
19 going to be a signal to boost if we are down at the
20 bottom of the hill.

21 MR. HURRING: With that one, if we had
22 a variance to go higher than the 6 feet at that
23 other site, do we know how high we have to go to get
24 that beam to be -- or is that not...

25 MR. PIERSON: You are a couple

1 thousand feet away. If the angle, you change -- if
2 PSE&G allowed you to go higher, which are not going
3 to allow you to.

4 MR. HURRING: They have a restriction?

5 MR. PIERSON: Yeah. That's not going
6 to happen. If you look at the angle that you have,
7 if you are going out 2 or 3,000 feet, how much would
8 you have to change in order to change your angle to
9 get over the hill? The hill is, you know, 20 feet
10 or so from the top of it and you have trees on top
11 of Lafayette Avenue. So for you to change the angle
12 of how the signal is coming in, you have to make a
13 significant height difference at the other end in
14 order to try to change the angle because of your
15 distance so far away.

16 CHAIRMAN VIVONA: How tall were your
17 original antennas?

18 MR. PIERSON: Original?

19 CHAIRMAN VIVONA: Before you changed
20 the design, weren't they 13 inches by 48 inches?

21 MR. PIERSON: I think the antennas
22 didn't change since the original design.

23 CHAIRMAN VIVONA: Okay.

24 You mentioned a different variance for
25 the 6 foot as opposed to the older style.

1 MR. FERRARO: There was a comment, I
2 believe, in the planner's letter that indicated
3 there was a variance required for that. That was an
4 ordinance requirement, the 5-foot maximum antenna
5 panel height. We don't have it as a variance
6 because we are a use variance. The conditional use
7 variance criteria doesn't apply. We wanted to make
8 the Board aware why we are using the 6-foot antenna
9 so that was the purpose of that testimony.

10 I understand the Board is kind of
11 struggling with this site and the applicant is
12 trying to investigate these other sites that the
13 Board is pointing to. It's just that, as Mr.
14 Pierson testified to...

15 We have to meet the technical
16 requirements of the network, correct?

17 MR. PIERSON: Yes.

18 MR. FERRARO: We don't want to put
19 sites up in town that are not going to address the
20 network.

21 MR. PIERSON: That is just going to
22 create other problems that are going to have to be
23 solved later. Then, you are right back to where you
24 started from. You have T-Mobile approved at Spring
25 and School on that one tower and then two towers

1 between and then you have ours at Pine and you have
2 Chatham.

3 You have AT&T on the -- next to the Shunpike and
4 then the ones that are further north are not
5 available due to Wetlands. I'm not sure if there's
6 Wetlands issues between us and the T-Mobile one at
7 Spring and School or not. I don't remember.

8 CHAIRMAN VIVONA: I don't believe so.
9 That's higher ground.

10 MR. PIERSON: When they did it,
11 there's like -- the center area got depressed and it
12 started growing Wetlands type plants in the brush in
13 the middle. I don't know for sure.

14 CHAIRMAN VIVONA: Well --

15 MR. PIERSON: If I go south, I can't
16 cover north because I'm on the other side of the
17 hill from the T-Mobile location. You will get to
18 our pole and that's about it and you wouldn't get
19 Lafayette School from there either because of the
20 way you are trying to come up the hill and Lafayette
21 Avenue plateaus out and then you get the school in a
22 slight depression. That's going to stop, basically,
23 at the road just south of the school because of the
24 way the topography is, it flattens out. So it's
25 really balanced on the hill for three reasons. I

1 need to offload the Chatham site from a data
2 perspective. I need to provide a signal along the
3 top of the ridge so that there's coverage along the
4 top of the ridge and I need to cover north down the
5 other side of the hill. If I move one way or
6 another, I'm losing one or two of those which then
7 adds another site.

8 CHAIRMAN VIVONA: Well, our job here
9 is to keep the residents as happy as we can and I
10 know your job is to provide communications. It's
11 just, some towers aren't a problem. The two
12 T-Mobile ones were actually just put back on the
13 poles they were on so...

14 MR. PIERSON: I did the zoning for one
15 of the T-Mobile ones that is down the street here
16 off of Fairmont halfway up the hill. There's
17 residents right along both sides of that.

18 CHAIRMAN VIVONA: That was approved.

19 MR. PIERSON: I did the original one a
20 decade ago.

21 CHAIRMAN VIVONA: This is a new one.
22 We have many, many residents who don't care to have
23 it in their neighborhood and that's where our issue
24 is. I know the FCC says we have to, basically,
25 allow it but we are just trying to make it where

1 it's either as hidden as possible or the residents
2 are as informed as possible as to any detriments.
3 So this is what we are trying to come to grips with.
4 We know we have to have the towers somewhere. If we
5 want to have cell phones, we have to have towers.

6 MR. FERRARO: We made changes to the
7 design, Mr. Chairman, that our professional engineer
8 will go through all with the goal of trying to scale
9 down the visibility of what's going on the ground.
10 This particular -- the antennas will be 8 feet above
11 the top of the tower. The AT&T towers were approved
12 12 and a half feet above the tower up at the one the
13 Board wanted us to look at. There was a Fort Worth
14 insert in that tower before that tower came down.

15 We feel and I think the planner can
16 demonstrate with the photo simulations, this is
17 going to be a much less impactful installation than
18 what was approved for AT&T one pole up back in 2006.
19 So we are hearing the comments from this Board and
20 we are trying to minimize any impact as best we can
21 but at the same time, meet the technical
22 requirements of the network so we are not here
23 putting three different, four different sites in
24 when we can do it with one.

25 CHAIRMAN VIVONA: Okay.

1 MR. WESTON: I have a question. It's
2 more directed at the -- I don't follow the
3 telecommunication industry in a very serious way.
4 What are the trends in demand going forward as well
5 as the anticipated technologies going forward and so
6 that -- I understand that you are here with an
7 application for a single installation. In two or
8 three years, four years, five years, will you or one
9 of your competitors be here with another application
10 because demand has grown, technology has changed?
11 And I look at that in comparison to the e-mail that
12 you distributed where PSE&G has made it all but
13 impossible to collocate on a single tower so are we
14 going to have -- based on your understanding of the
15 industry, are we going to need more and more of
16 these things going up and down the PSE&G right of
17 way or are they going to get smaller and more
18 efficient or bigger and bigger or more numerous?

19 MR. PIERSON: Well, I mean, there is a
20 road map of what to do with the frequencies with the
21 licenses they have and the usage and where the usage
22 is going and, yes, everything is still growing. We
23 have seen a huge growth in the data network and
24 everything is moving to voice over the data network.
25 So the newer phones are capable of Voice Over IP.

1 That's where everything is going. So Verizon's plan
2 to handle the growth is, they're transitioning the
3 frequencies from the older 3G slower data. As
4 phones get traded out and are not relying on the old
5 data, we are pulling those radios out and putting in
6 the LTE radios and they will handle more capacity
7 and the next step is pulling out the standard voice
8 radios and putting in LTE. So there are different
9 frequency bands that Verizon has that can
10 accommodate our growth. That's in the plan.

11 So right now, in this area, there's
12 the 700 megahertz, the main one that is used for
13 LTE. That's a lower frequency. It has the largest
14 coverage footprint. So in suburban treed areas with
15 hilly terrain, that's the go-to frequency to use.
16 Unfortunately, there's only so much capacity and it
17 gets used up pretty quickly. So we are putting LTE
18 in.

19 We can't touch the 800 yet. There's
20 too many phones out there that rely on the standard
21 voice terminology to work so that's going to have to
22 be around for five years or so or maybe longer.
23 Once that can get cut back, then LTE channels can go
24 there which will provide much more users per
25 megahertz of spectrum so it will be more efficient.

1 That's the plan. That's how we can handle the
2 growth going on over the next five or so years.
3 That's the plan so we can handle what's going on and
4 there's a plan to do that and with the four
5 frequency bands.

6 The FCC might be auctioning off
7 another one, 600 megahertz, I'm not sure how that's
8 going to affect everything yet but that goes back
9 again to four antennas and why we need four antennas
10 because we have four now and there could be a fifth.
11 Can we work that into the four antennas? Yes. We
12 looked at that already and that can be worked in.
13 So that answers one of the questions.

14 Now, the next part of your question
15 is: Can you expect a cell provider to be on almost
16 every tower that's on this line? Right now, you
17 have AT&T on one. You have T-Mobile on two in this
18 particular vicinity. I'm talking between Route 124
19 and Southern. So that section, the residential area
20 that you are concerned about, that's between those
21 two. So we have one T-Mobile and one AT&T and we
22 have one that we are proposing; that's three. If we
23 assume there's one between our Chatham 3 at Southern
24 and the swim club, Spring Street where T-Mobile is,
25 you have one there and two more between our Pine

1 Street and the T-Mobile Spring Street one, that's
2 three towers total and then you have AT&T and then,
3 north, you have a couple you can't use and a couple
4 down at the bottom of the hill. Is it possible
5 that, if AT&T needs another one, would that be down
6 by Southern between T-Mobile and Verizon?

7 I would think that would be a reasonable assumption
8 that they may wind up going there. You have three
9 in a row there and then, if Sprint decided to --
10 they got the funding to start building sites again,
11 they could take another one north of T-Mobile and
12 then that, in conjunction with something way further
13 north, like the area you were talking about like the
14 train tracks, maybe that's one. I can't tell. I'm
15 designing their network so it looks like you could
16 easily have every other one or half of them, per se.
17 If everybody built everything out, there's a
18 possibility that half of those towers -- there's ten
19 towers between Kings Street to Southern so you could
20 have five of them with one wireless carrier on each
21 one of them based upon the latest rules. This is
22 purely hypothetical.

23 MR. WESTON: I understand.

24 CHAIRMAN VIVONA: So if you were to
25 upgrade to the 700, it could be eliminated in the

1 next five years?

2 MR. PIERSON: It wouldn't be
3 eliminated. It's full now and it will remain full
4 but we can start pulling out older technologies and
5 putting in the LTE. As years go on, that would
6 handle the growth we are seeing in the network.

7 CHAIRMAN VIVONA: So all the changes
8 would be in the compound, not on the poles; once the
9 poles are done, they are done?

10 MR. PIERSON: We may wind up changing
11 an antenna once in a while but it would look like-
12 for-like. Maybe this one -- like, if 600 megahertz
13 comes in, we have to put one down and put it in.
14 It's not going to look significantly different than
15 what's in there.

16 The changes would be in the cabinets
17 on the ground. Verizon used to have 12-by-36
18 shelters for all the equipment. That includes a
19 generator. In this particular area, we don't have a
20 generator and the cabinets are now down to just a
21 couple cabinets on a pad. When you look at the
22 latest drawings, that's been minimized, getting
23 smaller. The comment is: Are they getting bigger?
24 The equipment is getting smaller so the ground
25 equipment is going in the right direction for the

1 Board's perspective.

2 MR. HURRING: I don't know if we have
3 gone over that. We have so many of these. What is
4 that equipment on the ground doing? I don't know.
5 That's something that I never -- I get the antenna.
6 You send out the signal and you have one for each
7 spectrum. Why do we have this cabinet?

8 MR. PIERSON: The equipment on the
9 ground consists of a computer. It's smart. It has
10 a computer processing there. It has a transmitter
11 to create the signal to go up to the antenna and a
12 receiver to receive it from the cell phones and
13 those signals talk to the computer that's there that
14 process it and change it from -- strip out the radio
15 portion and put it into data or voice depending on
16 what the particular information is and then it ships
17 it down fiberoptics to get back to the switching
18 location. It's taking measurements of mobiles that
19 are out there running around and it's processing and
20 there's alarms and sensors. There's batteries in
21 this one because there's no generator. So there
22 will be some batteries similar but higher quality
23 than a car battery kind of situation and that's
24 primarily what's in a radio cabinet.

25 MR. HURRING: That processing has to

1 happen on site or is the latency so bad that it
2 could never go to some centralized location? Like,
3 here is my compound for these and it all ties into
4 one big one that -- I don't know.

5 MR. PIERSON: It wouldn't reduce the
6 size of it significantly so there's no reason to do
7 that.

8 MR. HURRING: But it could change the
9 location.

10 MR. PIERSON: No. I still need to
11 omit the signal from a given point at a given
12 height. That determines your location.

13 MR. HURRING: I'm talking about the
14 computer processing power on the base there. To
15 connect to that, do you run to some, let's say,
16 random, remote location? Not far, but just, is
17 there a distance you could go to be like "This is
18 where all my processing goes"?

19 MR. PIERSON: The transmitters, you
20 want right at the antenna and the receivers because
21 it makes the data more efficient. PSE&G doesn't
22 allow that so the transmitters and receivers have to
23 be at the base and they need to be as close as they
24 can. If you have a longer distance than the feed
25 line between the transmitter and the antenna, it's

1 lost. So you need to have the transmitter at the
2 base and you need to power those, back them up and,
3 the rectifier, you need to get the hundred-amp
4 service and get it to DC to run all the boxes. So
5 that stuff doesn't change. The actual computer is
6 probably the smallest part of the whole thing. If I
7 take the smarts and put it somewhere else, there's
8 no savings on the ground.

9 MR. FERRARO: I think the question is:
10 Can't you take the equipment and move it away from
11 the tower?

12 MR. PIERSON: Then you are increasing
13 the loss. We are running at 130 feet plus
14 20-something feet along the ground with the cables
15 that help carry the radio signal. If you increase
16 that, that's going to lower your signal and then
17 reduce the coverage, etc.

18 CHAIRMAN VIVONA: Now, for the
19 residents, there's nothing being emitted out of the
20 equipment in the boxes; there's no radio waves, no
21 shock potential? There's a totally benign area
22 around the computer boxes and all that?

23 MR. PIERSON: Everything is sealed.
24 We want that radio signal to go up the tower, not to
25 emit from the boxes. They have a solid copper

1 conductor and the radio wave runs inside that.
2 There's nothing down there that is emitting any
3 radio energy that's coming up the top. There's
4 another witness that goes through the levels coming
5 out of the antennas, etc.

6 CHAIRMAN VIVONA: Okay.

7 MR. PIERSON: It's standard household
8 power. It's no different.

9 CHAIRMAN VIVONA: Where are you
10 getting your power from?

11 MR. PIERSON: The site engineer will
12 address that. I think there's a pole right by Pine
13 Street so it would pull commercial power from that.
14 It will be on the plans and he will go over that.

15 CHAIRMAN VIVONA: To sum up the
16 concerns about the radio waves, they are all
17 thousands of percentage points below what's allowed?

18 MR. PIERSON: That's what the other
19 witness will go over. He did the calculations as
20 per the FCC guidelines and referenced the FCC
21 standard and do we meet it and how many times below
22 we are.

23 MR. FERRARO: We submitted a report
24 but to preview the testimony, the conclusion in the
25 report is that the emission levels from this

1 facility, if approved, would be below 1 percent of
2 what the FCC would allow. So it's more than 100
3 times below the level that the FCC would accept.
4 It's a very, very low number.

5 CHAIRMAN VIVONA: Okay.

6 I don't have any more questions for
7 Mr. Pierson. Does anybody on the Board have
8 anything they would like to ask?

9 MR. BORSINGER: You talked about the
10 equipment. On the Z3 drawings, there's something
11 identified in here, like the "RRH."

12 MR. PIERSON: The "remote radio head."
13 That is the transmit amplifier.

14 MR. BORSINGER: There's things that
15 are not identified that are quarter circles and
16 squares. What are those?

17 MR. PIERSON: The OVP. That is an
18 overload protection box for lightning protection.

19 MR. BORSINGER: There's things that
20 are not identified there's, three, like, squares
21 with quarter circles.

22 MR. FERRARO: Those are the cabinets
23 showing the door swing, the dotted lines.

24 MR. BORSINGER: They are just
25 cabinets?

1 MR. PIERSON: Yes.

2 MR. BORSINGER: With nothing in them?

3 MR. PIERSON: There's batteries and
4 processing, etc., that would be in those cabinets.
5 There's a radio transceiver card that creates a low-
6 level signal and a shielded line going to the RRH.
7 That's the actual power transmitter, 20 watts, 30
8 watts or 40 watts type of power amplifier, and they
9 make those separated now. You try to put them on
10 the tower so the site works as efficiently as
11 possible. The manufacturer makes them separate so
12 we put them in separate locations. So the
13 transceiver, the low-level transceiver cards are in
14 the cabinets, the batteries, the rectifier and then
15 the power amplifier for the transmitter is in the
16 other boxes that are -- they are all going to be
17 lower than the fence or -- the dimension may be on
18 here. They are usually a foot or two high, a foot
19 wide and a foot deep.

20 MR. FERRARO: The engineer can go over
21 that.

22 CHAIRMAN VIVONA: Anybody else have
23 any other questions for Mr. Pierson?

24 (No response)

25 CHAIRMAN VIVONA: At this time,

1 anybody from the public can ask questions of Mr.
2 Pierson's testimony but just what he testified to
3 and if it's not the right person, we will just have
4 you wait and ask your question to the correct
5 person.

6 Does anyone have any questions for Mr.
7 Pierson?

8 MISS HERR: Ellie Herr. I live at 53
9 Pine Street.

10 Does Lafayette and the high school use
11 WiFi?

12 MR. PIERSON: They may.

13 MS. HERR: Mary Herr, 53 Pine Street.
14 Would it be easier to have your own
15 pole?

16 MR. PIERSON: To put up a new
17 structure?

18 MS. HERR: Yes.

19 MR. PIERSON: If there's property that
20 would allow that but from an approval standpoint,
21 putting up a new steel structure versus using one
22 that is already there is frowned upon from all the
23 more legal portions of it. For me, I just need
24 something that holds my antenna in the air.

25 CHAIRMAN VIVONA: Does PSE&G allow

1 temporary structures on their right of way? They
2 wouldn't allow you within their right of way to
3 build your own private structure?

4 MR. FERRARO: I have never seen that
5 approved by PSE&G. Our engineer will testify to the
6 fact, we asked them if we can move the equipment
7 more towards the center of the right of way. They
8 won't do that because it interferes with their
9 maintenance equipment for the lines. I have never
10 seen it done and I don't imagine it would be
11 approved when they will say "Just go on the tower"
12 and I don't think the Boards, in general -- I'm not
13 putting any words in this Board's mouth but if we
14 came in with a 130-foot tower application when
15 there's a tower already there --

16 CHAIRMAN VIVONA: Right.

17 If no one else has anything, you can
18 bring on the next witness.

19 MR. FERRARO: It's the FCC expert,
20 Anthony Handley.

21 A N T H O N Y H A N D L E Y, Millennium
22 Engineering, P.C., first having been duly sworn,
23 testified as follows:

24 MR. HANDLEY: My name is Anthony
25 Handley, H-A-N-D-L-E-Y. I'm an independent wireless

1 consultant with Millennium Engineering, P.C. I have
2 a Bachelor's of Science in electrical engineering
3 from Widener University. I have over 12 years of
4 experience in wireless telecommunications and I
5 testified before Boards such as this numerous times
6 in New Jersey, Delaware, Maryland and Virginia.

7 CHAIRMAN VIVONA: Okay. Thank you.

8 DIRECT EXAMINATION BY MR. FERRARO:

9 Q. Mr. Handley --

10 DR. EISENSTEIN: Can I ask a question?

11 The report was signed by Paul Dugan.

12 Did you bear responsibility for it? Did you
13 participate in the report?

14 MR. HANDLEY: I read the report. He
15 is the principal for Millennium so he reviews and
16 signs everything that I do.

17 Q. So you participated in the calculations
18 contained in the report?

19 A. Yes.

20 Q. The context of your testimony is
21 compliance with the FCC requirements of the
22 facility?

23 A. Yes.

24 Q. Could you please review the analysis
25 and conclusions in the report that was submitted

1 dated June 1, 2015 entitled "RF Safety FCC
2 Compliance of Proposed Communications Facility"?

3 MR. FERRARO: This will be A-25.

4 (Exhibit A-26, RF FCC compliance report,
5 was marked for Identification.)

6 MR. SHAW: I think it's in the
7 application. It's A-26.

8 A. The FCC sets the standards for
9 electromagnetic field safety for the health, safety
10 and welfare of the public. Using FCC-prescribed
11 methodology, I did calculations to determine the
12 upper limit exposure from the proposed Verizon
13 facility at 137.5 feet above ground level on the
14 existing structure.

15 Using the power density equation from
16 the FCC Bulletin OET65, I found that the upper limit
17 exposure from the proposed facility as a composite
18 including all four frequency bands that Verizon is
19 licensed to transmit, would be hundreds of times
20 below what are defined as safe standards for
21 electrical magnetic field safety or hundreds of
22 times bellow what is defined as the exposure limits.
23 The actual exposure at ground level at the base of
24 the structure and at any distance from the base of
25 the structure would be less than 1 percent of the

1 exposure limits. I performed a similar calculation
2 for the nearest residential property on the second
3 floor and that exposure will remain well below 1
4 percent of the exposure limits at that location as
5 well.

6 Q. Did you do a specific calculation for
7 that?

8 A. Yes.

9 Q. The 137-1/2-foot antenna level you
10 analyzed, that's the antenna center line; is that
11 correct?

12 A. Correct.

13 Q. Is that where the signal emits from?

14 A. Yes, that's the strongest signal.

15 Q. Okay.

16 MR. FERRARO: Mr. Chairman, I know the
17 Board heard this testimony on numerous occasions.
18 Are there questions of Mr. Handley with respect to
19 the calculations?

20 DR. EISENSTEIN: I have some
21 questions.

22 I don't see in here, at what distance
23 did you get your minimum?

24 MR. HANDLEY: Right at the base of the
25 tower is the minimum. It's the lowest point below.

1 DR. EISENSTEIN: Typically, the
2 minimum is several hundred feet out.

3 MR. HANDLEY: The further you go, the
4 lower it gets. So I do it at the base and I did it
5 at 1,000 feet and the exposure goes --

6 DR. EISENSTEIN: I'm sure this is
7 within the 1 percent. I'm not used to seeing it
8 this way. You have various distances from the tower
9 at 6 feet off the ground. You do a calculation
10 based upon the equations that are in OET65 and
11 there's some distance away from the tower at the
12 base at which, there's a minimum and it goes -- I'm
13 sorry. Maximum and then it goes down from there.
14 The further away you get, it goes down. It's much
15 lower under the tower because of the radiation
16 pattern coming off the tower. What I don't have
17 here is the maximum. You are saying you have a
18 maximum which is under 1 percent. I don't have the
19 distance from the tower where that maximum occurs.

20 MR. HANDLEY: What I was saying, the
21 further out you go, the lower the exposure gets.

22 DR. EISENSTEIN: I'm telling you,
23 that's not true. Close to this tower, it's low.
24 You go a little further out, it gets higher and then
25 further out, it gets lower. I want to know where

1 that maximum is at a distance from the tower.
2 That's the point where you should state where the 1
3 percent is.

4 MR. HANDLEY: I would have to go back
5 and do that calculation for you.

6 DR. EISENSTEIN: I would like to see
7 the report done in what I consider to be standard
8 form. This is not standard form. He's stating the
9 1 percent but I don't see any graph as to where that
10 occurs with relation to the tower.

11 MR. FERRARO: Are you satisfied the
12 facility will operate within FCC standards? You are
13 just requesting where the maximum level is, how many
14 feet from the tower it is.

15 DR. EISENSTEIN: Correct. The typical
16 way the calculation is done is looking at it at a
17 distance 6 feet off the ground for a 6-foot person
18 standing out there and you look the distance from
19 the tower and you get plots of what the field
20 strength is at the various points. There's some
21 point where it's a maximum and then it tails off
22 from there. So it's minimum under the tower and it
23 goes up to a maximum and tails off from there. I
24 want to know that distance out and I assume you are
25 correct with the 1 percent. That's what I would

1 like to see.

2 MR. HANDLEY: Okay.

3 DR. EISENSTEIN: It seems like a net
4 opinion rather than a calculation. It should be
5 done from the distance of the base of the tower.

6 MR. HANDLEY: Okay.

7 MR. FERRARO: We can get that
8 information. No problem.

9 DR. EISENSTEIN: Let me make sure the
10 record is clear. All of your equipment is FCC-
11 compliant equipment?

12 MR. HANDLEY: Always. Correct.

13 DR. EISENSTEIN: Since the tower is
14 more than 10 meters off the ground, normally, you
15 would not have to do this calculation, correct?

16 MR. HANDLEY: Correct. Categorically
17 excluded.

18 DR. EISENSTEIN: So it's not an issue
19 of the safety. It's an issue of whether or not the
20 record is complete. So I don't think he has to come
21 back again. I think he can submit it as a
22 supplement. If the Board agrees, I'll send a note
23 to the Board that says I received it and it's okay.

24 CHAIRMAN VIVONA: So everyone is on
25 the same page because it's all FCC compliant, it's

1 all still below 1 percent at any distance but at one
2 point, there is a maximum but it's still 1 percent
3 as opposed to...

4 DR. EISENSTEIN: That's the part I
5 don't know because that's not in the report. He's
6 saying it's 1 percent. I don't see the numbers that
7 show me -- I'm used to seeing it go up, up, up, up
8 from the tower and hits a maximum down, down, down.
9 So I look at that maximum point and say "It's less
10 than 1 percent at that maximum. That's fine." I
11 don't know where that maximum occurs. I don't know
12 where it occurs with respect to the tower.

13 CHAIRMAN VIVONA: Is there a rule of
14 thumb for that height, where it would be?

15 DR. EISENSTEIN: It's better than a
16 rule of thumb. The FCC put out this bulletin OET65
17 and you put the formula in and do the calculation.
18 It's better than that. It refers to OET65 but he
19 didn't do the calculation as far as distance is
20 concerned. It's not in this report but I'm sure
21 they did it somewhere. The report does say that Mr.
22 Dugan did the calculations.

23 MR. HANDLEY: Right. He does it after
24 I do it.

25 MR. FERRARO: We have no other direct

1 questions of Mr. Handley. Are there questions from
2 the Board?

3 CHAIRMAN VIVONA: Well, I'm sure our
4 residents are concerned about any potential hazards
5 and your testimony is that we are well below what is
6 allowed and what is allowed is supposedly a safe
7 limit and we are at 1 percent depending on the
8 calculations of what is allowed.

9 MR. HANDLEY: Correct.

10 MR. FERRARO: We are well below 1
11 percent.

12 CHAIRMAN VIVONA: Okay. We have had
13 other testimony from other witnesses in your same
14 field that say you get more radiation -- not
15 radiation. More...

16 DR. EISENSTEIN: It is radiation.

17 CHAIRMAN VIVONA: From holding a cell
18 phone to your head than what comes from the towers.

19 MR. HANDLEY: And the closer you are
20 to the tower, the less radiation you get from the
21 phone. So the closer to a tower, the less radiation
22 you will get from the phone.

23 CHAIRMAN VIVONA: Okay. I don't have
24 anything else at this moment.

25 Anybody else on the Board?

1 (No response)

2 CHAIRMAN VIVONA: We will open up this
3 testimony to the public. Just state your name and
4 address and ask your question directly to Mr.
5 Handley.

6 (No response)

7 CHAIRMAN VIVONA: None heard.

8 Okay. Your next witness?

9 MR. FERRARO: That brings us to our
10 professional engineer, Chris Cirrotti.

11 C H R I S T O P H E R C I R R O T T I, 600
12 Parsippany Road, Suite 301, Parsippany, New Jersey
13 07054, first having been duly sworn, testified as
14 follows:

15 MR. CIRROTTI: My name is Chris
16 Cirrotti. I'm with Dewberry Engineers in Parsippany,
17 New Jersey. My background is that I have a
18 bachelor's degree from Rutgers University in civil
19 engineering. I have been practicing for 25 years.
20 I'm a licensed professional engineer in the State of
21 New Jersey. I manage the Parsippany office that
22 does wireless site design. I have been doing this
23 work, probably, for the last 15 or so years of my
24 career. I have appeared here, in the township,
25 before the Board of Adjustment on previous

1 applications and been accepted as an expert in civil
2 design and engineering throughout the State of New
3 Jersey.

4 CHAIRMAN VIVONA: Thank you.

5 DIRECT EXAMINATION BY MR. FERRARO:

6 Q. Mr. Cirrotti, the plans, were they
7 prepared by you or under your supervision?

8 A. They were prepared under my
9 supervision by a professional engineer on my staff.

10 Q. Have you had the opportunity to visit
11 the subject site?

12 A. I have, yes.

13 Q. Do you have exhibits to show?

14 A. I do.

15 (Exhibits A-27, letter dated March 31,
16 2016, was marked for Identification.)

17 Q. If you can, refer to the sheet numbers
18 as you move through the plans.

19 MR. SHAW: If they are part of the
20 application, don't mark them. They are part of the
21 set.

22 Q. Can you describe the existing site
23 conditions?

24 A. I'm referring to our site plan, Sheet
25 Z1 in the set. This is labeled "Site Plan" and it

1 is just, really, an overall plan for orientation
2 purposes of the property in question and the
3 proposed facility.

4 For orientation purposes, on the
5 right-hand side of the plan is Pine Street. Along
6 the bottom of the plan is the easterly right of way
7 line of PSE&G and the top would be the westerly
8 right of way line.

9 Located about midway along the right
10 of way is the proposed driveway, a 12-foot-wide
11 gravel access driveway. That is proposed. That
12 would come in from Pine Street and there's a
13 turnaround area for the vehicle to park, turn around
14 and exit. That would be a stabilized gravel
15 driveway.

16 The compound area is a fenced
17 enclosure area. I have a detailed plan that I'll
18 get to in a minute but, essentially, the compound is
19 consisting of the fenced area and the gravel surface
20 around the existing PSE&G tower. The compound is
21 located a distance from the easterly property line.
22 It is a 44-foot dimension to the common line with
23 the residential property adjacent to the east. The
24 compound is set back 133.82 feet from Pine Street
25 and then set back 108.4 feet from the rear property

1 line, in this case, at the PSE&G right of way
2 continuing south.

3 I would like to move to Sheet Z3.

4 Q. What's the width on the right of way
5 there?

6 A. The PSE&G right of way is 225 feet.

7 Q. And there's two towers on this
8 property?

9 A. There is. In this location, on the
10 easterly side of the right of way, there's the
11 existing monopole that's been recently placed and
12 then on the westerly side of the right of way, is
13 the lattice tower line that exists on that side as
14 well. It's not necessarily visible in this plan but
15 there's the Transco gas pipelines on the westerly
16 side of the PSE&G right of way.

17 Q. Are you also showing the setback
18 envelope on this plan as required by the R3 zone?

19 A. Yes. We have a 50-foot setback
20 requirement that we are meeting. We have a 15-foot
21 side yard setback on each side. We are meeting that
22 as well and a 50-foot rear setback that we are
23 meeting also.

24 I'll flip to Z3 and go over some of
25 the particulars of the compound area. Again,

1 pointing to Sheet Z3, first of all, we have, sort
2 of, a more detailed compound layout plan coming in
3 from Pine Street here at the right-hand side of the
4 plan. This is close in view of that 12-foot gravel
5 driveway. The turnaround area, that's 12 by 20, a
6 parking area for the service technician's vehicle.
7 They will typically visit the site once a month;
8 that's the typical frequency.

9 The compound area is now a fenced
10 enclosure that is 20 feet by 40 feet. That
11 fenced-in enclosure has now been revised to
12 encompass the equipment, the Verizon cabinets and
13 equipment and telephone and power service but also
14 to encompass the monopole itself. So the PSE&G
15 tower base will be enclosed within that compound.
16 We provided two gates, an access gate on the west
17 elevation of the fence at the south side for
18 Verizon's purposes close in proximity to their
19 equipment and another in close proximity to the
20 PSE&G tower. Within the compound, it's a gravel
21 surface and our telco cabinet, the point of
22 demarcation between the landlines and the
23 telecommunication facility itself, there would be a
24 meter at the southerly side of the compound. 400-
25 amp power service would be located there.

1 In the center of the compound, we have
2 an 11-foot-by-15-foot concrete pad and as Mr.
3 Pierson was describing, that's where all of the
4 radio equipment, the radio heads, all the various
5 boxes and so forth. The radio cabinet is located
6 there. We have battery backup and some equipment
7 located on the east side of the pad area. That pad
8 will be covered by, basically, a steel structure.
9 That is to protect the equipment and the service
10 technician from the elements, from weather, rain,
11 snow, and that is, basically, covering the footprint
12 of that concrete pad in the center of the compound.

13 CHAIRMAN VIVONA: That's just a roof,
14 no walls?

15 MR. CIRROTTI: A roof with columns,
16 yes.

17 A. On the north side of the pad, we have
18 a cable bridge. That cable bridge will now be
19 located at 6 and a half feet above grade level.
20 Previously, it was higher than that. It will now be
21 below the height of the fence. The fence that will
22 encompass the compound will be at the 7-foot
23 elevation.

24 You can see, on the elevation on the
25 right-hand side, we depicted all the equipment, the

1 cabinets, the battery backup, the radio heads, the
2 meter assembly. All of that will be out of view.
3 It's illustrated in that elevation but it's behind
4 the fence below the elevation of the top of the
5 fence. It would be screened from view. The only
6 structure visible from the compound would be the
7 canopy, which needs to be at a 9-foot maximum height
8 so we have some slope for drainage and we have
9 clearance, the headroom clearance that's required by
10 the building code by OSHA. There are two GPS
11 antennas located on that canopy. They are just for
12 locating site purposes. They are mounted on top of
13 that steel canopy. They are not related to
14 communication of the facility.

15 Q. What's the size of those?

16 A. They are fairly small. They are
17 probably 6 inches in height and are typically
18 mounted on the two corners. They would be on the
19 south corners of the canopy.

20 So the cable bridge -- I'll get back
21 to the cables now. The capable bridge, essentially,
22 protects the cables running over to the monopole.
23 They are run up in two locations. I'll call it the
24 northeast quadrant of the tower. They will be
25 attached to brackets that be will welded at 4-foot

1 intervals to the tower, as indicated by the notation
2 here, reaching the top of the existing tower, again,
3 which is at 132 and a half feet today. We would add
4 an 8-foot extension and platform assembly above the
5 static lines that are just at the top of the PSE&G
6 tower today.

7 At that location, what would be
8 installed is the platform depicted here, 12 and a
9 half feet square. On that platform would be mounted
10 four antennas in three sectors, generally, north,
11 west and east, with a little bit of angling to that
12 orientation on those three sides of that four-sided
13 platform. That's located, obviously, at the top of
14 the pole bringing the total height to the top of
15 those antennas capped off at 140 and a half feet
16 above ground level.

17 Q. There's 24 cables running up the pole?

18 A. Correct. 12 antennas with two cables
19 each and they would be run up on one of the two
20 stand-off brackets.

21 CHAIRMAN VIVONA: The antennas are
22 only on three sides?

23 MR. CIRROTTI: They will be on three
24 sides of the platform. You can see the orientation
25 is, again, at various angles. That's determined by

1 the radio frequency needs for the site but,
2 basically, that south side would not have antennas
3 on it.

4 Q. Is the platform required for
5 maintenance purposes on PSE&G poles?

6 A. Yes. So a technician can have
7 something to stand on while working on those
8 antennas.

9 Q. Without a platform, would PSE&G have to
10 power down the pole?

11 A. They would have to shut the whole line
12 down.

13 Q. You are showing some landscaping on the
14 outside of the compound?

15 A. Yes. We have proposed some
16 landscaping. Basically, it's minimal but we propose
17 some 3-foot boxwoods along the easterly and
18 northerly side of the compound, the sides facing
19 Pine Street and the closest residents. I should
20 mention, this is one of the last plans where
21 landscaping will be allowed by PSE&G.
22 Their policy is no more landscaping so this
23 application is a rarity at this point with
24 landscaping permitted.

25 CHAIRMAN VIVONA: Why don't you have

1 landscaping on the other side?

2 MR. CIRROTTI: We are trying to keep
3 it compact to the gravel driveway. We are trying to
4 minimize the area of disturbance. We just have
5 aligned it -- we probably have a limitation as to
6 how far out that compound can extend. PSE&G has a
7 -- the compound is located where it is in relation
8 to the pole because of their requirements to stay
9 clear of their access way and this access way is
10 probably better seen on Z1. Really, it's the center
11 area between the poles where PSE&G just wants to not
12 have anything in their way.

13 Q. Is the landscaping we are showing,
14 basically, the landscaping that PSE&G will allow at
15 this site?

16 A. This is it. You know, from my
17 experience on other applications, we try to make any
18 tweaks to it; at this point, they will not accept
19 it.

20 Q. Your understanding of their policy,
21 moving forward, would you be allowed to put
22 landscaping at another facility?

23 A. Not anymore. They frowned on it for
24 years. They made exceptions and they are digging in
25 now and not making exceptions on landscaping

1 anywhere.

2 Q. As you mentioned, we did visit the
3 issue of trying to move the compound further into
4 the center of the right of way?

5 A. We did and this is -- again, the
6 compound is kind of centered on the line, the pole,
7 the existing PSE&G pole and the overhead lines, and
8 that's the location. It's moved as far west as we
9 could move it.

10 Q. Flip to the last drawing. On Z3, could
11 you speak to the thinking behind fencing in the base
12 of the tower itself?

13 A. Probably, the best thing to really
14 look at, again, is the elevation view. When we
15 previously put forward the plan in January and there
16 was a site meeting and some discussion about the ice
17 bridge, about visibility, and so, by really lowering
18 that cable bridge to a height that's now below the
19 fence line and by extending that fence line around
20 the PSE&G tower, we were able to conceal it from
21 view, that ice bridge. That's really the primary
22 reason why we extended that fenced-in area and
23 elongated it so there's some minimal clearance of 8
24 and a half on one side and 4 foot, 8 on the other.
25 It's a minimal offset here so that PSE&G can access

1 around that pole. We have been able to conceal
2 everything other than that top projecting part of
3 the canopy. That will be at that 9-foot elevation.
4 Our proposal, again, is a composite fence, which I
5 think was the type desired and required by the other
6 applications. We would be proposing the same.

7 Q. There was some comments from the
8 Board's engineer with respect to the lighting that's
9 being proposed. Could you touch on that?

10 A. The lighting proposed, there are some
11 service lights, one in each corner of the canopy
12 structure. They are basically motion sensor lights.
13 They would not be on, at any time, unless it was
14 dark and a service technician was out and about,
15 moving, doing work within that area. That's a --

16 I believe what the question was with
17 regard to wattage, can they be screened or
18 concealed? We would tuck them up -- you have a
19 steel frame around the perimeter of the top of the
20 structure. What we would do is to locate those
21 lights up into that structure and then this way,
22 from a horizontal plane of that site, that would be
23 concealed. They are 300 watts. Each pair of lights
24 is 250 -- 150-watt bulbs so 300 watts in each corner
25 and that's really necessary for the purpose of a

1 technician being out there in the middle of the
2 night needing to service and needing to see so they
3 can do their work. It's only going to be on when
4 there's a problem and a service technician has to
5 come out in the darkness. So it would be a rare
6 occasion.

7 CHAIRMAN VIVONA: Would you say, 99
8 percent of the time or higher, it would be the once-
9 a-month visit during the day, no lights?

10 MR. CIRROTTI: Yes, they would not
11 visit the site in the evening unless there's
12 troubleshooting or a problem or things of that
13 nature. It will happen but it will be very
14 infrequent.

15 CHAIRMAN VIVONA: People walking their
16 dogs or a deer is not going to trip the motion
17 sensor lights?

18 MR. CIRROTTI: No. They would be able
19 to control the direction. You have to be within the
20 canopy structure for those lights to go on.

21 Q. This is not a motion detector light;
22 it's a timed light, correct?

23 A. It is both. It's a motion detector
24 that turns it on and it's a 10-minute time frame.
25 If no one is moving after 10 minutes, it's out. So

1 in 10 minutes, the lights are out.

2 CHAIRMAN VIVONA: Tell me about the
3 canopy.

4 MR. CIRROTTI: The canopy, I don't
5 have an exhibit other than what's depicted here on
6 Z3.

7 MR. FERRARO: We have photo
8 simulations that will depict it.

9 CHAIRMAN VIVONA: Okay.

10 MR. CIRROTTI: Essentially, it's a
11 steel structure, basically, a corrugated metal,
12 steel roof with a slight shed pitch to it, again,
13 fairly simple. Color is something we can work with.
14 It's really just to protect the equipment.

15 CHAIRMAN VIVONA: I don't want a great
16 big galvanized steel roof that would reflect. If
17 you do something like this, I would like it to be as
18 neutral as possible.

19 MR. FERRARO: The last structure we
20 proposed was a 12-foot equipment shelter which was a
21 building?

22 MR. CIRROTTI: Yes. In the previous
23 version, we had a shelter that stuck up. This is
24 now only a foot above that fence and less
25 noticeable.

1 CHAIRMAN VIVONA: I like the
2 streamlined design a lot better.

3 MR. CIRROTTI: It's just air cooled,
4 if you will, by ambient convection. There will be
5 no noise associated with it. There was a report, I
6 believe, from your noise consultant reviewing it
7 and, essentially, was satisfied that there's no
8 concern with noise from the facility any longer now
9 that the shelter and the air conditioner units have
10 been removed.

11 MR. SHAW: The Board just approved,
12 this evening, a facility for T-Mobile which are open
13 cabinets but don't have roofing on it so there's
14 nothing at all visible.

15 MR. CIRROTTI: Verizon requires that
16 we do have a roof based upon the type of equipment
17 that is what they require. It has to be protected
18 from the elements as opposed to other providers that
19 do not have canopies. It's Verizon's requirement to
20 have that.

21 MR. SHAW: We will get that depiction?

22 MR. FERRARO: We will show that.

23 I would like to mark as A-27 the noise
24 letter that Mr. Cirrotti referred to dated March 31,
25 2016.

1 MR. SHAW: We have that as A-20.

2 FURTHER DIRECT EXAMINATION BY MR. FERRARO:

3 Q. It's a letter indicating that there's
4 no generator and it will operate under noise
5 standards?

6 A. Right.

7 Q. You also prepared a drainage report.
8 This report is entitled "Drainage Report for New
9 York SMSA Limited Partnership" dated September 2015;
10 is that correct?

11 A. Yes.

12 Q. This report has been signed and sealed
13 by Alex S. Norris, an engineer with your firm?

14 A. Yes.

15 Q. He is also under your supervision?

16 A. He is no longer with us but in
17 September, he was when this was prepared, yes.

18 Q. Do you envision any drainage concerns
19 or impacts associated with this installation?

20 A. I don't. The additional impervious
21 coverage by this application is around the range of
22 165 square feet, very minimal. Any of the gravel
23 surfaces allow percolation and so forth so the
24 impacts are de minimis, in my opinion. I believe
25 the report identifies that as well.

1 I think there was a comment about the
2 canopy. We would comply with that, that the
3 drainage from the canopy would be in the westerly
4 direction so it flows onto the gravel compound and
5 has its opportunity to percolate, find its way into
6 the ground but moving in a westerly direction.

7 (Exhibit A-28, drainage report, was marked
8 for Identification.)

9 Q. This facility would require no
10 permanent employees?

11 A. No.

12 Q. Do you suspect that it would cause any
13 noise, dust, glare, noise, vibration or any other
14 nuisance?

15 A. No.

16 Q. Are there any issues associated with
17 this site that would be a concern to you?

18 A. No. I think it's pretty
19 straightforward and, certainly, we simplified and
20 addressed some of the concerns that the Board has
21 expressed to date.

22 Q. Do you feel there will be any
23 substantial impact on the traffic generated to the
24 site?

25 A. Again, a visit by a technician on the

1 frequency of once a month is very minimal.

2 Q. Will this facility require any
3 municipal services?

4 A. No. It would not.

5 Q. What are the utilities that are
6 required?

7 A. Electrical, that would be connected to
8 the utility pole on Pine Street. That's where we
9 get that service for both electrical and tied back
10 to the landlines for the communication.

11 Q. Would that be brought underground?

12 A. Yes. That's depicted on Z1 and that
13 would be right. It's right along the easterly side
14 of the driveway. An existing utility pole is
15 located on the easterly side of the gravel drive.
16 That's where we would tie in.

17 Q. Would this facility meet all applicable
18 building codes if approved?

19 A. Yes.

20 Q. In your professional opinion, do you
21 feel that this particular property can accommodate
22 this wireless telecommunications use?

23 A. I believe it will.

24 MR. FERRARO: Mr. Chairman, are there
25 questions from the Board? We tried to cover

1 everything in the report.

2 CHAIRMAN VIVONA: There are no cooling
3 fans on these boxes?

4 MR. CIRROTTI: That is correct.

5 CHAIRMAN VIVONA: There's no humming,
6 no buzzing, no fans? There's no air conditioner;
7 it's totally silent?

8 MR. CIRROTTI: No noise.

9 CHAIRMAN VIVONA: The difference
10 between this and T-Mobile, they had cooling fans but
11 didn't require the canopy. This one requires a
12 canopy but makes absolutely no noise. Also, with
13 T-Mobile, we requested they use -- the coaxial cable
14 comes in various colors. We requested one that
15 comes in a gray so it's less conspicuous on the pole
16 and also, the antennas, I believe, were also a
17 grayish color. So it's all sort of, like, blending
18 in.

19 MR. CIRROTTI: The cable can be
20 acquired in the gray color. The Verizon antennas,
21 I'm not sure.

22 MR. FERRARO: They are usually a dull,
23 off-white color. The antennas, they can be painted
24 gray.

25 CHAIRMAN VIVONA: I don't want to see

1 a big hairdo on top of the pole. Whatever doesn't
2 draw your eye up would be the best.

3 The fence is a composite, like a Trex
4 or something like that?

5 MR. CIRROTTI: Exactly.

6 CHAIRMAN VIVONA: It's maintenance-
7 free? Did we discuss a color on it?

8 MR. CIRROTTI: We indicated a light
9 brown color. There may be a note, cedar brown
10 color. I think our intent was to match the
11 condition from other resolutions. That is what we
12 would be looking to provide. This way, you have
13 some consistency. I think you mentioned that at the
14 hearing in January.

15 MR. BORSINGER: The canopy goes a foot
16 above the fence. Is there any restriction in making
17 the fence so it covers the whole thing?

18 MR. FERRARO: It's 2 feet above.

19 MR. CIRROTTI: Sorry. I'm not reading
20 the plan. 7-foot fence, 9 foot on the canopy, my
21 mistake.

22 MR. BORSINGER: Is there any way to
23 lower the footing or raise the fence so you don't
24 see that?

25 MR. CIRROTTI: A 9-foot composite

1 fence is going to start getting bulky.

2 MR. BORSINGER: Is there a way to
3 lower the base?

4 MR. CIRROTTI: That could compromise
5 the equipment. You want a little bit of a lip up
6 from the ground in case of accumulation of snow,
7 those kinds of things. It's not wise to have that
8 at a lower elevation.

9 CHAIRMAN VIVONA: It has no walls so
10 it's only like a 6-inch?

11 MR. CIRROTTI: You are seeing the
12 columns and just the pitch of the roof.

13 MR. BORSINGER: I would prefer a
14 higher fence.

15 MR. CIRROTTI: The simulations will
16 help with the visualization.

17 MR. WESTON: Was the fence extended
18 around the pole to conceal the coaxial?

19 MR. CIRROTTI: Right. That cable
20 bridge has been dropped below the elevation of the
21 fence and hidden behind the fence.

22 MR. WESTON: The cable bridge, to me,
23 is fairly small. If we increase the size of the
24 fence by 30 percent or so, it seems like a tradeoff
25 that I'm not sure if I would be making. That's

1 question one.

2 Two is: You previously testified that
3 you couldn't move this entire facility to the center
4 because that would block PSE&G; yet the fence
5 encloses the tower which, on one side, gives you
6 4-foot, 8-inches and has PSE&G approved this?

7 MR. CIRROTTI: They approved the plan
8 as you see it today.

9 MR. FERRARO: We can't come before you
10 if they don't first approve the plan.

11 MR. WESTON: It seems unusual, yet you
12 completely enclose the base of the tower. If this
13 facility is fenced in, does PSE&G have keys so they
14 can access the tower from the base without
15 contacting you?

16 MR. FERRARO: Absolutely, yes.

17 MR. CIRROTTI: They are the landlord.
18 They always have access to these compounds.

19 MR. FERRARO: If we can answer the
20 first question, there may be something -- the first
21 hearing, they asked about putting the cable bridge
22 underground and I think you asked AT&T to do that.
23 We did make a request and what we found is that we
24 could not get the cable bridge underground the
25 entire length of the pole.

1 MR. CIRROTTI: It would have to come
2 up and go over. It would still have to come up away
3 from the pole out of the ground to go horizontal.

4 MR. FERRARO: Because of the
5 foundation of the pole?

6 MR. CIRROTTI: Correct.

7 MR. FERRARO: So you have this thing
8 sticking up out of the ground and going to the pole
9 at a 10-foot level 4 feet back from the pole?

10 MR. CIRROTTI: Right.

11 MR. FERRARO: We didn't think that was
12 something the Board would want to see. If you look
13 at AT&T's plans, they probably ran into the same
14 issue. They have an underground cable bridge but if
15 you look on the note, at 4 feet from the pole, it
16 comes out of the ground and into the pole. So there
17 would be a visible cable bridge structure.

18 CHAIRMAN VIVONA: Their original was
19 10 feet high.

20 MR. FERRARO: It would still go out 4
21 feet before the pole and go in.

22 CHAIRMAN VIVONA: But it's not this
23 great big ugly structure. I like the intention of
24 the fence hiding it. If you didn't have that thing
25 fenced in -- is the fencing allowing you to lower

1 the cable bridge or...

2 MR. FERRARO: Well, no. I guess one
3 is not related to the other, the cable bridge being
4 lowered, because -- to make sure it's obscured
5 behind the fence.

6 MR. NEWMAN: There's not a fence for
7 it to go over because it had to go over a 7-foot
8 fence before; now, it doesn't.

9 CHAIRMAN VIVONA: I thought it needed
10 a certain amount of clearance for people to walk
11 underneath it? So if there was no fence, that would
12 be exposed and people couldn't walk underneath it.
13 So the tradeoff is: You don't see it and the fence,
14 basically, fades into the landscaping. So
15 personally, I like the idea of fencing the whole
16 thing in so you don't see -- all you see is a fence
17 and a little metal structure.

18 MR. FERRARO: We have enlarged photo
19 simulations to show the Board and the public to give
20 you a better idea.

21 MR. WESTON: I understand the nature
22 of these hearings are subject to a variety of
23 federal laws and regulations as well as PSE&G, over
24 which we have limited to no control over as a Zoning
25 Board, and when we discuss or put a proposal up, it

1 varies from site to site. I'm not really
2 comfortable with the idea. Why is the canopy
3 required? I understand that Verizon requires it and
4 I understand the feds require us to go over things.
5 I would like to know, like, where I can draw a hard
6 line and go, "Well, I don't like that canopy."

7 MR. CIRROTTI: What I can tell you,
8 Verizon would either put a shelter around their
9 equipment or a shelter over it but they will not let
10 it be exposed to open air. That's the nature of
11 their specific equipment. I can't tell you the
12 particulars of the nuts and bolts of that equipment.
13 I can tell you why because it generally needs to be
14 protected.

15 MR. WESTON: Is there a detail on the
16 slope or -- this is drawn as a slab.

17 MR. CIRROTTI: Yeah, yeah. There's
18 structural details on the last page of the set.
19 It's on Sheet Z6. It's really a framing plan. The
20 intent is that we have a slope there from one side
21 to the other. It's essentially flat, just a little
22 pitch to it so we get the water to run off to the
23 one side.

24 MR. FERRARO: Generally, what's the
25 width of that canopy if you are looking at it from

1 the side?

2 MR. CIRROTTI: It depends on the sides
3 we are looking at. There's two sizes of framing
4 pieces there. There's two thicknesses of steel that
5 are involved, W10, a 10-inch beam along one side
6 along the 15-foot dimension, and there are 6-inch
7 deep L-sections in the 11-foot dimension. So
8 depending on which side you are looking at, you are
9 looking at a framed piece of 6 or 10 inches and the
10 roof covering the top of that.

11 MR. FERRARO: So you are looking at a
12 streamlined structure?

13 MR. CIRROTTI: 10 inches at its
14 thickest which are tubular 4-by-4 posts.

15 MR. FERRARO: We believe that the
16 photo sims will show it to be de minimis. They
17 don't send their technicians out there with an
18 umbrella. They don't want to have the cabinets open
19 in inclement weather.

20 MR. MICHAELS: You show the distance
21 between the tower and the north wall of the enclosed
22 structure at 8 feet. The other dimension on the
23 west side is 4 feet, 8 inches. Why can't that 8
24 feet be reduced to reduce the size of the total
25 enclosure? What determines that 8-foot dimension?

1 MR. CIRROTTI: These were worked
2 through with PSE&G for minimum clearances for their
3 tower. I tried to minimize it to the maximum extent
4 possible but the intent of our objective was to keep
5 this compound as compact as we could, to keep the
6 pad as close to the pole as we could, to keep the
7 fence as close to the pole as we could, and those
8 are the dimensions that they approved of. That's
9 the best that I can provide you an explanation.

10 MR. MICHAELS: So that's determined by
11 PSE&G?

12 MR. CIRROTTI: Yes.

13 MR. FERRARO: We would make it smaller
14 if we could?

15 MR. CIRROTTI: Absolutely. We tried
16 to make it as compact as we can. It doesn't do us
17 any good to have extra room around their pole. To
18 push the fence out further, it adds to the gravel
19 area and so forth.

20 MR. O'BRIEN: On Z6, you show 10 feet
21 above to the top of the steel.

22 MR. CIRROTTI: It should be 9.
23 There's a dimensional correction on the pad detail
24 as well. We didn't pick that up on the shelter.
25 That needs to be corrected as well.

1 MR. O'BRIEN: I have a question on the
2 lighting. Would two lights be sufficient? Why do
3 we need four?

4 MR. CIRROTTI: This is the typical
5 from Verizon.

6 MR. O'BRIEN: Can they be mounted
7 lower, below the fence height?

8 MR. CIRROTTI: We have debated the
9 best way and I thought the best way was to tuck them
10 up behind the beam in the corners.

11 MR. O'BRIEN: So you can't see the
12 light source and it will be focused down on the
13 compound?

14 MR. CIRROTTI: Correct.

15 MR. FERRARO: And you wouldn't be able
16 to see the lights themselves?

17 MR. CIRROTTI: Not unless you are up
18 against the fence looking. To answer the question,
19 if we were to lower them below the fence line, they
20 are going to get to a 6-foot elevation. That is not
21 where we want them. We want them up and aiming down
22 a little more. It was best to keep them tucked up
23 high in the canopy.

24 MR. HURRING: Motion sensor why? I
25 like the timer idea so if somebody forgets, it can

1 shut off. Can it be something they hit the button?
2 I feel like the motion sensor opens it up for, if a
3 bird goes in there, they are flying in -- I don't
4 know.

5 MR. CIRROTTI: I think we can look to
6 do something with just a timer. I think the concern
7 would be if a technician is there and they have 10
8 minutes, every 10 minutes, they have to go to turn
9 it back on. That's why we typically would do the
10 combination of the motion sensor, so it stays on and
11 they don't need to keep going over and turn the
12 light on. If they are in the middle of doing
13 something and it goes dark on them, it's not a good
14 situation. The combination that they are looking
15 for would be the motion sensor with a timer so they
16 do not need to remember to turn a switch off. It's
17 going to go dark when they are done. I think what
18 we proposed is the best way, not to say it's the
19 only way, but it's the best option, I think.

20 CHAIRMAN VIVONA: If it's like a
21 homeowner thing, there are sensitivity settings on
22 it so you can put it low so you don't get accidental
23 turn- ons.

24 MR. NEWMAN: I have a question about
25 the plans. Your previous plans had a generator on

1 them and we were told --

2 MR. FERRARO: It did not have a
3 generator.

4 MR. CIRROTTI: PSE&G doesn't allow
5 generators. They had air conditioner condensers.

6 MR. NEWMAN: They will allow that?

7 MR. FERRARO: Yes.

8 MR. CIRROTTI: They don't want the
9 fuel supply in their right of way. Sparks and fuel
10 are a bad combination.

11 MR. NEWMAN: I am surprised that they
12 approved plans that encompass their pole within a
13 fence.

14 MR. SHAW: Is there any grounding
15 underneath all of this?

16 MR. CIRROTTI: Yes. For the pole and
17 there would be grounding with the canopy and with
18 the fencing.

19 MR. SHAW: That grounding would be
20 inside the fencing?

21 MR. CIRROTTI: Underground. It's in
22 the ground and it would be connected to all of the
23 conductive elements, the fence, the canopy and so
24 forth all underground. It would be part of the
25 construction plans.

1 MR. SHAW: Getting back to the other
2 application we had, they were required to have stone
3 on top of it rather than the dirt and their proposal
4 was to have all of this on the outside and they were
5 able to revise the drawings design so all the
6 grounding would be inside the fence.

7 MR. CIRROTTI: We would not propose to
8 put stone outside. We would put it on the inside
9 and the grounding loop would be internal as well.
10 Here, we would not be extending our stone surfacing
11 beyond the fence.

12 CHAIRMAN VIVONA: I know a lot of the
13 residents are concerned about the constant flow of
14 vehicles and stuff and I know you have said that,
15 once this is up and operational, it would be once-
16 a-month 10-minute, 30-minute check and it's done.
17 The only time someone would show up is if there was
18 an emergency. How long would you estimate the
19 construction of this would take that it would affect
20 residents in that area with trucks and construction
21 equipment?

22 MR. CIRROTTI: Well, the timing of it
23 is going to be with a line shutdown and that's -- so
24 there's going to be a very tight window when the
25 actual work up on the tower can be done and so I

1 don't know if I can give an exact time frame but
2 they are going to be working feverishly to have the
3 cable and the welding of the bracket and the antenna
4 on the tower. That's the hard part. The work on
5 the ground would be probably done within a four-to-
6 six-week time frame. Fencing, gravel, concrete,
7 it's not complicated. A little bit of underground
8 utility work. You know, probably, I would say, if I
9 had to guess, maybe an eight-week time frame, you
10 could probably accomplish all of it.

11 CHAIRMAN VIVONA: Since this is 137
12 feet off of Pine Street, there's no reason for
13 trucks to be parked on Pine Street. It would be
14 near the pole so it's not in any of the residents'
15 way?

16 MR. CIRROTTI: During the
17 construction, absolutely.

18 CHAIRMAN VIVONA: No problem with fire
19 trucks or emergency vehicles?

20 MR. CIRROTTI: Right.

21 CHAIRMAN VIVONA: Okay. I have
22 nothing else.

23 Anybody else?

24 MR. O'BRIEN: Soil erosion, you will
25 handle that and the tracking pad and all that?

1 MR. CIRROTTI: As you noted, the
2 controls that you mentioned, we will prepare a plan
3 and make it part of the set.

4 MR. O'BRIEN: Okay.

5 CHAIRMAN VIVONA: Anyone else on the
6 Board have anything?

7 (No response)

8 CHAIRMAN VIVONA: I'll open it up to
9 the public.

10 MS. HERR: How would snow accumulate
11 if there's a canopy? Why can't you lower the
12 structure? The canopy is there so there shouldn't
13 be any elements or accumulating...

14 MR. CIRROTTI: Any snow falling on the
15 canopy would accumulate. If we were to depress the
16 slab that the equipment is sitting on, lower that
17 into the ground, that's not an ideal scenario
18 because we are going to create a bathtub area on the
19 stone surrounding that where you could have snow
20 accumulating and being higher and being a problem
21 for the equipment. So that's what I'm talking
22 about.

23 MS. HERR: You can't dig it deeper and
24 put an area around it?

25 MR. CIRROTTI: I can't create a

1 bathtub here. This is electrical equipment. It
2 needs to be typically a step up from the prevailing
3 ground. That's common practice. Probably, code
4 requires that.

5 MS. HERR: Probably or does?

6 MR. CIRROTTI: I can't speak to the
7 building code requirement. I would suspect it's
8 typically a housekeeping pad of two inches, what you
9 see in any town.

10 MS. HERR: You mentioned that this
11 roof is metal and the sound from the rain panging
12 off a metal roof would be a little louder than any
13 other kind of structure; is that correct?

14 MR. CIRROTTI: It's a metal roof.
15 It's not an asphalt shingle.

16 MS. HERR: So you would hear a lot of
17 noise from the metal. And there's clarification
18 that there's no noise but there was no definition of
19 what those decibels would be in terms of the noise.
20 So there's a difference between noisy and the
21 absence of sound. So what is the decibels that it
22 will be?

23 MR. CIRROTTI: There's no moving parts
24 or fans. There's electrical current and that's it.

25 MS. HERR: So there's no decibels that

1 are impacting the sound that is coming out?

2 MR. CIRROTTI: What I can testify to
3 is: There's no appreciable noise that will come
4 from this facility. I can't give you a specific
5 level. I can tell you it will be, certainly, well
6 under the limits that are required for this facility
7 to be compliant with the code.

8 MS. HERR: There would still be noise
9 coming from the metal roof pinging.

10 Are you suggesting this is a
11 residential property?

12 MR. CIRROTTI: It's in a residential
13 zone.

14 MS. HERR: Because the setback for a
15 residential property is 15 feet. If it's a
16 professional institution, the side yard setback is
17 50 feet. So the setback per house is 15 feet. This
18 is not a house and for a professional or
19 institutional property, it's 50 feet.

20 MR. FERRARO: This is the R3 zone so
21 the only zone requirements that apply would be --
22 well, technically, it's a use variance so you could
23 make the argument of whether the bulk requirement
24 even applies.

25 MR. SHAW: They are subsumed but the

1 standards are the standards of the zone the property
2 is in.

3 MS. HERR: So even though this isn't a
4 residential, you are saying that the Board is saying
5 it's less stringent on a professional institution
6 that has a 50-yard setback than something like that
7 that is 44 feet from the property and 10 feet within
8 the radius of the compound, a residence. Okay.

9 MR. FERRARO: The equipment compound
10 is 44 feet from the closest property line, correct.

11 MR. CIRROTTI: Correct. That is to
12 the fence line. The equipment would be another,
13 approximately, 6 feet in from that fence about 50
14 feet.

15 MR. NISSEN: Jim Nissen, 39 Pine
16 Street.

17 Is the gravel coming out to the
18 southern perimeter of Pine Street?

19 MR. CIRROTTI: Gravel right out to the
20 edge of Pine Street. There would not be a concrete
21 apron.

22 MR. NISSEN: In general, for the
23 gravel, is that just being dumped on the ground or
24 several layers compacted in?

25 MR. CIRROTTI: It's compacted and a

1 course of 57 stone and then a clean stone surface.
2 There's, I believe, a detail on your Sheet Z4.
3 There's a weed barrier and compacted subgrade and 4
4 inches of Number 57 stone and then a 2-inch --
5 there's an engineered section to that gravel.

6 MR. NISSEN: As it comes out to the
7 road, I think, over time, there may be some
8 maintenance on there with snowplows and gravel
9 coming out to Pine Street. Cars have a tendency to
10 park in there and pull in that section. It's kind
11 of compacted dirt. Just a point of notation, I
12 could see there needing to be some maintenance on
13 the gravel all of the time as it comes out to Pine
14 Street.

15 MR. CIRROTTI: I think that is typical
16 for any gravel driveway.

17 MR. FERRARO: Verizon would be
18 responsible for maintaining that driveway.

19 MR. NISSEN: That gravel?

20 MR. FERRARO: Right.

21 MISS HERR: Ellie Herr, 53 Pine
22 Street.

23 I have two questions. How big is the
24 fence and how long is the road?

25 MR. CIRROTTI: How tall is the fence?

1 MISS HERR: Yeah.

2 MR. CIRROTTI: 7 feet tall and the
3 access road, I don't have a specific dimension. I
4 can estimate it's about 140 feet to here. I would
5 estimate it's about 200 feet.

6 CHAIRMAN VIVONA: I believe you
7 testified it's 183 feet with the turnaround. I
8 think that sounds familiar.

9 MR. CIRROTTI: That's probably in that
10 range, 180- to 200-foot range. I could scale it for
11 an exact number.

12 CHAIRMAN VIVONA: It's 12 feet wide?

13 MR. CIRROTTI: Correct. It's 225 feet
14 from the curb line to the far end in.

15 CHAIRMAN VIVONA: The setback for the
16 fence was 187. I'm way off. Okay.

17 MR. CIRROTTI: 180 plus 50, about 230
18 to the curb.

19 CHAIRMAN VIVONA: I think, going back
20 to the setback question, it is 50 feet to the
21 foundation, which is what the setback is measured
22 by. You didn't measure side yard setbacks by the
23 fence. So technically, that does need a side yard
24 setback variance because you measure to the
25 foundation. You don't measure from the fence --

1 your fence on your own yard to the foundation. You
2 measure to the property line.

3 MS. HERR: From that property line,
4 our property line is 40 feet.

5 CHAIRMAN VIVONA: From the fence, it's
6 50 feet to the foundation of the structure;
7 otherwise, they would need a variance for that.

8 MR. SHAW: The concrete equipment pad
9 is 15 feet by 11 feet or 20 feet by 10 feet?

10 MR. CIRROTTI: 15 by 11.

11 CHAIRMAN VIVONA: Anybody else in the
12 public have anything they'd like to ask?

13 (No response)

14 CHAIRMAN VIVONA: Okay.

15 MR. FERRARO: Mr. Chairman, did you
16 want to take a break or do you want to keep going?

17 CHAIRMAN VIVONA: You can go.

18 MR. FERRARO: Our next witness is our
19 professional planner, David Karlebach.

20 D A V I D K A R L E B A C H, first having been
21 duly sworn, testified as follows:

22 MR. KARLEBACH: David Karlebach, I'm a
23 licensed professional planner in the State of New
24 Jersey. I have been for 22 years. I have a
25 master's degree in city and regional planning from

1 Rutgers University. I have qualified and testified
2 before Planning Boards of Adjustment throughout the
3 state including this Board.

4 CHAIRMAN VIVONA: Okay.

5 DIRECT EXAMINATION BY MR. FERRARO:

6 Q. What did you review in preparation for
7 your testimony?

8 A. All of the application materials
9 including the site plan drawings. I have visited
10 the site and I photographed the site and prepared
11 computer simulations of what this facility would
12 look like if approved and constructed and I looked
13 at the zoning ordinance and Master Plan.

14 Q. Have you familiarized yourself with the
15 variance relief requested in this application?

16 A. Yes.

17 This property is in the R3 zone. It's
18 residential and these facilities are not permitted
19 at this location. We heard extensive testimony as
20 to why other collocation facilities or structures
21 were not available to this applicant for various
22 reasons and testimony regarding the availability of
23 the municipal properties and why they were not
24 feasible and that brought us to this particular
25 location so a use variance is required, a height

1 variance is required.

2 35 feet is the maximum permitted height in the zone.

3 The existing tower is 132 feet in height and what's

4 proposed is a height of 140.5 feet. So that

5 summarizes the variances.

6 Q. We just have one more bulk variance for

7 the fence height; is that correct?

8 A. The fence height is a 7-foot height so

9 it does require a variance as well.

10 Q. Where 6 feet is permitted?

11 A. Yes.

12 I want to go to the board quickly.

13 There is an exhibit that I prepared. It's actually

14 an aerial photograph of the site and some of the

15 surrounding area. I'll mark this as A-29.

16 (Exhibit A-29, aerial photograph of site,

17 was marked for Identification.)

18 A. This shows a swath cut right through

19 this residential area. You can see some of the

20 towers, the existing utility towers, in this

21 photograph -- notably, the one that's the subject of

22 this application, that's the proposed Verizon

23 Wireless facility -- and northeast of that is the

24 approved singular wireless telecommunications

25 facility. That site has been decommissioned. It

1 was originally approved back in 2006 and that
2 carrier, which we now call "AT&T," has moved its
3 antenna to another temporary location which is at
4 the top of the page to the north and that location
5 is right nearby the parking area of the Learning
6 Path preschool and you can see, here is the right of
7 way which is outlined in turquoise and otherwise,
8 it's a solid residential area.

9 The R3 zone permits homes on 20,000-
10 square-foot lots. That's what you see here. It's a
11 very heavily-wooded area, a lot of dense vegetation,
12 a lot of significant mature deciduous vegetation in
13 that area. You can't see in this particular
14 photograph but there is rolling terrain. So I think
15 the combination of those two elements that you do
16 have, mature shade trees coupled with that mature
17 vegetation -- with that rolling terrain, does help
18 in buffering the site from many of the surrounding
19 areas.

20 So you heard what the proposal was
21 for; I'll just reiterate. This facility uses only
22 electric and telephone service similar to what you
23 would have for a single-family home. Now, although
24 the conditional use requirements are not applicable
25 to this particular application because it's a

1 non-permitted use, I think it's fair to consider
2 some of those conditional use criteria and with very
3 few exceptions, this application satisfies just
4 about every one of the conditional use criteria.

5 It is within a residential district
6 and one of the criterion is that you cannot be
7 within 1,000 feet of a residential district so it
8 does not meet that particular criterion. As far as
9 the size of the panel antennas, they can't exceed 5
10 feet in height and it does not comply with that
11 particular criteria but the Board is preempted in
12 that regard and there's case law on that. I believe
13 it's New Jersey SMSA vs. Clarkston. The ruling in
14 that case was that you cannot dictate a carrier's
15 technology. They get to choose their own
16 technology. In that particular case, I think the
17 local regulation is supplanted.

18 In terms of the justification for the
19 granting of the variance, Boards of Adjustment are
20 directed by the New Jersey Supreme Court to employ a
21 four-step balancing test. When hearing and deciding
22 applications that require a D variance involving
23 wireless telecommunication facilities, the first
24 step of the test is to determine the public interest
25 at stake. In the Fair Lawn case, the Supreme Court

1 stated that the mere issuance of an FCC license
2 should suffice for the carrier to establish that the
3 general welfare purpose is served and Verizon
4 Wireless is the holder of four such licenses. So
5 that, in and of itself, satisfies the first step of
6 the balancing test, that the public interest is
7 advanced.

8 But beyond that, I believe, in our
9 advanced technological society, that wireless
10 telecommunications play a vital role in preserving
11 the health and safety of all New Jersey citizens.
12 They are typically used to report traffic accidents,
13 drunk drivers, suspected crime activity, medical
14 emergencies and other emergencies, to the proper
15 authority and the Board determined, in 2006, that
16 the Cingular Wireless facility qualified as an
17 inherently beneficial use.

18 Q. That's the Cingular Wireless now known
19 as the AT&T facility near Shunpike Road?

20 A. Yes.

21 Q. That's all in the R3 zone?

22 A. Yes.

23 The site is particularly suitable for
24 the use. To demonstrate it is particularly
25 suitable, the applicant must initially show the need

1 for the facility at that particular location. You
2 heard testimony from Verizon's radio frequency
3 engineer providing evidence that there is inadequate
4 signal strength in the area and that the proposed
5 site is particularly suited to relieve that
6 inadequacy.

7 Beyond that, I think it meets the
8 suitable requirement for other reasons. This site
9 utilizes an existing structure. It does not change
10 the number of locations of towers within the
11 community.
12 This site represents one of the few opportunities to
13 provide service to this area utilizing an existing
14 structure as preferred by ordinance. This lot does
15 benefit from the wooded perimeter which does aid in
16 screening the view of the facility from many
17 locations surrounding this site.

18 The second step of the balancing test
19 is to identify the detrimental effects that would
20 ensue from the granting of the variance. The courts
21 have found that, generally, the negative criteria
22 pertaining to wireless communications facilities
23 implicates aesthetics. If there is any visual
24 impact, it lies solely with the existing structure.
25 The antenna and the equipment will not significantly

1 change the visual quality of this site.
2 Significantly, the remote radio heads are not
3 located at the top of this tower. That's unusual
4 and you heard testimony that they will be located
5 down within the equipment compound because that does
6 add more mass to the top of the structure. Here,
7 you only have the antennas, no radio head.

8 The proposed wood fence and the
9 landscaping is certainly not out of character with
10 the residential environment. In fact, we see them
11 right at property lines separating two properties.
12 So here, the fence is actually 44 feet away, when,
13 in reality, we see 6-foot wood fences at the
14 property line, 0-foot setback. That 44-foot setback
15 is quite significant.

16 The setback requirement in the zone is 15 feet so
17 it's nearly three times the side yard setback
18 requirement for the R3 zone. It's very similar to
19 the AT&T application. That particular application
20 had a 43-foot setback to the nearest residential lot
21 line. This site, as I said, does benefit from the
22 rolling topography and mature vegetation in the area
23 and that aids in minimizing any visual impact.

24 I'll introduce another exhibit, a
25 series of photographs and photo simulations.

1 (Exhibit A-31, photo simulation board, was
2 marked for Identification.)

3 MR. FERRARO: We submitted a photo
4 simulation report. Has that been marked already?

5 MR. SHAW: It would have been marked
6 -- not specifically.

7 MR. FERRARO: We will mark this as
8 A-30.

9 (Exhibit A-30, photo simulation report,
10 was marked for Identification.)

11 Q. This was prepared by you, Mr.
12 Karlebach?

13 A. Yes.

14 Q. This is existing photos and photo
15 simulations of the facility?

16 A. Correct. 1, 2, 3 and 7 represent
17 photo simulations. 4, 5 and 6 are photographs of
18 the site with no simulation. The tower can't be
19 seen from those locations. These were taken from
20 locations near to the site and the top is a view
21 from 65 Pine Street, 250 feet north of the site, and
22 the one on the right, I simulated the antennas.

23 Actually, these were amended slightly
24 from our original submission because a resident
25 pointed out to me that it didn't have the

1 photorealism it could have had so I did find an
2 installation with a square platform with three sides
3 on it and I used that so it is photorealistic.

4 The second from the top is a view from
5 Maple Street, 500 feet west of the site, and you can
6 see the antennas at the top of the tower. The
7 photograph which is the second from the bottom is
8 the view from the vicinity of 40 Pine Street, 450
9 feet southeast of the site. Here, you can see the
10 extension and the antennas just above the treetops
11 at that location. If you were to move a little
12 further, maybe another 50 feet further southeast,
13 that array would completely disappear from view.

14 And finally, the bottom set of
15 photographs is the view from the equipment area from
16 the northwesterly property line at this location. I
17 tried to simulate the driveway, the turnaround area,
18 the 7-foot high wood composite fence, the canopy
19 structure which protects the equipment cabinets.
20 Some of the landscaping is visible at this location
21 and attached to the canopy structure itself are two
22 GPS devices. They are about the size of my fist.
23 All they are is like an atomic clock. It
24 synchronizes this site with all the other sites.

25 That's the extent of what's being

1 proposed. It's a location very near the site. If
2 you look up at 1-A, you see the compound at that
3 location but far less detail because it is much
4 further away.

5 I have another board, A-32.

6 (Exhibit A-32, photo simulations, was
7 marked for Identification.)

8 A. These are photographs from locations
9 where the tower was not visible. In the upper left-
10 hand corner, we have the vicinity of 67 Linden Lane,
11 approximately 880 feet northwest of the site, and a
12 view from 82 Pine Street, approximately 640 feet
13 north-northwest of the site, and a view from the
14 intersection of Robin Hood Lane and Sherwood Court,
15 approximately 590 northeast of the site. As
16 expected, as you move from distances further away
17 from the site exceeding 500 feet, the trees do
18 provide a buffering capacity.

19 I'll summarize by saying: I don't
20 believe there's a visual impact. If there is any
21 visual impact, it lies within the existing
22 structure.

23 It does not rise to the level of a substantial
24 impact, not at all. Additionally, this facility, as
25 you heard, is not going to generate any appreciable

1 noise, vibration, odor, glare, dust, fumes, or any
2 other objectionable influences. It's a benign use.
3 There's no increased demand on municipal service.
4 The site only requires infrequent maintenance visits
5 once every four to six weeks. It's a very passive
6 use. I believe this applicant has provided this
7 Board with the least intrusive method of providing
8 service into this area.

9 Regarding the height variance, it's
10 well- settled that, when height is necessary to
11 effectuate a use, that fact, in and of itself,
12 becomes a special reason warranting the height
13 variance relief and the height of those antennas at
14 this particular geographic location is necessary to
15 effectuate the use. If the antenna height cannot be
16 achieved, this wireless carrier cannot provide
17 service to this area as planned and it would not be
18 able to meet its federal mandate of providing that
19 seamless reliable coverage that the FCC requires.
20 The 35-foot height limitation in the zone does not
21 allow the carrier to achieve the objectives. The
22 antennas need to be much higher, at least as high as
23 the trees, in order to clear the obstructions in the
24 landscaping.

25 That additional height does not

1 interfere with the penetration of light or air on
2 the adjoining property. It does not disrupt any
3 important views and in Grosso vs. The Borough of
4 Spring Lake Heights, the Court opined plaintiffs can
5 prove special reasons for the height variance if the
6 applicant can persuade the Board that it would be
7 consistent with the surrounding neighborhood. In
8 the present case, there are many structures of
9 similar height in the neighborhood. Residents and
10 passersby are already acclimated to the presence of
11 130-foot-high structures in this area. The modest
12 increase in height of this one structure will not
13 change the character of the neighborhood.
14 Expansions are generally favorable when the impact
15 on the community is minimal.

16 I'll just briefly site three court
17 cases.

18 One is Smart SMR vs. The Fair Lawn
19 Board of Adjustment. In that case, the Court found
20 that the replacement of a 90-foot monopole with a
21 140-foot monopole resulted in no substantial
22 impairment of the zone plan or the Fair Lawn
23 skyline.

24 In NYNEX Mobile Communication vs.
25 Hazlet Board of Adjustment, the Court found that the

1 antenna would only increase the tower by 8 to 10
2 feet which increase would be virtually undetectable.

3 In Kingwood Township Volunteer Fire
4 Company vs. The Board of Adjustment, the Court held
5 that the replacement of a 75-foot-high tower with a
6 197-foot-high tower would impose, at most, minimal
7 intrusion on the surrounding community.

8 The third step of the balancing test
9 is: The Board may impose reasonable conditions to
10 mitigate any impact. This application, I think, has
11 gone through many iterations before we arrived where
12 we are today. I think the applicant has taken into
13 account many of the Board's suggestions and
14 implemented those suggested changes. The ones that
15 I made note of are: They eliminated the equipment
16 shelter and replaced it with outdoor equipment
17 cabinets. There was the lowering of the equipment
18 canopy, the decreased fence height and the fence now
19 surrounds the base of the monopole. The portion of
20 the antenna cable is not visible. We have added
21 landscaping to this site. There's no air
22 conditioner condenser; that lessens the amount of
23 noise from the facility. The applicant did make an
24 attempt but was rebuffed when it attempted to move
25 the equipment compound closer to the center of the

1 right of way and that suggestion, again, was
2 rejected by the utility company.

3 Finally, the fourth step of the
4 balancing test is to determine, on balance, whether
5 the positives outweigh the negatives. On the
6 positive side of the ledger, we have many benefits.
7 You have public access to Verizon Wireless'
8 high-speed 4G LTE network. You have safe, secure on
9 demand wireless communication, enhanced public
10 safety through improved communication and, finally,
11 increased work productivity and efficiency.

12 On the negative side of the ledger, I
13 see no detriments. I'm going to suggest to the
14 Board that those public benefits that are derived
15 far outweigh any perceived detriment. I don't
16 believe there's any substantial impairment of the
17 zone plan. The applicant could not make use of any
18 location where this facility would be permitted or
19 conditionally permitted. It examined municipal
20 property as directed by the ordinance. They
21 couldn't make use of those properties. It could not
22 collocate on any of the existing electronic
23 transmission towers. It could not locate its
24 antenna in the affordable housing zone, which is a
25 significant distance away from the site. That's

1 what brought us here to this particular location in
2 the R3 zone.

3 Other electric transmission towers
4 northeast and southwest of the subject site are
5 similarly located in the R3 zone. They don't
6 represent a superior zoning alternative that would
7 require the same relief as this application.
8 Although located in a residential zone, this
9 property is improved with a nonresidential use. I
10 believe the quasi-public utility nature of this use
11 is very much consistent and compatible with the
12 public utility use that already exists on this
13 property.

14 When this Board approved the Cingular
15 Wireless application back in 2006, the Board made a
16 finding that this similar installation, an existing
17 electric transmission tower in an R3 zone a very
18 short distance from the side in the same residential
19 neighborhood, the Board found it did not
20 substantially impair the zone plan and I think the
21 Board should make a similar judgment here with this
22 application. I had the opportunity to review the
23 2011 Master Plan re-examination report. There's no
24 specific recommendation that pertains to wireless
25 communications facilities. I find that this

1 proposal does not conflict with any of the
2 recommendations in the plan.

3 I believe there are sufficient reasons
4 for the granting of the use variance, the height
5 variance and the fence height variance.

6 Q. Thank you, Mr. Karlebach.

7 Referring to the prior 2006 Cingular
8 Wireless, now AT&T Wireless --

9 MR. FERRARO: I'll mark that as A-33
10 for the record.

11 For the purpose of the record, can you
12 tell me, did the plans get marked by the Board?

13 MR. SHAW: Everything that came in was
14 marked A-19, the plans.

15 (Exhibit A-33, 2006 AT&T plans, was marked
16 for Identification.)

17 MR. FERRARO: Are there questions of
18 Mr. Karlebach from the Board or the public?

19 MR. MICHAELS: I want to be clear.
20 You are not asserting that this use is an inherently
21 beneficial use. You mentioned that early in your
22 testimony about a conclusion that was made before.
23 Are you asserting that this is a beneficial use or
24 not?

25 MR. KARLEBACH: I'll answer it this

1 way: The New Jersey Supreme Court made a very clear
2 distinction between those facilities that require
3 the construction of a new tower and those that do
4 not. So although the Court was reluctant to call
5 this type of use inherently beneficial, again, they
6 did make a distinction which, sort of, intimates, if
7 that ever came back before the Supreme Court for
8 that particular determination, they might be
9 inclined to call this inherently beneficial.

10 MR. FERRARO: If there's no new
11 monopole structure required?

12 MR. KARLEBACH: Correct.

13 MR. MICHAELS: It meets the general
14 welfare but you are not saying it is because the
15 Court hasn't made that determination yet?

16 MR. KARLEBACH: There have been lower
17 court decisions that determine this use to be
18 inherently beneficial. I'm not a legal scholar.
19 From what I understand, the New Jersey Supreme Court
20 did nothing to disturb those earlier decisions by
21 the courts.

22 MR. MICHAELS: Does your photo
23 simulation -- I think the one that you took from 65
24 Pine Street -- does that depict the cabling going up
25 the tower?

1 MR. KARLEBACH: Which photograph is
2 that?

3 MR. MICHAELS: 65 Pine Street.

4 MR. KARLEBACH: I think, at that
5 particular location, the cables are probably on the
6 opposite side of tower.

7 MR. MICHAELS: Was the cabling
8 depicted on that?

9 MR. KARLEBACH: At these distances
10 that close to 600 feet away, the cables -- I don't
11 know the exact outside diameter. Let's call it 2
12 inches from 600 feet away -- it's very difficult to
13 simulate those cables. The best thing is, I'm just
14 going to ask the Board to use their imagination.
15 I'm sure you have seen cables running up the side of
16 a tower. It would be very similar here with the
17 exception that these cables are going to be a light
18 gray color to more closely approximate the color of
19 the tower and not the typical color out of the
20 factory, which is black.

21 MR. MICHAELS: It's your opinion that
22 the cabling wouldn't appreciably change the
23 depiction shown in your simulations?

24 MR. KARLEBACH: Right. I don't think
25 it would be visually significant.

1 MR. FERRARO: They are 1 and 5/8ths
2 inch.

3 MR. WESTON: Since it was introduced
4 as part of the testimony, the photo simulations,
5 again, on 1-A, the view from 65 Pine Street does not
6 visually scale, to my eyes, as the drawings
7 presented to us.

8 I'm a little rusty on the number but the height in
9 Chatham is 35 feet?

10 CHAIRMAN VIVONA: Yes.

11 MR. WESTON: The length of the
12 structure -- I'm not concerned with what's going on
13 at the top of the tower. That's 137 feet up. I'm
14 concerned with the base. The ground facility is 44
15 feet long, 20 feet wide. 44 feet long is 9 feet
16 longer than we are allowed to build a home here. I
17 just don't want the photo simulations to present,
18 sort of, buyer's remorse. That looks like a little
19 square around the pole so it's not working. This
20 does not look like a 44-foot structure.

21 MR. FERRARO: There's another photo
22 simulation. The last one is taken broadside.

23 MR. KARLEBACH: I think the outside --
24 well, you can't see it in Photograph 7. The last
25 photograph, which is the view of the equipment area

1 from the northwesterly property line, there's a
2 concrete base to which the tower is attached and
3 that measured a 7-1/2-foot diameter. I was able to
4 use that feature of the existing tower as a baseline
5 or something to extrapolate from in order to create
6 the fence height and the area of the compound. So I
7 would say that, if you look at that view from the
8 northwesterly property line, that is a very accurate
9 depiction in terms of the scale because I did have
10 the benefit of that existing feature and its known
11 dimension.

12 Again, I know it's 20 feet by 44 feet.
13 As I said, a 6-foot high or 7-foot high fence in a
14 residential area certainly blends in. It's part of
15 the residential environment. We have fences right
16 at property lines. They are not 15 feet away. They
17 are on the property line and this has landscaping
18 around two sides of it so that, over time, is going
19 to help soften the appearance of that fence. The
20 only portion of the ground equipment that is going
21 to be visible is that steel canopy structure. So it
22 protrudes over the fence by 2 feet. The fence
23 height is 7 feet and the canopy is 2 feet so you
24 will have this protruding 2 feet over the fence but
25 I don't recognize that as a significant visual

1 impact or a substantial detriment and that's the
2 test. The test can't be: "I see it; therefore, it
3 has an impact; therefore, the application must
4 fail." The test is: Is there a substantial
5 detriment? I just want to remind the Board and the
6 public of that. That's what we are guided by.

7 MR. BORSINGER: Are you aware of any
8 studies that evaluated the property values as a
9 result of installations of something like that?

10 MR. KARLEBACH: I'm aware of them,
11 yes.

12 I have come across them during my lengthy tenure as
13 a professional specializing in this field, yes.

14 MR. BORSINGER: Do you mention any as
15 a negative detriment in your testimony?

16 MR. FERRARO: I can't let Mr.
17 Karlebach testify as an appraiser. I don't know how
18 he would qualify and provide that kind of testimony.

19 MR. SHAW: Well, to the extent you
20 participated in other applications, is there any
21 general experience that you developed? It's not
22 your testimony; it's hearsay testimony.

23 MR. KARLEBACH: The best way I can
24 answer the question is like this: I have had the
25 opportunity over many years to speak with various

1 tax assessors and George Rego, he was tax assessor
2 for 13 different New Jersey municipalities for
3 various times and I asked him "Has anybody come to
4 you and asked for a tax appeal based upon their
5 homes' relationship to an existing wireless
6 communications facility" and he said, "No, no one
7 has ever asked for an appeal." I asked "Would you
8 ever voluntarily change the valuation of somebody's
9 home because of the proximity to a facility" and he
10 said, "No, I would not." So maybe that's a question
11 for your own tax assessor, whether anybody asked for
12 a tax appeal. In my experience, it's never
13 happened.

14 CHAIRMAN VIVONA: I have two
15 questions.

16 I think they are for Mr. Cirrotti.

17 In the last picture, 7-A, two things
18 about the canopy. One, we discussed coloration of
19 it and, obviously, by showing it in the galvanized
20 steel, it looks very industrial and out of place and
21 doesn't blend in. So if we were to move forward on
22 this, a condition would be that the structure has to
23 be similar in color to the fence so it blends in.
24 One resident had a question about noise from it.
25 Being that it is a corrugated steel roof, is it

1 possible to put a rubber roof on top of that?

2 MR. CIRROTTI: I would have to look at
3 that. I don't have an answer for you, off the top
4 of my head, right now.

5 CHAIRMAN VIVONA: I would like to look
6 into that because that's, basically -- one of the
7 residents who lives closest to it -- steel roofs do
8 make noise when it's raining and a torch down roof
9 is not structural; it's just a barrier and it would
10 help with noise.

11 MR. FERRARO: Maybe we can put
12 something on top of it.

13 MR. SHAW: A torch down roof is
14 something that you put on a flat roof that has
15 rubber on it.

16 MR. FERRARO: I don't see why not. I
17 understand the concern.

18 CHAIRMAN VIVONA: That's all I have.

19 MR. CIRROTTI: We could look at a
20 material other than the exposed steel to mitigate
21 that concern.

22 CHAIRMAN VIVONA: The coloration, if
23 this was the same color as the fence, you wouldn't
24 even see it in the picture.

25 That's all. Thanks.

1 Any other questions from the Board?

2 (No response)

3 CHAIRMAN VIVONA: Anybody in the
4 public have any questions for Mr. Karlebach's
5 testimony?

6 MS. HERR: Do you have any photographs
7 from, actually, 53 Pine Street looking at the tower?
8 None of these are from the property looking at this
9 from the field looking across.

10 MR. KARLEBACH: Probably, the closest
11 one would be from 40 Pine Street.

12 MS. HERR: These are showing the
13 closest neighbors and not the house across the
14 street.

15 MR. KARLEBACH: The first three
16 photographs are taken very near the site. I thought
17 that was a fair representation for the Board to make
18 their judgment based upon those photographs.

19 MS. HERR: That's across the field
20 angling in?

21 MR. KARLEBACH: I used my judgment.
22 Those were the photographs, I thought, best showed
23 the proposal and I think the Board can make their
24 judgment based on the evidence tonight. I don't
25 have a photograph from 53 Pine Street.

1 MR. FERRARO: Would it be similar to
2 Photo 7 and 7-A, just with landscaping in front of
3 it?

4 MS. HERR: No, no.

5 MR. KARLEBACH: I would like to
6 introduce one more exhibit.

7 CHAIRMAN VIVONA: Sure.

8 (Exhibit A-34, photographs, was marked for
9 Identification.)

10 MR. KARLEBACH: The first is looking
11 northwest. So I'm standing at the equipment area
12 location looking towards the neighboring property
13 that would be furthest away. So going back now to
14 A-29, the photograph on the left would be standing
15 at this location looking towards the northwest
16 property line and the photograph on the right is the
17 opposite. Now, I'm standing at the equipment area
18 location and I'm looking at the property line at 53
19 Pine. So the point of that was, you could see some
20 of the existing -- what I'm going to call -- scrub
21 vegetation running along that right of way. Here it
22 is and you do have some buffering capacity already
23 without the aid of additional landscaping right
24 there.

25 MR. FERRARO: Which we are proposing?

1 MR. KARLEBACH: Exactly. You have two
2 layers of landscaping.

3 MS. HERR: When were these photographs
4 taken?

5 MR. KARLEBACH: I took photographs at
6 various times. I know most of the photographs were
7 taken in August of 2016 but those appear like they
8 were taken with the plants not in full leaf but they
9 were all taken within the last year. They are
10 current photographs.

11 MS. HERR: There's different views
12 then, I take it? I looked at the photo simulations
13 in the office. This is full bloom and it's
14 different in the fall and winter. So I'm wondering,
15 when it's fall foliage versus when it's not, the
16 pluses and minuses are very different when there
17 isn't full-bloom trees.

18 CHAIRMAN VIVONA: You are saying these
19 pictures look like full bloom?

20 MS. HERR: This is definitely August
21 or September. That's the date. Did you go back?

22 MR. KARLEBACH: That's probably
23 correct. They are taken, for the most part, in
24 August of 2015 but I may have gone back at various
25 times to take additional photographs.

1 CHAIRMAN VIVONA: The one from 65 Pine
2 Street looks a whole lot more in bloom, more green,
3 than those and, again, from your property, you don't
4 have the -- you have just grass and the landscaping
5 and then the fence. From the other side, they have
6 the road and then no landscaping, for what it's
7 worth.

8 MR. FERRARO: That is the only side
9 they would allow us to landscape.

10 MISS HERR: I have a question about --
11 there is, like, this power line holder near where
12 this cell tower is planning to be built. Will you
13 have to take that down to rebuild? If you were to
14 build this, would you have to take that down to
15 build it up?

16 MR. KARLEBACH: No. The power lines
17 are going to stay right where they are.

18 CHAIRMAN VIVONA: The power line that
19 goes from the street to the unit is buried so you
20 wouldn't see any new wires.

21 MR. CLARK: Tony Clark, 15 Robin Hood
22 Lane.

23 Why didn't you take pictures from the
24 property? Why didn't you take pictures from the
25 property that would be most impacted? Of all the

1 photos, you don't even depict or show what it would
2 look like from that vantage point and, ultimately,
3 most of these -- it's completely different. For the
4 majority of the year, it would be different than
5 that.

6 MR. KARLEBACH: I think I have taken
7 several photographs. I have photographs from, at
8 least, seven different locations. I make judgments
9 when I go out in the field on where to take the
10 photographs and I think it's a fair representation
11 of what's being proposed. I'm not disguising
12 anything.

13 The first three photographs are taken within 500
14 feet of the site. That's fairly close considering
15 how far the tower is from the public road. So
16 again, those are very prominent, very obvious views
17 of the tower in 1 through 3 and, certainly, I think
18 the Board can make a judgment based upon those
19 photographs.

20 MR. CLARK: You didn't answer my
21 question. Why didn't you?

22 MR. KARLEBACH: That was my judgment
23 at the time in the field.

24 MR. CLARK: Why didn't you take them
25 close to the road?

1 MR. FERRARO: It's 44 feet away. To
2 represent a photo simulation from 40 feet, what
3 would you see?

4 MR. KARLEBACH: Again, I think, from
5 that property at 53 Pine, they are probably most
6 concerned about the view of the compound so I
7 represented that view and I presented it to the
8 Board. If you are concerned about what the antennas
9 look like, it's not going to alter significantly
10 from the photographs in 1, 2 and 3. It's just at a
11 different vantage point but, essentially, the view
12 is the same. It's 8 and a half feet to the tower,
13 the four-sided platform with antennas. I think it's
14 fairly represented.

15 MR. CLARK: Why didn't you take photos
16 in the part of the year that you would see the
17 structure? Why wasn't that offered up?

18 MR. KARLEBACH: I take the photographs
19 at the time the applicant directs me to take
20 photographs. If they are part of the submission
21 package, if they have to accompany the application,
22 then time is of the essence and I take them at that
23 period. I don't wait for leaves to come on or off
24 the trees. It's just a matter of when the
25 application is submitted.

1 MR. CLARK: I thought he said he used
2 his judgment.

3 That's all.

4 MR. KARLEBACH: That had to do with
5 the location of where the photographs were taken,
6 not the time of year they were taken.

7 MR. FERRARO: I believe the
8 application was filed in August.

9 CHAIRMAN VIVONA: Anyone else?

10 MR. WESTON: I would like to make a
11 comment in the context of the photographic
12 representation in the -- if it was at a wide angle,
13 everything would look smaller. We have all the
14 towers in and on the opposite side, I don't have no
15 idea when this was done. I have no idea what I'm
16 looking at. In order to include the top of the
17 tower, the sides, I would bet this was not done at a
18 perspective that a normal human would see, which
19 would be the equivalent of a 50-millimeter lens. I
20 don't want to get involved with it. I just want to
21 put that on the table with the absence of when it
22 was taken or what the settings were, at least, on
23 the lens. I don't need to know the shutter speed.
24 You don't get a feel of what you are looking at. So
25 I thought I would throw that out.

1 MR. FERRARO: Mr. Karlebach, how many
2 photo simulations have you prepared in your career,
3 would you say?

4 MR. KARLEBACH: I would say probably
5 over a thousand.

6 MR. FERRARO: Do you feel it is an
7 accurate representation of what the facility would
8 look like if approved?

9 MR. KARLEBACH: Yes. It's accurate.

10 MR. FERRARO: It is what it is, Mr.
11 Chairman. It shows the antennas.

12 Did you take these photos from views
13 where you felt it would be most visual?

14 MR. KARLEBACH: Yes. I think 1, 2 and
15 3 are very obvious, as I said, very prominent
16 locations and I am not withholding any information
17 from the Board. I have given the Board all the
18 information they need to make a judgment on this
19 application. I don't know what else to say. I
20 didn't -- I used a digital camera. I didn't use a
21 single lens reflex camera. I have not found any
22 evidence to suggest that a 50- millimeter lens is
23 the one that most closely approximates the focal
24 length and the magnification of the human eye and I
25 have researched that topic and --

1 MR. WESTON: Don't go there. That is
2 not correct. Arguably, some say 42 is the human eye
3 most commonly but they make 50s. It's 50 but 42 is
4 the human eye. That's an error but I said it was a
5 tangential point so I wouldn't hang around there too
6 long.

7 MR. KARLEBACH: I used a digital
8 camera. I did not use a single lens reflex camera.
9 I didn't utilize the zoom or any feature of the
10 camera that would distort the image so it is shown
11 accurately.

12 CHAIRMAN VIVONA: You used, like,
13 digital software to -- you said you measured the
14 base of the tower at 7 and a half feet and you were
15 able to extrapolate that information into the
16 program to get your ratios right for the fence
17 height and the angle, all that?

18 MR. KARLEBACH: Yes.

19 MR. FERRARO: What we are showing is
20 what the application consists of. There's a
21 132-foot tower on that property. We are putting a
22 7-foot fenced area. That's the extent of the
23 application.

24 CHAIRMAN VIVONA: I know. We are
25 trying to cover all bases.

1 MR. FERRARO: Sure.

2 CHAIRMAN VIVONA: If no one else in
3 the public has anything to say --

4 MR. PURCELL: Bob Purcell, 28 Pine
5 Street.

6 All the municipal properties were
7 examined for possible sites for the antenna
8 structure?

9 CHAIRMAN VIVONA: According to their
10 testimony, everything that meets their standard was
11 examined. The next closest one has Wetlands around
12 it and they couldn't use it.

13 MR. PURCELL: What about a Board of
14 Education property, like Cougar Field or the high
15 school location?

16 CHAIRMAN VIVONA: There's no existing
17 poles there right now.

18 MR. PURCELL: I think somebody made a
19 comment at the last meeting that they needed to work
20 harder and maybe spend some money to look into a
21 situation. I don't know who said it at the Board
22 last meeting but if they have to put two or three
23 different locations of poles, wouldn't that meet
24 their technical requirements for coverage in an area
25 to get it out of the residential location?

1 CHAIRMAN VIVONA: Well, it's still
2 going to be a residential location no matter where
3 you put it and, now, you have three poles instead of
4 one that's already there.

5 MR. PURCELL: It's out of next door to
6 someone's property. That's what, I think, the whole
7 thing is why we are here meeting.

8 CHAIRMAN VIVONA: I think that,
9 through their testimony, they have looked at several
10 sites and we have come back here time and time
11 again.

12 MR. PURCELL: Did anybody look at the
13 Board of Education? That's what I'm asking.

14 MR. FERRARO: We didn't look at
15 putting --

16 MR. PURCELL: When you put a pole up
17 on a property like municipal or Board of Education
18 or some business, do they -- does the carrier pay
19 some kind of fee for that to the property owner?

20 MR. FERRARO: Of course, there's a
21 lease payment.

22 MR. PURCELL: The Board of Education
23 has Cougar Field a short distance from that pole on
24 Shunpike. AT&T, how much different coverage is that
25 --

1 CHAIRMAN VIVONA: I believe their -- I
2 think that was beyond their limits of coverage and
3 you would be putting up a pole and wouldn't
4 accomplish any more coverage.

5 MR. FERRARO: Plus, the ordinance is
6 that we are supposed to look for existing structures
7 and not proposing new towers and it's not a
8 conditionally permitted location under the ordinance
9 at the Board of Education property. It would be a
10 use variance application and the first thing those
11 residents would ask, "Did you try to locate it on
12 the PSE&G right of way where there is an existing
13 tower?" That's disregarding the fact that Mr.
14 Pierson testified that a site from that area would
15 not serve the area we are trying to cover. We are
16 trying to minimize the number of towers in town, not
17 trying to put three additional towers up when we can
18 fix it with an 8-foot extension on an existing
19 utility tower.

20 CHAIRMAN VIVONA: Okay. It's quarter
21 to 11:00. We are going to open it up to general
22 comments. You heard all the testimony from all the
23 witnesses. You heard all your questions. Now, it's
24 general comments from the public.

25 MR. SHAW: Are you planning to take a

1 vote with less than the full membership this
2 evening?

3 MR. FERRARO: We would ask to carry
4 and to have the absent members read the transcript.
5 There's also a question from Mr. Eisenstein for a
6 supplemental report. We can get that to him and
7 make sure that's acceptable.

8 MR. SHAW: I don't know how long the
9 public comment is going to be but it might be better
10 to stop now and do public comment since you are
11 coming back anyway.

12 MR. FERRARO: I would prefer to not
13 bring all our witnesses back because we are
14 finishing with the testimony.

15 MS. HERR: I will let you know, I have
16 a bit of evidence and information so if you are
17 prepared to go for a lengthy amount of time, I'll
18 wake you up. It is up to you or I can say a little
19 bit and it will let you think and wake you up but I
20 want my daughter to go first because she has some
21 wonderful things to say.

22 CHAIRMAN VIVONA: We stop at 11:00.
23 We generally don't take any testimony after 10:30 so
24 you can start now and I'll stop you at 11:00 or we
25 are going to continue this to another meeting and

1 put it early and once they summarize, then you can
2 have your full time.

3 MISS HERR: Hi. I'm Ellie Herr. I'm
4 10 years old. I live at 53 Pine Street. Every day,
5 when I look outside my bedroom window, I see the
6 power line. I do not want to see a giant cell tower
7 looming over our house every day. I'm living right
8 next to where the cell tower is planning to be
9 built.

10 So my sister and I love to run around
11 in the place where Verizon is planning to build this
12 cell tower. It's not just us that like to run
13 around the power line field. Dog walkers and dogs
14 themselves have the room to run freely. Now, with
15 this idea, you are taking away all that from us. So
16 we thought we could go out there and run our hearts
17 out until we heard this unnecessary idea.

18 The reason why this idea is so
19 unnecessary is because we have Verizon and our
20 devices work just fine. So technically, there's no
21 reason why we need a cell tower. There's no cell
22 tower needed and I'm kind of a little ashamed that I
23 am a resident because they are taking us for granted
24 and they want money for this.

25 So another reason is my brother has a

1 hearing disability in his right ear so it's harder
2 for him to hear. It will make a lot of noise when
3 it's built further damaging his ear and I have done
4 research and I found out that cell towers can be
5 dangerous from electromagnetic radiation which could
6 include muscle fatigue, irritability, headaches,
7 nausea, loss of appetite, sleep disruption,
8 depression, feeling of discomfort, difficulty in
9 concentration, memory loss, skin problems, visual
10 disruption, hearing disruption, dizziness, movement
11 difficulties, cardiovascular problems and I don't
12 think a little fence will stop the radiation.

13 So we also just bought this house. We
14 are technically new to the neighborhood and my
15 parents put a lot of hard work into buying the house
16 for our family and it took a lot of time. So if you
17 build a cell tower, it will go to waste and cell
18 towers can also cause electrical fires and that's
19 bad for our neighborhood and unsafe. If you build
20 the cell tower, we will all get sad and especially
21 my sister and she's 7.

22 So the cell tower would also disrupt
23 birds, squirrels, chipmunks, etc., and when the
24 weather gets warm, hawks come back in the area. The
25 cell tower will disrupt them and they will not have

1 a peaceful and safe environment to live in. The
2 cell tower would not only disrupt people, but
3 animals too.

4 Pine Street would be disappointed in
5 Verizon building this tower. We worked very hard to
6 make sure that the tower would not be built by
7 putting up signs and letters and speeches and we
8 want our hard work to pay off. When we ask
9 questions, I also realize it is not just a cell
10 tower but a fence and a building and a road and you
11 do realize what you are doing to Pine Street if the
12 cell tower is built. It's destroying our space. It
13 distracts us and it's very unnecessary. You are
14 being taken for granted. So don't build the cell
15 tower and don't make us disappointed.

16 Can I show a video?

17 MR. SHAW: We can't have that into
18 evidence. Thank you.

19 CHAIRMAN VIVONA: Thank you very much.

20 All right. With that, we will
21 conclude for the evening and our next meeting is May
22 19th. We will put it on early in the agenda.

23 DR. EISENSTEIN: Am I clear that the
24 witnesses will not be back?

25 CHAIRMAN VIVONA: Yeah. Because we

1 gave everyone an opportunity to question the
2 witnesses. I think --

3 MR. SHAW: Whether there's some public
4 comment whereby they want those witnesses present to
5 answer questions, that's for the applicant to
6 decide.

7 MR. FERRARO: I don't envision it
8 because the direct testimony was closed. If there's
9 going to be an abutter's case --

10 CHAIRMAN VIVONA: What about Mr.
11 Handley?

12 MR. FERRARO: We are just resubmitting
13 the report to the Board and Dr. Eisenstein.

14 DR. EISENSTEIN: I'll forward it to
15 the Board with my recommendation. I can do that in
16 writing. I don't have to come back, though, right?

17 MR. SHAW: For the members of the
18 public, this application is going to be carried to
19 the Board's regular meeting on May 19th --
20 hopefully, it will be one of the earlier items on
21 the agenda -- without any further notice.

22 If we could have a letter extending
23 action through the 19th of May?

24 MR. FERRARO: The applicant agrees to
25 the extension of time. I'll put that on the record

1 and follow up with a letter.

2 MR. SHAW: I had distributed a guide
3 for the public. If it is something that is
4 satisfactory to the Board, maybe somebody could make
5 a motion that the Board should adopt it and have the
6 website people put it up and have it available for
7 the members of the public at the next meeting?

8 CHAIRMAN VIVONA: Did everybody look
9 at it?

10 MEMBERS OF THE BOARD: Yeah.

11 MR. BORSINGER: I'll make a motion to
12 have it put up on the website.

13 MR. HURRING: Second.

14 CHAIRMAN VIVONA: All in favor?

15 MEMBERS OF THE BOARD: Aye.

16 CHAIRMAN VIVONA: Any opposed?

17 (No response)

18 (The hearing concluded at 11:05 p.m.)

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I, ALISON GULINO, a Certified Court Reporter, Registered Professional Reporter and Notary Public of the State of New Jersey, do hereby state that the foregoing is a true and accurate verbatim transcript of my stenographic notes of the within proceedings, to the best of my ability.

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