BEFORE THE RADNOR TOWNSHIP
BOARD OF COMMISSIONERS
DELAWARE COUNTY, PENNSYLVANIA

IN RE: Conditional Use Hearing of the Trustees of Dorrance Hamilton 3/15/1996 Revocable Agreement of Trust to Develop Properties at 208 and 228 Strafford Avenue and 18 Forrest Lane

Public hearing in the above matter held pursuant to notice on Wednesday, March 20, 2024, at the Radnor Township Municipal Building, 301 Iven Avenue, Wayne, Pennsylvania, commencing at 6:35 p.m., before Norma Gerrity, Professional Court Reporter.

BEFORE: MAGGY MYERS, President
MOIRA MULRONEY, Vice President
CATHERINE AGNEW, Member
JIM RILEY, Member
PETER NELSON, ESQUIRE, Solicitor

APPEARANCES: GEORGE W. BROSEMAN, ESQUIRE, for the Applicant

NOAH MARLIER, ESQUIRE, Special Counsel for Radnor Township

ALSO PRESENT: PEGGY HAGAN, Executive Assistant to Township Manager

NORMA GERRITY
Professional Court Reporter 14 Fetters Boulevard Downingtown, PA 19335

610-246-2362


## EXHIBITS

APPLICANT:
A-25 Summary of Properties

THE PRESIDENT: Welcome everyone.
We'll get started a few minutes late here, but we do have a quorum.

So welcome to the Board of Commissioners conditional use hearing on the Hamilton tract.

I'm going to turn it over to Peter Nelson to get it started.

MR. NELSON: Thank you. I don't believe there's any administrative matters at this point in time.

My understanding is we are at the township's cross of Mr. Lambert. And unless the parties have any issues, $I$ would say let's get on with it.

MR. MARLIER: I have no issues. I'm ready to cross.

MR. NELSON: We're good to go. Thank you very much.

MR. MARIIER: Thank you.

APPLICANT'S EVIDENCE

ROBERT M. LAMBERT, JR.,
having been previously duly sworn, was examined and testified further as follows:

BY MR. MARLIER:
Q. Good evening, Mr. Lambert.
A. Good evening.
Q. You presented a revised plan, the applicant presented a revised plan marked as A-12, and that revised plan was authored January 31st, 2024; is that correct?
A. A-12 was a plan set that we prepared. We resubmitted sheets 1 through 12 .

There's other sheets on the cover sheet there that were done by others which will be submitted under subsequent exhibits and was originally May 18th, 2023, last revised January 29th, 2024.

And there are various sets of cover sheets. The exhibit sheet that's up there is sheet four of A-12.
Q. Maybe that's a more specific question. When was that last revised?
A. January 31st, 2024.
Q. Thank you. Now, you were the engineer for what we've been calling Hamilton-1; correct?
A. Yes, that is correct.
Q. So you're obviously familiar with the plan that was submitted two years ago for conditional use for the property?
A. Yes. We prepared it several years ago. I don't know every detail at this point, but several years ago.
Q. I understand. I just would like you to go through the major differences, in your opinion, from that plan versus the plan that's on A-12, sheet four.
A. I probably won't list every one, because again it's been several years since we looked at that plan.

We've looked at different iterations, and this plan, as you pointed out, is a revised plan. So $I$ may conflate what was a revision of this current plan to the old plan.

But the original plan that we submitted, Hamilton-1, I have to believe it was 41 units, so it had more units, and as you are
aware, that was turned down as part of a conditional use process.

We received that decision, and there were comments, there were conditions, reasons for denial, and this plan was curative to that.

This plan was curative to that, so that the layout has been modified. The stormwater management was moved.

After that plan, when we had filed that Hamilton-1 plan and the ordinance required, and this is off the top of my head, $I$ believe it was 15 percent open space, and there's no language about stormwater in the original code.

And so Hamilton-1, one of the reasons it was denied was that some of the stormwater was under open space.

This plan, by the time we filed it, the township had actually amended their ordinance, increased the open space to require 25 percent.

They added language that the open space needed to be contiguous unless approved by the board, and it provided a limit of ten percent stormwater within the open space.

So this plan increased the amount of open space to 25 percent. It changed the configuration of the stormwater to keep it out of the open space or limited it to under ten percent.

It changed some of the units. Some of the unit dimensions were changed. So there was many changes to that plan.
Q. Thank you. Have you reviewed the Radnor Township Comprehensive Plan?
A. Yes, I have, over time. I haven't reviewed it recently.
Q. Did you review it for this application?
A. Yes. When we first looked at this, we reviewed the comprehensive plan.
Q. When did you first look at it?
A. The comprehensive plan?
Q. When you first looked at this, you reviewed the comprehensive plan?
A. And the revisions to the plans. When we originally looked at it, it was prior to Hamilton-1 that $I$ really went through it in depth.
Q. So you didn't review it for this particular application? Is that your testimony?
A. Not specifically, no. I did not.
Q. You testified, I believe, about a nearby development, and $I$ think everyone in this room is more familiar with it than $I$ am, but the Villa Strafford?
A. Strafford, correct.
Q. How many homes are there?
A. I believe there are 11 homes at Villa Strafford.
Q. And are there stormwater issues on that property, do you know?
A. I'm not sure what -- issues? Stormwater management features? I don't understand your question.
Q. Well, it's pretty clear that there are stormwater issues on or adjacent to this property. I think the neighbors have made that abundantly clear.

Are there similar issues on the Villa Strafford property, if you know?
A. I wasn't involved in that application.
Q. Do you know how this property and this
development specifically is similar to that, if at all?
A. They're both being proposed under the density modification provisions of the ordinance.
Q. Are the townhomes similar in size?
A. I don't know the exact size of those units at Villa Strafford. As I said, I did not do that application.
Q. Understood.
A. I believe the density is almost exactly what is proposed here.
Q. And how many townhomes do you believe are within a mile of the proposed townhome community here?
A. I don't know the exact number. We talked about Villa Strafford.

Remaining within Radnor, there's one on the other side, if you go up Eagle Road and cross over the railroad, there's a townhouse development on the east side of Eagle Road just as you cross the railroad bridge.

On the other side of Lancaster Avenue, I'm not sure if it's exactly a mile, but on, what would that be, South Wayne Avenue, the former

Adelberger Florist, there are townhouses in that location.

Across the street from that, I believe it's called Wicklow, there are townhouses there. Roughly across Conestoga Road, there is the Greythorne development.

There's a development on Bloomingdale of townhouses, so there are several around.
Q. Understood. Understood. If we can go to the one that you were referring to on the east side of Eagle Road, how many townhomes, if you know?
A. I do not know the number off the top of my head.
Q. Are there less than 20?
A. I'm not sure of the exact number there. It's an older development.
Q. How about the other side of Lancaster, the South Wayne development?
A. Which one are you referring to?
Q. You just referred to it. You said the east side of Eagle Road, and then you went to the second one on the other side of Lancaster, South Wayne.
A.

So it's the one at Adelberger Florist, I believe there's six townhomes there.

Greythorne, I don't know the exact number there. I would guess it's in the proximity of 50 .

Wicklow is, you know, somewhere around ten. I'd have to look up the exact number.
Q. Fair enough. Fair enough. I'd like to talk about the open space, and certainly we'll be utilizing $A-12$, sheet four, that's up on the screen.

You testified that the open space will be roughly 26 percent; correct?
A. Yes. That's what A-12, sheet four, says in the middle of the page.
Q. And where are your calculations for that 26 percent?
A. I believe $I$ identified the area as 84,807 square feet.
Q. Okay. So relative to the entire square footage, is that how you get to 26 percent?
A. Correct. We used the net tract size.
Q. And just to clarify, is any of the
open space in buffers, any of the buffering?
A. The open space is not in the buffering.
Q. Is any of it in floodplains or wetlands?
A. No.
Q. You testified that this open space would be, $I$ believe it was passive open space, was the word you used.

Do you remember that?
A. Yes. That's an accurate description.
Q. Is it going to be used for
recreational purposes?
A. Passive recreation, yes.
Q. What's passive recreation?
A. Typically active recreation would be an athletic event, something along those lines.

Something more passive would be walking through an open area and through woodlands, landscaping, any of those open areas.
Q. So not a baseball field, but walking through the trees?
A. Correct.
Q. And it's not going to be used for a
park site; correct?
A. It would be part of the HOA property.
Q. So you wouldn't call it a park site?
A. I would call it a parklike site,
right. So it has landscaping in it. It will be maintained as a parklike setting, but it will be under the ownership of the HOA.
Q. A township park, something along those lines, versus something that's similar in nature but not owned by a township or a municipality?
A. Yes. I think it has the features of what you would find in a park, but it is not a public park.
Q. And it's obviously not going to be used for school grounds; correct?
A. That is correct.
Q. Could it be used for woodland conservation?
A. There will be some trees that are preserved in that area, yes.
Q. And how much of it again, what is the exact percentage that's going to be utilized, of the open space, that's going to be utilized as stormwater facilities?
A.

If you refer to $A-12$, sheet four, in the bottom left-hand corner is the zoning summary table. The third line from the bottom of the table is the minimum common open space.

The far right is the proposed column, and it shows that it's 84,807 square feet, or 26 percent, and the stormwater management is 6,654 square feet. That's 7.9 percent.
Q. And some of these facilities will be under the park, is that correct, specifically the parallel parking and the parking in the bottom right-hand corner?
A. Yes. Under the bottom right-hand and bottom left-hand corner of that open space, there are parking spaces that it will be under, but the parking spaces are not included in the open space.
Q. Understood. So the parking, right. And that's shown depicted as the parking spaces are not in dark green; is that correct?
A. That is correct.
Q. Is it your testimony that each of the 38 townhomes proposed will have access to the open space?
A. Yes.
Q. And pedestrians will have to cross over Drive A or Drive B to get to that open space if you were in the townhomes on the bottom right; is that correct?
A. Yes.
Q. And we have a little bit of testimony about this. I just want to flesh it out a little bit. Will every townhome have a view of the open space?
A. Generally, yes.
Q. What do you mean "generally"?
A. I believe there was extensive testimony that we went through at the last hearing about that some of the units will have not direct views, but they will have views of the open space looking at an angle to see the open space.
Q. And in your opinion, which of the townhomes would have the hardest time seeing the open space, if you're looking at $A-12$, sheet four?
A. I don't think any of them have a hard time seeing the open space.
Q. Well, some of these homes will have a harder time seeing the open space; correct?
A. No. I think that it's easy to see the open space from any of these. It's just that some will have a fully unobstructed view. Others will have views that you will have to look at an angle.
Q. Okay. So if we look at -- I have my glasses on, and it's hard to see, but the left-hand side, the townhomes down the left-hand side.

It's even harder to see on my hardcopy, but on the left-hand side there, you have five townhomes; correct? What are those numbers of the homes?
A. Sixteen through 20, if you're referring to the ones on the far left of the plan.
Q. Yes. Is townhome 18 in the middle?
A. Yes.
Q. Would townhome 18 have an easier time seeing the open space than the townhomes that are on the other side of the street in the back of the property?
A. I believe you can see it from either one.
Q. Understood. And I understand your testimony is that every townhome will have some sight of some portion of the open space.

I'm asking if it would be easier for the townhomes, say, on the right side of Drive $A$ than on the left side of Drive $A$ ?
A. If you're looking out your window, if you're looking to find the open space, from either one you'll be able to find the open space.
Q. I understand that. I'm asking if it's harder for the townhomes on the left?
A. And my answer was that for both of them, they can both see it. And so when you say "harder," "easier," maybe I'm not understanding your question.
Q. Okay. If you look at townhome 18 standing in the driveway, is it easier to see the open space than if you're standing at the back of the house on the townhomes on the right-hand side of Drive A?
A. So if $I$ were seeking to see the open space and $I$ was standing in the driveway of unit

18, I would look to the bottom of the page from unit 24 , and $I$ would see the open space.
Q. And are there any plans, essentially structures, to be built or erected on the stormwater, the open space that's above the stormwater facilities?
A. I'm not sure $I$ understand your question.
Q. So if you look at the bottom of the inner loop, so the two stormwater facilities, the bottom left-hand side and the bottom right-hand side of the open space, are you with me there?
A. Yes.
Q. Are there any plans to have any sort of structures, besides the parking that's there, but talking about the green space area over the stormwater facilities, is there any plan to have any structures overtop of it?
A. No.
Q. In your expert opinion, could you put
a gazebo overtop?
A. Overtop of?
Q. Of that area we're discussing, where the stormwater facilities are in the bottom left
and bottom right of the open space?
A. No, we wouldn't recommend putting a gazebo directly on top of the stormwater management.
Q. And why is that?
A. For the foundation of the gazebo. If it was just at grade, it would be fine. If you're building a foundation for it, $I$ wouldn't build a foundation over the stormwater system.
Q. Does that go for playground equipment?
A. There have been instances where playgrounds have been built over them. It depends what type of equipment.

Again, it's really about the foundation. If you just have something surface mounted, it's not really an issue to the stormwater system.

If you're building a foundation, you would have to modify the stormwater system for some type of playground event.
Q. So you wouldn't recommend it in this case?
A. Correct, and none is proposed, just to be clear.
Q. Understood. Are there any sidewalks or public paths within the open space?
A. There would be a path, you know, it would be a lawn-type path through the open space that is proposed.
Q. So obviously not. It would be pervious?
A. Correct.
Q. If you were to put decks off the back of the townhomes, and I'm talking about the townhomes in the inner circle, so immediately abutting the open space.

If you were to put decks off the back of those townhomes, would they be encroaching into the open space?
A. As I testified previously, no decks are proposed on the backs of those units. The units are shown as footprints of where they would be.

If a deck was going to be built, it would be built within the 56 -foot depth of the proposed unit rather than going outside of that brown footprint.
Q. So is that the white border along the
brown footprint? Is that what you're talking about?
A. No, no. The white border is an area around the proposed structures to show that we have an area around the units that wouldn't be within the open space.

And so we have a, it's roughly five feet, it varies in depth, but roughly five feet around the units for, you know, whether that was maintenance activity of the building that was not within the open space.
Q. So if someone, if you were to put a deck off of these townhomes, and again the townhomes in the inner circle, inner loop adjacent to the open space immediately, the townhome would have to be reduced in size? Is that what your testimony is?
A. The footprint of the interior would be changed, yes.
Q. So without, let's assume we're not going to change what you're showing is the footprint of the interior of the house. Can a deck be put on the back?
A. If they filled up the entire area that
we're showing in this envelope, the 36 by 56, with building, there would be no deck beyond that.
Q. That's what's proposed, filling up that space; correct?
A. We're showing a kind of maximum build, and so that unit would not have any deck. If they wanted a deck space, you would reduce the actual footprint of the structure, and you'd be able to have a deck within that envelope.

We typically do this on townhouse site developments to provide the maximum build, and so all of the improvements are designed to that maximum build, and then when the units are actually usually designed and sold, the depth of that unit may vary.
Q. But people will have a say when they purchase the property, these townhomes, these units? They will be able to have a say in how big the townhome is?
A. There will be a standard townhouse unit, and then there will be typically options, is how it's usually done.

And I'd go back to kind of a
conditional use standard of a generalized plan; right? $I$ can pull up the language if you want.

But it's a generalized plan for both the engineering and architecture. What we're showing is the maximum build of a unit that would be proposed. The unit may be smaller than that.

For instance, you were asking about a deck. If you took an eight-by-eight area out or an eight-by-ten, you might have an eight-by-ten deck in the back corner rather than having that interior space.
Q. So for all of us who are looking at A-12, sheet four, just so $I$ understand this correctly, the commissioners, the neighbors, and myself, this isn't necessarily the size of the townhomes that are going to be there in the end?
A. This is the maximum size.
Q. So it's not necessarily what's going to be there in the end?
A. They could be a smaller footprint, yes.
Q. All that testimony about decks and whether it can be built off and how that could be done, does that apply to stairs that would be
coming out the back?
A. Yes. They'd all be within that footprint you see there.
Q. Understood. Because if you took stairs off the back of any of those townhomes in that loop adjacent to the open space, the stairs would probably be going into the open space; correct?
A. No, I wouldn't agree. We have five feet there. We talked about how the units are set, and $I$ can start looking at the grading plan to analyze. But some units may only need one step out, which would not be within the open space.
Q. What about pavers then, if someone wanted to do pavers off the back?
A. All of the testimony that we provided is that the buildable area of that unit is within that footprint. We do not propose to build beyond the footprint which is shown on the plan.
Q. I guess $I$ just want to drill down and just make sure $I$ understand. If it's built out completely, which is what you show on sheet four of A-12; correct?
A. Correct. We show a full unit plan, yes.
Q. Then you cannot have decking coming off the back?
A. Correct. You would now be exceeding that footprint.
Q. And you could not have pavers if they were beyond the five feet of that white strip?
A. Correct.
Q. Looking at $A-12$, sheet four still, can you just point out the setback for us, where the setbacks are?

We'll just say the left-hand side, the bottom of the sheet, and the right-hand side along Eagle Road?
A. So when you refer to the left-hand side, you're referring to the Grant Lane side of the property?
Q. Correct.
A. So on that side, we've provided a 30-foot rear yard. On the, I'll refer to it as plan south towards the shopping center, we have a 25-foot perimeter setback along the shopping center. Along Eagle Road and Strafford Road are

40-foot setbacks.
Q. Do you recall in Hamilton-1, the first conditional use application that the developer brought before this board, that the rear yard setback was 30 feet along the -- when $I$ say rear yard, what is the rear yard -- what are you calling the rear yard?
A. As $I$ just stated, we call the rear yard along Grant Lane. I believe my testimony I went through before, that during the planning commission meetings, the township engineer said we needed a rear yard.

Although the ordinance provisions suggest otherwise, that we, it just needed perimeter setback and no internal yards.

So they said that we needed a rear yard, so we have shown the rear yard adjacent to the Grant Lane neighbors.
Q. So there's a rear yard, and then there's a side yard perpendicular to it and a side yard parallel to it; correct?
A. No. There's -- because we're a corner lot, we have one rear yard and one corner setback.
Q. And what was the setback you remember for Hamilton-1 along the shopping center?
A. I don't recollect.
Q. If you increase the setbacks on any of those three sides, you would have to move the townhomes; correct?
A. Along the Grant Lane side, since we provided the larger 30-foot rear yard on that side, we would have to move it, those units.

The units along the shopping center, so the plan south, would not need to be moved.

And then the same goes for changing the front yards, where we have room between the rear of the units and the setback line. So, no, we wouldn't have to move all of these.
Q. So along the Grant Lane side, yes, but not along the shopping center line?
A. Correct, because we provided that 30 foot, that extra five feet on that side already.
Q. So you have five foot of wiggle room, for lack of a better term. Is that your testimony?
A. Again, I'm not sure where you're referring to, the five feet.
Q. Along the bottom side, along the shopping center.

You're saying you would not have to move the townhomes because you have an extra five feet of setbacks. Is that what you're saying?
A. Yes, that's correct, and it's dimensioned on the plan $A-12$, sheet four.
Q. If you decrease the size of the townhomes, you can increase the size of the open space; correct?
A. I'm sorry. Can you repeat that?
Q. If you decrease the proposed size of the townhomes, you can increase the size of the open space; correct?
A. Theoretically, yes.
Q. And the buffering on the Grant Lane side and the shopping center -- well, let's start with Grant Lane.

The buffering, landscape buffering, is there any other proposed buffering or screening?
A. I'm not following your question.
Q. If someone is, lives on Grant Lane, and they're looking towards this property, would
they be seeing the townhomes, or would there be screening or some sort of natural buffer?
A. There's a 25-foot buffer along that property line. So the 25 -foot buffer goes along all the properties.

It goes along the Grant Lane, along both sides of the Forrest parcel, and then there's one additional parcel on Forrest Lane that the buffer goes around that parcel.

The buffer is not required along the commercial frontage.
Q. I missed it. So you're talking about, when you say "buffer," what are you referring to?
A. I'm referring to -- and I pulled out the ordinance section, just so we can have it.

So it's 280-91.G. It says: There shall be a buffer of 25 feet along all property lines which abut residentially-zoned districts which shall not contain any roads, structures, parking areas, et cetera, and shall be planted in accordance with a plan which shall be approved by the board of commissioners at the time of final approval. This buffer strip shall not be counted as part of the common open space.
Q. So $I$ understand, so the buffering you're talking about is the space between the houses on Grant Lane and the townhomes?
A. I'm referring to the 25 feet along the property lines which abut residentially-zoned districts.
Q. Understood. Is there going to be any artificial screening, or I think you have a landscape architect who's going to talk about trees. Are there any trees in that area?
A. As you said, the landscape architect will be addressing this question.
Q. Will there be any artificial screening beyond the trees?
A. I don't know what "artificial screening" is.
Q. Fencing?
A. I'll defer that to the landscape architect.
Q. How many, and I believe you testified to this, Mr. Lambert, but it has been a few weeks. How many parking spaces do you believe are required in this development?
A. So the bottom center of $A-12$, sheet
four, there's a parking summary table.
There are two spaces per dwelling unit required, and there's 38 units, so there's 76 parking spaces required.

And then 255-29.A(20) has a
requirement for overflow off-street parking at one space per four units, and that's an additional nine and a half, and ten are proposed.
Q. And the garages are being used to calculate the parking, is that correct, some of that parking?
A. Yes. We have included a two-car garage in each unit.
Q. And the driveways are not being used to calculate that parking; correct?
A. Correct. Although they're of sufficient size to meet the requirements, we have not included them in that count.
Q. Understood. I want to talk about the dimensions of the driveways. I know you've testified to this, but $I$ don't think we -- $I$ just want to be clear.

What is your testimony as to what the dimensions are for each driveway? Is it the same
for each townhome?
A. Obviously not, because the geometry of units $1,2,3,15,13,12$, there's different lengths. However, there's a minimum of 19 by 20 per each unit.
Q. That minimum, is that for the townhomes that have the two-feet facade? There's a staggered facade; correct?
A. Correct.
Q. And so some are two feet further out than others?
A. Correct.
Q. So is this 19 by 20 , is it your testimony that that minimum is for the townhomes that have the two-feet facade coming out?
A. It will be for all of the units. The garage door itself, those will be recessed as part of the architecture.
Q. And what are the dimensions of the garages?
A. I don't have the exact architectural amounts. There will be a minimum of 19 by 20 provided within the garage for the parking spaces.
Q. And what are the dimensions of the openings of the garage?
A. I'm not the architect. I don't have the opening itself.
Q. So the architect would have that?
A. A architect, yes.
Q. If one had two SUVs, would they fit into the garages as proposed?
A. Yes. The spaces inside are nine and a half by 20 , which is the township requirement for a parking space.
Q. And so that would fit your testimony that two SUVs could fit in the garage?
A. In a nine and a half by 20.
Q. And what are the dimensions, $I$ want to talk about Drive $A$ and Drive B. I have a number of questions about that. But what are the dimensions of Drive $A$ and Drive B?
A. When you say "dimensions," you mean width?
Q. Width.
A. It's a 28-foot width.
Q. Can you point out townhomes one and two? Where are they on the --
A. They're in the bottom right corner.
Q. And how would one pull into those driveways? If they pulled in to park, they would have to back out; correct?
A. Yes.
Q. If they're backing out, they're backing out onto Drive B; correct?
A. That is correct, yes.
Q. And have you done -- those are curved driveways; correct?
A. They are curved, yes.
Q. Have you shown on any of the documents you provided the radius for that turn?
A. I do not believe that radius is shown, but it's a gentle radius for a passenger vehicle.
Q. A gentle radius. So it's your testimony that it would be safe to pull out of the parking spot or the driveways in townhomes one and two?
A. Yes.
Q. How far apart are each driveway from the other? Let's take the ones on the bottom.
A. Can you be more specific?
Q. Yes. Along the commercial property on
the bottom of A-12.
A. Which? There's varying widths.
Q. I have my cursor over a townhome. Do you see that? Which townhome is that?
A. You're looking at the one on the, using words, it's unit 12 . It's on the bottom left. It's the last most unit on the shopping center side of the property; is that correct?
Q. Correct. And what is the distance between that driveway and the unit to its right?
A. I do not have an exact dimension. Eyeballing it, you're probably 15 feet or so.
Q. And is that consistent -- they vary throughout all these townhomes; is that correct?
A. Yes.
Q. Is that on a high side, the distance between the driveways, or are other driveways further apart?
A. It just depends on the orientation.
Q. What you do you mean by that?
A. If the driveways are kind of closer together or further apart.
Q. Look at the lower left-hand side the public parking in the lower left-hand side of the
open space. So this is the parallel parking on the curve?
A. Yes.
Q. Is it your testimony these parallel parking spaces would be rectangular in shape?
A. It would be -- I guess it would technically be trapezoidal, right, the shortest distance along the curb line with a little longer distance out because it's on a curve.
Q. And what are the dimensions of each of these parking spots?
A. They're shown as nine by 22.
Q. They're nine by 22 , but they're not necessarily a rectangle because of the curve; correct?
A. Correct.
Q. And have you done any sight lines analysis if one were to be pulling out of those parallel parking spots into Drive A?
A. We didn't do sight triangles there. It's a very limited distance. You would be able to see both down, you know, both sections of Drive A pulling out of the spaces.
Q. So if a car is traveling on Drive $B$
onto Drive $A$, so the parallel parking would now be on the right, your testimony is that someone pulling out of those parallel parking spaces, they would be able to see, safely see cars coming from that direction?
A. Yes.
Q. How wide are the sidewalks, the sidewalk that's on the inner loop? There's one sidewalk along Drive $A$ and Drive $B$; correct?
A. Correct. So $A-12$, sheet four, identifies the sidewalk as five feet.
Q. Is it your testimony that the sidewalks, that sidewalk complies with ADA standards?
A. Yes.
Q. Can you show me how a person in a wheelchair would get from that sidewalk over to the open space?
A. You could, one, you could cross at the, where the driveway reaches Strafford Avenue and be able to go into the space, and then you would be able to just cross and go into that open space at any number of locations.
Q. So if someone was coming from the
shopping center and using the sidewalk, they could cut between the two townhomes.

They would have to go up Strafford along the sidewalk to get to the open space?
A. They could, yes.
Q. They could, or is there another way?
A. They could cross. You know, it's a very technical question you're asking.

Typically, something like this would be handled in land development. If we were looking at this, we could provide a curb cut on the other side.

There are no proposed paved walkways through that open space, so it would be grass surface.

But if we needed a wheelchair ramp to get into that grass surface, you can easily provide that.

Again, it's very, you know, you're 12 steps behind our design, and you're asking a very technical question.
Q. So it hasn't been designed yet?
A. That, the ADA access to the open space has not been designed as of this time.
Q. If there was a sidewalk on the other side of Drive A and Drive B, your answer could have been, correct me if I'm wrong, they could cross at a crosswalk from the outer loop, the outer sidewalk along Drive $A$ and Drive B, cross safely along the crosswalk to a sidewalk on the inner loop of Drive $A$ and Drive $B$.

That could have been your testimony;
correct?
A. No, I don't think it would be my testimony. You're suggesting a different design than what's proposed.

You're suggesting we would have that at this juncture. We don't have that design at this time for ADA accessibility, which I'm not even sure is required for that open space.

But if it were required under the codes, whether the township or federal guidelines, we will be able to address that.

As I said, it typically would be during either land development or permitting to provide that level of detail.
Q. I think the only thing I'm suggesting is that your plan as shown right now, which is
what's before this board, is not at a state where someone in a wheelchair, $I$ mean, it could be if you had a sidewalk on the end. Do you not agree with that?
A. I don't agree with that.
Q. Have you provided a loading zone in the development?
A. No, we have not.
Q. Have you provided for a location for excess snow removal?
A. There's areas on the site that can accommodate snow removal. There's, for instance, I believe, in between units 15 and 16 , we would have an area for snow removal.

In between the driveway for unit one and unit 38 , there's an area to accumulate snow. In front of unit five, there's an area to accumulate snow.

So -- and we do have a 28-foot-wide cartway for them to be able to, you know, move that snow.
Q. If someone is living in a townhome between two other townhomes and they want to clear their driveway of snow, where are they
going to push it?
A. I lived in a condo for a long time. Everything is really up to the HOA.

Typically, driveways would be shoveled by the HOA in a development like this, and so they would be contracted and be shoveled or --
Q. I'm sorry. Go ahead.
A. They would be shoveled or plowed, and on either side of the driveway, just like $I$ do at the driveway at my house, you would be able to put snow on either side.
Q. So it's your testimony there's enough space in between the driveways, if you live in between two townhomes, there's enough space between the driveway to your left and your right to push that snow?
A. Yes. I believe I testified previously, if you do get an extreme snow event, oftentimes the HOA arranges for the snow to be removed; right?

If you have 30 inches of snow,
oftentimes that snow actually gets removed offsite, at least that's what my former HOA did.
Q. Are there any paths -- talking about

ADA accessibility.
Are there any paths specifically for anyone to cross Drive $A$ or Drive $B$ to the open space from the outer sidewalks?
A. This is a very low, a low-volume driveway within a community. It's easily, you know, we're not crossing Montgomery Avenue or Lancaster Avenue.

We're crossing kind of an internal driveway to a community, and you'd be able to cross at any number of areas.
Q. But there are no paths; correct?
A. It's all paved, right? So if you're referring to a paved surface, we have a paved surface in the whole driveway.
Q. Is there any crosswalks over that paved surface?
A. We have not striped any crosswalks across that paved surface.
Q. Where would residents place their trash?
A. Trash would be held in the garage itself, and then a private hauler would come and collect it.
Q. So the private hauler would have to collect it from the garage?
A. My understanding is actually they do. I'm actually surprised at that, that they get access.

Either that or it would be placed outside kind of at the end of the driveway corner and be collected just like any normal development.
Q. Can you note where the sewer lines would be on -- would this be the best place to look for the sewer lines, $A-12$, sheet four?
A. I believe sheet five would be a better option.
Q. Can you note where the sewer lines are on sheet five of A-12?
A. So generally the sewer lines are underneath Drive $A$ and Drive B. They then exit Drive $A$ right between units 12 and 13, and it goes behind unit 13 and then out to Forrest Lane to connect to the public sewer.
Q. So there will be a need for an easement for that connection; correct?
A. I'm sorry. When you say "that
connection," what are you referring to?
Q. Off of, $I$ believe you said, Forrest Lane?
A. It would be within the public right-of-way, and it would be part of the parcel. So I'm not sure what easement you're referring to.
Q. And what about the stormwater lines? Can you point those out?
A. So there are many stormwater lines throughout the property. They are the lines that have the "ST" on them.

They're a series of inlets and
stormwater pipes. There is stormwater pipes around directly adjacent to the buildings collecting roof drains.

There are five underground stormwater facilities that are identified as PCSM, EMP, you know, various tag numbers on this plan throughout the property really.
Q. And specifically, the bottom left-hand corner, there's a parcel that used to have a house in the previous plans and no longer has the house. That's been removed; correct?
A. Correct.
Q. And if we're looking at that
stormwater line, there's a stormwater line on that property; correct?
A. Yes. There's a small stormwater basin on the property, along with a stormwater line, yes.
Q. And how close is that stormwater line from the sanitary sewer line on that property?
A. I'd have to check the exact
dimensions. Eyeballing it, I believe it was -again, I'm just eyeballing it. It's probably ten or 15 feet.
Q. There's a path that's leading between the two townhomes in the bottom right-hand corner onto the shopping center. Would that require an easement as well?
A. No.
Q. How many structures are currently on the property?
A. Can you bring up sheet two, I believe?
Q. Sure.
A. So when you say "structures," I'm going to refer to building structures. Is that
what you're --
Q. That is what I'm referring to, building structures.
A. Let me count them. So this is A-12, sheet two. It looks like there's ten approximately, but the house on Forrest, which would be 11.
Q. And of those 11 structures, how many are houses?
A. There are two main houses. There are other structures. I included dwellings.
Q. And have you consulted with the Radnor Historical and Architectural Review Boards to determine any historic significance for this site or any of those houses?
A. I have not.
Q. Do you know if the applicant has at all?
A. I don't believe so, and I don't believe it's a requirement of the ordinance.
Q. You testified that development on this property would not be impacted by strong prevailing winds. Do you remember that?
A. Yes.
Q. I just want to be clear, Mr. Lambert. You're not an expert in aerology; correct?
A. I am not an expert in aerology.
Q. You also testified as to seasonal temperatures at this property not being an issue with the proposed development. Do you remember that?
A. I do. That was in reference to current building codes addressing seasonal temperatures.

I've lived in this region my entire life, so with modern-day insulation and HVAC, it doesn't affect the seasonal temperatures.
Q. But you have no numbers or analysis to back up that testimony; correct?
A. I do not.
Q. I'd like to talk about vehicular access to the site and within the site.

Trucks would have to -- to get into Drive $A$ or Drive $B$, trucks would have to swing into the oncoming lanes on Strafford; is that correct?
A. Can you be more specific about what trucks you're referring to?
Q. If there's a fire truck, and it's coming up from the Grant Lane side and wants to take a right onto Drive $B$, it would have to swing into the other lane; correct?
A. Yes. It's really a function, you know, Strafford is a narrow street, that we would be able to make that maneuver, which would not be uncommon for a fire truck.
Q. And there will be two access points for fire trucks; correct?
A. Both Drive $A$ and Drive $B$ access Strafford Avenue, yes.
Q. And have you discussed with the fire marshal whether two access points are sufficient?
A. I have not.
Q. Anyone for the applicant, to your knowledge?
A. We did not. We recently did another project in Radnor, it had about 300 units, and used one main driveway access point.
Q. The turn radius for Drive $B$ is sharper than the turn radius for Drive $A$, correct, if you're looking at the turn at the bottom right-hand corner and bottom left-hand corner?
A. That is correct.
Q. Why is that?
A. It was really just design, looking at how the units laid out, how the development --
Q. Well, if you soften that turn radius on Drive $B$, you would be going into the open space; correct?
A. Yes. If we changed the drive radius, it would change the open space in that area.
Q. Have you provided a turn radius for the largest UPS trucks that would be entering the development?
A. We have not, but it would fall, come within a subset of the two vehicles that we did provide for the site.
Q. And that would be your testimony for Fed Ex trucks?
A. Yes.
Q. Proposed facilities trucks?
A. Yes.
Q. And garbage?
A. They all have much tighter turning radiuses than the vehicles that we demonstrated can safely maneuver through the site.
Q. Can you go over again the improvements you are making to Strafford, if any?
A. So we would be providing a curb and sidewalk along Strafford.
Q. Between Drive $A$ and Drive B?
A. When you say "between," I just want to understand what you're referring to.
Q. You have Drive $A$ on the left-hand side and Drive $B$ on the right-hand side, and you have Strafford running perpendicular there.

So if you go out Drive A --
A. Yes.
Q. -- and you take a right, are you providing sidewalk and curbing along Strafford heading towards Drive $B$ ?
A. Yes. That was the intent.
Q. Until a few months ago, you were calling Drive $A$ and Drive $B$ roads; correct?
A. Yes. We had nomenclature on the plan that referred to it as "road." Hamilton-1, you know, we had, I believe, the same nomenclature then of "road."

At that time that we submitted
Hamilton-1, we had engineers review things like
that, and it was never brought up that the nomenclature on the plan would confuse and make it considered a "street" versus a "driveway."

During Hamilton-2, or the current application, we submitted the plans, received a review letter from the same consultants that we did for Hamilton-1 and brought up different issues that they didn't bring up previously.

So it seemed like it was a different interpretation of this plan than the first plan. And in that new review, it was brought up suggesting that it should be considered a "street" versus a "driveway."

And, I mean, I don't think that it was really, just from the nomenclature, that was causing the issues, and that's why we renamed it to "drive" versus "road."
Q. And when did that change take place?
A. I don't recall the exact iteration of which it was, or when it was, but it was actually submitted and before now.
Q. So since last May and before now?
A. Correct. Again, it was, I received the reviews, saw the reviews. I think, for me,
it was creating some confusion. And so to limit the confusion, we re-labeled them.
Q. Have you provided in any of your exhibits sight lines for ingress and egress from Drive A or Drive B?
A. Yes, we did.
Q. And if you move Drive $B$ further from where it is now, would that impact the sight lines?
A. Not substantively, no.
Q. Would it impact the distance to the townhomes?
A. I'm not sure -- I'm not sure I understand your question.
Q. So if you moved Drive B further to the left, would it be further from the townhomes or the same kind of distance? How would it change the proposal?
A. You're talking about a different plan that's not the plan ahead of us. You know, we can change all of the buildings and units, but that's not what we're proposing, right, so I don't really understand your question.

I mean, you're asking me to move one
element on the plan, other elements maybe not move, and you'd have to look at different configurations.

There's other things to consider.
It's not a static environment.
Q. You all brought in a plan, another plan, correct, I think it's Exhibit 4. That's a completely different plan; correct?
A. That was what you referred to as the neighbor plan. The applicant met with the neighbors. Neighbors asked for various things. That plan was responsive to the neighbors' comments. It did not necessarily meet the codes.

I believe it was in the purview of the board to approve it, but it was not meeting the code requirements that this plan meets.
Q. Understood, and we'll circle back to that. I'm asking, you brought in a totally new plan, potentially hypothetical, and maybe this board could allow for it.

I'm just asking you to change one thing. If you move Drive $B$ a little further away from Eagle, how would that change --
A. I haven't drawn that plan, right? So you're asking me to move one thing. I don't know what else -- are you asking me to move everything, or are you asking me to move one thing, or are you asking me to move, you know, like $I$ don't understand what you want me to move; right?

You know, if $I$ left the buildings exactly where they were and moved Road $B$ on top of them, Road $B$ would be on top of the buildings. I mean, that's what you're asking. I don't really understand your question.
Q. Well, it wouldn't be on top of the buildings if you would move the buildings to the left; correct?
A. Potentially, or you could reconfigure the buildings. There's different design solutions.
Q. Let me ask you this. You have Drive B. If you move it further from Eagle Road, you're going to cut down the open space; correct?
A. Potentially modify the open space, yes, because we have the open space touching Drive B.
Q. Right. And are there any fire hydrants provided on this plan?
A. We haven't gotten to that level of design.
Q. So there's no fire hydrants on this plan?
A. Correct. That would be typically during final plan or potentially even post final plan that we would look at that. That's again much later.

I go back, you're asking very technical, detailed questions, and I go back to kind of the general standard of 280-135.C:

A generalized site plan shall be submitted as part of any conditional use application.

It is not intended that such plan be engineered or contain a fixed architectural layout, such as would be required under 255.

But it says -- a lot of your questions are really directed to a much further developed plan.

I think most of your questions have been very technical questions, but $I$ understand,
and I'm trying to answer them.
But something like a fire hydrant, there's many different locations that you could put it much later in the process.
Q. You testified the height of each unit would be 35 feet; correct?
A. I believe it was less, less than 35 feet. The ordinance requirement is 35.
Q. Is that shown on the plan for any of the units?
A. So in the zoning summary table on A-12, sheet four, left-hand side, the second-to-the-bottom line says maximum building height.

If you look at the section, the requirement 35 feet. The proposed is less than or equal to 35 feet.
Q. And you -- so that's for each unit specifically. You're capturing that. Is that what you testified to?
A. Yes. We've asserted that the units will be less than 35 feet.
Q. And you talked a little while ago about the recess of some of the townhomes of two
feet.
It's your testimony that this plan reflected on $A-12$, sheet four, is in conformance with the code regarding the facade and the setback of two feet, the stacking?
A. Yes.
Q. Let's talk about stormwater a little bit. Once the development is finished, do you believe the HOA maintains the stormwater facilities?
A. Yes.
Q. And if there was any issue with the stormwater facilities at any point in the future, there would have to be earth disturbance within the open space to get to at least two of the basins; correct?
A. Can you repeat that question?
Q. In the future, if there's any issues with the basins, backups, anything of that sort, to get to those facilities, you'd have to disturb earth within the open space, specifically for the basins in the bottom left-hand and right-hand corner; is that correct?
A. Not necessarily. You might be able to
jet clean them. There's other maintenance activities that you might be able to do.
Q. But it could lead to earth disturbance of the open space; correct?
A. That is one possibility, yes.
Q. And there is natural stormwater management on the site at this time; correct? Mature trees?
A. There are, there's -- can you repeat your question? I caught a couple words of that.
Q. Sure. There is natural stormwater management on the site currently; correct?
A. I would refer to the vegetation as natural stormwater management. There is about two acres that are impervious that runs off there.

There is no engineered stormwater basins or anything like that on the property that I'm aware of.
Q. But there are mature trees on it; correct?
A. Yes, there's some mature trees. There's some over-mature trees that are dead. And, as $I$ said, there's lots of impervious.

MR. MARLIER: If we could, Madam Chairman, can we take a five-minute break?

THE PRESIDENT: That's fine.
MR. MARLIER: Thank you.
THE PRESIDENT: So we'll reconvene at 7:45.

-     -         - 

(Recess taken.)

-     -         - 

THE PRESIDENT: All right. We'll get started again.

BY MR. MARLIER:
Q. Yes, Mr. Lambert. I just have a few more questions about stormwater.

Your plans specifically show how the stormwater is collected off of each townhome. You testified to that.

Does this show it on the plan?
A. Yes.
Q. And where is that?
A. If we can pull up sheet five, A-12, sheet five. There is a line that's roughly along the perimeter of the structure that shows the $S T$ line. That's referring to stormwater line.

It's called out in various locations of varying size. Some of it calls out roof drain, six-inch PVC pipe, the clean-outs, really just around the perimeter of the building, and then it connects to the stormwater management facilities.
Q. And are manholes shown?
A. We have inlets shown. The sanitary sewer manhole is shown. Most of the stormwater is collected through the structures that we have, our inlets.

We have to look at them specifically. I have to double check specifically if we have any manholes, but we were doing a lot of it through inlet structures.
Q. Fair enough. And the stormwater piping, is it consistent -- I think there's five basins; correct?
A. Correct.
Q. Is the piping between those basins the same size, or does it differ throughout the property?
A. It will vary. Again, the initial design here, as we talked about extensively, it
would need land development, permitting, everything else after this, which will continue to refine the design.
Q. Understood. And will there be basements to these townhomes?
A. Yes.
Q. Will the basements be -- you testified a little while ago this evening that the townhomes could change in size and dimension; correct?
A. Correct.
Q. And so the basements, can you tell us what the size and dimension of those basements will be or will that be --
A. No.
Q. -- specific to the townhome? How far down will the basements go? That may be consistent for each townhome; correct?
A. No.
Q. It will not?
A. I do not know.
Q. You don't know how far down the basements will go?
A. Correct.
Q. Will they go further than ten feet?
A. I don't know. The previous testimony, I think one of the commissioners asked, and we hypothesized different dimensions, and we came up with a rough dimension of slightly under ten feet.
Q. And will those dimensions count towards the square footage?
A. Square footage of?
Q. The entire home. There's been testimony they are going to be 3,000-square-foot townhomes?
A. Correct. That is above grade level.
Q. But the basement could be considered square footage if it meets certain requirements; correct?
A. I believe the builders and investors all look at that. Typically, $I$ am not a builder or an investor.
Q. Will there be more earth disturbance during the construction of these townhomes with the basements compared to if there weren't basements?
A. Again, $I$ don't understand your
question.
Q. Will there be more earth disturbance during this construction because there will be basements constructed than if there weren't basements constructed?
A. No.
Q. I want to bring up another exhibit here for you. You testified to stormwater infiltration testing on the property; correct?
A. Yes.
Q. And is it your testimony now that you followed the methodology consistent with the PA DEP BMP manual?
A. Yes.
Q. And you testified that you went ten feet down to find the limiting zone; correct?
A. I believe generally the excavation was down to ten feet. I'd have to double check the exact numbers. But, yes, we went down beyond the bottom of the basins to verify the limiting zone.
Q. And is it your testimony that you never hit the water table in your testing?
A. We did not hit the groundwater table.
Q. And when were these tests performed?
A. 2019 .
Q. So that 2019 is when the tests were performed, so they were performed for conditional use in Hamilton-1; is that correct?
A. Yes.
Q. And they're the most recent tests?
A. They are, yes.
Q. I'm going to direct your attention to what $I$ brought up on the screen, $A-13$, page 1E.

The triangles and the circles in the middle in the two rectangles toward the top of the page, what do those represent?
A. They were -- the triangles and circles refer to the test pits and the permeability location.
Q. And what kind of tests did you do at this site?
A. I did not do any tests at this site.
Q. Do you know what types were done at this site?
A. Guelph permeameter tests were done at that site.
Q. Were double ring tests done at that site?
A. They were not.
Q. Okay. When you testified that the infiltration testing was sufficient for this property, for this development, did you take into account where you, during that testimony, where you take into account the four tests that are in that rectangle, the triangle and circles that are within the two rectangles?
A. As I explained before, we brought these plans further along than a typical conditional use.

We found that conditional use is a lot less stormwater and a lot less testing completed and modeling. We did this in response to the neighbor concerns, looking at the site.

But, yes, we took all the different testing across the site into consideration of our design.
Q. So specifically those four test sites that I'm referring to in those rectangles were part of your testimony saying, stating that it's sufficient testing?
A. We tested in many locations throughout the site, taking a look at the different soil
conditions.
We took the, you know, all the tests that we did into consideration when we did our stormwater analysis.
Q. I'd like to draw your attention to A-12, sheet four again, and the bed number five, which $I$ believe is in the bottom left-hand corner; correct?
A. Yes. Bed number five is in the Forrest Lane parcel.
Q. And this bed collects from beds one, two, and three; is that correct?
A. Yes, that is correct.
Q. And what is the area of that basin?
A. I don't know the area offhand.
Q. Do you know the width offhand?
A. Not offhand. I can look it up if we need to.
Q. Is the width of that basin narrower than the width of the other basins?
A. Yes.
Q. Significantly narrower?
A. Yes.
Q. Is there more likely to be a blockage
in a narrower system or a wider system?
A. The systems are made out of the same type of system, right, so it's proposed a storm brick system, which has a large void area throughout the entire system.
Q. Ninety-five percent; right?
A. Something along those lines, yes.
Q. So my question was, is it more likely for there to be a backup in a narrower system or a wider system?
A. Typically the systems themselves don't back up. If you're referring to that, you know, I'm not sure exactly what you mean by "back up."

But typically the systems, as long as they're maintained, do not back up.
Q. Well, $I$ think what a lot of folks have expressed concern about is a large storm comes along, the system can't handle it, and it backs up.

That's what $I$ mean by "back up." I'm trying not to be too technical with you. But when I say "back up," I mean water rises in these basins and it backs up in the other basins.

Does that make sense?
A. Somewhat. I'm not sure. You'd have to be more technical so $I$ can understand your question.
Q. If a failure in the system occurs, how will the residents be notified?
A. I don't understand your question. If a failure in the system occurs, can you repeat that? I'm not following.

MR. NELSON: Actually, can we go back to that last question?

THE WITNESS: Sure.
MR. NELSON: I would be interested in, what happens if the system overflows, that its capacity is reached and we have a 500-year storm and it cannot handle it.

Where does that water go?
THE WITNESS: The water will continue to run downhill. So if you reach that 500-year storm, which just for the record I would point out is beyond what is required by the ordinance, the water will run, just like all the other water in the area, across the surface, right?

And you will have surface flow
throughout the entire area if you have that 500-year storm.

BY MR. MARLIER:
Q. Towards the houses on Grant Lane?
A. Downhill, right? So we will be, if there is -- anywhere where it's running downhill that, you know, again we're talking about this hypothetical 500-year storm, which is beyond the purview of the code, that water will run downhill, yes.
Q. Towards Forrest Lane?
A. Forrest Lane is downhill of the site, so, yes, the water will run downhill.
Q. Just to be clear, the reason I'm asking, again $I$ don't live here. Everybody else does.

They know, but also we're trying to develop a record, a complete record for this board.

So downhill towards Grant, downhill towards Forrest, downhill towards Eagle as well?
A. Anywhere where the grade is lower than higher, it will run toward the lower side, is where the water will run.
Q. Do the Grant Lane houses have basements?
A. I do not know.
Q. Do the Forrest Lane houses have basements?
A. I do not know.
Q. And Mr. Nelson asked about a large storm that causes a backup, and you testified that the water would simply run downhill, and so that's where $I$ was going with a backup or a failure.

How will the residents be notified if that happens?
A. Residents would be notified through their HOA, just like any other property owner.
Q. Can you explain what freeboard means relative to these basins?
A. Typically freeboard is the amount -freeboard is typically used for above-grade basins, when people refer to freeboard, and it's the volume, you know, the area above the hundred-year storm event.
Q. And are these basins above grade?
A. No.
Q. So you don't believe that freeboard is relevant to these basins?
A. The, the basin has a volume. They're modeled through the stormwater of how much water is getting there.

It models it to make sure that the basin has capacity, and then it has a discharge point where the water runs out.
Q. So again, $I$ just want to be clear. So do you believe that the concept of -- or the concept of freeboard applies here or not?
A. Typically not.
Q. I just want to be clear. I'm sorry. Typically not, that makes me think you're talking in generalities.

For these specific basins on this specific site, does it apply?
A. No.
Q. Is it true that the beds one, two, and three all go through five, we talked about that, and then exit off the property in a stormwater facility under Forrest Lane; is that correct?
A. That is correct.
Q. What are the overall contributing
drainage areas bed size?
A. I'd have to look up the exact numbers.
Q. If you have them?
A. It might take me some time, but.
Q. Well, let me ask this, Mr. Lambert.

Is there a reasonable margin of error if one of the basins leading to five fails?

We talked about, $I$ think, one, two, and three lead into five?
A. Yes.
Q. If one of those fails, do you believe, is it your testimony that there's a reasonable margin of error, meaning that the other systems will not fail?
A. Yes. I believe having multiple systems provides redundancy.
Q. I want to go back to basin five and the width of it.

The reason you had to make basin five that thin is because of the nature of the parcel that it's on?
A. Yes.
Q. If you had not used that parcel but used some other part of the property for that
basin, would it have taken up space that otherwise would be used for a townhome or for open space?
A. We originally did not have that basin, as you're aware from the previous plan. We added that basin in response to neighbors' concerns. We actually included the extra basin down there.
Q. You mentioned you're using storm bricks for the stormwater; correct?
A. That is the current design, yes.
Q. And that there's void space, and I believe it's 95 , is what $I$ saw in the documents.

Does that sound correct to you?
A. Yes.
Q. Is there any supporting data within the documents that reflects or shows how you got to that 95 percent void space?
A. It's the manufacturers. They have their technical specifications providing that volume.
Q. So would that be found on their website, or has that just been provided to you?
A. That what's been provided to us. I mean, I'm sure it can probably be found on the
website.
Q. I want to point out the infiltration systems on A-12 and their proximity to the townhomes.

If you look at bed one, can you describe where bed one is?
A. Bed one is near the intersection of Drive A, Drive B, roughly underneath the five parking spaces and some of the open space and some of the drive.
Q. What is the distance between bed one and townhome 28?
A. I don't have an exact dimension. It appears to be about 20 feet.
Q. Are these dimensions shown anywhere on the plans, that you know of?
A. I don't believe so.
Q. If you look at bed two, which is between townhome 25 and 24, the bottom left-hand corner of the open space, what is the approximate distance from bed two to townhome 25?
A. It looks a little further. Probably 25 or 30 feet.
Q. If we're looking at bed three, which
is behind 15, 14, 13 -- townhome 15, 14, and 13, how close is that to the townhomes 15, 14, and 13?
A. Again, I'd have to approximate, but I'd say 20, 25 feet.
Q. Let's go over to bed four. How close is bed four to townhome two?
A. Twenty feet plus.
Q. And going back to three, how close is bed three to Mr. Chawla's property, Mr. and Mrs. Chawla's property on Grant Lane immediately to the left?
A. It appears it's 35 feet or so.
Q. And if we go to bed five, how close is that to Mr. Schuda's house?
A. From his house or from his property?
Q. From his property.
A. From the property line, again it's probably 30,35 feet.
Q. You testified previously that the groundwater can flow a different direction from surface topography. Do you remember that?
A. Yes.
Q. Do you have any calculations to
determine that?
A. No.
Q. The board's indulgence. I have put up on the screen what's been marked as A-15, sheet two.

Do you have any calculations to show the change in the drainage boundary from sheet two -- from sheet one to this sheet?
A. Can you repeat the question?
Q. Sure. Does sheet one, this is --
A. A-15 $A$ and $A-15$ is what you're referring to, $I$ believe.
Q. Correct. Thank You, Mr. Lambert.

So are there any calculations, you have changes in -- what do the colors show us on 15 A?
A. 15 A shows four different colors of different areas, a pink, a green, a purple, and a teal.

The teal, which was area bed four, shows the area on the subject parcel, predominantly on the subject parcel, and then it has the other areas.

It's really just showing the drainage
area, as I testified to before, based on publicly-available LiDAR information.
Q. And then if you go to 15 B , what does that show?
A. That is showing the proposed plan and proposed drainage areas and the modification to the existing drainage areas and how that would be controlled.
Q. And do you have any calculations in any of the documents that have been presented to show the change from 15 A to 15 B?
A. It's really our proposed stormwater system is the major modification to the teal color.
Q. So you don't have calculations to show the difference?
A. We do. It's our stormwater, A-13.
Q. $A-13$ ?

Did you use the -- for this exhibit, from 15 A to 15 B, did you use the predevelopment pervious condition as meadow, and that's been discussed and defined previously?
A. No. What $I$ previously talked about, we looked at -- the purpose of this exhibit was not following the code.

It was looking at actual conditions, so we were not looking at fictitious conditions in this analysis.
Q. Are you implying that the code is fictitious?
A. Yes.
Q. I want to point out, 15 B , there's inlets up on Strafford; correct?
A. Correct.
Q. Those inlets, if you look at the one, it's hard to see, but there's an inlet up towards Drive $B$, correct, kind of like on the curve of Strafford going onto $B$ ?
A. Yes.
Q. If that inlet was, let's say, on Strafford and not on a curve, it would collect water better; correct?
A. It depends where the water is running and how you're collecting it, but $I$ don't necessarily agree.
Q. Well, there would be curbing along Strafford; correct?
A. There is curbing where the inlet's proposed.
Q. But some of the water would keep going and running down Strafford towards Grant. Some of the water would keep running.

Not all of the water would turn around the curve and go into the inlet; correct?
A. And again, can you repeat that?
Q. Sure. If water is running along Strafford going towards Grant along the curve, and then there's a curb into Drive B, and are you testifying that all of the water along Strafford would go towards that inlet that's on that curve, or would some of it just keep going down towards Grant?
A. So the grade along Strafford, according to LiDAR, is higher, and the road pitches toward Grant almost for the entire length of that section.

So if you look at A-15 A, you can see the pink area is much closer to the intersection at Strafford and Eagle Road.

And so our onsite stormwater system is picking up a section of that prior to it getting to, you know, further down toward Grant and collecting and controlling it as part of our
stormwater system.
Q. I understand. I'm trying to get to, if that inlet was just a few feet over on the straightaway on Strafford instead of on the curve, it would collect more of the water, because it would go right into it as opposed to going around the corner?
A. No. I mean, the water, the grading there is going to turn the corner and get into that inlet.
Q. Fair enough. Going back to basin five, let's go back to basin five.

You testified it's going to go into Forrest Lane, that's where this basin five exits into, correct, into the stormwater on Forrest Lane?
A. Correct. The outdoor pipe plugs into the existing collection system on Forrest Lane.
Q. And have you determined that existing pipe has sufficient capacity for this onsite stormwater?
A. We're going to be reducing those rates and volumes reaching that point, so we're actually reducing the flow to that location.
Q. So you believe it has sufficient capacity?
A. We're going to be reducing other flows from our site to get to that location.
Q. So is your testimony that it has sufficient capacity?
A. My testimony is that we are reducing the flow leaving our site, yes.
Q. So you believe it has, as it exists, it has sufficient capacity, and you're going to make it so that there's less flow?
A. We have not done an offsite analysis of the PennDOT, Tredyffrin Township, and Radnor Township sewer systems.
Q. Fair enough. Do you know the diameter of that main then?
A. We're showing that's a -- appears to be an 18-inch corrugated metal pipe.
Q. Does your analysis of whether or not that main has sufficient capacity take into account the adjacent shopping center?
A. As I stated, we have not done an analysis of the PennDOT, Tredyffrin Township, and Radnor Township sewer system. We are reducing
the amount of flow leaving our site.
Q. One more question. The neighbor plan, A-4, I understand it's been stated by a couple different witnesses now, including you, that it does not meet the code.

In what ways, you don't have to go through all of them, but if you want to hit the high notes, in what ways does it not meet the code?
A. So there's two iterations of the plan. It's complicated. But one of the major pieces where it does not -- it meets the code if the board approves open space which is separate.

The open space requirement, and we can pull up the code, says that it should be contiguous unless approved by the board.

So using that language, the board can approve it if it's not contiguous, but it has to be specifically approved by the board. So that was one piece.

The amount of impervious, A-4 A, included the correct amount of impervious -- or open space. It had the correct percentages for stormwater, so it met the other provisions.

It just did not -- it did not meet the contiguous requirement of the code.
Q. So the one code section it does not meet is that it's not contiguous?
A. It would meet the requirement if approved by the board.
Q. And there's nothing else that you can think of on, if that neighbor --
A. In the base plan, I believe that was the most significant. There was also a provision the neighbors had asked for, an alternate on the bottom of A-4 A, and $I$ don't know if you have A-4 A you can pull up for everyone.

But A-4 $A$ has an alternative driveway configuration which had access to Eagle Road.

There are code provisions that say that the driveway, if you're on a corner parcel, should take access, if you're on a major collector, should take access from a secondary street.

And so we would need -- the board would need to approve that specifically to allow that access.
Q. The access onto Eagle?
A. Onto Eagle. So at the bottom of the page, there's an inset. And again, that's why we included it as an inset.

This was a plan that was responsive to neighbors' questions and comments, was that we would be able to provide that if approved by the board.
Q. Just so $I$ understand, the purpose of this plan, correct me if I'm wrong, is to provide the board an ability to come up with conditions on the plan that's shown on A-12?

Is that your testimony?
A. It was to also reflect to the neighbors that we were not ignoring their requests, right?

The applicant spent an extensive amount of time meeting with various neighbors over time trying to come up with a plan that was a mutually-agreeable plan, and that was reflected in this A-4 $A$ document.
Q. And an alternative to what you've done, bringing it in on another application, is to bring a new application, correct, with this plan?
A. Yes. I would defer to legal. That's more a legal question.

A different application with this plan, but this plan had items that didn't explicitly meet the code, like our current plan explicitly meets the code.

MR. MARLIER: I have no further questions.

MR. NELSON: So it's my understanding that the neighbor parties have already had Cross-examination; correct?

MR. BROSEMAN: Yes.
MR. NELSON: So the only body that hasn't had their chance is our board members.

MR. BROSEMAN: I believe the board also did.

MR. MARLIER: And I think Mr. Rice did say that there could be potentially cross from the neighbors, additional cross. That was my --

MR. BROSEMAN: There was very extensive cross by the neighbors and the board, so $I$ would object to further cross.

Mr. Marlier, the township's attorney, has been cross-examining Mr. Lambert, I think we took a ten-minute break, but he started in on Mr. Lambert at 6:30.

It's now 8:20, so almost two hours. I would like to have some redirect.

MR. NELSON: Okay. Just one second, please.
---
$(D i s c u s s i o n ~ o f f ~ t h e ~ r e c o r d)$.
---
MR. NELSON: I think what were going to do is, based on John's statement at the last hearing, that the neighbors would have another chance, but only on issues raised during this cross-examination.

So we're not allowing -- this is directed to the neighbors. You can't just go far off the field.

You can ask questions and follow up what the township asked, but not something, not a new area.

So that being said, and recognizing how long it's been going on, I will go
through the list.
If you could please then come up to the microphone, if you have a question, and ask it, we'd appreciate it.

MR. MARLIER: Mr. Nelson?
MR. NELSON: Yes?
MR. MARLIER: I am so sorry.
MR. NELSON: Yes?
MR. MARLIER: Can I please have a five-minute break to go to the restroom, please?

THE PRESIDENT: Yes.
MR. MARLIER: Thank you so much.
THE PRESIDENT: We'll take five minutes.

-     -         - 

(Recess taken.)

THE PRESIDENT: All right. We're ready to start again.

-     -         - 

CROSS EXAMINATION

MR. NELSON: Ms. Levy?

MS. LEVY: Amber Atwood Levy, Radnor Conservancy. I just wanted to circle back to our kind of quick conversation on natural stormwater management.

Are you aware of the amount of stormwater that mature trees capture?

Because you said on the site, there wasn't currently -- you weren't aware of any stormwater management that was currently occurring.

THE WITNESS: What I said was no structured stormwater.

We had about two acres of impervious that are all direct runoff, and there are mature trees on the site.

There are a lot of declining trees on the site. That's the answer.

MS. LEVY: Right. But I believe that you said that you wouldn't refer to vegetation on the site as stormwater management, and $I$ just wanted to address that, because deciduous trees, and this is available on a lot of places --

MR. BROSEMAN: I'm going to object.

This isn't a question. This is a statement.

MS. LEVY: This is a question. The question was, are you aware that trees can capture five hundred to seven hundred gallons of water a year and that large evergreens or conifers can capture two to three times that amount, because I think that that qualifies as a natural stormwater management --

MR. NELSON: Ms. Levy?
MS. LEVY: Yes?
MR. NELSON: You asked a perfect question.

MS. LEVY: Yes.
MR. NELSON: You stop. So let him answer that question that you asked him.

MS . LEVY: Okay.
MR. NELSON: Are you aware of trees capturing that much stormwater?

THE WITNESS: Can you define what you mean by "capture"?

MS. LEVY: Yes. No problem. So they can absorb that. They slow that rate.

They capture that, functioning very much as an engineered stormwater management system would.

THE WITNESS: So when you refer to "capture" in that context, $I$ believe you're referring to like the tree actually absorbing that water from the soil and uptaking it into the tree?

MS. LEVY: That is actually -- during the summer, trees transpire 80 to a hundred gallons of water a day, and that's transpiration. That's not actually what $I$ was referring to.

THE WITNESS: So when you're saying "capture," are you saying from the surface of the tree?

MS . LEVY: Um-hum. Yes.
THE WITNESS: So during a rainfall then, you get attachment of water to that tree surface. Is that what you're --

MS. LEVY: There is the attachment of water to the tree surface, but also the tree bark is, grows in such a way to channel the rain water down --

MR. BROSEMAN: Again, we have no question. We're getting a speech.

MS. LEVY: I am replying to his question.

MR. NELSON: Mr. Lambert was asking a question. She's answering it. So let's go on, but see if we can circle this back around to questions, please.

MS. LEVY: SO I should or should not answer?

MR. BROSEMAN: Rob, if you don't know the answer, it's okay.

MR. NELSON: He's attempting to figure out what you mean by "capture."

MS. LEVY: Yes. So the trees, the rainfall --

MR. NELSON: So if you can circle it back around to explain better what you mean by "capture," that would be perfect.

MS. LEVY: No problem. The rainfall is directed to the roots of the tree and absorbed by the tree roots.

THE WITNESS: The runoff coefficients take that into account when we do our
pre-model.
MS. LEVY: Take into account?
THE WITNESS: Into account the site conditions, whether it's impervious, meadow, a woodland. I don't think this has been qualified as a woodland.

MS. LEVY: Okay. Well, I assume you know the definition of woodland, because before you had said that --

THE WITNESS: We have a wooded area, right? Again, I'm using the stormwater, looking at $a$, for the runoff coefficients for the model.

The township wants us to use the preceding conditions as "meadow," and that's what we used as the requirement.

The -- $I$ believe your questions really related to, you know, individual tree. No, I did not take into account an individual tree in that calculation.

MS. LEVY: Trees, right, because there's quite a few. So considering the amount of large canopy trees that are on this property and functioning and in this
stormwater mitigation way, don't you think it would better serve our community, as far as much of those large canopy trees as possible to be preserved, and not just rely on engineered stormwater management, because we can couple those two and have better for the flooding that is happening in our community if we rely on --

MR. NELSON: Ms. Levy?
MS. LEVY: Yes?
MR. NELSON: Once again, you're asking for --

MS. LEVY: Sorry. Sorry. Sorry.
Yes?
MR. NELSON: Your question is, why can't you preserve more trees. Let him answer that question.

MS. LEVY: Sorry.
MR. NELSON: So why don't you let him answer that?

THE WITNESS: What was the question?
MS. LEVY: Sorry. The question was, given the benefits of trees and the challenges our community is facing from
flooding, would it better serve our community to preserve as much large canopy as possible and not just rely on engineered stormwater management?

THE WITNESS: There is a portion of the canopy which is being preserved as part of this, and we're supplementing that obviously with the proposed stormwater management we talked about occurring.

MS. LEVY: Got it. Do engineered stormwater mitigation systems provide any type of pollution filtration?

THE WITNESS: There will be some best management practice with, you know, either vegetation-increased swale before the inlet to provide water quality.

We also have the infiltration components, getting the water back into the ground.

MS. LEVY: And is that as much as the trees that are there currently provide?

THE WITNESS: I have not done that calculation.

MS. LEVY: Okay. And are you aware
that the site will not -- is situated less than a mile from Gulph Creek and a mile from Little Darby Creek?

THE WITNESS: I don't know the exact dimensions, but they're generally in the area, yes.

MS. LEVY: All right. Thank you.
MR. NELSON: Thank you very much.
Okay. And I apologize. I'm not great at pronouncing names.

Mr. Chawla, $\mathrm{C}-\mathrm{H}-\mathrm{A}-\mathrm{W}-\mathrm{L}-\mathrm{A}$ ?

-     -         - 

(No response.)

-     -         - 

MR. NELSON: Okay. Mr. Clemente?
MR. CLEMENTE: No questions.
MR. NELSON: Thank you, sir.
Mr. Curley?

-     -         - 

(No response.)

-     -         - 

MR. NELSON: Not here.
Mr. Gaeto?
(No response.)

-     -         - 

MR. NELSON: Not here.
Mr. Hansen?
MS. HANSEN: No questions.
MR. NELSON: Thank you.
Mr. Holloway?
MR. HOLLOWAY: No questions.
MR. NELSON: Thank you.
Mr. Hymel?
(No response.)

-     -         - 

MR. NELSON: Ms. Lafarge?

-     -         - 

(No response.)

MR. NELSON: Ms. Mahoney?
MS. MAHONEY: No questions. Thank you.

MR. NELSON: Thank you.
Ms. Pechet, $\mathrm{P}-\mathrm{E}-\mathrm{C}-\mathrm{H}-\mathrm{E}-\mathrm{T}$ ?
(No response.)

MR. NELSON: Not here.
Ms. Ruschmann?
(No response.)

-     -         - 

MR. NELSON: Ms. Sareen?

-     -         - 

(No response.)

-     -         - 

MR. NELSON: Mr. Satterfield?

-     -         - 

(No response.)

MR. NELSON: Mr. Scheri?
MR. SCHERI: Yes. Steve Scheri, 9 Grant Lane, Radnor. Just a couple questions, Mr. Lambert.

If we can go, I think you've seen this sheet enough, you're fully aware of it, A-12, four, the original, just a simple question. I know you know the answer.

THE WITNESS: Go ahead.
MR. SCHERI: On that, you said that
there's a 25-foot buffer with a five-foot extra inclusion to meet code, for a total of 30 feet from the property lines on Grant Lane to the nearest townhome; is that right?

THE WITNESS: Correct.
MR. SCHERI: Okay. Looking at, what are we calling this one, A-4 $A$, what is the distance from the property line on Grant Lane to the homes?

THE WITNESS: About 85 feet to the property line.

MR. SCHERI: Eighty-five feet. Thank you. Using A-4 A, is there additional stormwater management on this plan along the Grant Lane compared to A-12 A, which is relying on natural slope?

THE WITNESS: Yes. There's a stormwater system behind units 15 through 18.

MR. SCHERI: Concerning the, whatever we're calling the left road, I think that's Road B?

THE WITNESS: It's not labeled on
there, but, yes, the road to the left.
MR. SCHERI: The one to the left. Drive -- sorry -- street, road, drive.

In this plan in comparison to $A-12$, four, is the entrance further up Strafford than it was on the previous one?

THE WITNESS: Yes.
MR. SCHERI: Again, looking at the traffic, is there a stop sign at the corner of Grant Lane and Strafford Avenue?

THE WITNESS: Yes.
MR. SCHERI: By moving this exit, does it improve the sight line to the stop sign on Strafford Avenue, in your opinion?

THE WITNESS: There's more straight of way in that section, so the sight line will be improved in its footage.

MR. SCHERI: In A-12, four, with the, where the drive is proposed, do you have a rough approximation of the distance from that exit to the stop sign in car lengths?

THE WITNESS: I do not know that number.

MR. SCHERI: Would it be fair to say
about two car lengths, two to three?
THE WITNESS: From drive -- let me make sure I'm understanding your question.

From the westernmost drive on $A-12$, sheet four, to the stop sign at Grant? MR. SCHERI: Correct.

THE WITNESS: It appears that there would be at least ten car lengths between the stop sign and Drive A.

MR. SCHERI: That's a little overstated, but --

THE WITNESS: The 30 feet between the property -- I'll tell you how -approximately there's 30 feet between the property line and the rear of unit 20. Unit 20 is 56 feet deep, so that's 86 . The driveway is 20 , so $I$ have 106 . The sidewalk is five, so $I$ have about 110 .

And it looks like the, Mary Ann
Mahoney's property is of a similar depth. A car lane, using the township parking standard, is 20 feet.

So we have kind of five to six on her side -- five to six on our side and five to
six on the other side of our property.
MR. SCHERI: Okay. Thank you. Just one last question concerning A-4 A.

With the 85 feet, for lack of a better word, setback, would that allow for more mature trees to be put in to improve the sight lines for those living on Grant Lane so that the homes that you are proposing to build would be less visible?

THE WITNESS: There would be more landscaping there. The maturity of the tree may not change.

MR. SCHERI: But you would have more room to put in larger trees; correct?

THE WITNESS: You will have more room between the property line.

MR. SCHERI: Thank you.
MR. NELSON: Ms. Scheri?
MS. SCHERI: No questions.
MR. NELSON: Mr. Schuda?
MR. SCHUDA: Joe Schuda, 14 Forrest Lane. A couple questions for Mr. Lambert.

First $I$ wanted to ask regarding I believe it's Drive B. I can't make it out.

The one closest to -- oh, thank you.
THE WITNESS: There you go.
MR. SCHUDA: Drive B, you testified in your testimony that Drive $B$, that radius on that turn could accommodate certain vehicles; is that correct?

THE WITNESS: Yes.
MR. SCHUDA: Would it possibly accommodate standard tractor trailers, 53 feet, to be exact, in length with a trailer?

THE WITNESS: I believe we looked at a WB-40 tractor trailer, and that moves through there.

MR. SCHUDA: I'm sorry?
THE WITNESS: We looked at a WB-40 tractor trailer, which was able to maneuver through there.

MR. SCHUDA: So it could. Great. You also testified regarding the stormwater system, that the HOA would have maintenance responsibility once the system is installed and the HOA has been charged with the facilities?

THE WITNESS: Yes.
MR. SCHUDA: In that circumstance, would that -- and this may not be a question for Mr. Lambert, so I'm not sure if I'm going to be able to pose it.

But will that HOA responsibility be spelled out in the sell plan for these homes, do you know?

THE WITNESS: I believe, as part of our NPDES permit, there will be a document recorded.

And it's my understanding, and I'm not an attorney, that recorded documents become of record to the property when it's sold.

MR. SCHUDA: Thank you. And with respect to the stormwater system itself, any water -- all water, runoff water, is going to be collected by the system; is that correct?

THE WITNESS: I don't like to use the word "all," but a large majority of the water will be collected, yes.

MR. SCHUDA: So will any of that water be subject to absorption by normal ground?

If it doesn't all go into the retention system, will it go into groundwater?

THE WITNESS: Yes. And we have both the infiltration components of the stormwater systems, which will potentially put it back in the groundwater, but we also have the, all the area shown in green on A-12, four, are really landscaped areas.

So that water will, again, the water from the sky will go into the landscaped area.

MR. SCHUDA: So do you have an idea about approximately how much water will go into the actual Forrest Lane percentage wise?

Would 50 percent go into Forrest Lane, and the rest would be absorbed by the normal percolation?

THE WITNESS: I'm not sure what we're taking a percentage of. Tell me, what are we comparing it to?

MR. SCHUDA: Well, currently there is no system, so whatever flows or whatever
rain accumulates --
THE WITNESS: So we're reducing the rates running off from --- the systems provide a reduction in the rates.

I can go back over the numbers if you'd like, but we had both the post-development condition using the township standards.

We had provided, $I$ believe, A-15, which was, the question you posed to me is, what happens in actual conditions, not in this made-up condition of a meadow, but what happens today versus what happens in the future, and that shows a drastic reduction in the amount of runoff.

MR. SCHUDA: Okay. And that's it. Thank you.

THE WITNESS: Thank you.
MR. NELSON: Thank You. Ms. Silver?
(No response.)

-     -         - 

MR. NELSON: Mr. Szary?
MR. SZARY: Gregory Szary, 6 Forrest

Lane.
Regarding the stormwater management system, can you tell us, you used the term "outflow."

Can you tell us what the difference is between "outflow" and "overflow" regarding the stormwater management?

THE WITNESS: So the outflow is a, there's an outlet structure, which will have various orifices, holes, in that structure to allow water out at a metered rate.

MR. SZARY: And is it related in some way to overflow?

THE WITNESS: So $I$ believe when we were discussing "overflow," there was a question about having an extreme storm event, right?

If you have a storm event that exceeds any township requirement, again just for the record, that you get this 500, thousand-year storm, where would the water go and would the systems overflow, I point out that if we did not put any of these
systems in, we would have all kind of runoff running downhill.

Right now with these systems, we will have some collection, some control of those extreme events, and then after the systems reach their capacity, in this fictitious storm, that water will, after we've filled up the whole system, where does the water go, and my answer is that that water will run downhill.

MR. SZARY: Okay. So an overflow might be construed as surface water and outflow would be construed as water below grade?

THE WITNESS: I'd say controlled, right? So if you have outflow, you know, our outlets are controlled, and in this instance, it's controlling the volume, yes.

MR. SZARY: Okay. Thank you. Did you state that a study of the existing storm sewer that you were going to be connecting to was not performed?

And what I'm talking about is the storm sewer in Forrest Lane.

THE WITNESS: Correct. I said that, my testimony was that we have not studied the PennDOT, Tredyffrin Township, and Radnor Township sewer lines for that system, and as you're aware, that system is connected to all of this.

MR. SZARY: Okay. And are you aware of the history with flooding that has occurred on Forrest Lane and Grant Lane?

THE WITNESS: It has been relayed to me. I do not know all of the specifics of it, but some of the flooding has been relayed to me, yes.

MR. SZARY: So you're saying that you're designing a stormwater management system which ties into a municipal storm sewer system, and you have no idea whether it can manage that outflow or not?

THE WITNESS: My testimony is, was that the proposed stormwater on this site reduces the amount of runoff reaching that current municipal system.

MR. SZARY: That's not my question. My question is, you're designing a storm
sewer system that's connecting to a municipal storm sewer system, and you don't know if that system can handle the outflow of your stormwater system?

THE WITNESS: So I'm going to -- I have the same answer. My answer is that we have less water getting there postdevelopment than we do pre-development. MR. SZARY: That's commendable. However, the water that does leave the site, you have no idea whether the storm sewer you're connecting to can conduct that water away?

THE WITNESS: So we have a predevelopment condition where all of this water gets to that location, to that same collection system.

We have -- we are reducing the amount of water getting to that collection system.

MR. SZARY: Again, that's still not answering my question.

MR. NELSON: Could you try to rephrase your question to get the answer, you know, get a response you're looking for?

MR. SZARY: All right. The system that you're designing has an outflow, and a certain amount of water exits that outflow; correct?

THE WITNESS: Correct.
MR. SZARY: Is that calculable?
THE WITNESS: Yes.
MR. SZARY: Is it calculable to know whether the storm sewer system you're connecting to in Forrest Lane can handle that outflow?

THE WITNESS: So there's two pieces of a question there. One would be, what do you mean by "handle"?

And the second would be that that stormwater is part of a much larger network of pipes.

MR. NELSON: Mr. Lambert, have you done any study or measurement of the capacity of the storm sewer system that you will be connecting to?

THE WITNESS: I believe I testified that we have not done a study of the PennDOT, Tredyffrin, and Radnor sewer
system.
MR. NELSON: So since you have not done the study, you're assuming, based on the fact that you feel your system is going to provide, less water is going to end up going to the system than currently goes to the system, ergo, the system has the capacity?

THE WITNESS: I'm saying that our site has an existing volume and a rate of runoff that leaves it during a hundred-year storm event, and our calculations show from actual conditions, again, I'm making that code distinction, from actual conditions is we're reducing probably about 50 percent for a hundred-year storm.

So we're cutting our rate of runoff during an extreme storm event basically in half.

MR. NELSON: And do you know currently, in actual conditions, can the municipal system handle a hundred-year storm?

THE WITNESS: I have not done a study
of the PennDOT, Tredyffrin, and Radnor sewer system.

MR. NELSON: Yeah, and I recognize that. But do you have any information that the system currently overflows during large storm events such as a hundred-year storm?

THE WITNESS: I do not know what storm event it overflows in.

MR. NELSON: Do you know if it overflows, if it has overflowed in any storm event in the last ten years?

THE WITNESS: I believe it has. And some of those storm events may not be classified as a hundred-year storm, but it's really about the rate that the water's coming down.

MR. NELSON: The speed that it's entering the system?

THE WITNESS: The speed that it's entering the system.

MR. NELSON: Does that address your concern, sir?

MR. SZARY: Yes, it does. Thank you very much. I have just a couple more
questions, and it's relative to the testimony you had just given in response to cross-exam by the very first individual. You had mentioned that there are a percentage of trees that are going to be retained on the site. Do you know what that percentage is?

THE WITNESS: I don't have the percentage of trees.

MR. SZARY: I'm sorry?
THE WITNESS: I do not have the percentage of trees.

MR. SZARY: Okay. Are you aware that the demolition plan marked $A-4$ shows approximately 381 trees on the site?

THE WITNESS: I do not have that number.

MR. SZARY: Are you aware that the demolition plan shows 254 of those trees are going to be removed from the site?

THE WITNESS: I did not do the calculation.

MR. SZARY: Okay. Do you realize that that's approximately two-thirds of all the
trees on the site?
THE WITNESS: If these two numbers come out to two-thirds, I suspect that's what the number is.

MR. SZARY: Okay. I understand -well, that's getting out of your testimony. I'm sorry. I think that's all $I$ have at this point.

MR. NELSON: Thank you very much, sir.
MR. SZARY: Thank you.
THE WITNESS: Thank you.
MR. NELSON: Mr. Willis?
MR. WILLIS: No questions.
MR. NELSON: Mrs. Willis?
(No response.)

-     -         - 

MR. NELSON: And last, Ms. Lutz?

$$
-\quad-
$$

(No response.)

-     -         - 

MR. NELSON: Okay. Mr. Broseman, you said you had some redirect?

MR. BROSEMAN: Yes. Would I be able
to borrow your mic, Noah? Thank you.
So Mr. Lambert has been testifying, I think, for three hearings, cross-examined by a lot of those, so my notes go back through all of those.

So I might be asking something that didn't occur tonight, but it was a question he was asked on cross-examination at another time.

MR. NELSON: Understood.
MR. BROSEMAN: So I just wanted to explain that, but I've been keeping notes all this time.

## REDIRECT EXAMINATION

BY MR. BROSEMAN :
Q. Mr. Lambert, at the very beginning when you were being qualified and accepted as a witness, the township's attorney, Mr. Marlier, asked you about projects that you had in Radnor Township that involved properties over seven acres, and I think your response was there weren't many properties that big.

But did you think of any additional properties in Radnor that you've worked on that have been over seven acres since that time?
A. Yes. I think we talked about Cabrini University, I've done work there for many years; Eastern University.

There's the Valley Forge, formerly Valley Forge Military parking lot, which is now 18 residential homes on 24 acres, $I$ believe it was, around 20 acres, 22 acres.

Across the street from Valley Forge Military Academy we did the Oak Hill project, it's a senior living for 300 residents on 24 acres, just to kind of name a few right there in that same circle.
Q. And those senior dwellings, they included quite a few independent living dwelling units; correct?
A. Yes, that is correct.
Q. I think Mr. Marlier also asked if you had projects with over 30 dwelling units. Obviously, you just mentioned Oak Hill was 300.

Have you done other projects with over 30 dwelling units at other locations?
A. Yes, or close to that. There's some mixed-use projects we're currently working on in the township that are currently over that number.

Outside the township, there's many.
We've done other mixed-use projects with a hundred, 150 units. We've done townhouse developments with 123 units.

So we're familiar with the larger developments. His questions were specific, I think, to Radnor.

Radnor didn't have that many projects in my tenure that were over that number.
Q. I believe it was Mr. Rice, when he was cross-examining you at a prior hearing, asked you a question with the implication that, $I$ think his words were, would the entire site be bulldozed.

Can you address that?
MR. MARLIER: I would just object to the characterization of cross-examination.

Mr. Rice asked two or three questions the entire time, in my opinion, just to simply clarify or get a little more information.

MR. NELSON: So noted. Thank you.

MR. BROSEMAN: It's been more than that.

THE WITNESS: So I'll use Exhibit A-12, sheet five. There was a question about earth moving, and $I$ think it was a multipart question.

The area that's shown actually with a solid line with double dashes is one of those disturbance lines.

And you can see, there's actually about an acre in the middle of the site that really remains undisturbed.

From a development standpoint, there is about a quarter acre that's close to Eagle and Strafford. Again, that remains.

And then there's an area along Grant, a smaller area that is outside of that area of disturbance.

So, you know, we have about an acre and a quarter, a little over an acre and a quarter that's undisturbed.

BY MR. BROSEMAN :
Q. So it would not be accurate to say the entire site would be bulldozed?
A. That's correct.
Q. And if a similar townhouse plan would be prepared, would this have any greater amount of disturbance or earth moving than a typical townhome plan for this development?
A. No, it would not.
Q. In your opinion, would a non-density modification single-family development plan even have more disturbance than a plan like this?
A. Yes. A single-family plan likely would disturb the entire site, as you wouldn't have the open space areas, so you would be building individual homes likely in that area.
Q. I think one of Mr. Rice's questions was, and maybe Mr. Marlier cleared it up, so I don't want to be repetitive, but Mr. Rice was asking if all the drives were a minimum of 19 feet by 20.

I believe you clarified that tonight. Is it accurate to say that all drives are a minimum of 19 feet by 20 feet?
A. Yes, there are minimums of 19 by 20.
Q. And many are bigger?
A. Yes.
Q. In your -- strike that. You were asked about the fire truck that you used and if you met at this stage with the fire marshal.

In the conditional use standards for a density-modification development, is there a requirement to review the plans with the fire marshal?
A. No, there's not.
Q. You mentioned you've done a lot of other projects in Radnor that went through land development and permitting.

Did you have occasion to review those plans with the township fire marshal?
A. Much later in the process. It wouldn't be during the conditional use -- it wasn't during the conditional use phase.
Q. And when you did that, were you given guidance as to what size fire truck to use?
A. Yes. And that's the same fire truck that we've used on this application.
Q. Mr. Rice, in one of his questions, asked you about the single-family plan that we had submitted, $I$ believe it was just a concept, because the question had come up when Mr. Rice
was questioning Mr. Houder. I think that was at exhibit --
A. A-16?
Q. Correct, A-16. That was a concept. Mr. Rice asked you, did you know if driveways would be permitted on Eagle Road.

Are you aware of the development just across the street that was originally the property at 205 Strafford?
A. Yes, I am.
Q. And was that approved by the township?
A. Yes, it was.
Q. And were there new homes built there with driveways to Eagle Road?
A. Yes. They had direct access to Eagle Road.
Q. And that was approved by the township?
A. Yes.
Q. The issue came up during several questions from several people about whether, it came up again tonight, whether the project should have internal streets under the township subdivision and land development ordinance for standards for streets, and you gave your opinion
as to why you believe that didn't apply, and those opinions were also in the response letters that we made part of the record?
A. Yes, they were.
Q. In addition to that, are you familiar with numerous communities that are served by common internal drives?
A. Yes.
Q. And can you describe some of those in the area generally?
A. So after this came up, we started to take a closer look at other developments in the community and how they've been interpreted, just to see what was, how they function today.

And we looked at a lot of them, the one on the north side of Eagle, going up Eagle, the north side of, the east side of the train tracks. There was obviously, Villa Strafford we talked about.

The ones we mentioned earlier tonight during, the beginning of cross-examination down kind of in the West Wayne area, and we started looking at all of those driveways.

And, you know, all of the sites we
looked at did not -- they weren't streets, right? They don't meet the street requirements.

They didn't have the width. They didn't have a proper turnaround at the end, right? They didn't have a cul-de-sac bulb.

They didn't have the right geometry as far as centerline geometry.

So none of the ones that we saw would actually meet the street requirements out of any of the developments that we looked at.

So going back to that is, the code, I think, was pretty clear that -- I can pull up the section.

I believe it was $255-40$ was for the multifamily, the multifamily attached dwelling residential development.

Seeing all of the properties that had varied issues, and they all seemed to have driveways, they did not have access that would be qualified as a street, that 255-40 made a lot of sense.

I know there was questions early on about the ordinance section and how that would apply, but that really started to make sense,
that the township has looked at it as a driveway with access and circulation, you know, the plan for convenient circulation suitable for traffic needs, et cetera, in the 255-40 section.
Q. And I would like you to put up on the screen Exhibit A-25.
(Applicant's Exhibit A-25 was marked for identification.)
$-\quad-$
BY MR. BROSEMAN :
Q. Is this a summary of some of the properties you looked at?
A. Yes. This is --

MR. MARLIER: I would object to any documents being brought in at this time. They had a chance. They had their direct examination. We're past that point.

MR. BROSEMAN: If $I$ could respond, this was an issue that was brought up about streets, and we should have an opportunity to present evidence as to how similar communities, which Mr. Marlier himself brought up at the very beginning of the
testimony this evening, he asked about these specific communities, and we should be permitted the opportunity to put this evidence forward.

MR. NELSON: The objection is overruled.

THE WITNESS: So this is just a couple. I said I looked at a lot of them. So this was Villa Strafford.

These are arranged in kind of a first sheet of summary, a few pictures. I'll go quickly through them.

BY MR. BROSEMAN :
Q. There are page numbers so, for the record, they're little, on the bottom, if you could refer to those.
A. Yes. So we have Exhibit $A-25$, sheet one. So this is Villa Strafford, 115 Strafford Avenue, just some general property comments.

It's an R-4 density-modification development with 11 townhouse units, and it's on a 2.1-acre site.

There's three common driveways, and this question has come up a couple times during
the initial testimony, are, you know, how do you end up naming them, right?

So this is a perfect example, Villa Strafford Lane, Madison Lane, and Lincoln Lane. So there's actually three lanes, even though it's part of a private $H O A$. The lanes are all named in there.

The driveway widths are 22 feet, so it would be substandard for a street, but it meets the drive -- actually, $I$ think it's less than some of the driveway requirements, and the sidewalk on one side.

The units have individual addresses on their driveway, and they kind of have a common mailbox. Going to sheet two --
Q. Before you leave that, there is a sidewalk on one side of Villa Strafford, and you can show this in the photo, so $I$ won't belabor it, but not on the other drives; correct?
A. Correct.
Q. And I think Mr. Rice and maybe some others asked, and we explained this would happen later in the process, but how do you get an address on a driveway?

Do you recall there is a person that the township has granted party status to, her name is on the list here that Mr. Rice gave me, Jennifer Pechet, $P-E-C-H-E-T$.

She's spoken here, and she lives at Villa Strafford. The address on Mr. Rice's list is 3 Madison Lane. Do you remember her speaking?
A. I do.
Q. So she has an address for her unit on the driveway that's called Madison Lane; correct?
A. That is correct.
Q. Okay. Keep going.
A. This is an aerial photograph.
Q. Page two?
A. On page two. You can see the bottom of the page is Lancaster Avenue. There are four buildings that are perpendicular to Lancaster Avenue.

You can see that you have Villa Strafford Lane labeled, Villa Strafford Lane going into the site, and then you have Madison Lane and I think it's Lincoln Lane that are perpendicular or roughly perpendicular to Villa Strafford Lane.

So the resident we just talked to lived in the first set of buildings there, and it's Madison Lane.

If I go to sheet three, this is a, kind of an inset of the record plan. This shows the driveway entering the site, the main drive. You have the two other driveways.

As Mr. Broseman pointed out, there is a sidewalk along one side of the main drive going into the site.

The driveway between the units, really accessing the units, does not have any sidewalks entering there, so there's no sidewalk on either side of that.

This property, I'd just point out, is, as I look at it, kind of the standards of street that we talked about was, does it have a cul-de-sac? No, it does not have a cul-de-sac.

Does it have the appropriate width? No, it does not have the appropriate width. Does it have the right-of-way? No, it won't have a 50-foot right-of-way.

So there's lots of requirements that would say that if it was a street, that this
would have to have, and this has none of them.
This is just a picture and sign showing a picture of the site showing the street signs.
Q. Page four?
A. Page four. It has a -- you can see the back side of the stop sign there.

There was a question about what happens when you have private driveways with any traffic control signage.

There was a question about that at a previous hearing, so this shows that it gets installed.

Sheet five, this is a group mailbox at Villa Strafford, so they have mail that goes on location.

Again, that was a question from Mr. Rice, how they get mail, and one of the commissioners also asked that question.

The next development was 237 West Wayne Avenue, the Jardin. I believe this was the former Adelberger Florist site.

It's an R-5 residence district. There's six townhouse units with an office
building in the front. It was built in about 2014.

There's a common driveway width of 20 feet, starting with a mailbox, which I'll point out. There's no sidewalks along the common drive, and you have common mailboxes.

Again, these were just trying to address questions that came up during previous meetings.

So I'm going to go to, I believe I'm up to sheet seven of A-25.

So again, this is an aerial
photograph. West Wayne Avenue is on the bottom going over to the left, over to about the middle right.

Conestoga Road is going from the kind of upper middle left to the middle bottom. You can see there's a driveway access on West Wayne Avenue.

The building that's closest to the corner is an office building with associated surface parking around it.

It has a 20-foot driveway going up the side of the office building, and in between the
two buildings in the back there's a little pin that says 237 West Wayne Avenue on one of the buildings.

There is access to the garages of the units with a driveway between them.

So sheet eight, this is the record plan. Again, it shows the same layout, the same orientation as the previous slide. It shows the driveway.

One thing I would point out on this is the geometry of this does not meet any street standards.

It wouldn't be considered a street. There's a turnaround. There's a curvature at the end with kind of a zigzag. It does not meet any of the standards. It's a dead end.

Slide nine, this is a photograph looking in with my back toward West Wayne Avenue. On the left-hand side, this is the office building.

You can see the condos or townhouses in the rear. This is looking down the common driveway. You can see the mailboxes on the left-hand side.

This is a picture, my back would now be facing the office building, looking between the two buildings.

So you have a townhouse building on the right, and you have a townhouse building on the left. You can see that they have kind of small driveways leading to their garages.

There are some cars parked in those areas, and then you have common parking down at the end of the driveway.
Q. When you were there, Mr. Lambert, in the photo on page ten, did you notice any trash cans in the individual unit driveways?
A. Yes. At the time it was trash day. There was some trash cans out.
Q. In front of the garages?
A. Yes. You can't really see it in this picture, but they were up closer to the garage.

Sheet 11 is 123 Bloomingdale Avenue, an R-5 residence district. There's five homes. There's three townhome units and two single-family homes. It was built around 2019.

The common driveway width is 21 feet. There's a sidewalk on one side of that kind of
common driveway, and this one actually had individual mailboxes for each unit.

Again, this is an aerial photograph, sheet 12. It shows Bloomingdale, which is labeled going left to right.

You can see roughly in the kind of middle left is the actual site. You can see the driveway going into a $T$ configuration.

There's a larger townhouse building in the rear with two single-family dwellings out closer to Bloomingdale.

Sheet 13, this is a portion of the record plan for the site, again showing the driveway, the sidewalk on one side of the driveway going into the site, and then the driveway going back in between the front and back buildings.

Sheet 14, this is a photograph from Bloomingdale looking into the site. You can see on the left and right are the individual dwellings, single-family dwellings.

You'll see some townhouses in the rear. You can see the driveway. There's a sidewalk going up the right-hand side.

So Wicklow Court, which is sheet 15 , West Wayne Avenue. This is almost directly across the street from Jardin site that we referenced before.

This is an $R$-5 residence district, eight townhome units built in 2013. There's a common driveway width of 25 feet.

There are no sidewalks along the common driveway, group mailbox, and the common driveway has the name of Wicklow Court.

Sheet 16 , the site is circled roughly on the page. The right-hand side is Keith Martin Electric, and there's a former restaurant at the corner.

But you can see where Wicklow Court is. There's three residential buildings. There's a common parking area with garages alongside.

Sheet 17 , this is the record plan for the Wicklow Court development, again showing the configuration of the parking, driveway, and units.

Sheet 18, this is a photograph of the Wicklow Court development. You can actually see
a street sign on the left-hand side right at the top there.

You can see the paver area. It's very nice. This is a driveway accessing these units. I don't know if you can see, but there's common trash right out by the street there.

You can see common trash, and you see the common mailbox on sheet 19 .
Q. Now, did you also see some projects with more units?
A. Yes. We could probably go on all night going over the projects. But there's, a little further from the site that we just talked about across the street, it's Conestoga, I believe, is Greythorne.

It has many more units. Again, the geometry there, that one actually had a little bit better circulation. It was a loop.

So it wasn't a dead end like many of the ones we looked at, but the geometry of the driveway would be nowhere near what a street would be required.

You have grades and geometry, so it wouldn't meet any of those requirements.

There's a larger development, I believe it's Ironworks Way. Again, it's behind the Land Rover dealer on Lancaster Avenue.

Again, it's a long dead end. There's a driveway. It accesses the parking there. Given that that's a little different configuration of units, but it falls under the same ordinance requirements.

And so that was a driveway access. There's no turnaround, no cul-de-sac. The driveway width is substandard also. So it wouldn't be a street, $I$ should say.
Q. And would it be accurate to say that Greythorne Woods has 49 units? Does that --
A. I was going to guess around 50, but, yes, 49, I'll go with that.
Q. And any idea how many in Pembroke North?
A. I think it's somewhere around that same number. I believe it's around 50.
Q. Now, can you compare generally the -all of these access drives that you've seen when you looked at all of these properties, would the access drives, common access drives that are
proposed on this plan, Exhibit A-12, sheet four, does this plan have advantages over those as far as better circulation?
A. When you look at the ordinance requirement of $255-40$, there's two sections. C is access and circulation and $E$ is driveways. And there's several sections that talk about the convenient access.

And I believe that the proposed plan on $A-12$, sheet four, is far superior to all of the developments we talked about, with the ease of access, convenience, and circulation through the site.

We don't have a dead end. We have kind of a $U$ shape, whether it's for, it talks about trash and service to the buildings.

We have a much better access and service to this site and this configuration.
Q. And this common driveway on this proposed plan is wider than all of those common driveways?
A. Yes, it was.
Q. And there was no project you saw that had sidewalks on both sides of the common
driveways?
A. That is correct.
Q. And some had none?
A. Some had none.
Q. And many of those had one driveway access, only one driveway access to the adjoining public street, and this plan has two; correct?
A. That is correct.
Q. In your opinion, is that better?
A. One correction. The development on the east side of, it's not one that we went over specifically, but the east side of the railroad tracks on Eagle Road has a one-way access from Eagle Road.

So you kind of have two, but that was very substandard, so I'm not sure $I$ would want to compare that.
Q. Is it better generally for access, emergency access, to have two driveways to the public street as compared to one?
A. It would be superior, I think, from the access, circulation, turning movements, all of the above.
Q. Tonight Mr. Marlier was asking about
and calling it the Hamilton-1 plan, the prior --
MR. NELSON: Mr. Broseman, before you get started, due to the lateness of the hour, how much more do you have? Is this a good time to break?

MR. BROSEMAN: I'd like to wrap up. I maybe can do it in five minutes.

MR. NELSON: Okay.
MR. BROSEMAN: I would challenge myself.

MR. NELSON: I won't hold you to that. And I'm sorry to tell you, but you will be recrossed by all of the parties. Sorry. I didn't want you to get your hopes up. BY MR. BROSEMAN :
Q. Mr. Lambert, Mr. Marlier was asking you about differences between the Hamilton-1 plan.

You may not have touched this, but as compared to the Hamilton-1 plan, does the plan at Exhibit A-12 now have all the required common open space as one contiguous area?
A. Yes, it does.
Q. And one of the reasons the prior board
denied the Hamilton-1 plan was they said that only the area in the central they were going to count, and they weren't going to count the other areas; correct?
A. Yes, I believe that's correct.
Q. You were asked if the common open space contained any floodplain or wetlands, and you said no.

But to clarify the record, the entire property has no floodplain or wetlands; is that correct?
A. That is correct.
Q. In your experience, is it common for stormwater management facilities to be underneath common open space?
A. Yes, and active recreation, for that matter, can go over stormwater management, athletic fields.
Q. And even under, even if it's not required common open space, under lawn areas?
A. Yes.
Q. How about under parking areas?
A. It's routinely designed under both lawn or paved area.
Q. To clarify, you were asked about the footprints of the units.

I think you said this, but just to clarify, the brown areas on sheet four of Exhibit A-12 shown as 36 by 56 feet, that's the maximum size of the unit; correct?
A. That is correct.
Q. So they won't be any larger than that?
A. That is correct.
Q. And any decks or things of that nature would be within that area?
A. Correct.
Q. And Code Section 280-135.C, which are some of the general conditional use standards, specifically says you don't have to have a final architectural plan at the conditional use phase; correct?
A. That is correct.
Q. You were asked about the distances of units 16 through 20 to Grant Lane.

The units 16 through 20, the minimum distance is 30 feet; correct?
A. That is correct.
Q. Some of the units, particularly 19 and

17, have a slightly greater setback because that's where the facade varies?
A. Correct.
Q. And, of course, units 15, 14, and 13, they are kind of in the general Grant Lane area, but they have much greater setbacks from the Grant Lane property line; correct?
A. Correct.
Q. Are there any conditional use standards for density modification that govern the distance between individual driveway units for townhomes?
A. No, there's not.
Q. Density modification allows townhomes to be up to six in a row; correct?
A. That is correct.
Q. And this plan only has one row with up to six; is that right?
A. Yes.
Q. So by allowing units up to six, you could have more driveways closer to one another than are shown on all the other smaller building types; correct?
A. Yes, and I point out, these are wide
units. If you get a narrower unit, the driveways would be closer together.
Q. You were asked about things like delivery vehicles and snow removal.

In your professional opinion, does having this width of this driveway, which is wider than the other driveways that you observed in other attached or multifamily communities, does that help address that issue practically as well?
A. Yes.
Q. And how is that?
A. A wider driveway, if a vehicle -- we all experience Amazon and UPS and everybody else stopping along the edge.

This is a much wider driveway that cars would be able to circulate around.
Q. Do the conditional use standards for density modification require having a plan showing ADA, Americans with Disabilities, access requirements?
A. No, they do not.
Q. And that is typically handled at the land development or permitting phase?
A. Yes.
Q. Is there a specific requirement in the conditional use standards for a snow removal area?
A. I don't believe in the standards, no.
Q. You were asked about crosswalks going across the Drive $A$ and Drive $B$.

Are there any conditional use code requirements for that type of thing?
A. No, there is not.
Q. In your experience, is it typical for people to walk across driveways when getting to various features, whether they be open space, municipal buildings, stores, things of that nature?
A. Yes. And in a development this size, I actually lived in a development that had 83 units, and we did not have any crosswalks.

And the decade that $I$ lived there, there was never a problem crossing the driveway.
Q. You were asked how many main houses were on the property. I think you may have said two.

But as $I$ look at sheet two of $A-12$, $I$
think I see at least three main houses and other structures?
A. My testimony was there were two houses. There were other structures that had dwellings associated with them. There's lots of larger structures on the site.
Q. In your experience in doing many developments over the years, is it common for fire trucks to have to cross over lanes of either streets or driveways when they're making their turns?
A. Yes, very common.
Q. Even on public streets?
A. Yes.
Q. You mentioned you worked on a project in Radnor with 300 units with one access to a public street?
A. It was one main access, yes.
Q. One main access? Do conditional use standards for density modification have requirements for fire hydrants?
A. No, they do not.
Q. Are fire hydrants usually dealt with at land development or permitting?
A. Yes.
Q. Are you aware of any code provisions that would prohibit earth disturbance in a common open space or otherwise if it was necessary to maintain a stormwater management system?
A. No. The open space provision actually provides for up to ten percent to remove stormwater, so $I$ believe it also acknowledges that you have to maintain said stormwater.
Q. You were asked about specifics about stormwater management tests and things like that, infiltration tests.

In the review letters that you
received from the township engineering consultants, they had stormwater management comments in them, didn't they?
A. They did.
Q. And did they put you on notice of the type of issues that the township's attorney was bringing up tonight?
A. They did not. And again, the technical stormwater, as we've mentioned before, will be further reviewed during land development, permitting, and the NPDES permit, so there will
be lots of people reviewing that as we move forward past this conditional use.
Q. There was discussion about if there was this hypothetical 500-year storm, which is not regulated by the township, that if the system, $I$ think the word used was "overflowed," and you explained how the system might capture the water, in your opinion, if that were to happen. Does that mean the system failed?
A. No.
Q. And can you explain that?
A. The system is designed for a hundred-year storm, so you would be -- it would be reaching its capacity and just being overcapacity.
Q. And if that fictional 500-year storm came down upon the site today without this development, would more water go downhill, you mentioned the water would go downhill, than would if we did this development and we did this stormwater management system?
A. Yes. The stormwater management system, we have the volume that we're holding back before it would reach that capacity.
Q. And what's been your general experience with time and number of years you've been working with underground stormwater management systems, inspecting them and how they function over the years, in your experience?
A. So I guess over the last five years or so, some municipalities actually require annual inspection or semi-annual inspections of the stormwater system.

So we not only get to design them, hear from residents after they're installed or clients after they're installed, but also we now have to follow up on them.

We have not seen any major failures of systems. We have not seen the systems themselves, as was being suggested before, have failures, where, you know, there are sometimes issues with inlets.

It's very easy to maintain, clean out, remove the debris from it to allow the water into the system, but the systems themselves have not failed.

We've gone into large-diameter systems or a large pipe and actually gone down in them,
and some of the systems were 15 or 20 years old or older and were still functioning and had no substantive issues.
Q. And, of course, as you mentioned, there will be a document recorded that requires the proper maintenance, inspection, and repair in the event that something like that would happen?
A. Yes, that's correct.

MR. NELSON: Mr. Broseman, you're well over your five minutes.

MR. BROSEMAN: I've got one more. Thank you.

BY MR. BROSEMAN :
Q. Mr. Szary asked you about the trees, and Mr. Panzak, our landscape architect, will be talking about that.

But when he was giving you the numbers, you don't know if the numbers he used involved trees that were dead or declining or were invasive species when he was saying how many might be removed?
A. No, I did not count the trees, and $I$ don't know how he established that number.

MR. BROSEMAN: Okay. Thank you.

MR. NELSON: Thank you very much.
So, Mr. Lambert, as I said, you are subject to recross-examination by both the township and the parties, and the board may ask further questions.

We are looking for our next date. Two nights that we would like to put forward in April are the 17 th and 30 th .

MR. BROSEMAN: Can't we just do it now? We've had so many nights of Mr. Lambert coming back.

MR. NELSON: We're over three hours in. In my experience, things kind of go downhill after about three hours.

MR. BROSEMAN: I think I will object to further cross, for the record. He's been crossed for hours.

MR. NELSON: Overruled. I think since he was on redirect, it's perfectly appropriate to allow cross-examination only on the areas that he was redirected on.

So going back to scheduling, the next hearing, we're looking at April 17th and April 30th.

I believe that works for the majority of the board. It works for Mr. Rice, although he actually prefers the 17 th . It works for the township.

I think the question is, does it work for you, Mr. Broseman, and your witness.

MR. BROSEMAN: We're checking.
MR. LAMBERT: I have a conflict, but I should be able to resolve it.
(Discussion off the record.)

-     -         - 

MR. NELSON: So we are continuing this hearing to April 17 th , which is a Wednesday, April 17th, and Tuesday the 30th, both nights starting at 6:30 here at the township building.

Mr. Broseman, $I$ don't think we're running into any sort of time issues, but $I$ believe John's asked you in the past, and I know we asked you, you're willing to waive any possible timing requirements of the MPC, such as the 45 days between hearings and --

MR. BROSEMAN: Yes. I want to clarify. It's obvious, but $I$ say it every time, that it's 6:30 p.m. for the two hearings, and I'm okay with the timing of the hearings, with the times of the MPC. I'm waiving that.

MR. NELSON: Okay. Great. Thank you very much. You should be seeing Mr. Rice at the next one.

THE PRESIDENT: All right. Motion to adjourn?

MS . MULRONEY: So moved.
THE PRESIDENT: Second?
MR. RILEY: Second.
THE PRESIDENT: Got it.

-     -         - 

(Proceedings concluded at 9:43 p.m.)

-     -         - 


## CERTIFICATE OF REPORTER

I, Norma Gerrity, a Professional Court Reporter, do hereby certify that the foregoing record is a true and accurate transcript of my stenographic notes in the above-captioned matter.

Norma Gerrity
Professional Court Reporter

affect ${ }_{[1]}$ - 47:13
ago [6] - 5:6, 5:9, 5:10,
50:17, 56:23, 61:8
agree [4]-24:9, 40:3,
40:5, 78:20
agreeable [1] - 84:19
ahead $[3]-41: 7$,
52:20, 97:23
allow [6] - 53:21,
83:22, 101:5,
106:11, 148:20,
150:20
allowing [2] - 86:17, 142:20
allows [1] - 142:14
almost [4]-9:10,
79:16, 86:5, 134:2
alongside $[1]$ - 134:18
alternate [1] - 83:11
alternative [2]-83:14,
84:21
Amazon [1]-143:14
Amber [1] - 88:1
amended ${ }_{[1]}$ - 6:18
Americans [1] 143:20
amount [14] - 7:1, 70:18, 82:1, 82:21, 82:22, 84:17, 88:5, 89:8, 92:23, 105:15, 108:21, 109:18, 110:3, 119:3
amounts [1] - 32:22
analysis $[7]-36: 18$,
47:14, 66:4, 78:3,
81:12, 81:19, 81:23
analyze ${ }_{[1]}$ - 24:12
angle [2]-15:17, 16:7
Ann [1] - 100:19
annual [2]-148:8
answer [14]-17:14,
39:2, 56:1, 88:17,
89:17, 91:10, 91:12,
93:17, 93:20, 97:22,
107:9, 109:6, 109:23
answering [2] - $91: 6$, 109:21
apart [3]-34:21,
35:18, 35:22
apologize [1] - 95:9 applicant [5] - 4:10,
46:17, 48:16, 53:10,
84:16
Applicant's [1] - 124:8 APPLICANT'S ${ }_{[1]}$ -

## 3:22

application [11] -
7:14, 8:2, 8:23, 9:8, 26:3, 51:5, 55:16, 84:22, 84:23, 85:3, 120:20
applies [1] - 71:11
apply [4]-23:24,

71:17, 122:1, 123:24
appreciate [1] - 87:4
appropriate [3] -
128:19, 128:20,
150:20
approval [1] - 29:23
approve [3]-53:16,
82:18, 83:22
approved [8] - 6:22,
29:21, 82:16, 82:19,
83:6, 84:6, 121:11,
121:17
approves [1] - 82:13
approximate [2] -
74:20, 75:4
approximation [1] -
99:20
April [5] - 150:8,
150:23, 150:24,
151:14, 151:15
architect $[7]-30: 9$,
30:11, 30:19, 33:3,
33:5, 33:6, 149:15
Architectural [1] 46:13
architectural [3] -
32:21, 55:18, 141:16
architecture [2]-23:4, 32:18
area [45] - 11:18, 12:19, 13:20, 18:16, 18:23, 21:3, 21:5, 21:24, 23:8, 24:18, 30:10, 40:14, 40:16, 40:17, 49:9, 66:14, 66:15, 67:4, 68:22, 69:1, 70:21, 76:20, 76:21, 77:1, 79:19, 86:22, 92:10, 95:6, 104:8, 104:12, 118:7, 118:16, 118:17, 119:13, 122:10, 122:22, 134:17, 135:3, 139:22, 140:2, 140:24, 141:11, 142:5, 144:4
areas [17]-12:20, 29:20, 40:11, 42:11, 72:1, 76:18, 76:23, 77:6, 77:7, 104:9, 119:12, 132:9, 140:4, 140:20, 140:22, 141:4, 150:21
arranged [1] - 125:10
arranges [1] - 41:19
artificial [3] - 30:8, 30:13, 30:15
asserted [1]-56:21 associated [2] -
130:21, 145:5
assume [2]-21:20,

92:7
assuming $[1]$ - 111:3
athletic [2]-12:17, 140:18
attached [2]-123:15, 143:8

## attachment [2] -

90:19, 90:21
attempting [1] - 91:13
attention [2]-64:8,
66:5
attorney $[4]-86: 1$,
103:13, 115:20,
146:19
Atwood [1]-88:1
authored [1] - 4:11
available [2]-77:2, 88:23
Avenue [19]-9:22, 9:24, 37:20, 42:7, 42:8, 48:12, 99:10, 99:14, 125:19, 127:16, 127:18, 129:21, 130:13, 130:19, 131:2, 131:18, 132:19, 134:2, 136:3 aware [15]-6:1, 58:19, 73:5, 88:5, 88:8, 89:4, 89:19, 94:24, 97:20, 108:5, 108:7, 113:13, 113:18, 121:7, 146:2

| $\mathbf{B}$ |
| :---: |

backing [2] - 34:6, 34:7
backs [3]-20:17, 67:18, 67:23
backup [3]-67:9, 70:8, 70:10
backups [1]-57:19
bark [1] - 90:23
base [1]-83:9
baseball [1]-12:21
based [3]-77:1,
86:13, 111:3
basement [1] - 62:14
basements [12]-61:5,
61:7, 61:12, 61:13,
61:17, 61:23, 62:22,
62:23, 63:4, 63:5,
70:2, 70:5
basin [14]-45:5,
66:14, 66:19, 71:3,
71:7, 72:17, 72:19,
73:1, 73:4, 73:6,
73:7, 80:11, 80:12,
80:14
basins [16] - 57:16,
57:19, 57:22, 58:18,

60:18, 60:20, 63:20, 66:20, 67:23, 70:17,
70:20, 70:23, 71:2,
71:16, 72:7
become [1]-103:13
bed $[14]-66: 6,66: 11$, 72:1, 74:5, 74:6,
74:11, 74:18, 74:21,
74:24, 75:6, 75:7,
75:10, 75:14, 76:20
Bed [2]-66:9, 74:7
beds [2]-66:11, 71:19
beginning [3] -
115:18, 122:21, 124:24
behind [5]-38:20,
43:20, 75:1, 98:19, 136:2
belabor [1]-126:18
below [1] - 107:13
benefits [1]-93:23
best [2] - 43:11, 94:13
better [13]-27:21,
43:13, 78:17, 91:18, 93:2, 93:7, 94:1,
101:4, 135:18,
137:3, 137:17,
138:9, 138:18
Between [1] - 50:5
between [30]-27:13,
30:2, 35:10, 35:17,
38:2, 40:13, 40:15,
40:23, 41:13, 41:14,
41:15, 43:19, 45:14, 50:6, 60:20, 74:11,
74:19, 100:8,
100:12, 100:14,
101:16, 106:6,
128:11, 130:24,
131:5, 132:2,
133:16, 139:17,
142:11, 151:23
beyond [7]-22:2,
24:20, 25:8, 30:14,
63:19, 68:20, 69:8
big [2] - 22:20, 115:24
bigger ${ }_{[1]}$ - 119:23
bit [4]-15:7, 15:9,
57:8, 135:18
blockage [1] - 66:24
Bloomingdale [5] -
10:7, 132:19, 133:4, 133:11, 133:19
BMP [1] - 63:13
board [21]-6:23, 26:4,
29:22, 40:1, 53:16,
53:21, 69:19, 82:13,
82:16, 82:17, 82:19,
83:6, 83:21, 84:7,
84:10, 85:14, 85:16,
85:24, 139:24,
150:4, 151:2
Board [1] - 3:4
board's [1] - 76:3
Boards [1] - 46:13
body [1] - 85:13
border [2] - 20:24, 21:3
borrow [1] - 115:1
bottom [34]-14:2,
14:3, 14:11, 14:13,
14:14, 15:4, 18:1,
18:9, 18:11, 18:24,
19:1, 25:14, 28:1,
30:24, 34:1, 34:22,
35:1, 35:6, 44:21,
45:15, 48:23, 48:24,
56:13, 57:22, 63:20,
66:7, 74:19, 83:12,
84:1, 125:15,
127:15, 130:13,
130:17
boundary [1] - 76:7
break [4]-59:2, 86:3,
87:10, 139:5
brick [1] - 67:4
bricks [1]-73:9
bridge [1]-9:21
bring [4]-45:21, 51:8,
63:7, 84:23
bringing [2] - 84:22, 146:20
Broseman [6] -
114:22, 128:8, 139:2, 149:9, 151:6, 151:18
BROSEMAN [24] -
85:12, 85:16, 85:22, 88:24, 91:1, 91:11, 114:24, 115:11, 115:17, 118:1,
118:22, 124:11,
124:19, 125:13,
139:6, 139:9,
139:15, 149:11,
149:13, 149:24,
150:9, 150:15,
151:7, 152:1
brought [11]-26:4,
51:1, 51:7, 51:11,
53:6, 53:19, 64:9,
65:9, 124:16,
124:20, 124:24
brown [3]-20:23,
21:1, 141:4
buffer [9]-29:2, 29:3,
29:4, 29:9, 29:10,
29:13, 29:17, 29:23, 98:1
buffering [7]-12:1,
12:3, 28:16, 28:19, 28:20, 30:1
buffers [1] - 12:1
build [7] - 19:9, 22:6,
22:12, 22:14, 23:5,
24:19, 101:9






| ```15:14, 35:7, 51:22, 68:10, 86:14, 101:3, 112:11, 114:18, 148:6 late[1] - 3:2 lateness[1] - 139:3 lawn [3] - 20:4, 140:20, 140:24 lawn-type [1] - 20:4 layout [3] - 6:7, 55:19, 131:7 lead [2] - 58:3, 72:9 leading [3]-45:14, 72:7, 132:7 least [4]-41:23, 57:15, 100:8, 145:1 leave [2] - 109:10, 126:16 leaves [1] - 111:11 leaving[2] - 81:8, 82:1 left [39] - 14:2, 14:14, 16:10, 16:13, 16:17, 17:8, 17:13, 18:11, 18:24, 25:13, 25:16, 35:7, 35:23, 35:24, 41:15, 44:21, 48:24, 50:8, 52:16, 54:8, 54:15, 56:12, 57:22, 66:7, 74:19, 75:12, 98:22, 99:1, 99:2, 130:14, 130:17, 131:19, 131:24, 132:6, 133:5, 133:7, 133:20, 135:1 left-hand [20] - 14:2, 14:14, 16:10, 16:13, 18:11, 25:13, 25:16, 35:23, 35:24, 44:21, 48:24, 50:8, 56:12, 57:22, 66:7, 74:19, 131:19, 131:24, 135:1 legal [2] - 85:1, 85:2 length [2] - 79:16, 102:10 lengths [4]-32:4, 99:21, 100:1, 100:8 less [13] - 10:15, 56:7, 56:16, 56:22, 65:13, 81:11, 95:1, 101:9, 109:7, 111:5, 126:10 letter [1]-51:6 letters [2] - 122:2, 146:13 level [3]-39:22, 55:3, 62:13 Levy [4] - 87:24, 88:1, 89:11, 93:9 LEVY [25] - 88:1, 88:18, 89:3, 89:12, 89:15, 89:18, 89:23, 90:9, 90:17, 90:21, 91:3, 91:9, 91:15,``` |  | ```125:8, 135:20, 136:23 looking [26] - 15:17, 15:21, 17:9, 17:10, 23:12, 24:11, 28:24, 35:5, 38:11, 45:2, 48:23, 49:3, 65:15, 74:24, 78:1, 78:2, 92:12, 99:8, 109:24, 122:23, 131:18, 131:22, 132:2, 133:19, 150:6, 150:23 Looking [2] - 25:10, 98:7 looks [3] - 46:5, 74:22, 100:19 loop [7] - 18:10, 21:14, 24:6, 37:8, 39:4, 39:7, 135:18 low [2] - 42:5 Iow-volume [1] - 42:5 lower [4]-35:23, 35:24, 69:22, 69:23 Lutz [1] - 114:18``` <br> M <br> Madam [1] - 59:1 <br> made-up [1] - 105:12 <br> Madison [5] - 126:4, <br> 127:7, 127:10, <br> 127:21, 128:3 <br> Mahoney [1] - 96:18 <br> MAHONEY [1] - 96:19 <br> Mahoney's [1] - <br> 100:20 <br> mail [2] - 129:15, 129:18 <br> mailbox [5]-126:15, 129:14, 130:4, 134:9, 135:8 | ```manage [1] - 108:18 management [29] - 6:8, 8:15, 14:7, 19:4, 58:7, 58:12, 58:14, 60:5, 88:4, 88:9, 88:21, 89:10, 90:2, 93:5, 94:4, 94:9, 94:14, 98:15, 106:2, 106:7, 108:15, 140:14, 140:17, 146:5, 146:11, 146:15, 147:21, 147:22, 148:4 maneuver [3] - 48:7, 49:24, 102:17 manhole [1] - 60:9 manholes [2]-60:7, 60:14 manual [1] - 63:13 manufacturers [1] - 73:18 margin [2] - 72:6, 72:13 marked [4]-4:10, 76:4, 113:14, 124:8 Marlier [7] - 86:1, 115:20, 116:20, 119:15, 124:23, 138:24, 139:16 MARLIER [15] - 3:16, 3:20, 4:6, 59:1, 59:4, 59:12, 69:3, 85:7, 85:18, 87:5, 87:7, 87:9, 87:13, 117:18, 124:15 marshal [4] - 48:14, 120:3, 120:7, 120:13 Martin [1] - 134:12 Mary [1] - 100:19 matter [2] - 140:17, 153:9 matters [1]-3:10 Mature [1] - 58:8 mature [6] - 58:20, 58:22, 58:23, 88:6, 88:15, 101:6 maturity [1] - 101:11 maximum [7]-22:6, 22:12, 22:14, 23:5, 23:17, 56:13, 141:5 meadow [4] - 77:20, 92:5, 92:15, 105:12 mean [17]-15:12, 33:19, 35:20, 40:2, 51:14, 52:24, 54:11, 67:13, 67:20, 67:22, 73:24, 80:8, 89:22, 91:14, 91:18, 110:14, 147:9 meaning [1] - 72:13 means [1] - 70:16 measurement [1] - 110:19``` | ```meet [14]-31:17, 53:13, 82:5, 82:8, 83:1, 83:4, 83:5, 85:5, 98:2, 123:2, 123:9, 131:11, 131:15, 135:24 meeting [2]-53:16, 84:17 meetings [2]-26:11, 130:9 meets [5] - 53:17, 62:15, 82:12, 85:6, 126:9 members [1]-85:15 mentioned [9]-73:8, 113:4, 116:22, 120:9, 122:20, 145:15, 146:22, 147:19, 149:4 met [3]-53:10, 82:24, 120:3 metal [1]-81:18 metered [1]-106:11 methodology [1] - 63:12 mic [1] - 115:1 microphone [1] - 87:3 middle [8]-11:15, 16:19, 64:11, 118:11, 130:14, 130:17, 133:7 might [8]-23:9, 57:24, 58:2, 72:4, 107:12, 115:6, 147:7, 149:21 mile [4]-9:13, 9:23, 95:2 Military [2] - 116:8, 116:12 minimum [8] - 14:4, 32:4, 32:6, 32:14, 32:22, 119:17, 119:21, 141:21 minimums [1] - 119:22 minute [3]-59:2, 86:3, 87:10 minutes [4] - 3:2, 87:15, 139:7, 149:10 missed [1] - 29:12 mitigation [2]-93:1, 94:11 mixed [2]-117:2, 117:5 mixed-use [2]-117:2, 117:5 model [2]-92:1, 92:13 modeled [1] - 71:4 modeling [1] - 65:14 models [1] - 71:6 modern [1] - 47:12 modern-day [1] -``` |
| :---: | :---: | :---: | :---: | :---: |


| 47:12 | natural [7]-29:2, | never [3]-51:1, 63:22, | object [5] - 85:24, | 138:20, 139:22, |
| :---: | :---: | :---: | :---: | :---: |
| modification [10] - | 58:6, 58:11, 58:14, | 144:20 | 88:24, 117:18, | 139:24, 142:17, |
| 9:4, 77:6, 77:13, | 88:4, 89:9, 98:17 | new [5] - 51:11, 53:19, | 24:15, 150:15 | 142:21, 145:16, |
| 119:8, 120:5, | nature [4]-13:9, | 84:23, 86:22, 121:13 | objection [1] - 125:5 | 145:18, 149:11, |
| 125:20, 142:10, | 72:20, 141:10, | next [4]-129:20, | observed [1] - 143:7 | 152 |
| 142:14, 143:19, | 44:15 | 150:6, 150:22, 152:9 | obvious [1] - 152:2 | one-way [1] - 138:13 |
| 145:20 | near [2]-74:7, 135:21 | nice [1] - 135:4 | obviously [5] - 5:5, | ones [5] - 16:17, |
| modified [1] - 6:7 | nearby [1]-8:5 | night [1] - 135:12 | 13:14, 20:6, 94:8, | 34:22, 122:20, |
| modify [2] - 19:19, | nearest ${ }_{[1]}$ - 98:4 | nights [3] - 150:7, | 122:18 | 123:8, 135:20 |
| 4:22 | necessarily [6] - | 150:10, 151:16 | Obviously [2] - 32:2, | onsite [2]-79:21, |
| Montgomery [1] - 42:7 months [1] - 50:17 | $\begin{aligned} & 23: 15,23: 18,36: 14, \\ & 53: 13,57: 24,78: 20 \end{aligned}$ | $\begin{gathered} \text { nine }[6]-31: 8,33: 9 \\ 33: 14,36: 12,36: 13, \end{gathered}$ | $\begin{aligned} & \text { 116:22 } \\ & \text { occasion [1] - 120:12 } \end{aligned}$ | $\begin{aligned} & 80: 20 \\ & \text { open [81] - 6:12, 6:16, } \end{aligned}$ |
| Most [1] - 60:9 | necessary [1] - 146:4 | 131:17 | occur [1]-115:7 | 6:19, 6:21, 6:24, 7:2, |
| most [4] - 35:7, 55:23, | need [7]-24:12, | Ninety [1] - 67:6 | occurred [1] - 108:9 | 7:4, 11:9, 11:12, |
| 64:6, 83:10 | 27:11, 43:22, 61:1, | Ninety-five ${ }_{[1]}$ - 67:6 | occurring [2] - 88:10, | 2:1, 12:2, 12:7 |
| Motion [1] - 152:10 | 66:18, 83:21, 83:22 | Noah [1] - 115:1 | 94:9 | 12:8, 12:19, 12:20, |
| mounted [1] - 19:16 | needed [5] - 6:22, | nomenclature ${ }_{[4]}$ - | occurs [2] - 68:4, 68:7 | 13:23, 14:4, 14:14, |
| move [17] - 27:5, 27:9, | 26:12, 26:14, 26:16, | 50:19, 50:21, 51:2, | OF ${ }_{[1]}$ - 153:3 | 14:16, 14:24, 15:3, |
| 27:15, 28:4, 40:20, | 38:16 | 51:15 | off-street [1]-31:6 | 15:9, 15:17, 15:21, |
| 52:7, 52:24, 53:2, | needs [1]-124:4 | non [1] - 119:7 | offhand [3]-66:15, | 15:24, 16:2, 16:4, |
| 53:23, 54:2, 54:3, | neighbor [5]-53:10, | non-density [1] - | 66:16, 66:17 | 6:22, 17:5, 17:10, |
| 54:4, 54:5, 54:6, | 65:15, 82:2, 83:8, | 119:7 | office [5] - 129:24, | 17:11, 17:20, 17:23, |
| 54:14, 54:20, 147:1 | 85:10 | none [5] - 19:23, | 130:21, 130:24, | 8:2, 18:5, 18:12, |
| moved [5] - 6:8, | neighbors [11]-8:19, | 123:8, 129:1, 138:3, | 131:19, 132:2 | 19:1, 20:2, 20:4, |
| 27:11, 52:15, 54:9, | 23:14, 26:18, 53:11, | 138:4 | offsite [2]-41:23, | 20:12, 20:15, 21:6, |
| 152:12 | 83:11, 84:14, 84:17, | Norma [2] - 153:6, | 81:12 | 21:11, 21:15, 24:6, |
| movements [1] - | 85:20, 85:23, 86:14, | 153:13 | oftentimes [2]-41:19, | 4:7, 24:13, 28:9, |
| 138:22 | 86:18 | normal [3] - 43:8, | 41:22 | 8:14, 29:24, 36:1, |
| moves [1] - 102:13 | Neighbors [1] - 53:11 | 103:24, 104:19 | old [2] - 5:21, 149:1 | 37:18, 37:22, 38:4, |
| moving [3]-99:12, | neighbors' [3]-53:13, | north [2]-122:16, | older [2]-10:17, | 38:14, 38:23, 39:16, |
| 118:5, 119:4 | 73:6, 84:5 | 22:17 | 149:2 | 42:3, 49:6, 49:9, |
| $\begin{aligned} & \text { MPC [2] - 151:23, } \\ & \text { 152:5 } \end{aligned}$ | $\begin{aligned} & \text { Nelson }[3]-3: 8,70: 7, \\ & 87: 5 \end{aligned}$ | North [1] - 136:18 <br> note [2] - 43:10, 43:15 | Once [2] - 57:8, 93:11 <br> once [1] - 102:22 | 54:21, 54:22, 54:23, 57:15, 57:21, 58:4, |
| $\begin{aligned} & \text { MULRONEY }_{[1]}- \\ & 152: 12 \end{aligned}$ | NELSON [65] - 3:9, $3: 18,68: 9,68: 12$ | noted [1] - 117:24 <br> notes [4]-82:8, | oncoming [1] - 47:21 | $\begin{aligned} & 73: 3,74: 9,74: 20, \\ & 82: 13,82: 14,82: 23, \end{aligned}$ |
| 152:12 <br> multifamily [3] | $\begin{aligned} & 3: 18,68: 9,68: 12, \\ & 85: 985: 13.86: 7 \end{aligned}$ | ```notes [4] - 82:8, 115:4, 115:12, 153:9``` | One [5] - 82:2, 110:13, 131:10, 138:10, | 119:12, 139:22, |
| 123:15, 143:8 | 86:12, 87:6, 87:8, | nothing [1]-83:7 | 145:19 | 140:6, 140:15, |
| multipart ${ }_{[1]}$ - 118:6 | 87:24, 89:11, 89:13, | notice [2]-132:12, | one [78] - 5:15, 6:14, | 140:20, 144:13, |
| multiple [1] - 72:15 | 89:16, 89:19, 91:5, | 146:18 | $9: 17,10: 10,10: 20,$ | 146:4, 146:6 |
| municipal [5] - | 91:13, 91:17, 93:9, | notified [3] - 68:5, | 10:23, 11:1, 17:2, | opening [1] - 33:4 openings [1] - 33:2 |
| 108:16, 108:22, | 93:11, 93:15, 93:19, | 70:12, 70:14 | 17:11, 24:12, 26:23, | openings [1] - 33:2 |
| 109:2, 111:22, | 95:8, 95:15, 95:17, | nowhere [1] - 135:21 | 29:8, 31:7, 33:7, | opinion [10]-5:13, |
| 144:14 | 95:22, 96:3, 96:6, | NPDES [2] - 103:10, | $33: 23,34: 2,34: 19,$ | 15:19, 18:20, 99:14, |
| municipalities [1] - | 96:9, 96:14, 96:18, | 146:24 | 35:5, 36:18, 37:8, | 117:21, 119:7, <br> $121 \cdot 24,138 \cdot 9$ |
| 148:7 | 96:21, 97:2, 97:7, | number [18]-9:15, | 37:19, 40:15, 48:20, |  |
| municipality [1] - | 97:11, $97: 15$, $101: 18,101 \cdot 20$, | 10:13, 10:16, 11:4, | $52: 24,53: 22,54: 2,$ | 143:5, $147: 8$ <br> opinions [1] - 122:2 |
| 13:10 | 101:18, 101:20, | 11:7, 33:16, 37:23, | 54:4, 58:5, 62:3, | opportunity [2] - |
| mutually [1] - 84:19 | 105:19, 105:23, 109:22, 110:18, | 42:11, 66:6, 66:9, | $66: 11,71: 19,72: 6,$ | 124:21, 125:3 |
| mutually-agreeable [1] - 84:19 | 111:2, 111:20, | $99: 23,113: 17,$ | 72:8, 72:11, 74:5, | opposed [1] - 80:6 |
|  | 112:3, 112:9, | 114:4, 117:3 | 74:6, 74:7, 74:11, | option [1] - 43:14 |
| N | $\begin{aligned} & \text { 112:17, 112:21, } \\ & \text { 114:9, 114:12. } \end{aligned}$ | $148: 2,149: 23$ | 82:11, 82:20, 83:3, | options [1] - 22:22 <br> ordinance [12]-6:10, |
| name [3] - 116:14, | 114:14, 114:18, | numbers [10] - 44:19, 47:14, | $: 6,101: 3,102: 1 \text {, }$ | $6: 19,9: 4,26: 13,$ |
|  | 114:22, 115:10,117:24, 125:5, | $72: 2,105: 5,11$ | 118:8, 119:14, | 29:15, 46:20, 56:8, |
| 127:3, 134:10 named [1]-126:6 |  | $125: 14,149: 18$ | 120:21, 122:16, | 68:21, 121:23, |
| named [1] - 126:6 <br> names [1] - 95:10 | $\begin{aligned} & \text { 117:24, 125:5, } \\ & \text { 139:2, 139:8, } \end{aligned}$ | numerous [1] - 122:6 | 125:18, 126:12, | 123:23, 136:8, 137:4 |
|  | $\begin{aligned} & \text { 139:2, 139:8, } \\ & \text { 139:11, 149:9, } \end{aligned}$ |  | 126:17, 128:9, | orientation [2] - |
| naming [1] - 126:2 | 150:1, 150:12, | 0 | 129:18, 131:2, | $\text { 35:19, } 131: 8$ |
| narrow [1] - 48:6 <br> narrower [5] - 66 | ```150:18, 151:13, 152:7 net [1] - 11:23 network [1] - 110:16``` |  | $\begin{aligned} & \text { 132:24, 133:1, } \\ & \text { 133:14, 135:17, } \end{aligned}$ | orifices [1] - 106:10 original [3] - 5:22, |
| 66:22, 67:1, 67:9, |  | Oak [2]-116:12, | $138: 5,138: 6,$ | 6:13, 97:21 |
| 143:1 |  | 116:22 | 138:11, 138:13, | originally [4] - 4:18, |



| ```Proceedings [1] - 152:17 process [4] - 6:2, 56:4, 120:14, 126:23 professional [1] - 143:5 Professional [2] - 153:6, 153:13 prohibit [1] - 146:3 project [5] - 48:19, 116:12, 121:21, 137:23, 145:15 projects [9]-115:21, 116:21, 116:23, 117:2, 117:5, 117:11, 120:10, 135:9, 135:12 pronouncing [1] - 95:10 proper [2] - 123:4, 149:6 properties [7] - 29:5, 115:22, 115:24, 116:2, 123:17, 124:13, 136:23 property [51] - 5:7, 8:13, 8:19, 8:22, 8:24, 13:2, 16:24, 22:18, 25:18, 28:24, 29:4, 29:17, 30:5, 34:24, 35:8, 44:11, 44:20, 45:4, 45:6, 45:9, 45:20, 46:22, 47:5, 58:18, 60:22, 63:9, 65:4, 70:15, 71:21, 72:24, 75:10, 75:11, 75:16, 75:17, 75:18, 92:24, 98:3, 98:9, 98:12, 100:13, 100:15, 100:20, 101:1, 101:16, 103:14, 121:9, 125:19, 128:15, 140:10, 142:7, 144:22 proposal [1] - 52:18 propose [1] - 24:19 proposed [31] - 9:3, 9:11, 9:13, 14:5, 14:23, 19:23, 20:5, 20:17, 20:22, 21:4, 22:4, 23:6, 28:12, 28:20, 31:8, 33:8, 38:13, 39:12, 47:6, 56:16, 67:3, 77:5, 77:6, 77:12, 78:24, 94:8, 99:19, 108:20, 137:1, 137:9, 137:20 Proposed [1] - 49:19 proposing [2] - 52:22, 101:8 provide [12] - 22:12, 38:11, 38:18, 39:22,``` | ```49:15, 84:6, 84:9, 94:11, 94:16, 94:21, 105:4, 111:5 provided [15] - 6:23, 24:17, 25:20, 27:8, 27:18, 32:23, 34:13, 40:6, 40:9, 49:10, 52:3, 55:2, 73:22, 73:23, 105:9 provides [2] - 72:16, 146:7 providing[3] - 50:3, 50:14, 73:19 provision [2] - 83:10, 146:6 provisions [5] - 9:4, 26:13, 82:24, 83:16, 146:2 proximity [2] - 11:5, 74:3 public [9]-13:13, 20:2, 35:24, 43:21, 44:4, 138:7, 138:20, 145:13, 145:17 publicly [1] - 77:2 publicly-available [1] -77:2 pull [7]-23:2, 34:2, 34:17, 59:21, 82:15, 83:13, 123:12 pulled [2]-29:14, 34:3 pulling [3] - 36:18, 36:23, 37:3 purchase [1]-22:18 purple [1]-76:18 purpose [2]-77:23, 84:8 purposes [1] - 12:13 purview [2] - 53:15, 69:9 push [2] - 41:1, 41:16 put [16]-18:20, 20:9, 20:13, 21:12, 21:23, 41:11, 56:4, 76:3, 101:6, 101:14, 104:7, 106:24, 124:5, 125:3, 146:18, 150:7 putting [1] - 19:2 PVC[1] - 60:3``` <br> qualified $[3]$ - 92:6, 115:19, 123:20 <br> qualifies [1]-89:9 <br> quality ${ }_{[1]}$ - 94:16 <br> quarter [3] - 118:14, <br> 118:20, 118:21 <br> questioning [1] - 121:1 | ```questions [28] - 33:17, 55:12, 55:20, 55:23, 55:24, 59:14, 84:5, 85:8, 86:20, 91:8, 92:17, 95:16, 96:5, 96:8, 96:19, 97:18, 101:19, 101:22, 113:1, 114:13, 117:9, 117:20, 119:14, 120:21, 121:20, 123:22, 130:8, 150:5 quick [1] - 88:3 quickly [1] - 125:12 quite [2] - 92:22, 116:17 quorum [1] - 3:3``` <br> R <br> R-4 [1] - 125:20 <br> R-5 [3] - 129:23, 132:20, 134:5 <br> radius [10]-34:13, 34:14, 34:15, 34:16, 48:21, 48:22, 49:5, 49:8, 49:10, 102:4 <br> radiuses [1] - 49:23 <br> Radnor [17] - 7:10, 9:17, 46:12, 48:19, 81:13, 81:24, 88:1, 97:17, 108:4, 110:24, 112:1, 115:21, 116:2, 117:10, 117:11, 120:10, 145:16 | ```44:20, 48:5, 49:3, 51:15, 52:23, 54:12, 55:21, 60:3, 76:24, 77:12, 92:17, 104:9, 112:15, 118:12, 123:24, 128:11, 132:17 rear [17] - 25:21, 26:4, 26:5, 26:6, 26:7, 26:8, 26:12, 26:16, 26:17, 26:19, 26:23, 27:8, 27:14, 100:15, 131:22, 133:10, 133:23 reason [2]-69:14, 72:19 reasonable [2] - 72:6, 72:12 reasons [3] - 6:4, 6:14, 139:24 received [4]-6:3, 51:5, 51:23, 146:14 recent [1]-64:6 recently [2] - 7:12, 48:18 recess [1] - 56:24 Recess [2] - 59:8, 87:17 recessed [1] - 32:17 recognize [1] - 112:3 recognizing [1] - 86:23 recollect [1] - 27:3 recommend [2] - 19:2, 19:21 reconfigure [1] - 54:16 reconvene [1]-59:5 record [16] - 68:19, 69:18, 86:10, 103:14, 106:21, 122:3, 125:15, 128:5, 131:6, 133:13, 134:19, 140:9, 150:16, 151:11, 153:8 recorded [3] - 103:11, 103:13, 149:5 recreation [4]-12:14, 12:15, 12:16, 140:16 recreational [1] - 12:13 recross[1] - 150:3 recross-examination [1] - 150:3 recrossed [1] - 139:13 rectangle [2] - 36:14, 65:7 rectangles [3] - 64:11, 65:8, 65:20 rectangular [1] - 36:5 REDIRECT [1] - 115:15``` | ```redirect [3] - 86:6, 114:23, 150:19 redirected [1] - 150:21 reduce [1]-22:8 reduced [1]-21:16 reduces [1]-108:21 reducing [8]-80:22, 80:24, 81:3, 81:7, 81:24, 105:2, 109:18, 111:15 reduction [2]-105:4, 105:15 redundancy \({ }_{[1]}\) - 72:16 refer [10]-14:1, 25:16, 25:21, 45:24, 58:13, 64:14, 70:20, 88:19, 90:4, 125:16 reference [1] - 47:8 referenced [1] - 134:4 referred [3]-10:21, 50:20, 53:9 referring [20]-10:10, 10:20, 16:17, 25:17, 27:24, 29:13, 29:14, 30:4, 42:14, 44:1, 44:6, 46:2, 47:24, 50:7, 59:24, 65:20, 67:12, 76:12, 90:6, 90:13 refine [1]-61:3 reflect \([1]\) - 84:13 reflected [2]-57:3, 84:19 reflects [1] - 73:16 Regarding [1] - 106:2 regarding [4]-57:4, 101:23, 102:20, 106:6 region [1] - 47:11 regulated [1]-147:5 related [2]-92:18, 106:13 relative [3]-11:20, 70:17, 113:1 relayed [2] - 108:10, 108:13 relevant [1]-71:2 rely [3] - 93:4, 93:8, 94:3 relying [1] - 98:17 Remaining [1] - 9:17 remains [2]-118:12, 118:15 remember [6]-12:10, 27:1, 46:23, 47:6, 75:22, 127:7 removal [5] - 40:10, 40:12, 40:14, 143:4, 144:3 remove [2]-146:7, 148:20 removed [5] - 41:20,``` |
| :---: | :---: | :---: | :---: | :---: |



|  |  | $\begin{aligned} & \text { 143:4, 144:3 } \\ & \text { soften }[1]-49: 5 \\ & \text { soil }[2]-65: 24,90: 7 \\ & \text { sold }[2]-22: 15, \\ & 103: 14 \\ & \text { solid }[1]-118: 8 \\ & \text { solutions }[1]-54: 18 \\ & \text { someone }[7]-21: 12, \\ & \text { 24:15, 28:23, 37:2, } \\ & \text { 37:24, 40:2, 40:22 } \\ & \text { sometimes }[1]- \\ & \text { 148:17 } \\ & \text { Somewhat }[1]-68: 1 \\ & \text { somewhere }[2]-11: 6, \\ & 136: 19 \\ & \text { Sorry }[6]-93: 13, \\ & 93: 18,93: 22,139: 13 \\ & \text { sorry }[10]-28: 11, \\ & 41: 7,43: 24,71: 13, \\ & 87: 7,99: 3,102: 15, \\ & 113: 10,114: 7, \\ & \text { 139:12 } \\ & \text { sort }[4]-18: 14,29: 2, \\ & 57: 19,151: 19 \\ & \text { sound }[1]-73: 13 \\ & \text { south }[2]-25: 22, \\ & 27: 11 \\ & \text { South }[3]-9: 24, \\ & 10: 19,10: 23 \\ & \text { space }[92]-6: 12, \\ & 6: 16,6: 19,6: 22, \\ & 6: 24,7: 2,7: 4,11: 9, \\ & 11: 12,12: 1,12: 2, \\ & 12: 7,12: 8,13: 23, \\ & 14: 4,14: 14,14: 17, \\ & 14: 24,15: 3,15: 10, \\ & 15: 17,15: 18,15: 21, \\ & 15: 24,16: 2,16: 4, \\ & 16: 22,17: 5,17: 10, \\ & 17: 11,17: 20,17: 24, \\ & 18: 2,18: 5,18: 12, \\ & 18: 16,19: 1,20: 2, \\ & 20: 4,20: 12,20: 15, \\ & 21: 6,21: 11,21: 15, \\ & 22: 5,22: 8,23: 11, \\ & 24: 6,24: 7,24: 14, \\ & 28: 10,28: 14,29: 24, \\ & 30: 2,31: 7,33: 11, \\ & 36: 1,37: 18,37: 21, \\ & 37: 23,38: 4,38: 14, \\ & 38: 23,39: 16,41: 13, \\ & 41: 14,42: 4,49: 7, \\ & 49: 9,54: 21,54: 22, \\ & 54: 23,57: 15,57: 21, \\ & 58: 4,73: 1,73: 3, \\ & 73: 11,73: 17,74: 9, \\ & 74: 20,82: 13,82: 14, \\ & 82: 23,119: 12, \\ & 139: 22,140: 7, \\ & 140: 15,140: 20, \\ & \text { 144:13, 146:4, 146:6} \\ & \text { spaces }[12]-14: 15, \\ & 14: 16,14: 19,30: 22, \end{aligned}$ | ```31:2, 31:4, 32:24, 33:9, 36:5, 36:23, 37:3, 74:9 speaking [1] - 127:7 species [1] - 149:20 specific [9]-4:23, 34:23, 47:23, 61:16, 71:16, 71:17, 117:9, 125:2, 144:2 specifically [15] - 8:3, 9:1, 14:10, 42:2, 44:21, 56:19, 57:21, 59:15, 60:12, 60:13, 65:19, 82:19, 83:22, 138:12, 141:15 specifications [1] - 73:19 specifics [2]-108:11, 146:10 speech [1] - \(91: 2\) speed [2]-112:17, 112:19 spelled [1]-103:7 spent [1] - 84:16 spoken [1]-127:5 spot [1] - 34:18 spots [2]-36:11, 36:19 Square [1] - 62:9 square [6] - 11:19, 11:21, 14:6, 14:8, 62:8, 62:15 ST \({ }^{2}\) ] - 44:12, 59:23 stacking [1] - 57:5 stage [1] - 120:3 staggered \([1]\) - 32:8 stairs []] - 23:24, 24:5, 24:6 standard [5] - 22:21, 23:1, 55:13, 100:22, 102:9 standards [13] - 37:14, 105:8, 120:4, 121:24, 128:16, 131:12, 131:16, 141:14, 142:10, 143:18, 144:3, 144:5, 145:20 standing \([3]\) - 17:19, 17:20, 17:24 standpoint [1] - 118:13 start [3]-24:11, 28:17, 87:20 started \([8]-3: 2,3: 8\), 59:11, 86:4, 122:11, 122:22, 123:24, 139:3 starting [2] - 130:4, 151:16 statement [2]-86:13, 89:2 static [1]-53:5``` |  |
| :---: | :---: | :---: | :---: | :---: |





