1   **STATE OF NEW HAMPSHIRE**
                   SITE EVALUATION COMMITTEE
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4   September 29, 2017 - 9:07 a.m.   DAY 42
    49 Donovan Street   MORNING Session ONLY
5   Concord, New Hampshire

6   {Electronically filed with SEC on 10-16-17}

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                   IN RE: SEC DOCKET NO. 2015-06
8   Joint Application of Northern
                            Pass Transmission, LLC, and
9   Public Service Company of
                            New Hampshire d/b/a Eversource
10   Energy for a Certificate
                            of Site and Facility.
11   (Hearing on the merits)

12

    PRESENT FOR SUBCOMMITTEE/SITE EVALUATION COMMITTEE:
13 Chrmn. Martin P. Honigberg Public Utilities Comm.
    (Presiding as Presiding Officer)

14
    Cmsr. Kathryn M. Bailey   Public Utilities Comm.
15 Dir. Craig Wright, Designee Dept. of Environ. Serv.
    Christopher Way, Designee   Dept. of Resources &
16   Economic Development
    William Oldenburg, Designee Dept. of Transportation
17 Patricia Weathersby   Public Member
    Rachel Dandeneau   Public Member

18

19 ALSO PRESENT FOR THE SEC:
    Michael J. Iacopino, Esq., Counsel to the SEC
20 (Brennan, Caron, Lenehan & Iacopino)

21 Pamela G. Monroe, SEC Administrator

22   (No Appearances Taken)

23   COURT REPORTER: Susan J. Robidas, NH LCR No. 44

24

1   I N D E X

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3   NORTHERN PASS CONSTRUCTION WITNESS PANEL:

4   Samuel Johnson
                     Kenneth Bowes
5   Nathan Scott
                     Lynn (Farrington) Frazier
6   John Kayser

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1   P R O C E E D I N G S

2   CHAIRMAN HONIGBERG: All

3   right. Good morning, everyone. Welcome to

4   Day 42. Welcome back to the Applicant's

5   construction panel. You all are still under

6   oath, so we won't go through that again.

7   Mr. Needleman, I understand

8   you have a brief direct examination of the

9   panel to get this cued up?

10   MR. NEEDLEMAN: I do. Thank

11   you. I'll try to move through these topics

12   as quickly as we can.

13   DIRECT EXAMINATION

14   BY MR. NEEDLEMAN:

15   Q.   You all completed testimony on June 2nd,

16   2017, and you've been recalled pursuant to

17   the Chair's September 19, 2017 order. The

18   Committee wants you to focus on an assessment

19   of whether sufficient information has been

20   provided regarding the exception requests to

21   DOT, with a particular focus on, quote,

22   "progress of DOT's review process." In

23   addition, you're being asked to focus on,

24   quote, "new evidence related to potential

1   inaccuracies in the underground construction

2   plans."

3   Mr. Johnson and Mr. Bowes, you both have

4   primary responsibilities with respect to

5   these issues. Are you prepared to speak to

6   those topics?

7 A. (Bowes) Yes, I am.

8 A. (Johnson) Yes, I am.

9 Q. And have you both reviewed the Chair's

10   September 19th order?

11 A. (Bowes) Yes, I have.

12 Q. Starting with Mr. Johnson, can you describe

13   what role you have played in dealing with

14   those issues since you last testified?

15 A. (Johnson) Sure. So my responsibility in

16   regards to the DOT, really all aspects of the

17   DOT, is I am managing the process of the

18   design, the exception requests, and the

19   survey that accompanies the design on behalf

20   of the owner.

21 Q. And Mr. Bowes, same question to you.

22 A. (Bowes) I have an executive-level role to

23   meet with the DOT. And we've had one such

24   meeting since I last testified; it was to

1   introduce our construction contractor and

2   review the means and methods with the entire

3   DOT team, including the commissioner, and

4   establish a relationship and contact

5   information with the commissioner if any

6   issues are escalated to our level.

7 Q.   I want to start with the, quote, "new

8   evidence related to potential inaccuracies in

9   the underground construction plans." What is

10   your understanding of the specific topics

11   that need to be addressed here to address the

12   Committee's concerns?

13 A.   (Johnson) So there are two sort of focuses,

14   if you will, first being the background

15   survey itself. So that would be the

16   right-of-way boundaries and how those

17   boundaries were established. In the letter

18   that we received from the DOT, they discussed

19   the use of the word "approximate," and they

20   were looking for more foundational evidence

21   to move off of the approximate right-of-way

22   boundary lines.

23   The second focus is really the physical

24   types of survey. So there were some

1   instances where, for instance, a drainage

2   feature was labeled as a corrugated metal

3   pipe, and when we went out in the field, it

4   was actually a concrete box culvert. There

5   are certain instances where there were

6   utilities that were given to us by third

7   parties. We incorporated them into the

8   drawings, but it turns out in the field that

9   those utilities were on the other side of the

10   street. So the as-builts weren't provided to

11   us, or the incorrect information was put in.

12   There were other instances where

13   monuments or other street signs or things of

14   relative significance were missed in the

15   survey which was not picked up because the

16   surveyors didn't think that would have an

17   impact on the actual design of the

18   underground alignment. So we have -- okay.

19 Q. I want to bring up Applicant's Exhibit 220 is

20   which is the DOT August 11, 2017 letter. Is

21   this the letter, Mr. Johnson, where DOT

22   identified some of those concerns?

23 A. (Johnson) Yes, it is.

24 Q. And this pertained to the survey report, but

1   it didn't pertain to some of those other

2   issues; is that correct?

3   A.   (Johnson) That is correct.

4   Q.   And since the time that this letter was

5   issued, have you had any conversations with

6   DOT about it?

7   A.   (Johnson) We have. We've had several

8   conversations with the DOT about it.

9   Effectively, we've worked with the

10   Right-of-Way Bureau to establish a protocol

11   that we would go out into the field that

12   would, in their estimation and the group's

13   estimation together, would meet Condition

14   No. 4 of the original conditions that the DOT

15   put forth.

16   We had a meeting specifically on

17   September 5th with our surveyors meeting with

18   the right-of-way bureau where they put this

19   all forth. On our regular monthly meeting on

20   September 19th, we presented this formally to

21   the larger group, and we talked through the

22   approval process. They accepted this

23   verbally but are going to present it to their

24   front office, I believe on Monday of next

1   week.

2   Q. So what is the approach going forward now to

3   deal with the issues that DOT has raised?

4   A. (Johnson) So, again, we're going to go back

5   to the two tracks, if you will. The first

6   track is the boundary right-of-way. So what

7   we've done is gone back and re-looked at the

8   archives and historical things to make sure

9   we've got all of the appropriate

10   documentation. We have worked with the DOT

11   to get the commissioner's return of layouts

12   which prescribe, you know, metes and bounds

13   of a lot of the roads that we're on. And

14   then thirdly, we've identified areas where

15   there are just -- there isn't enough

16   information either by the commissioner's

17   return or historic layouts, where we're going

18   to have to establish the right-of-way through

19   prescriptive rights.

20 Q. Is it your --

21 A. (Johnson) Sorry. The second track of that

22   is, again, on the physical side. We've sent

23   out another set of crews that are looking to

24   validate the utilities, edge of pavement,

1 street signs and all the other things picked

2 up originally, as well as anything that they

3 believe would be missing, so that they can

4 add, if you will, or enhance the physical

5 part of the survey.

6 Q. Is it your understanding, based on your

7 interactions with DOT, that the path forward

8 that you just described is an acceptable

9 approach to them?

10 A. (Johnson) It is.

11 Q. And what's the timetable for achieving that?

12 A. (Johnson) So the field crews are going to be

13 out across the entire 16-1/2 miles over the

14 next four to six weeks. After that, they

15 will be creating the next revision of the

16 survey report, which will include not only

17 the maps, but a narrative accompanying it,

18 basically tying in all the references that

19 they've used in creating the right-of-way, or

20 establishing what the Project believes to be

21 the right-of-way. And that will all be

22 available probably in the six- to eight-week

23 time frame.

24 Q. Does this effort relate at all to the DOT

1   exception process?

2 A.   (Johnson) Yes, it does. The two are

3   intertwined. Basically for the exception

4   process to really begin, you have to have

5   established the boundaries of the

6   right-of-way. And so what we'll do is take

7   the information from that survey report,

8   superimpose them onto the exception requests

9   and then submit that to the DOT.

10 Q.   The other topic that you were asked to

11   address here is the, quote, "progress of

12   DOT's review," close quote. And I wanted

13   to -- my understanding is there are two

14   components to that: One is the exception

15   request process, and the other is the status

16   of the underground design in relation to that

17   process. So I want to start with the

18   exception request process.

19   MR. NEEDLEMAN: And if we

20   could put up Applicant's 136, Page 23.

21 BY MR. NEEDLEMAN:

22 Q.   This is the Utility Accommodation Manual.

23   And these are the general highway standards.

24   Are you aware of those?

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 1   A.    (Johnson) I am.

 2   Q.    I want to call your attention to Standard

 3         No. 2 and ask you to generally explain that

 4         standard to us.

 5   A.    (Johnson) So, basically what this says is

 6         when a installation is within the

 7         right-of-way -- or the DOT's right-of-way in

 8         a longitudinal way, it should be as near to

 9         the edge of the right-of-way as practicable

10         to provide a safe environment and for traffic

11         operations.

12   Q.    And keep that one in mind for a moment, and I

13         want to call up Pages 40 and 41.  And in

14         particular, I want you to look at

15         Condition 5, Page 41.  And if you could

16         briefly explain your understanding of that

17         requirement.

18   A.    (Johnson) So, basically this lays out the

19         exception request process.  If you look at

20         the last sentence, that says if you cannot be

21         at the edge of the right-of-way, that the

22         commissioner may grant, on a case-by-case

23         basis, a design that moves you away from the

24         edge of the right-of-way.
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1   Q.   And am I correct that both of the

2   requirements we just looked at do contemplate

3   that -- both of the requirements we just

4   looked at, do you contemplate that exceptions

5   can be sought?

6   A.   (Johnson) That is correct, yes.

7   MR. NEEDLEMAN: And so can we

8   call up Page 11 of the Utility Accommodation

9   Manual?

10   BY MR. NEEDLEMAN:

11   Q.   And can you just briefly explain what we see

12   here?

13   A.   (Johnson) Sure. So this basically defines

14   what needs to be included in an exception

15   request, sort of the outline. So, you know,

16   it's design data, cost comparisons, traffic

17   control measures, if there's anything that's

18   pertinent, and any other information that may

19   be required by the Department themselves.

20   Q.   So it was pursuant to these sections that we

21   just looked at that the Project filed the

22   exception requests with DOT?

23   A.   (Johnson) That is correct.

24   Q.   And can you generally summarize the

1   substantive reasons why you sought particular

2   exception requests?

3 A.   (Johnson) Sure. So, for all of the

4   directional drills, we will be underneath

5   bridge abutments or underneath the roadway as

6   the track of the directional drills goes.

7   Clearly, they'll be 30 to 65 feet below the

8   road, but it still "below the road" by

9   definition. There are places where there are

10   deep utilities, if you will, that are either

11   drainage in nature or some other sort. We've

12   sought to go over the top of those drainage

13   facilities, if there was enough room, of

14   course. There are certain ones where there

15   are steep inclines and declines across the

16   edges of the road or where there's guardrails

17   that prevent us from being at the edge of the

18   right-of-way, so we petitioned to be inside

19   or in the shoulder or on the roadway in

20   certain cases.

21   MR. NEEDLEMAN: I want to call

22   up Applicant's 221.

23 BY MR. NEEDLEMAN:

24 Q.   And can you explain to the Committee what

1   this exhibit is?

2 A.   (Johnson) Sure. So this is a summary by

3   region, if you will, that describes how many

4   exception requests we have filed and how many

5   have been approved. So there are two that

6   are general in nature, and those would be the

7   use of FTB, or flowable thermal backfill, and

8   the use of plating as a construction

9   technique to safely tie up the construction

10   zones overnight. Both of those have been

11   approved.

12   WBR3 is the region between Woodstock and

13   Bridgewater along Route 3. We filed 52

14   exception requests there, and the DOT has

15   approved 18 of them.

16   WMNF is the part of the Project that's

17   within the forest, and that's in Woodstock

18   and Easton.

19   The Rock is the part that's in Bethlehem

20   near the Rocks Estate.

21   SHEB is Sugar Hill and Easton, and that

22   includes Sugar Hill, Franconia and Easton.

23   Then North and Route 3 are the

24   Pittsburg, Clarksville and Stewartstown

1   areas.

2   You can note that the approval process

3   has stopped after the WBR3 at this moment,

4   and that's because we are updating all of the

5   survey drawings, and those will be reissued

6   or reapplied with the DOT.

7   Q.   Has any of this initial round of exception

8   requests been denied by DOT?

9   A.   (Johnson) No, they've not been flat denied.

10   All of the exception requests that have been

11   sent back to us are seeking further

12   information.

13 Q.   And in the cases where they've sent them back

14   to you and sought further information, do you

15   have any sense of how that would work and

16   whether it would lead to changes or

17   improvements in the design?

18 A.   (Johnson) Absolutely. So there are almost

19   more than half of the ones that come back to

20   us are basically the iterative process of

21   design, where the DOT has asked us to move

22   from one side of the road to the other for

23   reasons for their convenience. Or, for

24   instance, one of the examples was we had

1   designed around a catch basin, and they told

2   us that we have the right to move the catch

3   basin, which would keep us off of the

4   roadway. So it's that type of iterative

5   process that we're working through with the

6   DOT.

7 Q. Can you provide a brief description of the

8   meetings that you've had with DOT regarding

9   the exception process?

10 A. (Johnson) Sure. So as the Committee knows,

11   we meet monthly with the DOT, typically the

12   third Tuesday of every month. And that has

13   been ongoing for over a year and a half at

14   this point, and will continue to go.

15   Typically we will talk about the SEC process

16   itself, updating them, and then we'll get

17   into any details that either the Project

18   wants to bring forth to the DOT or the DOT

19   wants to bring forth to the Project, as far

20   as specific exception requests.

21 Q. Who from DOT typically attends these

22   meetings?

23 A. (Johnson) So, the Chief of Design Services,

24   Melodie Esterberg, chairs the monthly

1   meetings; typically, Dave Rodrigue, Director

2   of Operations, is there; Mike Servetas, who's

3   the Assistant Director of Operations; Alan

4   Hanscom, who's the District 3 Maintenance

5   Engineer, and that's the portion from

6   Bridgewater to Woodstock, is there; Philip

7   Beaulieu, who's the District 1 maintenance

8   engineer, and that's from Woodstock all the

9   way north through Coos County; Chuck Schmidt,

10   who's the Bureau of Right-of-Way

11   Administrator, attends when there are items

12   of interest regarding survey; Bob Talon, who

13   is the chief surveyor for the Right-of-Way

14   Bureau, attends when it's appropriate; and

15   then Lennart Suther, who is the utilities

16   engineer, and Matthew Powers, who is the

17   utilities coordinator, both work for Melodie

18   Esterberg. Those are typically the members.

19   Occasionally Bill Cast, who is the Assistant

20   Commissioner, attends. Again, depending on

21   people's schedules, other folks may come in

22   and out.

23   Q.   Are notes kept of those meetings?

24   A.   (Johnson) They are.

1   Q.   Are those publicly available?

2   A.   (Johnson) They are. The DOT publishes them

3   typically two weeks after our meetings on

4   their web site.

5   Q.   What's your understanding of who and how DOT

6   actually makes the determinations about the

7   exception requests?

8   A.   (Johnson) So the commissioner, as is noted in

9   the Utilities Accommodation Manual, is

10   responsible for ultimately authorizing the

11   exception requests; the ones that have been

12   approved to date have been signed by Melodie.

13 Q.   I want to move now to the next topic, which

14   is the status of the underground design in

15   relation to the DOT review process. Based on

16   what you know today, is it true that you can

17   provide clarity about actual, specific

18   locations of the underground alignment in

19   certain places?

20 A.   (Johnson) It is.

21 Q.   And is it also correct that you can provide

22   clarity about the likely location of the

23   alignment in the remainder of those places?

24 A.   (Johnson) That is correct.

1   MR. NEEDLEMAN: So I want to

2   call up Applicant's Exhibit 222.

3 BY MR. NEEDLEMAN:

4 Q.   And it will probably take a few minutes for

5   folks to digest this, so we're going to leave

6   it up there for a while. But as they do, I

7   want to ask you some questions about it.

8   First of all, can you describe for the

9   Committee how this exhibit was created?

10 A.   (Johnson) Sure. So, basically we took all of

11   the exception requests that have been

12   created, and that basically equals Columns 1

13   and 2. So, Column 1 would be any of the

14   exception requests where we're requesting to

15   be in the pavement. Column 2 would be the

16   directional drills where we expect to be

17   under the pavement. And then what we did is

18   we worked with our design engineers, and

19   they've produced a preliminary design

20   basically similar to the one submitted as

21   part of the original application, but more in

22   line with the preferences that DOT has, as

23   far as our discussions over the last year and

24   a half. And so we've been able to ascertain

1   that approximately 33 miles of the road -- of

2   the alignment will be outside of the roads

3   and have no impact to tree limits, and then

4   3.7 miles will be outside the road that

5   potentially could have impacts to tree limits

6   in scenic byways, and 0.6 miles that

7   potentially could have impacts on non-scenic

8   byways.

9 Q. Calling your attention to the second asterisk

10   which relates to that first column, can you

11   explain that in a little bit more detail?

12 A. (Johnson) Sure. So, of the 7.5 miles that

13   we're noting are in the roadway,

14   approximately 3 miles have been approved by

15   the DOT, and that was the 18 that you saw

16   earlier, the 18 approved. And the remaining

17   4.5 miles are requests that have been

18   submitted. We are confident that those --

19   that we can state those will remain within

20   the roadway because the exception request

21   types are similar to ones already approved.

22 Q. So an important feature of this exhibit is

23   that in the top descriptive column for all

24   five of the columns you use the phrase "tree

1   line impact." Can you explain when you put

2   this together, what you meant by "tree line

3   impact" and how you determined whether there

4   would be tree line impact?

5 A.   (Johnson) Sure. So the design itself, when

6   it's not in the roadway by definition, is in

7   the shoulder or off of the shoulder, into the

8   ditch line, so away from the pavement itself.

9   So what we did is we factored in a distance

10   off the shoulder that would be an offset

11   where there would be the 3 feet, approximate

12   3-foot width of the trench itself, and then

13   we put a 5-foot work zone on the far side of

14   the trench. So that in all gave us

15   approximately 10 feet of construction work

16   zone. And then we compared that to the

17   general layout that our design engineers put

18   together and then cross-referenced that

19   against information we had regarding where

20   the tree line is in relation to the

21   alignment.

22   We also looked at sort of the trees that

23   were -- we then went to Google Earth or

24   field-visited a lot of these places and

1   looked at places where there were sort of

2   shrubs or low-value trees, if you will,

3   4 inches in diameter or less, and we used

4   that as sort of a basis of saying we believe

5   that we can cut those down or remove that

6   vegetation without impacting the scenic

7   quality of the roads.

8 Q.   So let me focus your attention on the triple

9   asterisks at the bottom. How did you make a

10   determination about the amount of mileage

11   along this 52-mile section that was in

12   cultural and scenic byway?

13 A.   (Johnson) So the DOT publishes a map that

14   shows all the scenic byways, and we

15   superimposed that onto our routes and noted

16   that 43.8 miles of alignments between

17   Bridgewater and Bethlehem are on designated

18   cultural and scenic byways.

19 Q.   So I want to focus on that for a minute in

20   relation to Column 4 here, which says there's

21   a potential of 3.7 miles of tree impacts in

22   scenic byway. Doing the math, that 3.7 miles

23   in relation to the 43.8 miles of scenic byway

24   is about 8-1/2 percent; is that right?

1   A.   (Johnson) That's correct.

2   Q.   So, conversely, are you saying that you're

3   confident that, with respect to 91-1/2

4   percent to the scenic byway, you would not

5   have tree impacts?

6   A.   (Johnson) That is correct.

7   Q.   And focusing on those 3.7 miles, what is your

8   level of confidence that you will be able to

9   avoid or minimize impacts to those 3.7 miles?

10 A.   (Johnson) So the DOT does have an exception

11   process specific to scenic byways, and we

12   believe that we can petition the DOT with

13   exception requests similar to the other types

14   of requests we put forward to avoid impacts

15   to these areas as much as possible.

16   MR. NEEDLEMAN: So I want to

17   go back to Applicant's Exhibit 136 and pull

18   up Page 22 of the Utility Accommodation

19   Manual.

20 BY MR. NEEDLEMAN:

21 Q.   Was this the section that you were just

22   referring to?

23 A.   (Johnson) It is, yes.

24 Q.   And in the top part, this section focuses in

1   the second line on scenic byways, but also on

2   recreation areas, historic sites, public

3   parks and landscaped areas; is that correct?

4   A.   (Johnson) That is correct.

5   Q.   And have you discussed this part of the

6   Utility Accommodation Manual with DOT in

7   relation to the specific concerns that we've

8   just talked about here?

9   A.   (Johnson) We have.

10 Q.   Can you describe those discussions?

11 A.   (Johnson) Yeah. The DOT recognized that

12   scenic byways have a particular status, if

13   you will, and are understanding that because

14   of that status the impacts to the aesthetic

15   qualities can be a reason for exception

16   requests. They did note, also, that they

17   themselves have to request exception requests

18   when they're doing their own projects for

19   certain aspects specific to scenic byways.

20 Q.   Is it your expectation that this section of

21   the Utility Accommodation Manual would be the

22   basis to help ensure that the design would

23   not have adverse impacts on the scenic byway?

24 A.   (Johnson) It is. This is the site we would

1   reference.

2 Q. So what I want to do now is switch to the

3   ELMO. And the last piece here that I would

4   ask you to try to fill in is explaining how

5   it is that with these various sections where

6   you don't yet with certainty know the

7   alignment you still believe that you're

8   confident that you can avoid these impacts.

9 A. (Johnson) Sure. Can I come up?

10   MR. NEEDLEMAN: We're going to

11   use a chalk, Mr. Chair, to have Mr. Johnson

12   explain that particular aspect.

13   Dawn, can you switch over to

14   ELMO, please?

15 BY MR. NEEDLEMAN:

16 Q. I'll give you the microphone and let you

17   explain this.

18 A. (Johnson) So what we're trying to represent

19   with this exhibit here is basically typical

20   exception requests and how they would be

21   addressed as we go forward. I'm just going

22   to draw in some quick features here.

23   So, "B" is going to stand for bridge,

24   and that's a bridge crossing over a river.

1   "C" is going to stand for cliff, or areas

2   where there are sharp embankments that would

3   either be in a valley or be sharp on one side

4   and dropping off the other side. "D" is

5   going to be a hay field or an open area or

6   pasture. "E" is going to be a barn, and

7   we're going to sketch in a little barn that's

8   close to the side of the road. "F" is going

9   to be another hay field or open type of area.

10   "G" is going to be a tree area where there

11   are mature trees that are very close to the

12   edge of the right-of-way. And then "H" would

13   be back to a normal type of thing, similar to

14   "A." So we've drawn these, and it looks like

15   they're very close together. Any one of

16   these sections could be several thousand feet

17   long, depending. So this isn't to scale by

18   any means whatsoever.

19   So, really what we want to focus on is

20   sort of the areas that potentially present

21   issues as far as the alignment. So, from A,

22   if we're along the edge of the road -- so

23   what I'm going to sketch now is the proposed

24   alignment and how we can be assured, for the

1   most part, that we aren't going to impact

2   trees or other features.

3   So as we get to a bridge, this would be

4   an HDD. And this would be an exception

5   request that's already been filed, where we

6   would basically go, you know, deep down, but

7   again, underneath the roadway.

8   When we get to a cliff area, this is

9   another exception request that we filed and

10 the DOT has granted in certain areas where

11 they would allow us to be in the pavement

12 just because there's no room on either side

13 of the road.

14   When we get to a hay field or an open

15 area, again, the Project will move the

16 alignment off the roadway. And again, that's

17 that 10 foot work area I was just discussing.

18 So that's, again, not to scale.

19   When we get to a barn, there may be an

20 opportunity where, again, the DOT's approved

21 a couple of these already -- where we cross

22 the road from an alignment perspective to

23 avoid an obstruction and then cross back at

24 some certain distance. Again, that could be

1   several thousands of feet.

2   When we get again to an open area or a

3   hay field, for example, and we go back off

4   the right-of-way.

5   And then this is the tree, the mature

6   tree area we just discussed. Where the

7   potential is for adverse impacts on a scenic

8   byway, we would petition the DOT to again go

9   back into the roadway to avoid impacting

10   those trees.

11 Q. So, before you go back, one question about

12   this. On this exhibit, as things stand

13   today, you can say that with respect to Area

14   B, Area C, Area D and Area F, that you know

15   that those are likely alignments; is that

16   correct.

17 A. (Johnson) That is correct.

18 Q. And with respect --

19   CHAIRMAN HONIGBERG: The

20   answer was "that is correct" for those in the

21   room.

22 BY MR. NEEDLEMAN:

23 Q. And then with respect to areas like E and G,

24   you're saying you don't know today that

1   that's what the alignment is. But based on

2   these features and based on the Utility

3   Accommodation Manual, and your interactions

4   with DOT, you believe that that's going to be

5   the alignment. Can you explain that further?

6   A.   (Johnson) That is correct. Effectively, by

7   doing these exception requests, and based on

8   the ones that have been approved to date, we

9   think we have, with a high probability, an

10   ability to determine where the alignment is

11   going to be.

12 Q.   All right. So, Mr. Johnson, I'm going to ask

13   you to go back up there.

14   MR. NEEDLEMAN: We will scan

15   and circulate this as soon as we're done.

16 BY MR. NEEDLEMAN:

17 Q.   So what is your sense then of --

18   MR. IACOPINO: Mr. Needleman,

19   did you want to give that chalk a number?

20   MR. NEEDLEMAN: I do. I

21   thought I said it was 223. But if not,

22   that's what it will be.

23 BY MR. NEEDLEMAN:

24 Q.   So, based on this iterative process that you

1   just described with DOT, can you give us any

2   sort of specifics about how this process has

3   already resulted in what you would consider

4   to be design improvements?

5   A.   (Johnson) Yes. I guess from the iterative

6   process with the DOT, when they've asked us

7   to move things, not only is it for better

8   operations perspective from DOT, but also in

9   certain instances it's enabled us to, where

10   they've approved going over the top of deep

11   utilities, that's a much faster construction

12   process. So impacts to the general public

13   will be less, and we'll be able to get

14   through work zones or specific work areas

15   much quicker.

16   A.   (Bowes) So I'd like to add that I think there

17   was, from our meeting with the commissioner

18   and staff in June, there were key items that

19   the DOT is now comfortable with that they had

20   concerns of prior to that meeting. And I

21   think there's several of those that have been

22   part of exception requests and several of

23   those have been part of how they'll evaluate

24   exception requests in the future, the first

1   being use of plating. We got the DOT

2   comfortable with plating, which they

3   typically do not allow, and that's to create

4   a moving work zone 1500 feet in the more

5   rural areas and a compressed work zone for

6   the urban constrained areas of 300 feet. So

7   we proposed to them to have special crews

8   that would work in a very constrained

9   footprint to go through downtown sections of

10   the Project.

11   The second item was getting them

12   comfortable with why we should be on top of

13   other utilities, not below them. And as Mr.

14   Johnson said, that is good for many reasons.

15   First of all, it will create a faster

16   construction process. Those also tend to be

17   in areas where we may have a higher

18   concentration to business customers. So

19   we'll have less impact in those areas because

20   we're going through the process faster, much

21   less issues with the depth of trench there as

22   well so that shoring will be avoided. So it

23   will be a much faster construction process.

24   One of the other things we talked about,

1   actually came from our construction

2   contractor, is why don't you use temporary

3   chimneys on the splice pits. That will

4   avoid, you know, removing the cover of the

5   splice pit once that work has been done.

6   We'll still pave over them for seasonal

7   restrictions, and ultimately they would be

8   removed. But in the interim process, using a

9   chimney that would allow us to do the

10   splicing, as well as the cable pulling,

11   without impacting excavation in a large

12   manner again. Again, this iterative process

13   has provided, you know, some solutions that

14   we weren't thinking of originally.

15   And the last item Mr. Johnson also

16   touched on was the use of the fluidized

17   thermal backfill. There are some

18   restrictions on that that the DOT imposed.

19   But we really were able to convince them that

20   the thermal characteristics of the cable, as

21   well as the construction speed and protection

22   of the cable, would be enhanced by using that

23   technique.

24   So those are four key areas; three of

1   them, in essence, were part of exception

2   requests, or the general ones that Mr.

3   Johnson talked about. But this will really

4   lessen the impact on specific customers along

5   the route because the construction will

6   progress at a much faster rate.

7   MR. NEEDLEMAN: Dawn, can you

8   bring back up Exhibit 222?

9 BY MR. NEEDLEMAN:

10 Q.   So I want to focus on the fifth column here

11   for a moment. These are off-pavement impacts

12   to trees that are not in scenic byways.

13   Well, can you speak to this in light of the

14   DOT exception requests process, which I think

15   also covered things like landscaped areas and

16   so forth? What is your anticipation about

17   how you'll deal with this column?

18 A.   (Johnson) So we would work with the DOT in

19   the exact same way we would with the scenic

20   byway type of thing to assess the aesthetic

21   impacts of any trees that we may be

22   potentially impacting and seek an exception

23   request as well for these areas.

24 Q.   So when will the updated design drawings be

1   available?

2   A.   (Johnson) So as I mentioned earlier, the

3   first step is to get the right-of-way

4   boundary survey complete. The second step

5   would then be to get the exception requests

6   processed and approved by the DOT, and then

7   the design process would begin in earnest.

8   At that point we're expecting to be providing

9   the DOT with design drawings, most likely in

10   the February time frame of 2018. And those

11   would be issued for construction for their

12   review.

13   Q.   When you were describing the off-pavement

14   construction process a few minutes ago, you

15   were describing a zone 10 feet wide from the

16   edge of pavement out where the trench would

17   be. And you've explained how it is through

18   the exception process that you hope to avoid

19   impacts to trees.

20   My question is: Are there any

21   construction methods that you think you might

22   be able to employ that could also help to

23   avoid the sorts of impacts that are described

24   in Column 4 and 5?

1 A.   (Johnson) Sure. I'd just like to clarify

2   your question to begin with. The 10 feet is

3   actually from the edge of the shoulder, not

4   the edge of the pavement. So there is an

5   additional piece of room there.

6 Q.   Okay.

7 A.   (Johnson) But yes, there are construction

8   techniques as we go through the process. The

9   typical trench construction will have an

10   excavator straddling the actual trench with

11   its tracks on either side, and that's why you

12   need that extra 5 feet on the far side from a

13   work zone perspective. There are cases where

14   you can have the excavator located on the

15   roadside and be digging sort of crossways

16   where you wouldn't have to have any further

17   impacts beyond, say, a foot more than where

18   the trench is itself. So it's a way to

19   narrow the work zone, if you will, from that

20   10 feet to somewhere in the 5- to 6-foot

21   range.

22 Q. Focusing on Column 4 of Exhibit 222, where

23   the total impacts were projected to be as

24   much as 3.7, if you were to employ that

1   construction method that you just described

2   in those areas, have you done any

3   calculations to determine how much it would

4   reduce those impacts?

5   A.   (Johnson) We have, yes.

6   Q.   Can you describe that?

7   A.   (Johnson) Yeah, we believe that we can get

8   the impact down to just less than a mile,

9   about 0.9 miles.

10   Q.   And that's completely independent of the

11   exception process?

12   A.   (Johnson) That's correct.

13   Q.   Okay. Just a couple more questions.

14   Speaking generally about the iterative

15   nature of the design and efforts to

16   continually improve the design and minimize

17   impacts, one of the places that has come up

18   repeatedly during the course of this

19   proceeding is the Gale River crossing in

20   Franconia. Do you have any new information

21   for the Committee about the status of the

22   design there?

23   A.   (Johnson) Sure. So the status as proposed

24   was a microtunnel that, if you recall, would

1   have two 20-foot diameter shafts on either

2   side of the Gale River itself. The Project

3   Team has done some conceptual thinking about

4   this area and has determined that there may

5   be a solution where we can use an HDD

6   technology instead, much less invasive, as

7   far as we don't need the two shafts.

8   What would happen is they'd drill from

9   the south side towards underneath the river

10   to the north side and actually extend the

11   drill path up towards the on-ramps of I-93 on

12   the far side of the intersection, if you

13   recall. They would then pull back the

14   conduit and casings from that side and then

15   dig down where the north 20-foot diameter

16   shaft would have been, dig down there and

17   intercept the HDD as it comes up and cause it

18   to turn to the left as you go from 116 down

19   Route 18 -- or sorry -- down 18 towards Sugar

20   Hill.

21 Q. If you could successfully move that design

22   from the conceptual phase to actually being

23   able to do it, how would that reduce impacts

24   from the current proposal?

1   A.   (Johnson) So, both from the amount of

2   physical workspace that's required, as well

3   as the speed at which we could get through

4   the construction of the intersection, both of

5   those would be positively affected.

6   Q.   One final topic. A number of times with

7   respect to the design, the issue has come up

8   of the relationship of the underground

9   drilling to bridge abutments and bridge

10   locations. Have you had conversations with

11   DOT about that issue?

12   A.   (Johnson) We have. And we actually had input

13   from the bridge design department and talked

14   with them. We got all of the bridge abutment

15   plans from them and are now including them in

16   our drawings. Effectively, at a minimum, we

17   must be 10 feet below those. But more

18   importantly, I think that they've made it

19   quite clear that in the future, if there are

20   bridge abutments that need to be replaced

21   with bigger or different types of

22   foundations, then the Project is responsible

23   for moving its facilities out of the way.

24   Q.   If the Project could not move its facilities

1   out of the way, what would the alternative

2   be?

3 A.   (Johnson) There would have to be some sort of

4   economic impact analysis done, and the

5   Project would have to pay for the

6   differential of a different type of design

7   foundation.

8 Q.   And have you made DOT aware that you would be

9   willing to do that?

10 A.   (Johnson) We have, yes.

11 Q.   And Mr. Bowes, would the Project be willing

12   to have that be a condition of the

13   certificate if the Committee issued a

14   certificate?

15 A.   (Bowes) Yes, that is typically a condition we

16   have for similar projects in other states.

17 Q.   And just one last question, Mr. Johnson.

18   Once a directional drill is complete

19   under a bridge and an as-built plan is

20   available, can you describe your level of

21   confidence with respect to how the as-built

22   plan would represent the location of the

23   directional drill, the precision of the

24   location?

1   A.   (Johnson) Yes. So the drilling technology

2   has advanced quite a bit over the last decade

3   or so. And whether it's through GPS or

4   another type of location, they will be able

5   to tell you within, I think less than a foot,

6   of where the actual directional drill will

7   be.

8   MR. NEEDLEMAN: Okay. Thank

9   you, Mr. Chair. I'm all set.

10   CHAIRMAN HONIGBERG: I

11   understand that Mr. Pappas is next.

12   MR. PAPPAS: Thank you, Mr.

13   Chairman.

14   CROSS-EXAMINATION

15   BY MR. PAPPAS:

16   Q.   Good morning, gentlemen. And Mrs. Frazier,

17   congratulations.

18   A.   (Frazier) Thank you.

19   Q.   Welcome back.

20   You were shown earlier the DOT Utility

21   Accommodation Manual. And I assume all of

22   you are familiar with that. If you're not,

23   please say so. Hearing nothing, I assume

24   you're all familiar with it.

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 1          You were shown Pages 40 and 41 regarding

 2      underground power lines and longitudinal

 3      installation of underground power lines.

 4      Would everybody agree with me that the UAM

 5      requires underground power lines to be off

 6      the road and as close to the edge of the

 7      right-of-way as possible?  Does anyone on the

 8      panel disagree with that statement?

 9  A.  (Johnson) As close as practicable, yes.

10  Q.  Okay.  So, Mr. Scott, am I correct that you

11      prepared the initial design of the

12      underground sections?

13  A.  (Scott) Yes.

14  Q.  And that would include the .7 miles near the

15      Connecticut River -- under the Connecticut

16      River, the 7-1/2 miles in the far north, and

17      the 52-mile section between Bethlehem and

18      Bridgewater?

19  A.  (Scott) Correct.

20  Q.  Okay.  And you were aware, I assume, of the

21      UAM's requirements at the time that you

22      designed the initial underground route; is

23      that correct?

24  A.  (Scott) Yes.
```

1   Q.   So the Project's initial design of the

2   underground route had the transmission line

3   going down the road, for the most part; isn't

4   that right?

5   A.   (Scott) Yes.

6   Q.   So when you designed it going down the road,

7   for the most part, you knew that that was

8   contrary to the UAM's requirements; correct?

9   A.   (Scott) Correct.

10 Q.   And at the time you initially designed the

11   underground, you didn't know the location of

12   the DOT's right-of-way along the underground

13   section; is that right?

14 A.   (Scott) I believe we knew for some portions,

15   but not all of the --

16 Q.   Would I be correct in saying that for most of

17   the portions you did not know and therefore

18   had to estimate?

19 A.   (Johnson) That's a fair assessment, yes.

20 Q.   All right. For instance, at the time that

21   the initial underground design in the

22   Application was submitted, the Project had

23   not yet done a survey of the DOT's

24   right-of-way; correct?

1   A.   (Johnson) I don't know.

2   Q.   You don't know?

3   A.   (Bowes) I would say that typically the DOT's

4   right-of-way is provided to the Applicant, or

5   to the person that's wanting to locate in the

6   highway. This is an unusual circumstance, I

7   would say, where the Applicant has to

8   actually define where the right-of-way is.

9   Q.   Right. And at the time that the Application

10   was filed in October of 2015, for the most

11   part, the Project didn't know where the DOT

12   right-of-way was; correct? You've had to

13   since go out and try to locate it or find out

14   where it is? Mr. Johnson?

15 A.   (Johnson) We have since chosen to do that,

16   yes.

17 Q.   Right. But at the time you filed the

18   Application, you didn't know where that

19   right-of-way was; correct?

20 A.   (Johnson) For the most part, that's correct,

21   yes.

22 Q.   Now, we all know that the design of the

23   underground route has changed since the

24   Application was submitted, and we heard some

1   more about that today. And I understand that

2   until all the exceptions are ruled upon, the

3   final design will not be settled until that

4   occurs; correct?

5 A. (Johnson) That is correct.

6 Q. Mr. Johnson, this morning we were shown

7   Applicant's Exhibit 221, which indicates that

8   a total of 118 requests for exceptions have

9   been filed with the DOT. Do you remember

10   that exhibit that was put up this morning?

11 A. (Johnson) I do, yes.

12 Q. Yeah. Now, if you go on the DOT's web site,

13   you can see the request for exceptions;

14   correct?

15 A. (Johnson) That is correct.

16 Q. And if you go on the DOT's web site, it

17   indicates that the Project has submitted more

18   than 118 requests for exceptions; correct?

19 A. (Johnson) That's correct.

20 Q. In fact, I think the number goes up to 188;

21   does it not?

22 A. (Johnson) I don't believe it's that high, but

23   it could be.

24 Q. Mr. Johnson, what's on the screen now is

1   Counsel for the Public Exhibit 490. This is

2   the first page of it. Do you recognize that

3   document?

4 A.   (Johnson) I do not recognize it, but I can

5   see what this is.

6 Q.   Okay. What's on the screen now is Counsel

7   for the Public Exhibit 491. And what this

8   shows is the prior document, but it separates

9   the request for admissions into group numbers

10   and then request numbers and then by town.

11   Do you see that?

12   CHAIRMAN HONIGBERG: Just to

13   be clear, Mr. Pappas, they're requests for

14   exceptions not request for admissions; right?

15   MR. PAPPAS: Oh, correct. Old

16   habits die hard.

17   CHAIRMAN HONIGBERG: Yeah, in

18   litigator land.

19   MR. PAPPAS: This is true.

20 A.   (Johnson) So I'm assuming this is more than

21   one page and goes through the rest of them?

22 BY MR. PAPPAS:

23 Q.   Yes. And just so that you understand the

24   format and the Committee understands the

1   format, the Project submitted requests for

2   exceptions in 11 groupings; correct?

3   A.   (Johnson) That is correct.

4   Q.   And typically, each grouping would include

5   one town or perhaps a couple of small towns;

6   correct.

7   A.   (Johnson) Correct. It was based on a region

8   or area, if you will.

9   Q.   Okay. And, for instance, they are -- there

10   were 12 exception requests in the town of

11   Plymouth. Do you see that?

12 A.   (Johnson) I do.

13 Q.   Actually, there were 13 because there were

14   two number 11s; correct?

15 A.   (Johnson) Correct.

16 Q.   And then if you look at Campton, there were

17   29 exception requests. Do you see that?

18 A.   (Johnson) 41 minus 13.

19 Q.   And then moving on to Thornton, which is

20   Group 3, there were 29 exception requests in

21   Thornton; correct?

22 A.   (Johnson) You have 28 written there.

23 Q.   I'm sorry, 28. Thank you.

24   And then Woodstock was split into two

1   different group requests. Do you recall

2   that?

3   A.   (Johnson) I do.

4   Q.   And this document speaks for itself, so we

5   don't need to go through this whole thing.

6   But if you go through this whole document and

7   add them up -- in fact, if you go the to the

8   DOT web site and look at the last exception

9   request, there are about 188 or 190 of them;

10   is that right?

11   A.   (Johnson) It's possible, yes.

12   Q.   It's in fact the case, isn't it?

13   A.   (Johnson) I haven't looked at the web site

14   recently, so I can't tell you.

15   Q.   Well, it's certainly many more than 118;

16   isn't that right?

17   A.   (Johnson) Correct. The Project has withdrawn

18   approximately 60-something of those requests

19   because of the evolution of working with the

20   DOT, and some of the requests that we had

21   prior are no longer valid or no longer need

22   to be requested because we've resolved

23   whatever that issue was.

24   Q.   When were those requests withdrawn?

1 A. (Johnson) Throughout the process with the

2   DOT.

3 Q. Can you give me maybe a start date and end

4   date?

5 A. (Johnson) Several months ago. So if you

6   noted when we put up our number of 118, the

7   DOT has only looked at Woodstock down to

8   Bridgewater. And effectively, we've

9   suspended, if you will, the rest of the

10   exception requests pending updating the

11   survey drawings and any other lessons

12   learned, if you will, from the exception

13   requests that have been dealt with already.

14   So the plan -- the Project will resubmit all

15   of the remaining exception requests.

16 Q. And those remaining will be the remaining out

17   of the 118?

18 A. (Johnson) That is correct.

19 Q. Do you have a list of the requests that have

20   been withdrawn?

21 A. (Johnson) I do not have one here, but I'm

22   certainly able to provide one for you.

23 Q. I'd request that you do so because it's not

24   on the DOT web site, and we don't have one.

1   CHAIRMAN HONIGBERG: Mr.

2   Needleman.

3   MR. NEEDLEMAN: We can do

4   that.

5   MR. PAPPAS: Thank you.

6   BY MR. PAPPAS:

7   Q.   Mr. Johnson or Mr. Bowes, do you anticipate

8   filing any additional requests for

9   exceptions?

10 A.   (Johnson) Potentially, as we discussed

11   earlier. We have not yet filed any exception

12   requests in relation to scenic byways and

13   potential impacts to trees. So, depending on

14   where we end up as far as our design is

15   concerned relating to that 3.7 miles that we

16   discussed earlier, there could be exception

17   requests filed for those.

18 A.   (Bowes) I would also anticipate there may be

19   a small number of additional requests based

20   upon updated survey information.

21 A.   (Johnson) Good point.

22 Q.   Gentlemen and Mrs. Frazier, what's in front

23   of you now is Applicant's Exhibit 183, which

24   contains a number of the DOT's responses to

1   various requests for exceptions. And if you

2   look at the first page, it indicates that

3   Exception Request No. 1, Revision 2, was

4   approved with conditions. Do you see that?

5 A. (Johnson) I do.

6 Q. And that would mean that the original

7   exception request was rejected. Revision 1

8   to Request No. 1 was rejected, and eventually

9   Revision 2 was accepted; correct?

10 A. (Johnson) It appears that way, yes.

11 Q. And so we see on this page two requests have

12   been approved with conditions, and nine

13   requests have been rejected and need to be

14   resubmitted to address comments; is that

15   correct?

16 A. (Johnson) That's correct.

17 Q. And this May 31 letter was the first response

18   from DOT -- let me ask it another way.

19   Was this May 31, 2017 letter the first

20   response from DOT to exception requests?

21 A. (Johnson) The first formal response, yes. As

22   you can see with the ones that have second

23   revisions, there was some dialogue back and

24   forth as to the merit of that particular

1   exception request.

2   Q.   Okay. So, on the screen now is DOT's July 7,

3   2017 listing of their decisions on several

4   requests for exceptions. Do you see that?

5   A.   (Johnson) I do.

6   Q.   And there are a number of, or a few of them

7   that were approved. Seven were approved, and

8   the others were rejected; correct?

9   A.   (Johnson) That's correct.

10   Q.   There are a number of these letters that DOT

11   issued that indicates whether an exception

12   request was approved or rejected; correct?

13   A.   (Johnson) That is correct.

14   Q.   And would you agree with me that if I go

15   through all the letters, it will show that 20

16   of them were approved, which is consistent

17   with the Applicant's exhibit we saw a moment

18   ago? Correct?

19   A.   (Johnson) That is correct.

20   Q.   It'll also show that 40 of the requests were

21   rejected; isn't that right?

22   A.   (Johnson) That's correct.

23   Q.   So, to date, the DOT has reviewed and made a

24   decision on 60 requests, 20 of which have

1   been approved, usually with conditions, and

2   40 of which have been rejected at this point;

3   correct?

4 A.   (Johnson) With request to resubmit with

5   further information, yes.

6 Q.   So, Mr. Johnson, I just want to review

7   generally the types of things that you make a

8   request for, and then I'm going to ask you

9   some specific questions about a few of them.

10   All right?

11 A.   (Johnson) Okay.

12 Q.   So, generally, one of the areas is that the

13   Project has determined that the line has to

14   be in the pavement, which is called

15   "alignment in pavement"; correct?

16 A.   (Johnson) Correct.

17 Q.   And that typically is where there is not

18   enough room or some obstacle that prevents

19   the Project from being completely off the

20   road and out of the pavement; correct?

21 A.   (Johnson) That is correct.

22 Q.   Okay. The second type of request is where

23   the Project requests that splice vaults be

24   placed underneath the road; correct?

1 A. (Johnson) Correct.

2 Q. And that is because in many places there just

3   isn't enough room to put the splice vault off

4   the pavement; correct?

5 A. (Johnson) Correct.

6 Q. In fact, that's the case for most of the

7   splice vaults; isn't that right?

8 A. (Johnson) No, I believe that's not a correct

9   statement.

10 Q. How many splice vaults are there in total?

11   Do you remember?

12 A. (Johnson) Top of my head, 154.

13 A. (Scott) It's in the ballpark of 150 or so. I

14   think it was 152.

15 Q. Yeah. Okay. Do you recall how many of them

16   you've requested to be under the pavement?

17 A. (Johnson) I think less than 20. We can get

18   that number for you.

19 Q. Thank you.

20   The third type of request involves where

21   there's some existing structure that you want

22   to go underneath -- or you want to go over

23   rather than underneath; correct?

24 A. (Johnson) Correct.

1 Q. For instance, where there's a drainage

2   structure or a culvert, you're seeking to go

3   over that structure, not underneath it.

4 A. (Johnson) In certain circumstances, yes.

5 Q. And in certain instances there are some

6   utility structures, such as sewer or water,

7   where you're seeking to go over them rather

8   than under them; correct?

9 A. (Johnson) Correct.

10 Q. Now, earlier, Mr. Bowes, you indicated that

11   that would speed up construction; correct?

12 A. (Bowes) Yes.

13 Q. To be able to go over these.

14 A. (Bowes) Yes.

15 Q. After the line is placed, if the line is

16   built and placed in service, if the line is

17   above, for instance, a utility, a water or

18   sewer utility, that will have some impact on

19   the ability to either repair or replace that

20   utility, correct, because now they have to go

21   under your transmission line to get to the

22   utility?

23 A. (Bowes) So maybe you could be more precise in

24   the type of utility because I think it does

1   make a different.

2   Q.   All right. Let's talk about a water utility.

3   Let's say that they want to replace some

4   water utilities. If your line were below the

5   water utility, to dig from the ground surface

6   to the water utility, they wouldn't have to

7   deal with your line; correct?

8   A.   (Bowes) So, again, depends on the type of

9   water. If it was a large main, I would say

10   you're probably accurate to transverse or go

11   perpendicular. If it's a water service, they

12   could probably go above.

13   Q.   And so if it involved a water main, it would

14   have an impact on the water district's

15   replacing that water main; correct? It would

16   slow their work down; would it not?

17   A.   (Bowes) So I think they would have to deal

18   with it in the design phase. The use of the

19   fluidized thermal backfill and the concrete

20   will provide a self-supporting structure. So

21   I think it will usually have minimal impact

22   on a perpendicular crossing underneath for a

23   water main.

24   A.   (Johnson) If I may add, as part of the

1   exception approval, there are the conditions

2   as you noted where the Project must have

3   reinforced concrete for a specific span

4   length that the DOT has prescribed

5   specifically to assist in future construction

6   or repair in the areas where we're crossing

7   over a particular facility.

8 Q.   Okay. But nonetheless, both in design phase

9   and in construction phase, it would be easier

10   for the water utility if it didn't have to

11   deal with your transmission line above it;

12   correct?

13 A.   (Bowes) Again, I'm not sure what "easier"

14   means.

15 Q.   Well, they don't have to deal with it either

16   in designing around it or excavating around

17   it or simply having to worry about it if

18   they're digging, excavating to get to their

19   water line. Wouldn't you agree with me that

20   if you had a preference and you were the

21   water utility, you'd rather not have the

22   transmission line there than have it there?

23 A.   (Bowes) I think that's generally an accurate

24   statement. However, easier, I mean, the

1   water companies, you know, telecommunication

2   companies, they are very professional in how

3   they design projects and how they construct

4   projects. This is an issue that they would

5   deal with during design phase, as well as

6   construction. But it's something they're

7   very used to dealing with just with their own

8   facilities and, you know, other utilities.

9 Q. Are you aware of any water utility in the

10   state of New Hampshire that has to deal with

11   a 345,000-volt transmission line that is in

12   the ground above their water lines?

13 A. (Bowes) So, just to be clear, we're not

14   proposing that. We don't have a 345-kV

15   underground transmission line.

16 Q. Three hundred and twenty? I stand corrected.

17 A. (Bowes) So, to the best of my knowledge,

18   there are no underground electric

19   transmission lines that are located within

20   the state of New Hampshire.

21 Q. Mr. Johnson, another type of request you make

22   is, as you testified earlier, if there are

23   highway crossings and bridge abutments, you

24   have to go in the road to get past the bridge

1   abutments in some places; correct?

2   A.   (Johnson) That is correct.

3   Q.   And then sort of a final category, if you

4   will, is for HDD drilling. And virtually all

5   of the HDD drillings, you're going to have

6   the drilling equipment in the road rather

7   than off the road; correct?

8   A.   (Johnson) No. That's incorrect. There are a

9   few places where we're requesting that the

10   drill area be, or the pits, if you will,

11   where the entry and exit points are, be in

12   the road. Typically, one is always off the

13   road. And because the second one has to be

14   within a 10-foot area, they might push it

15   into the road. But for the most part, we've

16   tried very hard to put both the entry and

17   exit points off of the roadway. It's because

18   there's two bores, one for each, positive and

19   negative portion of the cable.

20 Q.   There are approximately 52 HDD/microtunnel

21   locations along the underground route;

22   correct?

23 A.   (Johnson) That is correct.

24 Q.   All right. Would you agree with me that the

1   Project has submitted 38 requests for

2   exceptions dealing with HDD drilling?

3 A. (Johnson) I'll take your word for it. But

4   it's quite possible, yes. Again, some of

5   those could have been removed or withdrawn.

6 Q. And for each of those 38 requests, it

7   requests some portion of the HDD drilling to

8   be in the pavement; correct?

9 A. (Johnson) Yes.

10 Q. Okay.

11 A. (Johnson) Again, by definition, the HDD is

12   going to be in the pavement at a depth of 30

13   to 65 feet, but still underneath the

14   pavement. So every HDD will have a request

15   ultimately because of that. The question of

16   whether the Project's equipment will be in

17   the roadway is dependent on each entry and

18   exit point site.

19 Q. Let me come back to that.

20   Each of these requests has a traffic

21   control duration component; correct?

22 A. (Johnson) Correct.

23 Q. And for each of these requests there's an

24   estimate for how long traffic control is

1   required to accomplish the task within the

2   request; correct?

3 A.   (Johnson) Correct.

4   MR. PAPPAS: Go to Counsel for

5   the Public 496. No, it's going 497.

6 Q.   Mr. Johnson, in front of you is Counsel for

7   the Public 497, which is Exception Request

8   No. 1, second revision. Do you see that?

9 A.   (Johnson) I do.

10 Q.   And the first part, this involves crossing --

11   or, rather, alignment in pavement and

12   crossing over existing drainage structure.

13   Do you see that?

14 A.   (Johnson) I do.

15 Q.   And if you look at the first paragraph, it

16   talks about traffic control type, alternate

17   one-way. Do you see that?

18 A.   (Johnson) I do.

19 Q.   And that means there's going to be a lane

20   closed, so traffic's going to alternate going

21   in that open lane; correct?

22 A.   (Johnson) That is correct.

23 Q.   And it says here, traffic control duration is

24   estimated to be six days for the proposed

```
 1         installation.  Do you see that?
 2   A.    (Johnson) I do.
 3   Q.    So if this request is approved, it's
 4         anticipated that while this work is done, the
 5         lane will be closed for six days; correct?
 6   A.    (Johnson) That is correct.
 7   Q.    And it goes on to say, if the requested
 8         exception is not granted, NPT expects an
 9         additional two to three weeks of work
10         requiring traffic control.  Do you see that?
11   A.    (Johnson) I do.
12   Q.    So what that is saying is, if this exception
13         request is not granted, for two to three
14         weeks the lane will be closed, or one lane
15         will be closed in that area; correct?
16   A.    (Johnson) That's correct.
17   Q.    What's on the screen in front of you now is
18         Counsel for the Public Exhibit 500.  And this
19         is a copy of Exception Request No. 4, the
20         third revision.  Do you see that?
21   A.    (Johnson) I do.
22   Q.    And this also indicates traffic control
23         alternate one-way, which would be one lane
24         closed; correct?
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1   A.   (Johnson) That's correct.

2   Q.   And this statement indicates that the traffic

3   control duration is estimated to be 24 days

4   for the proposed installation. Do you see

5   that?

6   A.   (Johnson) I do.

7   Q.   So that would mean it's estimated that for 24

8   days there will be a lane closed at this

9   location while this work is being done?

10   A.   (Johnson) Yes.

11   Q.   Okay. And so for each of these exception

12   requests, there's an estimate of how long a

13   lane will be closed, traffic control

14   necessary if the work, if the exception

15   request is approved; correct?

16   A.   (Johnson) That is correct.

17   Q.   And they vary anywhere from, we saw six days,

18   and this one's 24 day days. Some of them are

19   more or less than that; correct?

20   A.   (Johnson) Correct.

21   Q.   Okay. And they also indicate that if the

22   exception request is not granted, then

23   there's a different estimate for how long a

24   lane will be closed at that location;

1   correct?

2   A.   (Johnson) Correct. That's a requirement of

3   the exception request process.

4   Q.   Okay. And so if any of these exception

5   requests are denied, it will slow

6   construction down and will require a lane to

7   be closed longer than if the request is

8   granted; correct?

9   A.   (Johnson) Correct. Typically you're going

10   deeper or using an alternative type of

11   construction method which would be longer in

12   nature.

13   Q.   Now, earlier you testified, back in May and

14   June, that there would be -- along the

15   underground route there would be lane

16   closures as construction proceeded down the

17   underground route; correct?

18   A.   (Johnson) Correct.

19   Q.   Now, these -- and whether it's now 118 or

20   some larger number, whatever the ultimate

21   number of requests for exceptions are

22   submitted, the time estimates for each

23   specific request is above and beyond the

24   general time for a lane closure along the

1   underground route; is that correct?

2 A.   (Johnson) No. I would say for certain

3   specific locations that is true. But for

4   instances where the alignment is in the

5   pavement, it would be the same construction

6   time as was contemplated with the main line

7   construction methodology.

8 Q.   So, for some places it's -- the additional

9   lane closure is going to be beyond what was

10   contemplated, and in some places it's going

11   to be the same because the same amount of

12   work -- or the same area is affected;

13   correct?

14 A.   (Johnson) From a duration perspective, yes.

15 Q.   Right.

16 A.   (Johnson) There are no additional lane

17   closures other than the one that we're

18   proposing, still maintaining alternate

19   traffic.

20 Q.   Right. You're proposing a lane closure all

21   along the 52 miles, just going to be at

22   different locations at different times;

23   correct?

24 A.   (Johnson) Exactly.

1   Q.   And it's going to depend on how many crews

2   are working and where they're working;

3   correct?

4   A.   (Johnson) Correct.

5   Q.   But these exception requests indicate that in

6   some instances the lane closure is going to

7   have to be longer than otherwise anticipated

8   based upon the work; correct?

9   A.   (Johnson) That is correct.

10   Q.   So, Mr. Johnson, in front of you is Counsel

11   for the exhibit -- Counsel for the Public's

12   Exhibit 555. Do you see that?

13   A.   (Johnson) I do.

14   Q.   And this is the exception request for the

15   microtunnel in Franconia. Do you see that?

16   A.   (Johnson) I do.

17   Q.   Is this still pending?

18   A.   (Johnson) I believe it is still pending until

19   we've got a more definitive design, as we

20   discussed earlier.

21   Q.   So if you look at this, it indicates that if

22   you're going to do the microtunneling in

23   Franconia, the control duration is estimated

24   to be approximately 8 to 12 weeks. Do you

1   see that?

2   A.   (Johnson) I do.

3   Q.   And it goes on to say that the duct bank

4   connections to microtunneling will take an

5   additional three to four weeks at each end;

6   correct?

7   A.   (Johnson) That's correct.

8   Q.   And there are two ends.

9   A.   (Johnson) That's correct.

10 Q.   So the work in Franconia at this

11   intersection, if you're going to do the

12   microtunneling, is certainly going to consume

13   essentially an entire summer.

14 A.   (Johnson) That's correct, if the construction

15   is done in the summer.

16 Q.   It will take anywhere from 12 to 16 weeks.

17 A.   (Johnson) Yes.

18 Q.   Okay.

19 A.   (Bowes) Yeah, I would say 14 to 20 weeks if

20   you add both ends.

21 Q.   Okay. So if you look at the very bottom, it

22   has microtunnel shafts within pavement. Do

23   you see that?

24 A.   (Johnson) I do.

1   Q.   Okay. And now it indicates that the entry

2   shaft's about 25 feet in diameter. Do you

3   see that?

4   A.   (Johnson) I do.

5   Q.   The receiving shaft's about 20 feet in

6   diameter; is that right?

7   A.   (Johnson) Correct.

8   Q.   And the Project would need approximately

9   35 feet of level, stable, non-vegetated,

10   clear space from the edge of the pavement to

11   the edge of the right-of-way for the entry

12   shaft; correct?

13   A.   (Johnson) If that's what it says on Page 2.

14   I can't see.

15   Q.   Yeah, we can go to the next page. Look at

16   the top. It indicates about 30 feet for the

17   receiving shaft; correct?

18   A.   (Johnson) Correct.

19   Q.   And you need about 5 feet of clearance. Do

20   you see that?

21   A.   (Johnson) I do.

22   Q.   Okay. So on the screen now is still part of

23   this exception request, and it indicates the

24   location of the entry and receiving shafts.

1   Do you see that?

2   A.   (Johnson) I do.

3   Q.   Now, if you look at this, it's got the shaft

4   to the left of the picture in the

5   intersection; is that right?

6   A.   (Johnson) For all intents and purposes, yes,

7   it's at the edge of the roadway.

8   Q.   Yeah. And then on the right it has the other

9   shaft just past Academy Drive; correct?

10 A.   (Johnson) Correct.

11 Q.   Academy Street. Do you see that?

12 A.   (Johnson) Correct. Yes.

13 Q.   Okay. Now on your screen is the next page of

14   this exception request, and it is Page 14032.

15   And it shows the work areas for the two

16   shafts. Do you see that?

17 A.   (Johnson) I do.

18 Q.   Okay. Now, the work area -- which portion is

19   the entry shaft?

20 A.   (Johnson) I believe it's the area to the

21   right.

22 Q.   And so the receiving shaft is the area to the

23   left, in the intersection?

24 A.   (Johnson) Correct.

1   Q.   Okay. So the area to the right needs 35 feet

2   for the workspace; correct? That's the entry

3   shaft?

4   A.   (Johnson) Correct.

5   Q.   Okay. And do you know, based on this

6   drawing, how much of the travel lane remains

7   outside the work area?

8   A.   (Johnson) I believe a full lane.

9   Q.   And do you know how many feet -- what's your

10   estimate of how many feet that is?

11   A.   (Johnson) Twelve, approximately.

12   Q.   So you think that the travel area is 24 feet

13   wide in that area?

14   A.   (Johnson) I'd have to measure. It's an

15   assumption, yes. I mean, there was a scaled

16   part of that drawing, and it looks like it's

17   close to 30 feet, but...

18   Q.   Okay. So on the screen now is the next page

19   of this exception request, which is Page

20   14033. And if you look in the left-hand

21   corner, you can see the receiving shaft

22   that's just off the intersection. Do you see

23   that?

24   A.   (Johnson) I do.

1   Q.   And it shows where, in black, the original

2   open trench was going to come down one side

3   of the road and across the intersection into

4   the receiving pit, and now in green is the

5   proposed change; is that right?

6   A.   (Johnson) That is correct.

7   Q.   And then if you look at the right-hand side,

8   sort of the middle of the page, right where

9   it says NH116 Easton Road, it shows the entry

10   shaft; correct?

11   A.   (Johnson) Yes.

12   Q.   On this drawing, the entry shaft is shown on

13   the intersection side of Academy Street. And

14   we saw in the prior drawing that shaft was

15   shown on the other side of Academy Street.

16   Do you recall that?

17   A.   (Johnson) I do.

18   Q.   Do you know why one drawing has it on one

19   side and the other drawing has it on other

20   side of Academy Street?

21   A.   (Johnson) It's an error.

22   Q.   Do you know which side it's supposed to be

23   on?

24   A.   (Johnson) South side.

1   Q.   And which side is the south side? Closest to

2   the intersection or away from the

3   intersection?

4   A.   (Johnson) More to the right. Not the one

5   you're showing here.

6   Q.   Away from the intersection.

7   A.   (Johnson) Yes.

8   Q.   Okay. So this is the drawing that's in

9   error.

10   A.   (Johnson) Correct. So I might add that the

11   complexity of this, as you noted and continue

12   to note, is one of the reasons why we're

13   re-evaluating this construction technique in

14   this area and hoping to come up with a less

15   impactful methodology.

16   Q.   What's on the screen now is the last page of

17   this exception request, Page 14035. And this

18   shows a picture of the proposed entry shaft

19   area on the top. Do you see that?

20   A.   (Johnson) I do.

21   Q.   Okay. And that then also shows sort of the

22   shoulder, the sidewalk and then the travel

23   lane. Do you see that?

24   A.   (Johnson) I do.

1   Q.   And within that, that's the area where the

2   Project needs 35 feet in order to keep one

3   lane of traffic open?

4   A.   (Johnson) Yes, that's what was stated in the

5   request.

6   Q.   Okay. Do you know, if you look at that

7   yellow solid line in the middle of the travel

8   lane and you go to the right of the picture,

9   how far over 35 feet is?

10   A.   (Johnson) So I believe the yellow line is --

11   Q.   I'm looking at not the yellow line drawn in

12   on the picture, but the actual yellow line on

13   the road itself.

14   A.   (Johnson) The road markings?

15   Q.   Correct. Yes.

16   A.   (Johnson) I don't know how far that is. I'd

17   have to measure it. So I'm assuming it's

18   12 feet plus the shoulder plus the sidewalk.

19   So, 12... I don't know.

20   Q.   You don't know.

21   A.   (Johnson) No.

22   Q.   Okay. Do you know how far into the grass

23   area it will go?

24   A.   (Johnson) Not without measuring.

1 Q. Okay. If you look at the bottom picture,

2   that shows the intersection; correct?

3 A. (Johnson) It does.

4 Q. Do you see that real estate office on the

5   corner?

6 A. (Johnson) I do.

7 Q. And in that area the Project's going to need

8   30 feet, correct, for a work area?

9 A. (Johnson) That's what was stated, yes.

10 Q. And do you know, if you start at the center

11   line, the road markings on the road, and go

12   towards the real estate office, which is the

13   work area, how far into the grass area the

14   work area will go?

15 A. (Johnson) Not without measuring, no.

16 Q. But you agree with me the work area is going

17   to go into that grass area; right?

18 A. (Johnson) Without measuring, I can't say.

19   But it's highly probable.

20 Q. Yeah, there's not 30 feet of a travel lane,

21   the shoulder and the sidewalk, is there?

22 A. (Johnson) Probably not, no.

23 Q. Okay. Now, the request for exception that

24   we've gone through, that involves the

1   microtunneling operation; correct?

2   A.   (Johnson) That is correct.

3   Q.   That does not involve bringing the line

4   across the intersection in order to connect

5   with the microtunneling; correct?

6   A.   (Johnson) So that was the additional three to

7   four weeks or two to four weeks that was

8   noted in the exception request.

9   Q.   Okay. So it's anticipated that to bring the

10   line across is going to be the 3- to 4-week

11   time frame, and the 8- to 12-week is the

12   actual microtunneling?

13 A.   (Johnson) That's correct.

14 Q.   Okay.

15   CHAIRMAN HONIGBERG: If you're

16   going to a new topic, let's take a ten-minute

17   break.

18   (Recess was taken at 10:33 a.m.,

19   and the hearing resumed at 10:46 a.m.)

20   CHAIRMAN HONIGBERG: Mr.

21   Pappas, you may proceed.

22   MR. PAPPAS: Thank you, Mr.

23   Chairman.

24 BY MR. PAPPAS:

1   Q.   Mr. Johnson and Panel Members, I want to now

2   start asking you questions about the HDD work

3   areas. On the screen in front of you is

4   Counsel for the Public's Exhibit 496. I want

5   to use Exception Request 39 as an example.

6   And as you see, Exception Request 39 was

7   rejected and resubmitted to address comments.

8   Do you see that?

9   A.   (Johnson) I do.

10   Q.   Okay. On the screen now is Counsel for the

11   Public's 521, which is Exception Request No.

12   39, first revision. Do you see that?

13   A.   (Johnson) I do.

14   Q.   Now, this involves HDD pits within the

15   pavement, as well as alignment passing under

16   the pavement; correct?

17   A.   (Johnson) That is correct.

18   Q.   And this is in the town of Campton, on

19   Route 3?

20   A.   (Johnson) Yes.

21   Q.   All right. Now, if you look under the

22   Technical Discussion of Justification of

23   Exception -- do you see that?

24   A.   (Johnson) The category? Yes.

1   Q.   Yeah. I want to draw your attention to the

2   bottom paragraph. And I don't need to read

3   it into the record, but it indicates the area

4   that is needed to do this HDD drilling

5   construction. Do you see that?

6   A.   (Johnson) It's a description of the work

7   area, yes.

8   Q.   Right. And for instance, there are four

9   bores because there are two drills in each of

10   the HDD areas; correct?

11   A.   Four pits; two sending, two receiving, yes.

12   Q.   And they need to be 10 feet apart up on the

13   ground?

14   A.   (Johnson) On center, yes.

15   Q.   Yeah. And the HDD work area needs to be

16   30 feet, a minimum of 30 feet of a level,

17   clear space; correct?

18   A.   (Johnson) I believe it says "approximately

19   30 feet," but yup.

20   Q.   And that would apply to all of the HDD drill

21   sites; correct? This is a general

22   description of all of the sites?

23   A.   (Johnson) Yes.

24   Q.   Okay. So, for this exception request, on the

1   screen now is Page 13757 of this request for

2   an exception. Do you see that?

3 A. (Johnson) I do.

4 Q. And the top picture indicates where the

5   proposed HDD entry pit and work area would

6   be. Do you see that?

7 A. (Johnson) I do.

8 Q. And the Project proposed putting the HDD work

9   area right in front of this building to the

10   right. Do you see that?

11 A. (Johnson) The building with the green roof?

12 Q. Correct.

13 A. (Johnson) Yeah, I would say that you have

14   to -- it looks like that building is much

15   farther away from where the entry would be,

16   just on optics, but --

17 Q. Do you know what that building is?

18 A. (Johnson) In this particular case, not off

19   the top of my head, no.

20 Q. I'll represent to you, if you look further in

21   this exception request, it's a restaurant.

22 A. (Johnson) Okay.

23 Q. And are you aware of whether or not there is

24   a mobile home park in this area as well?

1 A.   (Johnson) I am not aware, no.

2 Q.   Okay. Now, the DOT denied this exception

3   request; is that right?

4 A.   (Johnson) They asked for it to be

5   resubmitted, yes.

6 Q.   Right. And one of the reasons they rejected

7   it is because the proposed entry work area

8   would interfere with the business in that

9   building with the green roof; correct?

10 A.   (Johnson) I'm not -- I'd have to go back to

11   the request itself or the request for

12   resubmittal. But if that's what you're

13   saying, then yes.

14 Q.   Well, on the screen now is Exception Request

15   39 which indicates that the exception request

16   was rejected because the proposed entry pits

17   are located within the driveway to the

18   restaurant. Do you see that?

19 A.   (Johnson) I do.

20 Q.   Okay. So on the screen now is the first page

21   of Counsel for the Public Exhibit 496. And I

22   want to ask you some questions about Request

23   No. 40. And that also was rejected and

24   requested to be resubmitted. Do you see

1   that?

2 A.   (Johnson) I do.

3 Q.   Okay. So on the screen now is Counsel for

4   the Public Exhibit 522. Do you see that?

5 A.   (Johnson) I do.

6 Q.   And this is a also a request dealing with an

7   HDD pit within the pavement and under the

8   pavement; correct?

9 A.   (Johnson) Yes.

10 Q.   And also in the town of Campton -- do you see

11   that -- on Route 3?

12 A.   (Johnson) Yes.

13 Q.   All right. Now, if you look at the section

14   Impacts on Page 13764, when the Project

15   submitted this request for an exception, it

16   stated, quote, "The design, as proposed, will

17   not adversely affect the design,

18   construction, stability, traffic, safety

19   environmental commitments, maintenance or

20   operation of US 3," close quote. Do you see

21   that?

22 A.   (Johnson) I do.

23 Q.   Okay. On the screen now is Page 13765 of

24   this exception request. On the top picture

1   it shows the proposed area for the HDD entry

2   pit. Do you see that?

3 A.   (Johnson) I do.

4 Q.   And the proposed HDD entry pit would be --

5   the Project proposed placing it in front of

6   the gas station to the right. Do you see

7   that?

8 A.   (Johnson) At the edge of their property, yes.

9 Q.   Yeah. Well, they -- an HDD pit needs 30 feet

10   of a work area; correct?

11 A.   (Johnson) In width, and then backwards from

12   this. The driveway would remain open.

13 Q.   So the width would be from the solid yellow

14   line on the pavement going 30 feet towards

15   the gas station; correct?

16 A.   (Johnson) The center line of the road, yes.

17 Q.   Yes. Yeah. Okay. And I misspoke earlier.

18   In this area, are you aware of a mobile

19   home park near this gas station?

20 A.   (Johnson) I am not, no.

21 Q.   Mr. Johnson, on the screen in front of you

22   now is Page 13521 of Counsel for the Public's

23   Exhibit 496, which is a notice of the

24   decision for this Request No. 40 we're

1   talking about. And if you see, the DOT

2   denied this request because the proposed

3   entry pits are located within the Chelsea

4   Road driveway to the gas station. Do you see

5   that?

6 A. (Johnson) I do.

7 Q. And they also indicate that this is the only

8   access to the mobile home park and the diesel

9   pumps. Do you see that?

10 A. (Johnson) I do.

11 Q. So the Project proposed an entry pit in an

12   area that would interfere with this gas

13   station and interfere with the access to the

14   mobile home park, correct, and for that

15   reason the DOT rejected it?

16 A. (Johnson) It seems to be. But based on the

17   photograph, I would say that the access to

18   the diesel pumps would have remained

19   throughout the entire construction effort.

20 Q. But that wasn't the opinion of DOT; correct?

21 A. (Johnson) According to their statement, yes.

22 Q. Okay. On the screen now is Page 13767 of

23   Counsel for the Public's Exhibit 522. Do you

24   see that?

1 A.   (Johnson) I do.

2 Q.   And if you look at this, this is the drawing

3   for the entrance pit in front of the gas

4   station that we're talking about; correct?

5 A.   (Johnson) Correct.

6 Q.   And you see Chelsea Road. Do you see that?

7   It's a little hard to see. But if you look

8   under the north --

9 A.   (Johnson) Yes.

10 Q.   Okay. And do you understand that Chelsea

11   Road is the access to the mobile home park

12   behind this gas station?

13 A.   (Johnson) As you've identified it, yes.

14 Q.   If you look for the entry pit area, that is

15   pretty much right in front of Chelsea Road.

16   Would you agree with me?

17 A.   (Johnson) It's right in the middle of the

18   intersection, yes.

19 Q.   Now I want to show you a few other examples

20   of HDD areas in some other towns.

21 A.   (Johnson) Sure.

22 Q.   On the screen now is Counsel for the Public

23   569, which is Exception Request No. 146 in

24   the town of Easton/Woodstock. Do you see

1   that?

2   A.   (Johnson) I do.

3   Q.   And on the screen now is Page 14146 of

4   Exception Request 146. That shows the

5   proposed entry area and exit area of the HDD.

6   Do you see that?

7   A.   (Johnson) I do.

8   Q.   And if you look at the proposed entry area,

9   you'd agree with me there's simply not

10   30 feet off the pavement for this HDD site.

11   Is that what the picture shows?

12 A.   (Johnson) So I believe this exception request

13   is to put the pits in the road?

14 Q.   Correct. And that's because you just don't

15   have the room off the road; correct?

16 A.   (Johnson) That's correct.

17 Q.   And if you look at the exit area, you're also

18   requesting to put the pits in the road

19   because there simply isn't enough room off

20   the road; correct?

21 A.   (Johnson) Correct.

22 Q.   All right. On the screen now is Counsel for

23   the Public Exhibit 570, which is another

24   exception request, Exception Request No. 147,

1   in the town of Woodstock. Do you see that?

2   A.   (Johnson) I do.

3   Q.   And this also involves putting the HDD pits

4   within the pavement; correct?

5   A.   (Johnson) Yes.

6   Q.   On the screen now is Page 14155 of Exception

7   Request 147. Do you see that?

8   A.   (Johnson) I do.

9   Q.   And again this shows a picture of the area

10   for the entry pits and the exit pits;

11   correct?

12 A.   (Johnson) That is correct.

13 Q.   And these two pictures depict that the entry

14   pits and the exit pits in this part of the

15   route need to be in the road because there's

16   simply not enough room off the road; correct?

17 A.   (Johnson) That's correct.

18 Q.   Okay. On the screen now is Counsel for the

19   Public Exhibit 573, which is Exception

20   Request 151 in the town of Woodstock. Do you

21   see that?

22 A.   (Johnson) I do.

23 Q.   Again, this is an HDD-related request?

24 A.   (Johnson) Correct.

1   Q.   On the screen now is Page 14183 of this

2   request, and it shows a picture of the

3   proposed entry pit area and exit pit area.

4   Do you see that?

5   A.   (Johnson) I do.

6   Q.   And in the entry pit area there's quite a bit

7   of ledge that requires the entry pits to be

8   in the road; correct?

9   A.   (Johnson) Correct.

10   Q.   And the exit pit area, the guardrail is the

11   reason for the request to be in the road;

12   correct?

13   A.   (Johnson) And the slope that goes down, yes.

14   Q.   And the slope that goes down. Thank you.

15   On the screen now is Counsel for the

16   Public exhibit 574, which is Exception

17   Request 153. Do you see that?

18   A.   (Johnson) I do.

19   Q.   Again dealing with an HDD?

20   A.   (Johnson) Yes.

21   Q.   And if you look at Page 14192 that is on the

22   screen now, it shows the proposed entry area

23   and exit area. Do you see that?

24   A.   (Johnson) I do.

1   Q.   Now, this is near Beaver Pond. Do you recall

2   that?

3   A.   (Johnson) Yes.

4   Q.   And this entry area on the top picture is in

5   order to have a HDD that goes under a brook

6   in that area; correct?

7   A.   (Johnson) Yes.

8   Q.   And if you look at the bottom picture, it

9   shows the parking lot to the left for Beaver

10   Pond, one of the two parking lots; correct?

11   A.   (Johnson) That is correct.

12   Q.   And if you look at what's on the screen now,

13   which is Page 14194 of this request, it shows

14   the exit pit, the two exit pit areas. Do you

15   see that?

16   A.   (Johnson) I do.

17   Q.   And those are just past the driveway to the

18   parking lot; correct?

19   A.   (Johnson) Yeah. Approximately, I don't know,

20   150 feet.

21   Q.   Yeah. And then the work areas are right

22   around where those pits are; correct?

23   A.   (Johnson) And would extend off to the right,

24   yes.

1   Q.   Yeah. And then there is an additional area,

2   like over a thousand feet where they need to

3   pull back through the drill area; correct?

4   A.   (Johnson) When they lay the conduit out, yes.

5   Q.   And that runs along -- there's ledge along

6   that area; correct?

7   A.   (Johnson) Correct. The workspace needed for

8   that is less than 5 feet.

9   Q.   Yeah, it's very long, but narrow.

10   A.   (Johnson) Correct.

11   Q.   Okay. On the screen now is Counsel for the

12   Public 580, another HDD work area; correct?

13   A.   (Johnson) Correct.

14   Q.   On the screen is Page 14250 of this Exception

15   Request 171. On the top it shows the

16   proposed entry pit and the bottom is the

17   proposed exit pit. Do you see that?

18   A.   (Johnson) I do.

19   Q.   And if you look at the bottom, the exit pit

20   needs to be in the road because there's a

21   house there. Do you see that?

22   A.   (Johnson) I do.

23   Q.   Okay. Now, we've seen several examples of

24   HDD pits. Would you agree with me that, in

1   most of the locations from Franconia through

2   Easton, down into Woodstock and south, the

3   HDD pits need to be in the road because

4   either there's not enough room off the road

5   or the slope is very steep off the road, or

6   in some instances there might be a house or a

7   barn or some other structure?

8 A.   (Johnson) I can't comment on every single one

9   in those three towns, but there certainly are

10   some, as you've shown, that have

11   obstructions.

12 Q.   And because there are obstructions, you agree

13   with me, for the vast majority of the HDD

14   drilling sites, the Project has requested to

15   have the work areas, the entry pits and the

16   exit pits, in the pavement?

17 A.   (Johnson) No, I don't believe that's true. I

18   think partially, yes. But we've worked very

19   diligently to be off the road. In this

20   particular Photograph No. 1, you can see that

21   there's a utility pole. So we know that the

22   DOT right-of-way extends at a minimum out to

23   the edge of that utility pole. So there

24   potentially could be room to move the utility

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 1        pole -- towards the utility pole.  I'd have

 2        to see what the rejection was in this

 3        particular area -- although, they haven't

 4        rejected it at this point.  They haven't

 5        reviewed this one yet.

 6   Q.   True.  But if -- go back to... on the screen

 7        now is the first page of this request.  And

 8        if you look at it, it's requesting that one

 9        entry pit and one exit pit must be in the

10        paved road, if you look at the first

11        paragraph, last line.

12   A.   (Johnson) Correct.  One of the two, not both,

13        yes.

14   Q.   Well, it says one entry pit and one exit pit

15        must be in the paved road.

16   A.   (Johnson) Correct.  So, one hole bore will be

17        outside of the road and one will be in.

18   Q.   Right.  And as a result, there will be HDD

19        construction activity within the paved road;

20        correct?

21   A.   (Johnson) Correct.

22   Q.   Would you agree with me that for virtually

23        all of the HDD drillings, the Project has

24        submitted a request for exceptions?
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1   A.   (Johnson) I would say that every one has a

2   request for exceptions because they need to

3   be -- because of the alignment under the

4   roadway.

5   Q.   I'm going to ask you some questions about

6   splice vaults.

7   A.   (Johnson) Okay.

8   Q.   So on the screen now is Applicant's

9   Exhibit 183, Page 65145. And what I'm

10   interested in is Request No. 13. Do you see

11   that?

12   A.   (Johnson) I do.

13   Q.   And Request No. 13 was rejected and a request

14   for resubmittal. Do you see that?

15   A.   (Johnson) I do.

16   Q.   So on the screen now is Counsel for the

17   Public's Exhibit 509, which is a copy of

18   Exception Request No. 13 in Campton. Do you

19   see that?

20   A.   (Johnson) I do.

21   Q.   Now, this is a request to put the splice

22   enclosure in the pavement. Do you see that?

23   A.   (Johnson) That's correct.

24   Q.   Okay. Now, if you look at this request for

1   an exception, would you agree with me that it

2   provides that there's a need to have 5 feet

3   of minimum space on all sides of a splice

4   vault?

5   (Witness reviews document.)

6   A.   (Johnson) It says a 5-foot offset from the

7   guardrail, not necessarily on all sides.

8   Q.   Okay. On the screen now is Page 13646 of

9   this exception request. And if you look at

10   Splice Enclosure in Pavement, do you see

11   that? It says, to construct the splice

12   enclosure, a minimum 5-foot work area is

13   required on all sides. Do you see that?

14   A.   (Johnson) I do.

15   Q.   So the splice vault itself is 8 feet wide; is

16   that correct?

17   A.   (Johnson) That's correct.

18   Q.   And so there's a minimum of 18 feet

19   required -- the 8-foot width of the splice

20   vault plus 5 feet on each side -- in order to

21   install a splice vault?

22   A.   (Johnson) Approximately, yes.

23   Q.   And splice vaults themselves can't be more

24   than 2100 feet apart from the next splice

1   vault?

2   A.   (Johnson) Approximately, again, yes.

3   Q.   Okay. On the screen now is Page 13649 of

4   Exhibit 509, which is Exception Request 13.

5   And this is a drawing of the proposed

6   exception request; correct?

7   A.   (Johnson) Correct.

8   Q.   And it indicates the location of the splice

9   vault. Do you see the square splice vault?

10 A.   (Johnson) I do.

11 Q.   And would you agree with me that that splice

12   vault is proposed to be installed directly in

13   front of the driveway to the home on the

14   other side of the street?

15 A.   (Johnson) It appears that way, yes.

16 Q.   And because the Project proposed to install

17   this splice vault in front of that driveway,

18   the DOT rejected this request; correct?

19 A.   (Johnson) I'll take your word for it. But

20   yes.

21 Q.   And would you let me represent to you, in

22   addition, the DOT felt that there would be

23   only 10 feet of travel lane if the splice

24   vault were located in this location? Do you

1   recall that?

2 A.   (Johnson) I do not. But if you represent it,

3   I'll take that.

4 Q.   And would you agree with me, and Mrs.

5   Frazier, you can chime in if you'd like, that

6   there needs to be, particularly on Route 3,

7   more than 10-foot for travel, for a safe

8   travel lane?

9 A.   (Johnson) I'll defer to Ms. Frazier now. But

10   I believe 10-foot is the minimum.

11 A.   (Frazier) Ten-foot can be approved in some

12   situations. Eleven-foot is the standard okay

13   minimum.

14 Q.   Thank you.   On the screen now is Counsel for

15   the Public Exhibit 509, the same Exception

16   Request 13, the first page. Do you see that?

17 A.   (Johnson) I do.

18 Q.   And under Traffic Control Duration, it's

19   estimated that 16 days will be required to

20   install this splice vault; correct?

21 A.   (Johnson) That's what it says, yes.

22 Q.   So, during those 16 days, one lane would be

23   closed to traffic in this area; correct?

24 A.   (Johnson) Correct.

1 Q. Okay. Now, would you agree with me that that

2   is typical for installation of splice vaults,

3   what's required to install a splice vault,

4   that the traffic duration is 16 days?

5 A. (Johnson) No, I believe most splice vaults

6   are five or six days.

7 Q. So you believe that most splice vaults, you

8   can excavate the -- well, let me back up.

9   When you say "install," do you mean

10   including excavation, placing the vault in

11   and then backfilling?

12 A. (Johnson) That's correct.

13 Q. So you believe that most splice vaults you

14   can excavate the hole -- and the hole needs

15   to be shored; correct? The size of these

16   holes --

17 A. (Johnson) Yes.

18 Q. So you can excavate, you can shore, you can

19   bring in a splice vault, you can install it

20   and then backfill and move on in five days?

21 A. (Johnson) Yes. So the shoring is a single

22   piece of shoring that gets put into the

23   trench. So there's no time really needed to

24   assemble anything. The splice vaults

1   themselves are precast concrete. So they

2   will literally arrive on a truck, and the

3   crane will pick them up and put them in and

4   then backfill around.

5   Q.   And so if you think most can be done in five

6   days, why would it take 16 days for this

7   location?

8   A.   (Johnson) I would assume it's because of the

9   narrowness of the road and the fact there's

10   not a large work zone around. It may require

11   smaller equipment to excavate, to stay within

12   the one-lane restriction of the travel way.

13   Q.   Okay. And this is along Route 3; correct?

14   A.   (Johnson) That's correct.

15   Q.   And would you agree with me that certainly

16   the roads in the 7-1/2-mile section -- Old

17   County Road, North Hill Road, Bear Rock

18   Road -- are narrower than Route 3 --

19   A.   (Johnson) Correct.

20   Q.   -- in this area?

21   A.   (Johnson) In those particular roads we've

22   talked about having full road closures.

23   Q.   Right. Would you agree with me that the road

24   through Easton is typically narrower than

1   Route 3?

2   A.   (Johnson) I'd say in general. This

3   particular area that you're showing happens

4   to be a very constrained area.

5   Q.   And so would you agree with me that the road

6   from Franconia through Easton to get to

7   Woodstock is typically the same width as

8   shown on this drawing or that we saw in the

9   drawing a moment ago?

10   A.   (Johnson) Not necessarily. There are large

11   areas of Route 112 that are much wider than

12   that.

13   Q.   Which areas of Route 12 [sic] are much wider

14   than that?

15   A.   (Johnson) Route 112, yeah.

16   Q.   Route 112. Which areas?

17   A.   I don't know specifically here, but I've

18   driven it many times and...

19   Q.   Okay. And would you agree with me that much

20   of Route 3 is also constrained, as we saw in

21   this picture a moment ago?

22   A.   (Johnson) I would not say most of it, no.

23   There are areas that are constrained, yes,

24   but not necessarily most of it.

1   Q.   There are many areas that are constrained;

2   are there not?

3   A.   (Johnson) Sure. It's 20-something miles

4   long, so there are areas where it's going to

5   be constrained.

6   Q.   For splice vaults, these are prefabricated,

7   concrete vaults; is that correct?

8   A.   (Johnson) That's correct.

9   Q.   And how many sections would one vault make

10   up? How do you intend to install these

11   splice vaults? In one section or more than

12   one section?

13   A.   (Johnson) So I'll defer to --

14   A.   (Scott) Ideally it would be two sections, one

15   the base and one the top.

16   Q.   So there would be one base section that would

17   be 8 feet wide, 34-foot long, and something

18   less than 7-1/2 feet tall?

19   A.   (Scott) Yeah.

20   Q.   And then the top section, do you anticipate

21   it being a similar size to the base section?

22   A.   (Scott) Yes.

23   Q.   Okay. Do you know how much either one base

24   section or one top section weighs?

1   A.   (Scott) Not off the top of my head.

2   Q.   Do you have an approximate weight?

3   A.   (Scott) Not off the top of my head.

4   Q.   Do you know the size of the crane necessary

5   to install these sections of the splice

6   vault?

7   A.   (Johnson) I do not know.

8   Q.   Do you know, Mr. Scott?

9   A.   (Scott) Not off the top of my head.

10   Q.   Do you know, Mr. Kayser?

11   A.   (Kayser) No, not exactly how big.

12   Q.   I didn't want you falling asleep over there.

13   Do you know, Mr. Scott, or anybody on

14   the panel, how many axles the crane truck

15   must be?

16   A.   (Scott) Not off the top of my head, no.

17   Q.   And either Mr. Johnson or Mrs. Frazier or

18   Mr. Scott, would you agree with me that each

19   time a splice vault is installed at that

20   location, whether it's 5 days or 16 days or

21   some other duration, you have to have a lane

22   closure during that operation? Is that

23   right?

24   A.   (Johnson) Yes.

1   Q.   Okay. Let me ask you some questions about

2   fluidized thermal backfill. Easier to say

3   "FTB."

4   Now, as I understand it, the Project

5   requested two exceptions for FTB; is that

6   right?

7   A.   (Johnson) Yes.

8   Q.   One was to use FTB to backfill the open

9   trench instead of putting back soil; correct?

10   A.   (Johnson) Correct.

11   Q.   And that exception was approved by DOT;

12   correct?

13   A.   (Johnson) That's incorrect.

14   Q.   Oh, it was not.

15   A.   (Johnson) It was not approved.

16   Q.   So that was rejected.

17   A.   (Johnson) Yes. So let me -- the reason for

18   rejection is that the DOT wanted to have the

19   structural integrity -- or the structural box

20   at the highway be the same integrity on the

21   entire width once we replaced.

22   Q.   Okay. That is for -- well, strike that.

23   What was approved by the DOT?

24   A.   (Johnson) So the approval was the use of FTB

1   as a thermal fill that could go from wherever

2   the actual ducts were to the bottom of the

3   structural box. And then from the structural

4   box up, it would be the 24 inches or 36

5   inches, depending on the tier of the road,

6   basically replacing like with like, as far as

7   the existing conditions of the road.

8 Q. Okay. So, above the duct will be gravel,

9   whichever gravel the DOT requires?

10 A. (Johnson) Correct.

11 Q. Okay. And so it won't be the FTB, in the

12   sense that I asked earlier about, when, for

13   instance, a water utility has to worry about

14   doing work in or below the transmission line.

15   You won't have that layer of FTB above the

16   duct; correct? You'll have natural gravel.

17 A. (Johnson) No, there will always be a

18   component of FTB above the ducts, the actual

19   ducts themselves.

20 Q. As long as it's below the 36 inches or

21   24 inches?

22 A. (Johnson) That is correct.

23 Q. Ah, and above that you need gravel.

24 A. (Johnson) Correct. Or whatever the road base

1   is.

2   Q.   Okay.

3   A.   (Bowes) So, also as part of the exceptions

4   that have been granted, we have to provide a

5   structural, a self-supporting structure for

6   any of the utilities we're going over. I

7   believe we'll be the only utility in the

8   state of New Hampshire that does that.

9   Q.   Okay. Would you agree it's probably because

10   you're the only utility in the state of New

11   Hampshire that's putting up a 320-volt line

12   above some of these other utilities?

13   A.   (Bowes) I think it's just in advancement of

14   the DOT's thinking in this area. If you're

15   going to allow structures within the roadway,

16   they should allow for future maintenance and

17   operations of the other utilities. But I was

18   more referring to you could have water,

19   sewer, drainage in the roadway already, and

20   none of those utilities have this

21   requirement, nor do they have this built into

22   their designs.

23   Q.   And Mr. Johnson, am I correct that what the

24   Project wanted to do was use FTB through the

1   entire part of the duct bank -- or above the

2   duct bank? Correct?

3 A. (Johnson) Our original request was to use FTB

4   all the way up basically to the asphalt

5   surface level, and that was what was denied.

6 Q. As a result, instead of having the concrete

7   trucks pour the FTB, now what you're going to

8   have is concrete trucks pouring some FTB and

9   then having to bring gravel back on top of

10   that to go up to the road surface, or right

11   below the road surface.

12 A. (Johnson) Correct.

13 Q. And would you agree with me that as a result,

14   that will slow construction?

15 A. (Johnson) It's a consideration, yes.

16 A. (Bowes) The use of plating would more than

17   offset that. And I'm not sure people

18   understood when I said the use of plating.

19   It means that the entire roadway will be open

20   once the construction period is done at

21   nighttime. So there will be no traffic

22   control on these highways once they're

23   plated.

24 Q. But it's going to take -- first of all, you

1   need to get the gravel and bring it to the

2   site, remove the plates and backfill;

3   correct?

4   A. (Bowes) Well, we would plate the areas that

5   are not backfilled.

6   Q. Right. But eventually you're going to have

7   to backfill.

8   A. (Bowes) That is clearly true. But the

9   process would allow us to plate along this

10   and reopen the highway without having to wait

11   for the backfill.

12 Q. Understood. But in that instance, what you

13   might have is a lane closure while the

14   initial construction is going on. If you're

15   allowed to plate, you could reopen that lane;

16   correct?

17 A. (Bowes) Yes.

18 Q. And then when you have to backfill, you have

19   to remove the plate and close the lane again

20   in order to backfill; correct?

21 A. (Bowes) Yes. The process we're planning

22   would be rolling right along. So there would

23   be the plating would move each day, the

24   backfill would take place each day, and the

1   paving would take place each day. So it

2   would be a continuous process along the

3   route.

4 Q. But because you now have to bring back gravel

5   rather than using FTB throughout, that will

6   slow construction down; will it not?

7 A. (Johnson) Compared to using just FTB, yes.

8 Q. Yeah. Okay. Have you sourced all this

9   gravel yet?

10 A. (Johnson) That's up to the contractor.

11 Q. Do you know whether the contractor has

12   sourced all this gravel?

13 A. (Johnson) To my knowledge, no.

14 Q. So now let me ask you some questions about

15   the other topic, which is the accuracy of the

16   plans.

17   On the screen now in front of you is

18   Applicant's Exhibit 183, which is the first

19   DOT letter listing approval and rejections of

20   exception requests. Do you see that?

21 A. (Johnson) I can.

22 Q. Okay. So this is Page 65140 in this exhibit,

23   and it is for the decision for Exception

24   Request No. 7. Do you see that?

1   A.   (Johnson) I do.

2   Q.   And under the first item after it says, "This

3   exception to the UAM is hereby rejected and

4   must be resubmitted to address the following

5   concerns," it states, "Existing utilities are

6   missing in numerous locations; therefore,

7   this request cannot be adequately reviewed."

8   Do you see that?

9   A.   (Johnson) I do.

10   Q.   On the screen now is Page 65141 of

11   Applicant's Exhibit 183. And this is for

12   Exception Request No. 9. Do you see that?

13   A.   (Johnson) I do.

14   Q.   And this request was rejected, and the DOT

15   indicated that, quote, "Existing NHDOT

16   right-of-way is not correctly shown between

17   Stations 2497 and 2505+50." Do you see that?

18   A.   (Johnson) I do.

19   Q.   What's on screen now is Page 65142 of

20   Applicant's Exhibit 183. And this was also

21   rejected because the profile shown does not

22   correspond to the plan view; therefore, it's

23   difficult to adequately review. Do you see

24   that?

1   A.   (Johnson) I do.

2   CHAIRMAN HONIGBERG: Mr.

3   Pappas, is there a punchline to all these,

4   "Do you see thats"?

5   MR. PAPPAS: There's going to

6   be.

7   CHAIRMAN HONIGBERG: Okay.

8   How many more "Do you see thats?" do you

9   have?

10   MR. PAPPAS: I'll skip to the

11   punchline.

12 BY MR. PAPPAS:

13 Q.   Mr. Johnson, since you manage this process,

14   would you agree with me that I could go

15   through several more of these, and the DOT

16   rejected them and indicated that either

17   things were missing or the plans were

18   inaccurate in some respect, or otherwise they

19   couldn't review them because there were

20   problems with the plans? Do you agree with

21   that?

22 A.   (Johnson) There are some, yes.

23 Q.   There were several of those; were there not?

24 A.   (Johnson) I'd have to go through each

1   rejection. But I'll take your word if you

2   say "several."

3 Q. Okay. Now, in your meetings with the DOT,

4   they also expressed concerns in those

5   meetings about the inaccuracy of the plans;

6   did they not?

7 A. (Johnson) Yes, they did.

8 Q. At one point, didn't DOT wonder whether they

9   should continue to review the plans because

10   they were inaccurate; correct?

11 A. (Johnson) That is correct.

12 Q. Okay. So let me ask you some questions about

13   the survey work that you testified about

14   earlier this morning.

15 A. (Johnson) Sure.

16 Q. Now, we went over this area before, so I

17   don't need to go over it in detail.

18   Would you agree with me that the Project

19   hired BL Companies to do survey work, and BL

20   Companies did some of the work and they

21   subcontracted some of the work to Meridian?

22   Correct?

23 A. (Johnson) That is correct.

24 Q. And both BL Companies and Meridian used three

1   levels of accuracy or confidence for their

2   survey work; correct?

3   A.   (Johnson) Correct.

4   Q.   The first level, which was the level was

5   determined, they didn't use that in any of

6   their work; correct?

7   A.   (Johnson) That is correct. Well, I take that

8   back. They did in very small instances.

9   Q.   Okay. And that's the most accurate and most

10   confident level; correct?

11   A.   (Johnson) Correct.

12   Q.   The second level, which is an approximate

13   location, they used in some areas; correct?

14   A.   (Johnson) Correct.

15   Q.   And then the third, level, which is the least

16   accurate or least confidence level, is a

17   dashed line for essentially an estimate;

18   correct?

19   A.   (Johnson) Correct.

20   Q.   Okay. Now, DOT's conditional approval,

21   Condition No. 4 that you saw earlier this

22   morning, required the Project to submit a

23   survey report; correct?

24   A.   (Johnson) That's correct.

1   Q.   And on the screen now is the second page of

2   Counsel for the Public's Exhibit 493, which

3   is the memo from DOT that was attached to the

4   August 11, 2017 letter that you saw earlier

5   today; correct?

6   A.   (Johnson) Correct.

7   Q.   Okay. And it shows that under Paragraph 4 of

8   DOT's conditions of approval, it required a

9   survey report; correct?

10   A.   (Johnson) That's correct.

11   Q.   And the DOT determined that the survey

12   reports submitted by Meridian and BL

13   Companies did not satisfy the DOT's

14   requirement; correct?

15   A.   (Johnson) That's correct.

16   Q.   Now, this morning you indicated that more

17   surveying is being done; correct?

18   A.   (Johnson) That is correct.

19   Q.   And you indicated that one of the things

20   you're going to do is you're going to look --

21   re-look at historical documents; right?

22   A.   (Johnson) Correct.

23   Q.   And you're going to look at DOT returns of

24   layout? Is that another item?

1 A.   (Johnson) Commissioner's return of layout,

2   yes.

3 Q.   And you indicated this morning that, if

4   looking at those two items did not

5   sufficiently identify an area in order to

6   satisfy the DOT's requirement, you were going

7   to look to a prescriptive rights process. Do

8   you remember that?

9 A.   (Johnson) I do.

10 Q.   Tell me what you meant by a "prescriptive

11   rights process."

12 A.   (Johnson) So, prescriptive rights are

13   basically where there is no layout for a

14   particular route, historic layout, or there

15   is no commissioner's return, and basically

16   not a lot of information available in a

17   particular area. There could be individual

18   plans or private property deeds that are

19   available, but not necessarily a true layout

20   in the historic sense.

21 Q.   So you can't determine the layout by looking

22   at documents. So when you say "prescriptive

23   rights," do you mean the Project's going to

24   seek to obtain rights prescriptively from the

1   abutting landowners?

2   A.   (Johnson) Not at all, no. Basically what it

3   means is that the Project will use its survey

4   expertise to identify the areas of use and

5   occupancy. So that would be typically,

6   obviously, the lanes of the road itself; it

7   would be shoulders; it would be drainage

8   ditches; any kind of physical evidence that

9   would describe the use and occupancy of the

10   road. We would then set that as our

11   boundary, whether or not the DOT had property

12   outside of that, because we feel, as the

13   Project, there's just not enough information

14   to verify anything but that. And we would

15   petition the DOT, if we couldn't be outside

16   of the roadway, to be in the roadway in those

17   areas specifically to avoid any potential

18   conflicts.

19 Q.   So when you say "use and occupancy," let me

20   give you an example. We've seen pictures

21   where there's a house or a barn 10 feet from

22   the pavement. In that instance, would that

23   tell you that the use and occupancy of that

24   area is as private property rather than DOT

1   right-of-way because someone has their barn

2   or house in that area?

3 A. (Johnson) Just because somebody has a barn in

4   an area doesn't necessarily mean that it's

5   not inside the DOT area.

6 Q. Oh, I understand that. But when you --

7 A. (Johnson) But we as the Project recognize

8   that as private property use and would look

9   to avoid putting any facilities there.

10 Q. That's what I'm trying to get to. When you

11   say "use and occupancy," you're looking at

12   how the land is being used in areas where the

13   documents don't tell you where the

14   right-of-way boundary line is; correct?

15 A. (Johnson) That is correct.

16 Q. So, for instance, if a private property owner

17   along the underground is using the land in

18   some way, whether there's a structure on

19   there or there's a garden on there, it's some

20   other use that would lead you to believe that

21   the use and occupancy would be private use

22   and not the DOT right-of-way; correct?

23 A. (Johnson) In the areas where there's no other

24   information, that's correct.

1 Q. Right. So in those areas you would have to

2   be in the paved road because you can't

3   establish a right-of-way boundary far enough

4   off the road; correct?

5 A. (Johnson) Depending where the obstruction

6   was, yes.

7 Q. And that's what you meant by "prescriptive

8   rights." You would petition the DOT to

9   recognize in these various areas where the

10   documents were not sufficient, and you had to

11   go out and determine the actual use in those

12   areas and petition the DOT to either

13   recognize the use as a road right-of-way or

14   the use as private property, not a road

15   right-of-way; correct?

16 A. (Johnson) Correct. So it's the Project's

17   interpretation of what that is. It's not the

18   DOT's interpretation of what that is.

19   Obviously, they have their own rights and

20   their own ways of getting rights to do

21   things. So this would be the Project's

22   interpretation so that we would be able to

23   stay within the DOT right-of-way as we

24   describe it.

1   Q.   And then the Project would petition the DOT

2   to recognize the Project's determination of

3   rights; correct?

4   A.   (Johnson) If there was -- not specifically

5   the determination of rights. Basically it's

6   if we had to be in the roadway for the

7   alignment, then we'd obviously have to submit

8   an exception request that would discuss the

9   aspects of the prescriptive nature of the

10   establishment of the edge of right-of-way.

11   Q.   And so you would have to then have the DOT

12   agree with you in order to set that as the

13   right-of-way boundary; correct?

14   A.   (Johnson) Correct. So, the approval of the

15   survey report, as well as the narrative that

16   goes along with that which will explain why

17   there are no records or what records are

18   there, is the approval -- if and when they

19   approve that, is the approval of that

20   particular area of right-of-way.

21   Q.   And if the DOT does not agree with your

22   interpretation?

23   A.   (Johnson) I've been watching it for a while.

24   Q.   That bug was on my table a minute ago.

1   A.   (Johnson) Can you repeat the question,

2   please?

3   Q.   If the DOT does not agree with your

4   interpretation, what's the backup?

5   A.   (Johnson) Then we'll work with the DOT to

6   establish something that's reasonable for

7   all.

8   Q.   And you indicated you thought all this could

9   be done in six to eight weeks?

10 A.   (Johnson) For the -- yes. Preparing the

11   survey report, yes.

12 Q.   When did that six weeks to eight weeks start?

13 A.   (Johnson) This past Monday.

14 Q.   Okay. And am I correct in saying that until

15   that is done, a new survey report is

16   submitted and there's some petitions for

17   prescriptive rights and there's some

18   discussion about that, all of the requests

19   for exceptions are essentially suspended

20   until that process works its way through?

21 A.   (Johnson) That's correct. The DOT will not

22   approve or deny until we've firmly

23   established the edges of the right-of-way.

24 Q.   And would I be correct in saying that if the

1   Project can't satisfy the DOT about the

2   survey and the edge of the right-of-way, the

3   Project will not have satisfied that

4   Condition No. 4?

5 A.   (Johnson) That is correct. The DOT must

6   approve the survey report to meet the

7   conditions of survey -- or Condition No. 4.

8 Q.   Okay. So let me ask you a couple questions

9   about Applicant's Exhibit 222 which we saw

10   this morning. Do you have that in front of

11   you?

12 A.   (Johnson) No, I do not.

13 Q.   The Applicant will need to put that up

14   because --

15   MS. MERRIGAN: No, I have it.

16   MR. PAPPAS: Oh, you got it.

17 BY MR. PAPPAS:

18 Q.   In front of you on the screen is Applicant's

19   Exhibit 222. Do you see it?

20 A.   (Johnson) I do.

21 Q.   All right. So let me just ask. In the first

22   column we have "Miles in Pavement, No Tree

23   Impact." Does that include anywhere that the

24   Project's going to be in the road?

1 A.   (Johnson) Yes.

2 Q.   So that would include all HDD sites.

3 A.   (Johnson) No, that's the second column.

4 Q.   Ah, okay. Other than HDD sites and

5   microtunneling, does the first column include

6   splice vaults?

7 A.   (Johnson) Yes.

8 Q.   So in order to determine where the Project is

9   going to be totally in the road, you add the

10   first two columns.

11 A.   (Johnson) Correct.

12 Q.   So it's going to be 15 miles in the road out

13   of the 52-mile stretch.

14 A.   (Johnson) That is correct.

15 Q.   Then if you look at the third column where it

16   says "Miles Outside Pavement, No Tree

17   Impact," do you see that?

18 A.   (Johnson) I do.

19 Q.   Is that inside the right-of-way or outside

20   the right-of-way?

21 A.   (Johnson) Inside the DOT right-of-way.

22 Q.   Okay. So that's only showing where there's

23   no impact within the DOT right-of-way, I

24   assume as you currently believe it to be.

1   A.   (Johnson) That is correct.

2   Q.   So if this new survey work changes the

3   right-of-way boundaries, it's going to change

4   the calculation on these 33 miles; correct?

5   A.   (Johnson) Absolutely.

6   Q.   Okay. And for any impact outside of where

7   you currently think the right-of-way boundary

8   is, that's not picked up in these 33 miles;

9   correct?

10 A.   (Johnson) Could you repeat that?

11 Q.   Sure. If this 33 miles is inside the

12   right-of-way, it does not include any impact

13   to trees that are outside where you think the

14   right-of-way boundary is today.

15 A.   (Johnson) So if a tree is not in the DOT

16   right-of-way?

17 Q.   Correct.

18 A.   (Johnson) Yes.

19 Q.   Okay.

20 A.   (Johnson) So the Project plans on an offset

21   from the edge of right-of-way, obviously to

22   be sure we're maintaining. But if you're

23   asking if we're impacting a tree that's

24   outside the right-of-way, no.

1   Q.   And as I said, just as a follow-up to

2   earlier, if that right-of-way boundary moves

3   by your new survey plan, there could be more

4   trees impacted; correct?

5   A.   (Bowes) No, less trees impacted.

6   Q.   Let's say the right-of-way boundary gets

7   smaller.

8   A.   (Johnson) If the right-of-way boundary gets

9   smaller --

10 A.   (Bowes) But then we'd apply for an exception

11   request to be in the road.

12 Q.   No, I understand. We're talking about trees

13   right now, though, Mr. Bowes. And so --

14 A.   (Bowes) Right. It would affect the first

15   column.

16 Q.   We're talking about the third column.

17   And Mr. Johnson, let me -- and Mr.

18   Bowes, you can correct me if wrong -- but if

19   the right-of-way boundary shrinks, there

20   could be more trees impacted; right?

21 A.   (Johnson) If the right-of-way boundary

22   shrinks, we'll petition the DOT to be in the

23   roadway.

24 A.   (Bowes) There'll be less trees impacted.

1 Q. Correct. I stand corrected. It's definitely

2   time for lunch.

3   Conversely, if it goes the other way,

4   there will be potentially more trees

5   impacted.

6 A. (Bowes) If the right-of-way hypothetically

7   was the 500 feet in the White Mountain

8   National Forest, hypothetically, yes, you

9   could locate out 400 feet. I don't think

10   that's at all being considered, but... and

11   then you would impact some trees out at 400

12   feet off the road. Again, that's very

13   hypothetical and that's not at all what's

14   planned.

15 Q. Right. And if it moves 10 feet, it could

16   impact some trees within that 10-foot zone;

17   right?

18 A. (Johnson) And again we'd petition that we

19   would not be impacting those trees through

20   Columns 4 and 5.

21 Q. Okay.

22   (Pause)

23 Q. What's on the screen now in front of you is

24   Counsel for the Public Exhibit 494, which is

1   a copy of the conference report for the

2   April 12, 2017 conference between the Project

3   and DOT. And Mrs. Frazier and Mr. Johnson,

4   you attended this meeting; correct?

5   A.   (Johnson) That is correct.

6   Q.   And what's on the screen now is the

7   conference report for the July 18, 2017

8   conference. And again, Mr. Johnson and Mrs.

9   Frazier, you attended that conference;

10   correct?

11   A.   (Johnson) Correct.

12   Q.   On the screen now is the last page of that

13   conference report, 13513. And it indicates

14   that a draft of the Transportation Management

15   Plan was submitted. Do you see that?

16   A.   (Johnson) I do.

17   Q.   What plan was submitted?

18   A.   (Frazier) So this statement is incorrect. It

19   was actually a copy of the form that goes to

20   the Traffic Control Committee to present

21   the -- to allow the TCC to determine the

22   impacts and whether or not a full

23   Transportation Management Plan is needed or

24   just a memorandum.

1   Q.   Did the DOT accept your form?

2   A.   (Frazier) No. We took it back because it was

3   addressed to Mr. Oldenburg, and we had to

4   re-address it to Mr. Cota.

5   Q.   Eventually did DOT accept your form?

6   A.   (Johnson) We have not submitted a revised

7   form yet.

8   Q.   You have not resubmitted a revised form.

9   A.   (Johnson) That's correct.

10 Q.   On the screen now is the conference report

11   from the August 15, 2017 conference where,

12   Mr. Johnson, you attended.

13 A.   (Johnson) That's correct.

14 Q.   This conference report at the bottom, and you

15   can see it's highlighted, indicates that Ms.

16   Esterberg has prepared a draft of the Traffic

17   Control Committee Traffic Management Plan

18   Determination Request Memo to present NPT's

19   Traffic Management Plan to the Department's

20   committee. Do you see that?

21 A.   (Johnson) I do.

22 Q.   And she anticipates being on the agenda the

23   third Thursday in September. Do you see

24   that?

1 A.   (Johnson) I do.

2 Q.   And they indicated someone from NPT should

3   attend?

4 A.   (Johnson) Unfortunately, she was unable to

5   get onto the September agenda. I believe

6   that we are scheduled for the October agenda.

7 Q.   And do you anticipate submitting that form

8   before the October meeting?

9 A.   (Johnson) We do.

10 Q.   And at the October meeting you'll find out

11   whether or not they're going to require a

12   full Traffic Management Plan or something

13   different?

14 A.   (Johnson) That's correct.

15 Q.   If they require a full Traffic Management

16   Plan, when do you anticipate submitting that?

17 A.   (Frazier) So we have begun work on it, and we

18   anticipate submitting a draft in February or

19   March of 2018. However, I don't know when

20   the final will be, considering it's an

21   iterative process and kind of what we're

22   calling a "living document" as people change

23   and circumstances change.

24 Q.   And would I be correct in saying that, in

1   order to finalize the Traffic Management

2   Plan, you need to have final, full

3   construction drawings in the underground

4   section so you know where the route's going

5   to go in the underground section?

6   A.   (Frazier) Yes, that's correct.

7   Q.   So you'll need some time after you receive

8   full construction drawings for the

9   underground route in order to complete the

10   Traffic Management Plan.

11   A.   (Frazier) Correct.

12   Q.   Do you have an estimate of how much time

13   you'll need?

14   A.   (Frazier) I would say a month or two.

15   Q.   Okay.

16   MR. PAPPAS: Thank you for

17   your patience. No other questions.

18   CHAIRMAN HONIGBERG: I think

19   we're either looking at Mr. Whitley or Ms.

20   Manzelli. But Mr. Whitley, are you ready to

21   go?

22   MR. WHITLEY: I have no

23   questions, Mr. Chair.

24   CHAIRMAN HONIGBERG: That's

1   easy enough.

2   Ms. Manzelli?

3   MS. MANZELLI: Sure. Give me

4   one minute, please.

5   CHAIRMAN HONIGBERG: Sure.

6   (Pause in proceedings)

7   CROSS-EXAMINATION

8   BY MS. MANZELLI:

9   Q.   All right. Good morning. My name is Amy

10   Manzelli, and I'm representing the Society

11   for the Protection of New Hampshire Forests.

12   I want to ask for everybody's patience this

13   morning. Many of my questions have been

14   covered, and so it will just take me a little

15   bit of time to weed through as we're going

16   along of what has not been covered.

17   So I want to turn first... we've seen

18   this document a couple times today. This is

19   the letter from the Department of

20   Transportation responding to the submission

21   of the survey. I did note that there was two

22   different versions that have come into the

23   record: There's Applicant's Exhibit, I

24   believe it's 220, and then it's also Counsel

1   for the Public 493. Counsel for the Public's

2   version is the highlighted version.

3   Now, if you turn to the second page of

4   this, you'll see the memo that is enclosed

5   here. Again, we've looked at this today.

6   But I just wanted to highlight the particular

7   wording. You agree that the words used to

8   describe what is required of Northern Pass

9   is, quote, "accurate location defined by

10   ground survey"; right?

11   A. (Johnson) Correct.

12   Q. Okay. And then what DOT reported back as its

13   description of what was submitted to it, they

14   said, "The majority of the right-of-way shown

15   in the plans is approximate location only";

16   right?

17   A. (Johnson) That's what it says, yes.

18   Q. So where we're at here is we have this

19   project going into the eighth year of

20   development. And the DOT had what I thought

21   was a pretty clear requirement for accurate

22   locations defined by a ground survey. And as

23   of today, Northern Pass either refuses or

24   just hasn't been capable of providing, quote,

1   "accurate location defined by ground survey";

2   is that correct?

3 A. (Johnson) So I would say we have worked with

4   the DOT to establish what they believe

5   answers this determination. And let me just

6   read it. The approval requires "an accurate

7   location defined by ground survey."

8   We met back in February of this year

9   with the DOT Right-of-Way Bureau to establish

10   what they felt was the proper way to define

11   the right-of-way. Obviously, that led to the

12   survey report and then this particular

13   rejection stating that they want more

14   information. We have since worked with the

15   DOT to establish again what their proper

16   protocols are to develop those. And again,

17   those will now be executed in the field and

18   an additional survey report will be provided.

19 Q. Is DOT now asking for something additional or

20   something different than it asked for in its

21   letter issuing a conditional -- a

22   recommendation for approval of this project?

23 A. (Johnson) I believe it's the interpretation

24   of the wording. We did not provide enough

1   references to plan documents. We did not tie

2   our survey back to known DOT projects and/or

3   established rights-of-way by reference. So

4   we've worked with them to establish those

5   protocols and again to do additional historic

6   research to see if there's additional

7   documents, as well as locating physical

8   monuments and iron pins in the field to help

9   further establish the right-of-way, in

10   essence, tightening up the survey report.

11 Q. So you're working on defining with DOT what

12   it means to have accurate locations defined

13   by a ground survey.

14 A. (Johnson) So that's been completed and will

15   be submitted to the DOT front office on

16   Monday by the Design Bureau on behalf of our

17   project. So, basically the Design Group and

18   Right-of-Way Bureau has agreed to an outline

19   of how to perform the work and then minimum

20   requirements to get there, and now the front

21   office will be approving that or denying it,

22   or asking for enhancements in a meeting next

23   Monday.

24 Q. Correct me if I'm wrong. I thought from your

1   prior testimony this morning the "it" that

2   you were just discussing is a process by

3   which you're going to develop this accurate

4   information. It's not a new survey that's

5   going to be approved on Monday; right?

6 A.   (Johnson) No, that's correct. It's a

7   process, yeah.

8 Q.   All right. And we've talked about that

9   process. That's a six- to eight-week process

10   for you to generate -- if your plan is

11   approved on Monday, it's a six- to eight-week

12   process, starting this past Monday, the 25th,

13   for you to generate that information; right?

14 A.   (Johnson) That's correct.

15 Q.   Now, just to restate that, that's for

16   Northern Pass to generate information for the

17   DOT to then consider subsequent to receipt of

18   the information from Northern Pass; right?

19 A.   (Johnson) Correct.

20 Q.   Do you have any expectation of when you would

21   hear back from Northern Pass -- from DOT on

22   that?

23 A.   (Johnson) I do not.

24 Q.   You have some --

1   A.   (Johnson) I would assume it would be within a

2   couple of weeks. They are aware that this

3   product is going to be delivered to them, and

4   obviously they have to review it and do their

5   own due diligence. But I believe that with

6   the information that we'll be providing this

7   time, it won't be several months for them to

8   review like it happened the last time.

9   Q.   And just to make sure I understand what would

10   be on DOT's plate at that time, so they would

11   be reviewing their conditions of approval,

12   including No. 4 regarding the survey, to see

13   if those conditions have or have not been

14   satisfied.

15   A.   (Johnson) Correct.

16   Q.   And they would be reviewing tens, possibly

17   approaching a hundred exception requests.

18   A.   (Johnson) So the exception request process

19   has been suspended, as was noted earlier,

20   until the results of this survey are complete

21   and incorporated into all of the exception

22   requests.

23   Q.   Thank you. So, six to eight weeks for

24   Northern Pass to submit, forgive me if I call

1   it a guesstimate. It's an educated guess.

2   And DOT would get back to you in about a

3   month. Following that, Northern Pass would

4   then adjust accordingly the exception

5   requests and resubmit those. How long do you

6   think that will take?

7 A.   (Johnson) A fairly quick turnaround. The

8   design drawings are already being worked on.

9   But again, until the finite review of any

10   changes in the survey that may affect the

11   exception, the individual exception request.

12   But within another month.

13 Q.   Okay. And then what's your expectation of

14   when DOT would respond to those exception

15   requests?

16 A.   (Johnson) Again, I'm not going to speak for

17   them, but they've been fairly quick at

18   turning around requests to date that have

19   gone in. So I would guess another month, I

20   would suppose.

21 Q.   I want to look now at the Utility

22   Accommodation Manual. This is Applicant's

23   Exhibit 136. I believe you testified, and

24   that everybody on the panel testified earlier

1   that they're familiar with this manual;

2   correct?

3 A.   (Bowes) Yes.

4   MS. MANZELLI: Let the record

5   reflect that most of the witnesses are

6   nodding up and down.

7 BY MS. MANZELLI:

8 Q.   Now, do you agree that the Utility

9   Accommodation Manual applies only to state or

10   federal roads in New Hampshire?

11 A.   (Johnson) Correct. Or state-maintained

12   roads.

13 Q.   So you agree, saying this another way, that

14   the manual does not apply to

15   municipally-maintained roads.

16 A.   (Bowes) I would say that's correct, yes.

17 Q.   Do you agree that the Subcommittee deciding

18   this case can impose requirements upon

19   Northern Pass that are above and beyond what

20   is required in the Utility Accommodation

21   Manual?

22 A.   (Bowes) It's a legal question, but I believe

23   that's correct.

24 Q.   Are you able to read that text there? I'm

1   not great with the zoom on the ELMO. Can you

2   read the highlighted section, please?

3 A. (Bowes) "Where industry or government codes,

4   orders or laws require utilities to provide a

5   higher degree of protection than provided

6   herein, the higher degree of protection shall

7   prevail."

8 Q. Now, we talked a bit about the Scenic Areas

9   section of the Utility Accommodation Manual.

10   Let me turn to that. Now, having heard this

11   morning's testimony, I understand that

12   currently the Project is underway considering

13   scenic areas and impacts, potential impacts

14   to them, and possibly preparing additional

15   exception requests to avoid those impacts.

16   Did I generally capture what you testified to

17   earlier?

18 A. (Johnson) You did, yes.

19 Q. Okay.

20 A. (Bowes) I would also add that the initial SEC

21   Application also considered the impacts, and

22   specifically Appendix No. 9.

23 Q. Refresh my memory. What is Appendix No. 9?

24 A. (Bowes) It's the Petition for Aerial Road

1   Crossings and Underground Installations in

2   State-Maintained Public Highways.

3   Q. Thank you. And do you -- the document that

4   you're looking at there, does it have a Bates

5   Stamp or an exhibit number on it for the

6   record?

7   A. (Bowes) It's the SEC Application. So I don't

8   know beyond that.

9   MR. IACOPINO: That would be

10   Applicant No. 1. And then what appendix was

11   it, 9?

12   WITNESS BOWES: Appendix No.

13   9, yes.

14   MS. MANZELLI: Thank you.

15 BY MS. MANZELLI:

16 Q. Just looking again at the words here in the

17   UAM, you'd agree that it says that certain

18   lands are acquired or set aside for scenic

19   enhancement and natural beauty; right?

20 A. (Bowes) Yes.

21 Q. And then following that it contains a list

22   which includes scenic strips, scenic byways,

23   overlooks, welcome centers, rest areas,

24   recreation areas, recreation trails, wildlife

1   and water fowl refuges, historic sites,

2   public parks and landscaped areas; correct?

3   A. (Bowes) Yes.

4   Q. So am I correct, then, that the exception

5   requests to date do not address anything

6   except scenic byways from this list?

7   A. (Johnson) So, exception requests that have

8   been filed to date don't address scenic areas

9   at all. They are more pertinent to

10   constraints or areas where the Project has to

11   move into the roadway.

12 Q. And why is it that to date scenic areas have

13   not been addressed in the exception requests?

14 A. (Johnson) Because the exception requests by

15   definition are for putting a road -- or

16   putting a facility into the roadway, which

17   would not affect trees in any way whatsoever

18   because you're under the road. It is as we

19   developed the final design and the alignment

20   in areas that are off of the road that we

21   started to identify areas that may affect

22   trees either in the scenic or non-scenic

23   byways.

24 Q. And when you're talking about -- a lot of

1   your testimony this morning revolved around

2   scenic byways with respect to scenic areas;

3   correct?

4   A.   (Johnson) Correct.

5   Q.   So why are you excluding this rather long

6   list of other types of scenic areas?

7   A.   (Johnson) So, again, we're not necessarily

8   excluding anything. I think what we've

9   identified in the chart that was shown

10   earlier is areas that as the alignment is

11   developed and is off the pavement and

12   shoulder, areas where there could be

13   potential impacts to trees. Not excluding

14   any of these categories.

15   Q.   And just to clarify my understanding, I got

16   confused in your testimony earlier, and I

17   think I get it now. So with respect to

18   scenic areas, your intention is to request an

19   exception so that you can avoid impact to the

20   scenic area as opposed to -- I had thought

21   you were saying, but now I want to confirm

22   this is not what you were saying. You're not

23   contemplating requesting an exception so that

24   you can impair the scenic area.

1 A.   (Johnson) Your former statement is correct,

2   that we're looking to avoid any aesthetic

3   impacts to scenic areas.

4 Q.   And that would be all of the types of scenic

5   areas listed in this Section 7 of the UAM?

6 A.   (Johnson) If there were impacts, that's

7   correct, or potential impacts.

8 Q.   And when you were talking about tree impacts

9   with respect to this type of analysis, you

10   mentioned something about a 4-inch vegetative

11   cutoff. Can you elaborate what you meant by

12   that, please?

13 A.   (Johnson) Sure. So a 4-inch tree in general

14   is a non-mature tree or is still growing. It

15   could be 4 inches or less. So that could be

16   shrubbery on the side of the road. It could

17   be, you know, smaller species of plants. And

18   we would look at those sort of individually.

19   If they were ornamental, obviously that has a

20   different connotation than just sort of

21   shrubs along the side of the road because

22   somebody has clearly planted something or is

23   manicuring something or maintaining it.

24   Effectively what it was is the Project then

1   looked at that and said if we could clear out

2   whatever limits of the small trees versus

3   mature, that's how we looked at it.

4   Q.   So, looking at Applicant's Exhibit 222 from

5   this morning, earlier this morning, where you

6   have your fourth column, this column here,

7   Miles Outside Pavement, Potential Tree

8   Impact, were you counting only trees bigger

9   than four inches?

10 A.   (Johnson) Yes.

11 Q.   Now, earlier you looked -- and if we want to

12   look at the page, I'd be happy to do that.

13   But let me try to speed things along here.

14   Attorney Needleman showed you some of

15   the sections of the UAM setting forth some of

16   the requirements, siting requirements for

17   longitudinal facilities. Do you recall that?

18 A.   (Johnson) I do.

19 Q.   Okay. Are you aware that longitudinal

20   institutions -- installations for energy

21   infrastructure, such as a project like

22   Northern Pass, within the designated energy

23   corridors designated by House Bill 626 will

24   not be required to demonstrate extreme

1   hardship to be able to be located along,

2   within and under major state-owned

3   transportation routes, according to the

4   revised UAM that's in the approval process?

5   MR. NEEDLEMAN: Objection.

6   Relevance.

7   CHAIRMAN HONIGBERG: Ms.

8   Manzelli.

9   MS. MANZELLI: We're talking

10   about the UAM today and the special -- not

11   the special exception request -- the

12   exception requests and what the current

13   requirements are. I'm talking about what

14   future requirements might be to show an

15   increased acceptability of burying within

16   corridors.

17   CHAIRMAN HONIGBERG: These are

18   not current requirements?

19   MS. MANZELLI: That is true.

20   But it's based on current New Hampshire law.

21   CHAIRMAN HONIGBERG: How are

22   not current requirements relevant to the

23   decision we have to make today, not a

24   decision we might make?

1   MS. MANZELLI: Because your

2   decision should be based on current New

3   Hampshire law.

4   CHAIRMAN HONIGBERG: And

5   you're saying that current New Hampshire

6   law -- that the UAM hasn't caught up with

7   current New Hampshire law? Is that what

8   you're saying?

9   MS. MANZELLI: That current

10   New Hampshire law requires the UAM to be

11   revised.

12   CHAIRMAN HONIGBERG: The

13   answer to my question was "Yes." You're

14   saying the UAM has not caught up with New

15   Hampshire law.

16   MS. MANZELLI: Yes.

17   CHAIRMAN HONIGBERG: And what

18   is it you want to know from this witness

19   about current New Hampshire law with which

20   the UAM has not caught up?

21   MS. MANZELLI: If he is aware

22   of it.

23   CHAIRMAN HONIGBERG: You can

24   answer.

1   A.   (Bowes) So I am aware of the new law that has

2   been passed. It was identified as House

3   Bill, I think, 626. To the best of my

4   knowledge, there are no new requirements in

5   the Utility Accommodation Manual that cover

6   this.

7   BY MS. MANZELLI:

8   Q.   To the best of your knowledge, there are no

9   new requirements with respect to installation

10   of longitudinal facilities?

11   A.   (Bowes) Specific to that law, yes.

12   Q.   Okay. Have any exception requests been made

13   with respect to any overhead portion of the

14   Project?

15   A.   (Johnson) No, there is not.

16   Q.   Are there anticipated to be?

17   A.   (Bowes) So I will say that we committed

18   during the last testifying period to multiple

19   changes to the overhead design. We followed

20   that up with a letter in August. And I think

21   almost all of those were accommodated. So

22   there has been some changes. Some of those

23   also pertain to scenic byways and cultural

24   areas. My prefiled testimony from April

1   identified many of those areas where there

2   are trails or other scenic issues. And I

3   think we dispositioned each one of those that

4   the Counsel for the Public had identified

5   beyond our visual consultants.

6 Q. So I apologize. I'm not sure I heard the

7   answer to, Do you anticipate filing any

8   exception requests with respect to the

9   overhead route? I think what you're saying

10   is that you've made changes to the overhead

11   route but that they don't require exceptions

12   because they're, you know, otherwise in

13   keeping with the UAM. Is that accurate?

14 A. (Bowes) That general statement is accurate,

15   yes.

16 Q. Okay. I wanted to clarify another part of

17   earlier testimony. And again we can look at

18   the individual exception requests if you'd

19   like. I'm going to try to move more quickly

20   than that.

21   You discussed with Attorney Pappas the

22   use of the word "additional" in terms of the

23   construction -- or excuse me -- traffic

24   control duration.

1   A.   (Johnson) Okay.

2   Q.   Do you recall that discussion?

3   A.   (Johnson) Yeah.

4   Q.   I'm trying to get a clear understanding when

5   in an exception request you say, you know, an

6   additional two weeks or an additional six

7   weeks. What is that on top of?

8   A.   (Johnson) I don't believe it's on top of

9   anything. I believe it would take two

10   weeks -- or in the statement it describes

11   what it would be if the exception request was

12   granted. It would take, for instance, 16

13   days in the last one we reviewed. And I

14   believe it says if the exception is not

15   granted, it'll take an additional number of

16   days beyond that original request.

17 A.   (Bowes) So that would mean traffic management

18   or traffic controls would be in place for a

19   longer period of time.

20 Q.   Than if the exception requests were granted.

21 A.   (Johnson) That's correct.

22 A.   (Bowes) Yeah.

23 Q.   And again, I'm happy to look at the

24   individual exception requests if you prefer.

1   But let me ask you about the cost estimates.

2   You testified earlier that providing

3   cost comparisons between the exception

4   requests and, you know, whatever would happen

5   in the absence of an exception request is

6   part of the required standard; right?

7   A.   (Johnson) That's correct.

8   Q.   Now, do you agree that some of the exception

9   requests have no information whatsoever about

10   cost?

11   A.   (Johnson) Yes, they do. And for those it

12   would be no increase in cost to the

13   Applicant; it would just be a longer

14   duration. So cost was not a consideration.

15   Q.   Okay. And, for example, Request 41 estimates

16       $2,069,100 increase for the -- you know, if

17   the exception requests were not approved.

18   And for the exception requests that have a

19   cost estimate like that, there's typically a

20   chart towards the end that breaks it down a

21   little bit. How is that chart prepared?

22   A.   (Johnson) The design engineer and constructor

23   prepared those based on cost estimates that

24   they have.

1   Q.   Cost estimates from whom?

2   A.   (Johnson) The constructor and then the design

3   engineer.

4   Q.   Let me -- this is not marked yet, but it will

5   be SPNF 260. And this is just for the

6   purpose of illustrating what these cost

7   charts look like. You see here this is

8   Exception Request No. 41?

9   A.   (Johnson) I do.

10   Q.   If you turn to the fifth page, this is an

11   example of the cost estimate that you and I

12   were just discussing; correct?

13   A.   (Johnson) Correct.

14   Q.   And you note here on Note 2 it says, "Costs

15   based on contractual unit pricing for the

16   Project." What does that mean?

17   A.   (Johnson) So in the contract that the owner

18   has with the constructor, Par Electric, there

19   is an appendix that has unit prices for

20   things that may be encountered in the field

21   or new construction that gets added to the

22   Project due to "scope creep." So the Project

23   is -- the owner has identified specific costs

24   and unit pricing for those costs as part of

1   the contract.

2   Q.   So it's really just a "plug in jug" exercise

3   at this point. There's no, you know, bidding

4   or shopping around associated with the

5   exception request.

6   A.   (Johnson) No, there is not any bidding

7   process. The contract was awarded based on a

8   bidding process originally.

9   Q.   Is it fair to say that Northern Pass is

10   having trouble getting the exceptions

11   approved?

12   A.   (Johnson) No. I'd say that this is actually

13   part of the iterative process of working with

14   the DOT. I've worked with DOTs in other

15   jurisdictions, and this is fairly typical of

16   the give and take and working with the design

17   bureau to ensure a quality product that meets

18   both the owner's and the DOT's requirements

19   are met.

20   Q.   Just a question about notations. In the

21   exception requests where it would say

22   something, for example, Request 1, and in

23   parentheses, REV 2, does that mean that that

24   is the first time that that request has been

1   revised or that is the second time that

2   request has been revised?

3 A. (Johnson) Would be the second time.

4 Q. So then, do you agree that seven of the

5   exceptions have been rejected after the

6   second submittal?

7 A. (Johnson) I'd have to look, but I'll take

8   your word for it.

9 Q. Do you agree that --

10 A. (Johnson) It's possible.

11 Q. I'm sorry?

12 A. (Johnson) It's possible.

13 Q. Do you agree that seven have been rejected

14   after the third submittal?

15 A. (Johnson) Again, I don't know.

16 Q. Do you agree that there's even one that's

17   been rejected after the fourth submittal?

18 A. (Johnson) It's possible. So that kind of

19   rejection could be an iteration, where the

20   DOT has proposed something on their first,

21   we've counterproposed something, and we go

22   back and forth through the design iterations

23   until, again, we're all satisfied that

24   conditions have been met to benefit everyone.

1   Q.   You agree -- I'm looking at the -- let me

2   just put it up for you. Applicant's Exhibit

3   183. This is the May 31, 2017 letter from

4   the DOT, which was the Department's first

5   formal response to the exception requests as

6   you testified earlier; correct?

7   A.   (Johnson) Yup.

8   Q.   You agree that if we flip through the pages

9   there, you'll see comments from the

10   Department of Transportation, such as there

11   are so many existing utilities missing, they

12   can't adequately review the exception

13   request?

14   A.   (Johnson) I believe we looked at that one

15   earlier, yes.

16   Q.   And that DOT noted for you that, quote,

17   "Correct information should be shown on

18   plans," end quote?

19   A.   (Johnson) I'll take your word for it, sure.

20   Q.   You testified earlier that, with respect to

21   Exception Request 59, the use of fluidized

22   aggregate-based coarse material was denied.

23   This is the sort of top layer of the FTB;

24   correct?

1   A.   (Johnson) That's correct.

2   Q.   So what will you do instead?

3   A.   (Johnson) So we'll do like every other

4   construction process. You will lay back down

5   gravel and sand and whatever components are

6   required, compact them to the appropriate

7   level, put the next layer on, compact that to

8   the next level and build up a sub base until

9   ultimately we put asphalt on the road.

10   Q.   And will that require any application

11   amendments or anything like that, or is that

12   what you had originally proposed in the first

13   instance?

14   A.   (Johnson) That's the original proposal.

15   Q.   Again, looking at the DOT -- I apologize.

16   MS. MANZELLI: I had

17   anticipated asking Attorney Needleman to

18   confirm this earlier, but I will ask now.

19   Could you please confirm that

20   the July 7th letter from DOT is also part of

21   Applicant's 183, just for the record? Okay.

22   Yes, it is.

23   BY MS. MANZELLI:

24   Q.   So we're looking at a different part of

1   Applicant's 183, which is the July 7, 2017

2   letter from the Department of Transportation.

3   And you agree that if we were to leaf through

4   that, we would find a statement with respect

5   to Exception Request No. 18 that says the

6   existing NHDOT right-of-way appears from the

7   survey report to be the lowest level of

8   accuracy; right?

9 A. (Johnson) Again, I'll take your word for it.

10 Q. Take a second to look at this page, APP

11   65159. Do you see the highlighted language

12   there? Did I accurately describe that?

13 A. (Johnson) You did.

14 Q. Why would Northern Pass provide information

15   with the lowest level of accuracy?

16 A. (Johnson) Would appear to be an error.

17 Q. Do you agree that if we leafed through some

18   more of these DOT responses and rejections

19   and requests for further information, that

20   DOT had significant concerns about impact to

21   abutters?

22 A. (Johnson) Yes.

23 Q. So is the adverse impact to abutters up and

24   down New Hampshire not worth Northern Pass

1   investing in the highest level of accuracy,

2   or something better than the lowest level of

3   accuracy?

4   A.   (Johnson) So that's exactly the process that

5   we're working through today, that we started

6   to do in the past, and we're doing it to a,

7   in my opinion, a better quality product or a

8   tighter product than was put in before.

9   Clearly there were some errors in this survey

10   report that was put in, and we're striving to

11   correct those and ensure that we have an

12   accurate depiction of what the Project

13   believes is the right-of-way.

14   Q.   So was the error a Project decision to try to

15   get approval with the lowest level of

16   accuracy?

17   A.   (Johnson) No. In this case, I believe it was

18   just mislabeled.

19   MS. MANZELLI: Mr. Chairman, I

20   had asked Counsel for the Public for a favor,

21   to print something for me. Let me just

22   confer.

23   (Pause)

24   BY MS. MANZELLI:

1   Q.   Just a couple follow-up questions from your

2   testimony earlier today.

3   You testified earlier that, with respect

4   to the survey, DOT was looking for more

5   foundational evidence to move away from that

6   "approximate" language. Was the survey

7   submitted before field work was done?

8   A.   (Johnson) No.

9   Q.   Do you have the conference report from the

10   9/19 DOT meeting?

11 A.   (Johnson) Not published yet.

12 Q.   Do you have it?

13 A.   (Johnson) I do not, no. The DOT prepares the

14   conference reports.

15 Q.   Does anyone on the panel have it?

16 A.   (Bowes) I do not.

17 A.   (Johnson) I don't believe it's available yet.

18   They have not published it yet to us.

19 Q.   When you were using your chalk exercise,

20   which has now been marked as Applicant's

21   Exhibit 223, you said something about Section

22   A and, I believe, Section H that

23   characterized those areas as "normal." You

24   said -- I don't have your exact words, but

1   you said something like, and then, you know,

2   when we get away from these obstructions in G

3   and E and C, back to something that's normal,

4   and then you continued your thought. I'm

5   wondering what you meant by "normal"

6   circumstances.

7 A. (Johnson) So that's where there is available

8   space between the edge of the road and the

9   edge of the right-of-way to install the

10   alignment without impacting anything.

11 Q. And do I understand correctly that for the

12   HDD that does not exist?

13 A. (Johnson) So, the HDD, by definition, has to

14   go underneath the roadway as it goes under

15   bridge abutments. So there will always be an

16   exception request for that. The nuance that

17   Mr. Pappas and I discussed earlier were cases

18   where the entry and exit pits have to be in

19   the roadway partially or fully due to

20   right-of-way constraints.

21 Q. Mr. Scott, earlier you testified that you

22   prepared the initial design of the

23   underground design; correct?

24 A. (Scott) Correct.

1 Q. When was that?

2 A. (Scott) I'd have to check the date on the

3   drawings. It's been a while.

4 Q. Can you approximate at all? Certainly it was

5   before October of 2015, which is when the

6   Application was filed; right?

7 A. (Scott) Yeah, I believe it was that summer.

8 Q. So, approximately mid-2015.

9   Is anybody on the panel aware of whether

10   the UAM has changed at all, the approved

11   version of the UAM has changed at all from

12   the time of initial design in approximately

13   2015 through to the present?

14 A. (Johnson) I don't believe it has. The UAM is

15   dated 2010, the one that were designing

16   towards and have has put forth as part of the

17   exhibits.

18 Q. Mr. Bowes, you testified earlier that

19   typically the DOT provides the right-of-way

20   on a project; correct?

21 A. (Bowes) That is correct. In my 30 years of

22   doing projects, the state DOTs provide their

23   rights-of-way.

24 Q. There's a statutory process for DOT to define

1   an unclear right-of-way. Would you like DOT

2   to do that for this project?

3 A. (Bowes) I think they have given us a

4   condition where we will have control of that

5   process and go forward and do that.

6 Q. Mr. Johnson, you testified earlier that, I

7   think your word was "several," but to me it

8   seems like 10s, approaching somewhere between

9   50 and 100 of the exception requests have

10   been withdrawn; right?

11 A. (Johnson) Correct.

12 Q. How would one have known that aside from your

13   testimony today?

14 A. (Johnson) Most likely you wouldn't. We have

15   informed the DOT of which ones that we have

16   withdrawn. The DOT chose to put all of the

17   exception requests onto their web site as, I

18   assume, clarity or as far as the request for

19   information. In effect, we have withdrawn

20   all of them at this point, except --

21 Q. Unless they've been approved.

22 A. -- for the ones that have been approved while

23   we update the information.

24 Q. Ms. Frazier, you testified earlier -- let's

1   see here -- that you had submitted -- I

2   didn't catch the name of the form. But the

3   meaning of the form was a form to help the

4   DOT's determination as to whether a

5   full-blown Traffic Management Plan would be

6   needed, or something short of that; correct?

7   A.   (Frazier) Correct. It's the Traffic Control

8   Committee's determination.

9   Q.   And you testified that you withdrew that

10   request. And then I think it was Mr. Johnson

11   that added that that request has not been

12   resubmitted; is that correct?

13 A.   (Frazier) Correct.

14 Q.   And then you testified that Mrs. Esterberg is

15   acting on that request, even though it hasn't

16   been resubmitted; is that correct?

17 A.   (Johnson) No. So, part of what Ms. Esterberg

18   is doing is getting, if you will, a

19   placeholder for the Project to present at

20   the -- with the Traffic Control Committee, at

21   which time the document that Ms. Frazier is

22   referring to will be presented to them.

23 Q.   Thank you. I have no further questions.

24   CHAIRMAN HONIGBERG: All

1   right. We'll take our lunch break and be

2   back about 1:30.

3   (Lunch recess taken at 12:33 p.m., and

4   this concludes the Day 42 Morning

5   Session ONLY. The hearing continues

6   under separate cover in the transcript

7   noted as Day 42 Afternoon Session

8   ONLY.)

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1   C E R T I F I C A T E

2   I, Susan J. Robidas, a Licensed

3   Shorthand Court Reporter and Notary Public

4   of the State of New Hampshire, do hereby

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21   N.H. LCR No. 44 (RSA 310-A:173)

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