

1 June 11, 2018

2 Victoria, BC

3 **(PROCEEDINGS COMMENCED AT 9:38 A.M.)**

4 THE CHAIR: Good morning. Prior to calling the hearing to
5 order I will ask one of the panel members to
6 swear in the court reporter.

7 Ms. Beedle, will you take care of that,
8 please.

9 **LORI STOCCO, duly affirmed as**
10 **court reporter.**

11 THE CHAIR: This is a hearing pursuant to section 27 of the
12 *College of Applied Biology Act*. We will start
13 with introductions and any preliminary matters.

14 This panel consists of three members of the
15 discipline panel of the College of Applied
16 Biology. I am Brian Nyberg, Chair of the panel
17 for this hearing. I am a Registered Professional
18 Biologist.

19 MS. BEEDLE: I am Bronwen Beedle, and I am the lay member on
20 this panel.

21 MR. STEVENTON: I am Doug Steventon, a Registered
22 Professional Biologist.

23 THE CHAIR: In attendance is the panel's independent legal
24 counsel, Ms. Lisa Fong, assisted by Mr. Will
25 Pollitt.

1 THE CHAIR: Would the parties introduce themselves starting
2 with the College.

3 MR. UNDERHILL: It's Mark Underhill. I appear for the
4 College this morning.

5 MR. HANMAN: Yes, Chair. Ted Hanman, Charles Edward.
6 Mr. Lea is with me.

7 THE CHAIR: Does the court reporter have the names of the
8 panel, legal counsel, and the registrant?

9 THE REPORTER: Yes, I do. Thank you.

10 THE CHAIR: In terms of breaks, we expect to take a one-hour
11 lunch break at about 12:30 P.M. Because of
12 starting later than we anticipated, we may
13 actually break closer to 1:00 o'clock. And we
14 will likely take a short break before then at
15 around 11:00 o'clock perhaps.

16 I would ask that anyone in the room who is
17 not a party and may be called as a witness by the
18 College or by the Respondent to leave the room
19 until called as a witness. You may stay in the
20 hearing after giving testimony. And I take it
21 there are none.

22 Does either party have any other preliminary
23 matters which need to be addressed before the
24 College proceeds with its case?

25 MR. UNDERHILL: Mr. Chair, it's -- again, it's Mr. Underhill

1 for the College. The first matter, and I believe
2 the panel members all have copies, is a Notice of
3 Application from the College dealing with the
4 admissibility of certain evidence. And we
5 respectfully request that application be dealt
6 with first. We think it is an important matter.
7 We have had some discussions with independent
8 counsel about logistics, which I will get into in
9 a moment, but that is, at least in the College's
10 view, the first order of business that should be
11 addressed this morning.

12 MR. HANMAN: There was a panel -- Ted Hanman. So I have just
13 received this morning an amended citation. And
14 the amended citation removes 3(a). One of the
15 matters that is of substantive concern to me, and
16 I raised this previously, that my friend now by
17 way of a letter to me last week indicated that --
18 and the panel counsel had received a letter from
19 me to this effect -- that the statement of points
20 did not articulate any position, zero position,
21 on 3(a), (c), and (d). I responded to that
22 statement of points.

23 Two days later I received a letter, and you
24 will recall in a conference call on the Monday
25 counsel had indicated in response to my request

1 are you withdrawing 3(a), (c), and (d) that he
2 would have a position for me later in the week.

3 Well, the position was set out in a letter
4 to me, which was not forwarded to the panel --
5 and I did not pass it on. I have it in front of
6 me -- which respectfully materially alters the
7 argument that the College now seeks to make
8 because they have no evidence on (c) and (d) as
9 they were framed and don't articulate any
10 evidence in their statement of points that I
11 could respond to and didn't respond to.

12 And certainly for my purposes, we are
13 proceeding on the basis that this citation as
14 articulated in the statement of points does not
15 deal with (c) and (d). It deals with 3(a) --
16 sorry, 3(b).

17 THE CHAIR: So Mr. Hanman, do you have an application, or is
18 this something you are going to raise in closing
19 later?

20 MR. HANMAN: No, my friend has made no application to try to
21 amend. He simply wants to argue that, "Oh, I
22 have got a better argument even though I didn't
23 articulate it in my statement of points," and
24 somehow I am supposed to figure that out.

25 So I am proceeding, and the counsel, the

1 panel, is simply going to have to deal with this
2 matter. I am proceeding on the basis of the
3 points as articulated. You don't get to file a
4 statement of points and then say if you don't
5 like those arguments, I have other arguments.

6 So with regard to (c) and (d) he has given
7 me a letter which I propose to hand up. And you
8 can -- you will see right away what counsel wants
9 to argue. He can argue what he wants. I am
10 simply articulating to the panel my position that
11 this is not a matter that is before you in my
12 respectful submission. That's what the statement
13 of points is for. And it's -- I'm proceeding on
14 that basis. So I don't know what else to do.

15 MS. FONG: So just for clarification, there is an amended
16 citation. Is there a dispute as to whether it
17 was amended properly or not and within the Rules
18 of the College of Applied Biology? Because
19 that's the way I understand it being amended. It
20 removes item 3(a). So this is the citation on
21 which the hearing will proceed.

22 So the panel just wants to know is there a
23 dispute as to whether this was properly amended,
24 yes or no?

25 MR. HANMAN: No.

1 MS. FONG: Okay, thank you.

2 And Mr. Hanman, I understand from your
3 submission you do not currently have an
4 application before the panel. You have made --

5 MR. HANMAN: No.

6 MS. FONG: -- a statement. You may wish to raise your
7 arguments again in closing.

8 MR. HANMAN: I will.

9 MS. FONG: So the only application on the table, so to speak,
10 is the one from the College; is that correct, on
11 the admissibility of evidence?

12 MR. UNDERHILL: That is certainly my understanding. I have
13 received no application. I appreciate my
14 friend's position. Obviously the College
15 disagrees with his characterization of the
16 College's position. We are going to lead the
17 evidence we have indicated we are going to lead.
18 Mr. Page is going to take the stand and give his
19 evidence. And the issues my friend is raising,
20 on which we obviously respectfully disagree, are
21 matters for final argument.

22 MR. HANMAN: So the College -- or, sorry, the panel should
23 have the letter at this point, respectfully, that
24 my friend sent to me as to how he wishes to
25 characterize this matter because that will

1 certainly be part and parcel of the --

2 MS. FONG: Closing submissions; correct?

3 MR. HANMAN: Yes.

4 MR. UNDERHILL: I'm fine with it being handed up now. I say
5 it's -- for me it's a matter for closing, but...

6 MS. FONG: Thank you.

7 THE CHAIR: Are you going to mark this as an exhibit?

8 MR. HANMAN: We haven't got to exhibits yet, but I think it
9 should be marked, yes.

10 MR. UNDERHILL: Well, I don't believe a letter from counsel
11 is appropriately marked as an exhibit. These are
12 matters for legal argument. I have no difficulty
13 with it being before the panel. But it's a
14 matter for later, and I don't think it's evidence
15 that should be marked.

16 MR. HANMAN: Well, the citation is before the panel. This
17 squarely deals with the citation, the amended
18 citation, that I got ten minutes ago, not even
19 that. So we want to get on with this. And so
20 this has got to be read with the citation. This
21 is my friend's articulation of his interpretation
22 of the citation. So the two have got to be read
23 together.

24 THE CHAIR: All right. We are going to ask this be marked as
25 an exhibit just so we can keep track of the

1 documents.

2 MR. UNDERHILL: Might I suggest, then, if you are going to do
3 that, Mr. Chair, that you mark the amended
4 citation as Exhibit 1 and this letter as
5 Exhibit 2.

6 THE CHAIR: That seems appropriate.

7 MS. FONG: Do you have a copy for the court reporter of the
8 amended citation?

9 **EXHIBIT 1: Amended citation in the matter**
10 **of the College of Applied Biology of BC**
11 **and Ted Lea dated the 5th day of June 2018**
12 **EXHIBIT 2: Letter to C. Edward Hanman from**
13 **Mark Underhill dated June 5, 2018, Re: BC**
14 **College of Applied Biologists Discipline**
15 **Hearing - Ted Lea**

16 THE CHAIR: So you have marked both the College's citation
17 and the letter of June 5th?

18 THE REPORTER: Yes, I have.

19 THE COURT: So Mr. Underhill, you may proceed with your
20 application.

21 **[SUBMISSIONS ON APPLICATION FOR THE COLLEGE BY**
22 **MR. UNDERHILL - OMITTED]**

23 **[SUBMISSIONS ON APPLICATION FOR THE COLLEGE BY**
24 **MR. HANMAN - OMITTED]**

25 **[REPLY ON APPLICATION FOR THE COLLEGE BY**

1 **MR. UNDERHILL - OMITTED]**

2 **[REPLY ON APPLICATION FOR THE COLLEGE BY**

3 **MR. HANMAN - OMITTED]**

4 **[QUESTIONS ON APPLICATION FOR THE COLLEGE FROM**

5 **THE PANEL - OMITTED]**

6 THE CHAIR: All right. Thank you. So the hearing will now
7 adjourn for lunch. Before you leave, though, we
8 will go off the record and we wanted to discuss
9 the scheduling of the rest of the day because we
10 had some ideas about that.

11 MR. UNDERHILL: Thank you.

12 **(PROCEEDINGS RECESSED AT 12:39 P.M.)**

13 **(PROCEEDINGS RECOMMENCED AT 3:52 P.M.)**

14 **[RULING ON ADMISSIBILITY - OMITTED]**

15 THE CHAIR: The College may proceed with any opening
16 statement it may have.

17 MR. UNDERHILL: Thank you, Mr. Chair. We do not have an
18 opening statement. Instead what we -- in large
19 part to be frank with the panel, I took you
20 through at some length in the context of the
21 application the nature of the citation, and I
22 think I would only repeat myself if I was to give
23 an opening statement. I think you now have a
24 fair understanding of the nature of the citation
25 and the allegations that are being advanced

1 against Mr. Lea.

2 So with that I propose to, and I will go get
3 him myself, go get Mr. Page, have him sworn in
4 and then mark a series of documents as exhibits.
5 I will explain each one as we go so that we have
6 everything in front of you so we are ready to go
7 with Mr. Page.

8 So I will go summon him now.

9 THE WITNESS: Good afternoon.

10 THE CHAIR: Ms. Beedle, will you swear in Mr. Page.

11 **NICHOLAS PAGE, for the**
12 **College, duly affirmed.**

13 MR. UNDERHILL: Thank you, Mr. Chair. Before I proceed with
14 questioning Mr. Page now, what I will do is have
15 a number of documents marked as exhibits. So
16 first what I am doing is handing up to counsel --
17 let me see how many I have got here -- five
18 copies of the binder containing the College's
19 book of documents and as you will see I will just
20 leave those. Thank you. They, Mr. Chair,
21 contain among other things Mr. Page's two reports
22 as well as the documents or at least some of the
23 documents he relied on or was given in preparing
24 his opinion. So that is the first document and
25 before I go any further why don't we have that

1 binder of College documents marked as the next
2 exhibit, please.

3 MS. FONG: Oh, okay.

4 MR. UNDERHILL: Because you have got a copy; right, Lisa?

5 MS. FONG: Yeah, so we can use that one.

6 MR. UNDERHILL: So this will be the exhibit.

7 MS. FONG: Okay.

8 MR. UNDERHILL: And we will put it in front of Mr. Page.

9 MS. FONG: So we are at --

10 THE REPORTER: Three.

11 MS. FONG: Exhibit 3.

12 **EXHIBIT 3: Black binder containing the**
13 **College's book of documents**

14 MR. UNDERHILL: And Mr. Chair, the next document I'm now
15 handing up and we will have marked, Mr. Hanman
16 and I have spoken, there is no objections to
17 qualification or anything like that, so I am
18 going to hand up Mr. Page's curriculum vitae.
19 And that goes -- when I say there is no
20 objection, that goes both ways, in other words
21 there is no objection to qualifications for
22 Mr. Meidinger either.

23 MS. FONG: Are you asking for that to be marked as the next
24 exhibit?

25 MR. UNDERHILL: Please. Thank you.

1 **EXHIBIT 4: Curriculum vitae of Nicholas**
2 **Page**

3 MR. UNDERHILL: And then the last set of documents are
4 actually from Mr. Lea, but it is a compilation of
5 the Del Meidinger reports. There are three
6 reports contained in this binder, and I would
7 propose to have them collectively marked as the
8 next exhibit, Mr. Chair, because it may be
9 necessary for Mr. Page to refer to them.

10 MS. FONG: That's Exhibit 5?

11 THE REPORTER: That's correct. In front of the witness as
12 well?

13 MR. UNDERHILL: Please. Thank you.

14 **EXHIBIT 5: Compilation of the**
15 **Del Meidinger reports**

16 MR. UNDERHILL: All right. Is the panel ready to proceed?
17 You have got a lot of paper, now even more paper.

18 THE CHAIR: Yes, we are ready.

19 MR. UNDERHILL: Thank you, Mr. Chair.

20 **EXAMINATION IN CHIEF BY MR. UNDERHILL: (Qual)**

21 Q So Mr. Page, could you state your full name for
22 the record, please?

23 A Nicholas Page.

24 Q And Mr. Page, could I ask you to please have your
25 curriculum vitae in front of you which is now

1 marked as Exhibit 4 in this hearing?

2 A M'mm-hmm.

3 Q And I would like it if you could take the panel
4 through your curriculum vitae explaining in
5 particular your education and professional
6 experience in the subject matter of this hearing.

7 A So I have been a registered professional
8 biologist for 15 years and worked ten years prior
9 to that as an environmental consultant. I
10 currently split my professional time between my
11 consulting company Raincoast Applied Ecology and
12 the city of Vancouver where I am the city's lead
13 biologist for biodiversity, urban forestry and
14 related planning work. I have an undergraduate
15 degree in landscape architecture from UBC --

16 MR. HANMAN: Excuse me, excuse me, I'm sorry to interrupt.
17 Witness is reading from --

18 MR. UNDERHILL: Yes, the witness has prepared some notes to
19 help him with his testimony.

20 MR. HANMAN: No, no, no.

21 MR. UNDERHILL: Well, it's very common that witnesses have
22 speaking notes. If Mr. Hanman would like to see
23 them he is absolutely entitled to. Anything the
24 witness brings up to the stand Mr. Hanman is
25 entitled to. And so if he has got concerns

1 about -- this is all as I understand it -- the
2 witness, it just is an aide-memoire to help him
3 walk through his CV which is not in controversy
4 here. If there is a substantive objection we
5 will deal with it and Mr. Hanman is free to look
6 at them before he commences cross-examination.

7 MR. HANMAN: It's unheard of as far as I'm concerned to have
8 a witness reading off a prepared sheet in
9 response to questions. I have never seen it
10 done. And looking at his notes isn't helpful.
11 So, I mean, if it's just his CV, sure, and
12 nothing to object to there. It's just some CV
13 documents. But he doesn't get to -- I'm sorry.
14 He doesn't get to read his testimony off of a
15 document that he has prepared and I haven't seen.

16 THE CHAIR: Would you like to look at Mr. Page's notes and
17 determine whether you want to continue with your
18 objection?

19 MR. HANMAN: Well, maybe the first question is how far does
20 it go? Is it just his CV?

21 THE WITNESS: Would you like me to speak to that?

22 MR. UNDERHILL: Sure, the witness can answer.

23 THE WITNESS: It covers my professional experience and my
24 plant ecology project I was going to highlight.
25 And then it summarizes the three tasks that I was

1 hired by the College of Applied Biology to
2 provide guidance on.

3 MR. HANMAN: Well, my friend can ask questions on all that.
4 He has got the reports. He has got the CV in
5 front of him. He --

6 MR. UNDERHILL: Well, with all due respect to my friend I'm
7 not sure what the objection is. They are
8 uncontroversial matters, this is an aide-memoire,
9 and he is free to see them. I don't understand
10 the nature of the objection.

11 THE CHAIR: Are you objecting?

12 MR. HANMAN: Yes, I am.

13 THE CHAIR: And so you would like a ruling? Okay, we will
14 need to make a ruling on this. So we will
15 adjourn for a few minutes until we do that.

16 **(PROCEEDINGS RECESSED AT 4:07 P.M.)**

17 **(PROCEEDINGS RECOMMENCED AT 4:20 P.M.)**

18 THE CHAIR: The hearing is reconvened. Mr. Hanman has
19 objected to written notes before Mr. Page.
20 Mr. Page advises that the notes set out
21 information about his qualifications and the
22 three tasks he was asked to provide an expert
23 opinion on. Mr. Underhill offered for Mr. Hanman
24 to review these notes. The panel rules that
25 Mr. Page may refer to his notes given that his

1 qualification as an expert is not at issue. And
2 the parties have agreed to tender the expert
3 reports into evidence. The panel will permit
4 Mr. Hanman a brief adjournment to review
5 Mr. Page's notes in private if desired.

6 Would you like that opportunity, Mr. Hanman?

7 MR. HANMAN: I certainly want to look at them, sure. Yes.

8 THE CHAIR: Okay. So then we will adjourn for seven minutes.

9 It's now 4:22. We will reconvene, say, at 4:30.

10 The hearing is adjourned.

11 **(WITNESS STOOD DOWN)**

12 **(PROCEEDINGS RECESSED AT 4:22 P.M.)**

13 **(PROCEEDINGS RECOMMENCED AT 4:27 P.M.)**

14 **NICHOLAS PAGE, for the**

15 **College, recalled**

16 THE CHAIR: The hearing is reconvened. Mr. Underhill, you
17 may proceed.

18 MR. UNDERHILL: Thank you.

19 MR. HANMAN: Well, excuse me, Mr. Chair. Just a moment. I
20 appreciate the chair has made a ruling and I
21 appreciate that I have had an opportunity to read
22 the notes. I stand by my objection that
23 witnesses do not read off their testimony. It
24 may not be a matter of materiality. I
25 appreciate -- I agree that this is simply his

1 background. But this has implications for my
2 witness. So and the extent to which he can have
3 aide-memoires and some notes to refer to
4 documents and so on.

5 So I mean there is nothing in there that's
6 challenging to me; right? Nothing of concern to
7 me. I'm not here to frustrate the panel's
8 deliberations but from the point of view of my
9 witness having even a list of documents is
10 helpful just as an indication, you know, with
11 margin notes which don't mean anything to me,
12 won't mean anything to my friend, but are helpful
13 to him in terms of -- you are starting down a
14 path. So I simply raise that, sir, because I am
15 going to have discussions with my witness tonight
16 about what I can put in front of him. I have
17 been very clear to him that he can't sit there
18 with notes. So I'm -- there is nothing
19 objectionable in that material. I didn't expect
20 there would be.

21 THE CHAIR: Thank you. I understand your point. And we will
22 deal with your witness when you come to him. It
23 doesn't appear that there is a need for a
24 ruling --

25 MR. HANMAN: No, no ruling.

1 THE CHAIR: -- on that at the moment. Yeah. Okay.

2 Go ahead.

3 **EXAMINATION IN CHIEF BY MR. UNDERHILL (Continued): (Qual)**

4 Q Thank you, Mr. Chair. So Mr. Page, we were
5 looking at Exhibit 4 which is your curriculum
6 vitae and you were taking the panel through your
7 curriculum vitae and the qualifications. So if
8 you could continue, please?

9 A I was saying I have an undergraduate degree
10 from -- in landscape architecture from UBC,
11 graduated in 1993, and a masters in environmental
12 studies from UBC, graduated in 2003. My thesis
13 was a plant ecology focused project that
14 classified, that sampled and classified
15 vegetation in sand beaches on the west coast of
16 Vancouver Island and examined patterns of plant
17 species richness --

18 THE REPORTER: Sorry, it's really difficult when you are
19 reading that quickly.

20 A I'm sorry.

21 MR. UNDERHILL: Yeah, if --

22 A I can speak clearer this way. So my master's
23 focused on plant ecology on beaches on the west
24 coast of Vancouver Island where I sampled
25 900 plots across the region and classified

1 vegetation and looked at patterns of plant
2 species richness in those plant communities.

3 My work is quite varied. I work on
4 watershed ecology, I work on water quality, I do
5 urban forestry, urban wildlife. But I also have
6 considerable expertise in plant ecology focused
7 projects partially related to my academic work.
8 And that includes projects such as, looking at my
9 CV here, a sampling project for Metro Vancouver
10 Regional Parks looking at the Widgeon Marsh
11 reserve on the edge of Pitt Lake where I
12 classified and sampled vegetation, a similar
13 project looking at wetland vegetation in the Pitt
14 Polder area which mapped and described ecological
15 communities and surveyed rare plants, similar
16 work for City of Richmond looking at intertidal
17 wetland communities on the outer shore of
18 Richmond, and specifically the conservation
19 values of those plant communities so just to give
20 you some examples of relevant plant
21 ecology-related projects. I'll end there.

22 Q And I wonder if you might tell the panel a little
23 bit about your experience with sensitive
24 ecosystem inventories?

25 A So the Conservation Manual Volume 2 of the

1 original Sensitive Ecosystem Inventory for
2 southeastern Vancouver Island, I was a co-author
3 of that report that focused on describing
4 conservation values of the ecosystems that had
5 been mapped previously in Volume 1, as well as
6 providing management guidance on how those
7 ecosystems could be protected as part of
8 development planning processes. Many of the
9 projects I have just described, Widgeon Slough,
10 Pitt Polder work, the Richmond work, all relate
11 to different components of sensitive ecosystem
12 mapping in terms of that they are describing
13 ecological communities with high conservation
14 values, or that your -- the intent of those
15 projects is to be able to sample, analyze
16 vegetation data to identify which one of them --
17 which ones meet provincial criteria, other
18 criteria for describing sensitive ecosystems.

19 Q At the bottom of page 2 of Exhibit 4, your
20 curriculum vitae, Mr. Page, you have a few items
21 that summarize the work you have done for species
22 at risk. I wonder if you might take the panel
23 through that experience, please?

24 A So most of my experience working on species at
25 risk, and it's fairly extensive, has focused on

1 rare invertebrates in the south coast of BC. So
2 these would be butterflies and moths. But part
3 of that work, so many of those things are
4 inventories or surveys to identify where they are
5 and what their habitat requirements are, to work
6 on recovery planning as well. But rare species,
7 rare butterflies and moths often are very closely
8 associated with rare plant communities so there
9 is a very distinct, very important link to plant
10 ecology in understanding, for example, the host
11 plants or the nectar plants or the other habitat
12 features in those potentially sensitive
13 ecosystems, not always, but potentially sensitive
14 ecosystems that influence the butterfly or moth
15 community.

16 And some of the projects I have worked on
17 have been kind of I would describe almost as the
18 bureaucratic side of species at risk work related
19 to their development of status reports that
20 then -- that are submitted to COSEWIC, the
21 national body that assesses species, as well as
22 the recovery planning process which is either
23 provincial or federal process to identify things
24 like critical habitat or legal definition under
25 the *Species at Risk Act* or more practical means

1 of improving habitat or other conditions for
2 species at risk.

3 MR. UNDERHILL: Thank you. Subject to the -- any questions
4 from the panel I propose to now qualify Mr. Page
5 as an expert. As again I understand there is no
6 objection to this, so I will try to speak as
7 slowly as I can. So what the College asks is
8 that Mr. Page be qualified or accepted as an
9 expert in plant or vegetative ecology qualified
10 to give opinion evidence on the preparation of
11 sensitive ecosystem inventories and specifically
12 to provide opinions on or the assessment of the
13 reports prepared by Mr. Lea which are found at
14 tab 4 of Exhibit 3.

15 And so, Mr. Chair, the last part of that
16 qualification, the eight reports which are the
17 subject matter of the citation, in turn
18 Mr. Page's report are found there and we will be
19 going through those in part as we move on.

20 MR. HANMAN: So I have a comment about this if I might?

21 THE CHAIR: Yes? Go ahead.

22 MR. HANMAN: Sorry. So I agree he has the expertise to give
23 opinions; right? I certainly agree that my
24 friend has -- I tried to write it down as he
25 spoke it to provide plant and vegetation opinion

1 with respect to preparation of Sensitive
2 Ecosystem Inventory. Did I get that right?

3 MR. UNDERHILL: No. So to be clear I'm qualifying Mr. Page
4 as an expert in plant or vegetative ecology which
5 qualifies him then to give opinion evidence about
6 the preparation of sensitive ecosystem
7 inventories and specifically opinions on the
8 preparation of the reports by Mr. Lea which are
9 found in tab 4 of Exhibit 3.

10 MR. HANMAN: And so if I can ask, because with respect I
11 think that the request goes too far in terms of
12 that final step. Essentially it's a
13 self-fulfilling prophecy, that final line about
14 to provide opinions on the report. Certainly he
15 is entitled to provide opinions. If that same
16 language, if we adopt that same language for
17 Mr. Meidinger, possibly there is no harm here; do
18 you understand my point? That basically the
19 definition or the extent to which my friend is
20 asking this witness to be given an authorization
21 or qualified as an expert is essentially if I'm
22 hearing it correctly is ultimately dealing with
23 the question of whether his opinion is right or
24 not. And certainly it cannot go that far. He is
25 entitled to give an opinion on the reports.

1 MR. UNDERHILL: To help my friend I'm not going that far. I
2 apologize if I was confusing. It's simply I was
3 just trying to be very specific. And he is being
4 qualified to give opinions and of course the
5 panel has got to decide whether they accept it or
6 not, on the reports. That's as far as I go. And
7 I would expect -- and I have no objection to
8 Mr. Meidinger being qualified in a similar way.
9 He is entitled to give his opinions on the
10 preparation of these reports and we have agreed
11 to that and that's as far as we go.

12 MR. HANMAN: Well, yeah, Mr. Meidinger's opinions go beyond
13 that of course. But nevertheless, all right, so
14 if that's as far as my friend goes, I don't have
15 a problem with that.

16 THE CHAIR: So Mr. Underhill, will you repeat again for the
17 record a little more slowly this time --

18 MR. UNDERHILL: So the --

19 THE CHAIR: -- exactly what --

20 MR. UNDERHILL: Yeah.

21 THE CHAIR: -- the qualifications are?

22 MR. UNDERHILL: So the expertise just so everyone is clear is
23 in plant or vegetative ecology. All right? So
24 that's the expertise of this witness which in
25 turn then we are saying qualifies him to give the

1 opinion evidence in this matter respecting the
2 preparation, if I can put it more broadly, the
3 preparation of sensitive ecosystem inventories.
4 Maybe that's a simpler way to put it and we don't
5 even have to refer to the specific reports.

6 So I hope that's helpful. But again, the
7 expertise is in plant or vegetative ecology and
8 if you picture that as an umbrella, under that is
9 the specific issue at the heart of this citation
10 and this hearing this week which is the
11 preparation of sensitive ecosystem inventories.

12 THE CHAIR: The panel accepts Mr. Page's qualifications.

13 Thank you.

14 MR. UNDERHILL: Thank you.

15 MR. HANMAN: So I -- we're okay with that. Sorry, I didn't
16 hear the...

17 THE CHAIR: So I said the panel accepts Mr. Page's
18 qualifications. Yes.

19 **EXAMINATION IN CHIEF BY MR. UNDERHILL:**

20 Q Mr. Page, could I ask you just quickly to turn up
21 tab 1 of Exhibit 3 which is the documents of the
22 College of Applied Biology of British Columbia.
23 And you should find there a report dated
24 October 16th, 2017?

25 A Yes.

1 Q And can you confirm for the panel, please, that
2 you are the author of this report which we find
3 here at tab 1?

4 A Yes, the sole author, yes.

5 Q And before we go into that report, I want to ask
6 you this question: And that is -- it's two
7 related questions I suppose. First, that you
8 understand that you are here today to give
9 evidence as an independent expert to assist the
10 panel and not as an advocate for the College. Do
11 you understand that?

12 A Yes, I do.

13 Q And did you prepare this report at tab 1 of
14 Exhibit 3 in conformity with that same duty?

15 A Yes.

16 Q And while we are at it just so I don't forget to
17 do it did you also prepare the report found at
18 tab 9 of Exhibit 3 in conformity with that same
19 duty?

20 A Yes.

21 Q Could I then ask you to go to tab 2 in Exhibit 3,
22 please. And can you confirm for me, sir, that
23 these are the instructions, the written
24 instructions you received in respect of the
25 preparation of the report which is found at tab 1

1 of Exhibit 3?

2 A Yes, I received these by email in late
3 September 2017.

4 Q And could you then just take the panel through
5 this document and explain how you under- -- what
6 you understood your instructions to be in the
7 preparation of the report at tab 1.

8 A In these instructions are labelled File 1 and
9 File 2. I interpret these as two main tasks.
10 The first task was to review what the
11 professional standards of practice and due
12 diligence around assessment of sensitive
13 ecosystems by a Registered Professional
14 Biologist, was there a provincial or municipal
15 standard, was there a working standard used by
16 professionals in the biological community that
17 would guide what was expected of a professional
18 to undertake. And in that -- those tasks there
19 is (a), (b), and (c). What provincial standards
20 would be normally used to assess sensitive
21 ecosystems, what would be the typical data
22 collection procedures as well as analysis and
23 mapping. And what would be the typical reporting
24 procedures.

25 The second task was to review example

1 submission reports by Mr. Lea, a Registered
2 Professional Biologist, and I think initially it
3 was the number of reports was undefined and it --
4 as we moved forward it was the eight that are in
5 tab 4 of this binder that I have reviewed.

6 Q Thank you. Now, Mr. Page, you said you received
7 what is described here as File 1 and File 2.
8 Could you first confirm for me that what is at
9 tab 3 of Exhibit 3 is essentially File 1 that's
10 referred to at tab 2?

11 A Yes. I confirm that.

12 Q And could you explain to the panel, please, what
13 this document is?

14 THE CHAIR: And just for clarity, this is tab 3?

15 MR. UNDERHILL:

16 Q I'm sorry, we're at -- yes, we are at tab 3, it
17 should be, Mr. Chair, "Guidelines for Verifying
18 and Defining Boundaries of Sensitive Ecosystem
19 Inventory Polygons in the Environmental
20 Development Permit Area (29)".

21 A So this is guidance from the District of Saanich
22 Planning and Environmental Services Department or
23 I guess the Environmental Services Department
24 within the Planning Department that provides
25 guidance to landowners and/or their consultants

1 on how to verify and define boundaries of
2 sensitive ecosystem polygons.

3 These polygons have been incorporated into
4 the Environmental Development Permit Area, EDPA
5 it's referred to as by District of Saanich. And
6 I think the key point is in paragraph 3 where it
7 says:

8 "It is recognized that the inventory is
9 incomplete and accuracy can be improved in
10 some locations and this guidance is how to
11 undertake that work."

12 And it defines what reference documents
13 biologists in particular, because it does state
14 that the work has to be undertaken by a
15 professional, that the documents it refers to
16 are, one, a provincial standard called the
17 "Standard For Mapping Ecosystems at Risk in
18 British Columbia."

19 And within that, so that's listed as point 1
20 in this document from Saanich, and it describes
21 six bulleted points that have been extracted from
22 the "Standard For Mapping Ecosystems at Risk in
23 British Columbia" document.

24 The first being to compile existing
25 information such as records from the BC

1 Conservation Data Centre.

2 The second, to interpret air photos or other
3 imagery -- people really don't use air photos
4 anymore, we use orthophoto imagery -- provides
5 field sampling information including the forms
6 that should be used including what's called a
7 Site Visit Form, a method of collecting data, and
8 a Conservation Evaluation Form which looks at
9 condition and context and disturbance, the
10 identification of ecosystem types based on the
11 field sampling undertaken, and evaluate each
12 ecological community for ecological sensitivity.

13 And the last bullet on the second page is
14 "Reporting," and that is a section, reporting is
15 defined with a fairly lengthy list of
16 requirements in again the "Standard For Mapping
17 Ecosystems at Risk in British Columbia," the
18 provincial document.

19 The other documents it references, one is a
20 field manual for describing terrestrial
21 ecosystems, which is a fairly rigorous detailed
22 document on everything from vegetation sampling
23 to soil pits, that's been used for a long time
24 primarily through the forestry side but not
25 exclusively. And then, third document, the

1 Sensitive Ecosystem Inventory Volume 2, which in
2 turn is the conservation manual. And I spoke of
3 that earlier I was involved in the writing of
4 that, and it provides -- it's a more generic
5 guidance than the previous two documents I have
6 referenced.

7 Saanich's guidelines also provide what they
8 call a secondary assessment which is really to
9 look at the level of disturbance and urbanization
10 and some other factors that influence the
11 condition and value of those sensitive
12 ecosystems. And specifically it's referring to
13 the third page in this, in these guidelines,
14 titled "Conservation Value Assessment," and
15 divided into three components, landscape context,
16 condition, and restoration potential. And it
17 specifically says:

18 "The biologist must consider and report on
19 the criteria --"

20 Which I have just described in this.

21 "-- which have been adapted from the
22 Conservation Data Centre's Conservation
23 Evaluation Form."

24 The last relevant section is a reporting section,
25 that,

1 "A report must be submitted to the manager
2 of environmental services and the report
3 should include completed forms, field
4 notes, a sketch map if any changes are
5 proposed."

6 And I'm inferring changes to the boundary of the
7 sensitive ecosystem.

8 "The final recommendation of the biologist
9 should be based on the methodology plus
10 other ecological factors."

11 And any proposed -- the last sentence is:

12 "Please note that Saanich council has
13 adopted the EDPA atlas and any proposed
14 changes must be scientifically supportable
15 yet sensitive to the context of urban
16 ecology and community guides."

17 The other -- I will just refer just to the last
18 two and a half pages of this, of the guidelines,
19 which are really just an extraction of sensitive
20 ecosystem descriptions that have been used in
21 Saanich. And these go back to the original work
22 on southeastern Vancouver Island. So these are
23 the six key sets of ecosystems: Coastal bluff,
24 sparsely vegetated communities, terrestrial
25 herbaceous communities, which are now called just

1 herbaceous, wetland, riparian, woodland, and old
2 forest or older forest. And the reason I bring
3 them up is I think it's relevant to the
4 discussions of this hearing that you understand
5 just some of the basics of what these sensitive
6 ecosystems that have been mapped are.

7 Q Thank you, Mr. Page. And then could I ask you to
8 turn over to tab 4 and just take a moment to
9 confirm for the panel that these are the eight
10 reports authored by Mr. Lea that you reviewed for
11 the purposes of your first report at tab 1?

12 A Yes, these are the reports that I was provided as
13 part of the review.

14 Q So then could I ask you to go back to tab 1 and
15 your first report. And I'm going to ask you to
16 take the panel through this report. And
17 beginning with the background section on page 1
18 on sensitive ecosystem inventories. I appreciate
19 you have spoken a little bit about the panel --
20 to the panel about this in the context of Saanich
21 guidelines but if you could, perhaps if there is
22 anything to add from this section for the panel's
23 benefit you can do so now?

24 A A little historical context is probably useful to
25 understand sensitive ecosystem inventories, they

1 were originally, or the original project was
2 developed for southeastern Vancouver Island
3 including the area where I'm working now, the CRD
4 and Victoria area, by a number of both Ministry
5 of Environment and Ministry of Forest personnel
6 in provincial government who recognized that the
7 science around designation of ecological
8 communities and ecological communities at risk
9 really wasn't being translated into a more
10 practical tool that particularly municipal
11 governments, which was at that time in the '90s
12 were increasingly recognized as being important
13 managers of environmental values and those atlas
14 of riparian values and stream protection and land
15 development guidelines.

16 And think of the era of change as many of
17 the responsibilities that had historically been
18 within the federal and provincial governments
19 again were being translated to local government
20 or municipal government. And sensitive ecosystem
21 inventories was again seen as a very practical
22 tool that made the value of these ecosystems both
23 more understandable to the public, to
24 practitioners, to landowners and to politicians.
25 And so things like, you know, if you talk about

1 bogs and fens, but if you just call them a
2 wetland or if you call them an older forest that
3 was a much more easily grasped kind of piece of
4 land that could be incorporated into again
5 municipal protection tools and things like that.

6 So sensitive ecosystem inventories are
7 generally used for two purposes. They are used
8 for landscape level assessments to look at the
9 regional scale to look at, you know, what is
10 left. These are remnant ecosystems, often a very
11 small percent of the land base, so where are they
12 distributed across that land base, how are they
13 connected to one other, are they perhaps a part
14 of the existing park system which makes it much
15 easier to manage them. And so that could be used
16 for things like park acquisition or planning of
17 wildlife corridors, and things that have -- may
18 be crossing municipal boundaries for example. So
19 these are sort of plans of ecology principals
20 applied to a regional or even larger scale.

21 Secondly they were used by or in some cases
22 used by municipal governments to guide
23 development planning to incorporate into
24 development permit areas. And that was one of
25 the recommendations in the Conservation Manual

1 Volume 2 of the SEI work, was to look at how
2 municipal governments could use bylaws or other
3 legal tools to protect sensitive ecosystems,
4 because in most cases the loss in the
5 southeastern Vancouver Island region is related
6 to urbanization, is related to growth of cities
7 and highways and activities around it, and in
8 some cases agriculture and forestry as well. So
9 that's a little background for context.

10 Q Thank you. Unless you have anything else to add
11 I wonder if you could take the panel through the
12 next section of your report on page 2 which is
13 entitled "How Are SEI Polygons Assessed?"

14 A So this section on assessing them is basically
15 the step after they are mapped. So typically you
16 would have something like an inventory completed
17 for southeastern Vancouver Island, and I should
18 say that this methodology for SEI assistance is
19 now probably in the range of 15 or more areas
20 across British Columbia, so Howe Sound, Gambier,
21 Bowen, Metro Vancouver's Sensitive Ecosystem
22 Inventory was completed last year or the year
23 before. There is a number of projects across and
24 in some cases refinements of the original work
25 because of it becoming a little bit dated.

1 THE CHAIR: Can you make sure you speak up and try to speak
2 as slowly as possible and a little louder. That
3 would help us all.

4 A Okay. Sure.

5 The approach recommended by the BC Ministry
6 of Environment to evaluate specific polygons that
7 have already been mapped as part of a sensitive
8 ecosystem is to use the volume described as the
9 "Standard For Mapping Ecosystems at Risk in
10 British Columbia," a provincial document. So
11 this is a rigorous process which entails field
12 assessment, data management of existing map
13 polygons, looking at their vegetation and
14 environmental attributes, and following fairly
15 structured field sampling procedure that includes
16 what are described as full plots, ground
17 inspection plots, and field checks or visual
18 checks.

19 And so these are of different levels of I
20 will call them rigor or in terms of the amount of
21 data that's collected, full plots obviously being
22 the most. There is more data on for example
23 soils and things like that. Ground inspection is
24 a little bit less but using that generally the
25 same data collection as full plots.

1 And then visual checks are really just in a
2 way kind of a drive-by. And they are used in the
3 context of if you have looked at five other
4 woodland polygons and sensitive ecosystem
5 polygons and done detailed plots in those, maybe
6 the sixth and the seventh only need a visual
7 check to basically confirm that what you are
8 seeing there is what you have already sampled
9 elsewhere. So they are used in the context of
10 that you are sampling in a hierarchy of sort of
11 data collection methods, and those data
12 collection methods work together to inform your
13 overall, the quality of your overall data.

14 I also state that there is what I call the
15 secondary approach but is probably more described
16 as the sort of a more flexible approach to
17 sampling sensitive ecosystem polygons that really
18 recognizes that the provincial standard is quite
19 rigorous and difficult for perhaps a landowner or
20 a stewardship group that has limited resources,
21 funding, and staff to undertake the level of
22 sampling that the provincial standard for mapping
23 ecosystems at risk requires.

24 And so there is other approaches that do use
25 the same general approach to collecting field

1 data using plots, looking at a range of
2 conditions either within a specific polygon,
3 perhaps that's your focus, maybe you are a
4 municipal park department that has one park with
5 a particularly important wetland in it, for
6 example, that you want to refine and look at
7 maybe some of the ecological communities embedded
8 within that sensitive ecosystem polygon. And so
9 you can use a modified approach to collect some
10 additional data.

11 And I think it reflects again that there is,
12 there is a variety of methods that vegetation or
13 plant ecologists can use to collect useful and
14 rigorous data from these type of communities.

15 MR. UNDERHILL:

16 Q Thank you, Mr. Page. I wonder if you then might
17 turn to the next section of your report at the
18 bottom of page 2 with the heading "What is
19 Typical Practice for Assessing SEI Polygons?"

20 A So this builds on what I was just describing, and
21 I state that I do not consider the provincial
22 standard to define typical practice. And I say
23 that because I feel that the time and resources
24 to implement that standard are beyond the means
25 of not just landowners and perhaps stewardship

1 groups, but in some cases municipal governments
2 that are, you know, don't have enough resources
3 to, for example, hire a consultant to do that.

4 And then a provincial standard is often used
5 by contracts for the provincial government where
6 it is a requirement to meet that level of data
7 collection.

8 On the next page, page 3 of 5, I state that
9 even though there is a lack of a defined typical
10 practice there are a number of attributes that I
11 said are important or I should say perhaps
12 essential to assessment of an SEI polygon. And I
13 will go through them. There are five of them.

14 One is to review the overall extent of the
15 polygon. So you can't just look at one corner of
16 it. You need to look at its -- the variability
17 in conditions across it, you need to look at its
18 landscape context. The conservation value of
19 that polygon is not in isolation of, you know,
20 again one parcel of it or one property. It's
21 really what goes on in that full polygon and
22 outside of that polygon as well. How is it
23 connected to adjacent polygons, what are the edge
24 conditions, you know, there is a landscape
25 context that's a really important part to

1 understanding sensitive ecosystems. And I said
2 that SEIs, Sensitive Ecosystem Inventories, are
3 spatial so polygons should be viewed in that
4 context of size, configuration, and connectivity.

5 Second point says that a field assessment
6 must include an adequate number of plots,
7 vegetation plots, to characterize vegetation and
8 environmental attributes. Vegetation plots are
9 really a fundamental part of vegetation ecology.
10 This is how we collect the data that we then use
11 for analysis, for perhaps monitoring a change
12 over time, to ascribe values, to look at perhaps
13 the invasive species component of a non-native
14 component that might be something as part of
15 restoration planning. There is a variety of
16 reasons why we -- or what we would use this plot
17 data for, but it's really the quantitative
18 information, it's the number of species.

19 So a plot -- to describe a plot, what it is
20 is a point in space, typically of a certain
21 square metres, perhaps the size of this square
22 tables, or the size of the room. It does vary.
23 Could be as small as a metre square. And the
24 biologist inventories the number of species found
25 within the confines of that plot and typically

1 their abundance.

2 And abundance is often measured as
3 percentage cover, how much area, you know, this
4 one species occupied 50 percent of the plot and
5 then another species 20 percent, and you use that
6 to quantify the abundance of the different
7 species found in there. So in the end you get a
8 table, it has a list of species, and then some
9 measure of abundance. You could even count the
10 number of plants, for example, not a typical way
11 of doing it.

12 And that field assessment, you know,
13 defines -- it usually follows a defined method,
14 and the defined method could be defined by a
15 provincial standard or it could be defined within
16 the consultant's own report. It could say I did
17 2-metre-by-2-metre plots, you know, the time of
18 year I did them, and how I estimated the
19 vegetation or measured the vegetation within
20 them. So that becomes a repeatable method. And
21 that's a really important part as well, because
22 often you are looking at change over time or
23 someone else is using that data later so they
24 need to know how you obtained that data and how
25 they could repeat that. That's to be consistent

1 over time is very important.

2 Vegetation plots as I said are defined in
3 space. So you typically need a locational
4 information, most often with a GPS these days,
5 use your phone. You could mark it on an air
6 photo, print off a Google map from your computer
7 and mark it on that as well. But that defines
8 the location and time.

9 And also you would typically take photos of
10 the plot itself or at least representative
11 plots -- photos of the vegetation conditions in
12 that plot to supplement the information you have
13 collected. And in fact it's most often useful
14 when you are doing analysis and you are looking
15 at all this plot data and you need to kind of
16 reacquaint yourself with some of the visual
17 aspects of what you have seen.

18 The third point is that that plot stays --
19 field assessment must be undertaken during an
20 appropriate season to identify common and rare
21 plants. You can't go out in December and expect
22 to see the same diversity of wildflowers, for
23 example, that you would find in a Garry oak
24 woodland at this time of year or even earlier in
25 the season.

1 So I commented that generally the best time
2 for field assessments is late May to late July.
3 This is generally too late for some of our drier
4 communities, Garry oak woodland or grassland now
5 it's typically dried out, we had a very dry May.
6 So you would typically move that sampling window
7 into perhaps April or early May depending on the
8 floristics of the -- and how those plant
9 communities develop during the season.

10 The -- for SEI polygons as I commented
11 earlier, and in the Saanich's guidelines, that
12 these were fairly coarsely mapped when they were
13 first done. These were done by air photos that
14 were available during the 1990s. We have much
15 better imagery now. And basically those
16 boundaries need to be reviewed to make sure they
17 are not either, you know, that they are right, in
18 the right place.

19 You know, so there was -- it was also
20 different consultants or provincial staff did
21 some of the -- that initial mapping which gives
22 some, just some variation in the interpretation.
23 So the biologists, one of the biologists' jobs is
24 to confirm that boundary. And, you know, it
25 might move 20 metres out and capture a little

1 Garry, a piece of Garry oak woodland that was
2 missed in the original air photo work or on the
3 other hand it might contract because, you know,
4 there has been perhaps development since the time
5 it was mapped or vegetation change that no longer
6 includes it as a sensitive ecosystem. So it
7 needs, I said, review verification and sometimes
8 correction. And you typically use a GPS these
9 days as a technical aid, so take that boundary
10 data and translate it into something you can map
11 in the office.

12 Probably the first step, though I have
13 listed it last, is to look at additional
14 background information on what species or
15 ecological communities or other values may be
16 associated with that polygon. You know, they may
17 include rare species records or rare occurrence
18 records from the BC Conservation Data Centre.
19 There may be government inventories that have
20 done work. Surprising how many reports by
21 consultants or students or conservation groups
22 can inform decision making in at least some of
23 the sensitive ecosystem polygons that are in this
24 region.

25 So that's a -- it's very -- in some cases

1 essential data to look at particularly endangered
2 species or species at risk because again that's
3 one of the reasons we are identifying these
4 sensitive ecosystems is because they support
5 these species that are now mapped or defined
6 either federally or provincially as species at
7 risk.

8 Another source of information that I didn't
9 list here is historical air photos that can give
10 some context as to the trajectory of these
11 ecosystems or these specific polygons in terms of
12 things like tree encroachment or tree loss. I
13 will leave it at that.

14 Q Right. Mr. Page, I wonder if then you could then
15 take the panel through the next section entitled:
16 "Typical Reporting."

17 A So almost always a consultant is being hired by
18 again a provincial agency, a municipal
19 government, a landowner, or a conservation
20 organization to conduct some piece of work maybe
21 an assessment, maybe a restoration plan, but the
22 product, the reporting is a really critical part.
23 That's the final product that you are providing
24 that will tell people what you did, how you did
25 it and what you found.

1 And so for a typical product for a sensitive
2 ecosystem assessment would be if it was just a
3 localized project would be something maybe like a
4 letter report or if it's a larger project for a
5 municipal government looking at multiple polygons
6 or a larger area it might be a memo or a larger
7 report. But it defines the, typically the
8 purpose of the project, the site and some of the
9 environmental attributes, the site description I
10 called it, and then a concise -- sorry it's not
11 so concise -- summary of the assessment methods,
12 including what standards were used and the
13 results.

14 So this methods and results pairing is
15 really important I think because of methods is
16 again going out and telling people exactly what
17 you did, when you were on site, how you measured
18 things, the size of your plots, that you recorded
19 photos and locational information, you know, you,
20 maybe you brought in an outside consultant to
21 assist in bryophyte identification or difficult
22 grasses, you know, how was the team assembled to
23 do this work.

24 Those are all methods to tell people exactly
25 what you did and how you did it. And that's --

1 both supports the credibility and foundation of
2 your conclusions on the overall project, but it
3 also allows anyone else reading that to
4 understand and potentially repeat that work in
5 another, at another time. And I think that's
6 quite an important part of vegetation ecology is
7 that ability.

8 And the results are, you know, what did you
9 find? What -- what analysis of that data did you
10 do? What comparisons perhaps did you do to
11 provincial and ecological communities or their
12 findings? And so in case of the sensitive
13 ecosystems did you, you know, did you agree,
14 disagree, or recommend modification of both
15 perhaps the classification and the mapping of
16 that polygon?

17 And often we provide appendices which have
18 that plot-based information I described earlier,
19 perhaps summarized data or analyzed data, the
20 representative photos, and the mapping as
21 supporting products that are packaged up with the
22 overall report. Most often you are not -- people
23 aren't reading those pieces, but they support the
24 overall, again, the credibility and the
25 foundation of the overall report.

1 Q Thank you. Now, the next section of your report
2 which begins at the bottom of page 3, Mr. Page,
3 is your review of the letter reports from Mr. Lea
4 to the District of Saanich. Once again, for your
5 benefit and the panel's benefit they are found at
6 tab 4. So I wonder if you might take the panel
7 through that section of your report and where
8 possible take the panel into the reports at tab 4
9 if you are able to do so in the context of the
10 specific points you want to make.

11 A As I said earlier, I reviewed eight reports dated
12 July 4th, 2016, that were submitted by Mr. Lea to
13 District of Saanich. And each of them is
14 entitled "Field Verification and Assessment of
15 Terrestrial Herbaceous Sensitive Ecosystems, ESA
16 Mapping." And then the eight have obviously
17 different property descriptions. But they are --
18 so 2766 Seaview Road, 2810 Seaview Road,
19 2785 Seaview Road, 2810 Tudor Avenue, 2811 Tudor
20 Avenue, 2821 Tudor Avenue, 2825 Tudor Avenue, and
21 2831 Tudor Avenue are the eight addresses of the
22 properties that are included in these reports.

23 And without getting into the sort of the
24 details, but each of these properties included a
25 portion smaller or larger that backed onto an

1 area that had been mapped as terrestrial
2 herbaceous by the original Sensitive Ecosystems
3 Inventory for eastern Vancouver Island and then
4 had been incorporated into Saanich's
5 Environmental DPA when that was passed as a new
6 bylaw.

7 So the contents of the rep- -- each of the
8 eight reports is similar, they are all, I think
9 all three pages or close to that in a similar
10 size. Each is similar both in purpose,
11 structure, and content. And I will go through
12 some of the points I have made under the
13 subsection of my report called "Report Contents."
14 And there is seven numbers and unfortunately I
15 will probably read a little bit here to be
16 specific.

17 So the stated purpose of each report is to
18 assess:

19 "Whether there is an occurrence of a
20 terrestrial herbaceous sensitive ecosystem
21 on the subject property."

22 Each report states that the site and map unit was
23 visited in late May and early June 2016 though
24 it's not, you know, there wasn't specific dates
25 within that range. Each report uses similar text

1 to describe the general topography and vegetation
2 within the portion of the polygon that is within
3 the subject property. And they include what I
4 call just general descriptions such as the map
5 unit has sparse cover of Garry oak or most of the
6 unit is dominated by invasive species and has few
7 remaining native species.

8 In the reports I reviewed, no, there was no
9 plot data, photographs, maps or sketches, data
10 appendices or other supporting information either
11 within the body of the report or included as
12 appendices.

13 Each report states:

14 "This property does not support a
15 sensitive ecosystem following the
16 provincial "Standard For Mapping Sensitive
17 Ecosystems at Risk in British Columbia,"
18 nor in accordance with the sensitive
19 ecosystems standard for Vancouver Island."

20 Each report goes on to say that:

21 "The subject property does not meet the
22 definition of an Environmentally
23 Significant Area, ESA, for the following
24 reasons: The property is dominated by
25 invasive species. There are few native

1 species. There is no sensitive ecosystem,
2 ESA, in a relatively natural state on this
3 property. The property does not support
4 an ecological community that can be
5 considered provincially at risk by the BC
6 Conservation Data Centre. This occurrence
7 does not have sufficient ecological
8 integrity to be sustained in the
9 foreseeable future due to the predominance
10 of alien invasive species."

11 Each letter concludes with the following
12 statements:

13 "Following these standards and guidelines
14 it is my professional opinion that there
15 is no terrestrial herbaceous sensitive
16 ecosystem on the property."

17 And the second statement is:

18 "The ESA and subsequent EDPA designation
19 should be removed from this property for
20 the terrestrial herbaceous SEI polygon."

21 Q And then, Mr. Page, if you could turn now to the
22 conclusion section of the report found on page 5
23 and take the panel through that, please?

24 A So based on the review -- my two tasks, my
25 initial review of the standards, whether they be

1 provincial or municipal standards or typical
2 practice, I state in my conclusion that:

3 "I do not consider the assessment methods
4 described in the eight letter reports by
5 Mr. Lea to meet the professional standard
6 for assessing SEI polygons. The methods
7 and reporting were inadequate to support
8 the conclusions that these properties do
9 not support sensitive ecosystems."

10 I -- the second paragraph restates that:

11 "There isn't a defined typical practice
12 for assessing SEI polygons because of
13 different goals, project scales and
14 resources that are available for different
15 projects."

16 Specifically the provincial standard is not what
17 I consider a typical standard because in my
18 experience it is just not applied consistently
19 particularly in private sector projects and that
20 there are other suitable -- there is flexibility
21 for, to incorporate other methods of
22 characterizing sensitive ecosystems that depart
23 from provincial standards. There is flexibility
24 for the professional to interpret.

25 But a key part of this conclusion is that

1 even if there is this inherent flexibility in
2 terms of how sensitive ecosystems can be
3 assessed, that there are core, I call them
4 components, you could call them criteria, they
5 are sort of essential pieces that need to be
6 completed when you are assessing sensitive
7 ecosystems.

8 The first being that you undertake
9 plot-based vegetation surveys using defined and
10 repeatable methods at an appropriate time of
11 year. And that will -- can vary. It's not
12 saying you have to do a specific type of plot,
13 perhaps you do transects, meaning plots along a
14 line, to capture a topographic sequence for
15 example. But you are defining them and
16 explaining in your methods section how they are
17 undertaken, and that allows them to be repeated
18 and again supports the credibility and the
19 foundation for others to use your report.

20 The second piece is that you are undertaking
21 some form of mapping as part of your assessment.
22 And that mapping could be, you know, if you look
23 at the old provincial guidelines it talks about
24 putting a pin prick through your air photo, prior
25 to all our digital resources, to indicate where

1 you did that plot. But typically you would use
2 your phone or a GPS to do some digital mapping
3 but includes where the boundaries of that SEI
4 polygon that you reviewed, where the plots that
5 you measured in the field, and what other
6 characteristics that are relevant to
7 understanding both the ecology and the values of
8 that polygon.

9 And so that could be where you have a
10 prominent rock knoll that has a different
11 vegetation community perhaps to your mapping that
12 has a distinct subunit in your polygon, for
13 example. And perhaps that also might be tied to
14 your plot-based sampling. It may be where you
15 have large remnant Garry oak trees. I'm speaking
16 of examples that are more relevant to the CRD
17 Victoria area.

18 The third essential component is information
19 from the BC Conservation Data Centre, or other
20 sources such as previous assessments, consultant
21 reports, that described important features such
22 as the occurrence of rare species or ecological
23 communities. So, you know, is there a record,
24 and in, you know, in many cases it might not be
25 immediately in your polygon, it might be the next

1 one over.

2 But no one -- species at risk are
3 interesting in that data is always imperfect in
4 terms of where they are found and what their
5 population is. So you need to kind of -- that's
6 part of the context assessment of these polygons
7 where you want to understand that across the road
8 or a mile away on a, perhaps a similar habitat, a
9 species at risk has been recorded and that needs
10 to be documented in your assessment process.

11 In some cases it's the documentations of the
12 absence of information, that all you need to say
13 is I reviewed BC Conservation Data Centre records
14 for species at risk occurrences and found none.
15 And you can, you know, if you go on their
16 website, for example, they have a mapping app
17 that helps you with that, and they even provide
18 the citation that you can use to define how or
19 when you collected either again, either the data
20 or the absence of data.

21 And the fourth component again that I state
22 is essential, is data management and reporting
23 that documents the assessment methods and results
24 and provides adequate data and supporting
25 information to support your conclusions. So this

1 is -- I have already talked about methods and
2 results, but that supporting information can
3 range depending on the scale of your project,
4 what you found in terms of perhaps the species at
5 risk. It might be a sort of a sub report or a
6 secondary report that talks about, you know, a
7 search for a rare species that was undertaken by
8 a more specialized consultant that's then
9 provided as that supporting piece. So it can
10 vary quite a bit what you need to provide but you
11 need especially that core piece that describes
12 your methods and results.

13 I conclude my letter by saying:

14 "None of the eight letter reports from
15 Mr. Lea to the District of Saanich that I
16 reviewed meet these criteria that I
17 defined."

18 These four criteria that I have defined.

19 Q Okay, Mr. Page, I wonder if you might tell the
20 panel a little bit more about how you arrived at
21 these four components or criteria, where they
22 come from, how you concluded these were, as you
23 say, essential.

24 A Yeah, so I started obviously with those
25 provincial standards and they inform some of

1 this. If you look at the provincial document on
2 mapping sensitive ecosystems it has quite a bit
3 of information on -- fairly detailed information
4 on what report requirements are required.
5 Saanich's guidelines refer to them but also
6 provide some guidance as well.

7 But where these come from is it's much
8 broader than that. I wasn't just looking at
9 sensitive ecosystems to define these as essential
10 components. This is almost all the environmental
11 consulting or biological consulting work we do,
12 whether we are working on a rare butterfly or
13 developing a watershed plan that has, you know, a
14 fish habitat component, you know, we are all --
15 and this would be outside the world of biologists
16 as well to define the work they have done based
17 on this thoroughness of describing their methods
18 and the results they found and the information
19 that is embedded in that to substantiate their
20 conclusions.

21 And so I think if you were a geoscientist,
22 you were a professional forester, you know, the
23 same process applies. So it's really looking at
24 that whole lens of how we collect information,
25 analyze information, use information to support a

1 range of decision-making processes, but looking
2 at that through a very practical lens of what
3 these sort of core elements are.

4 Q Thank you, Mr. Page. Now, I would like you to
5 turn up if you can tab 9 of Exhibit 3, which
6 should be with any luck your report dated
7 May 26th, 2018.

8 A That's correct.

9 Q And I'm going to ask you first if you might to
10 again explain to the panel what you understood
11 your instructions were or your task was in
12 preparing this report, please?

13 A So I was contacted by the registrar of the
14 College of Applied Biology about a month ago to
15 review additional information that had been
16 provided as part of -- as part of the overall
17 process related to this hearing that was provided
18 by Mr. Lea, and review that in the context of
19 does this additional information change the
20 conclusions I arrived at in my October report.

21 So the new information, the new information
22 obviously was related to the environmental
23 assessment of the eight subject properties that I
24 have described in what we have just been talking
25 about. And I also reviewed two reports that

1 Mr. Del Meidinger had prepared as part of the
2 work leading up to this hearing as well. And the
3 purpose of the overall letter -- again dated
4 May 26th -- is to describe any changes to the
5 conclusions I arrived at in my first review based
6 on the new information provided.

7 Q So let's first identify so the panel is clear the
8 reports from Mr. Meidinger that you reviewed. If
9 you could have Exhibit 5 in front of you, please.
10 And just have a look at tabs 1 and 2 I hope.

11 I will just hand you -- Mr. Chair, I will
12 need to get an extra copy of Exhibit 5. I have
13 the reports, but I just don't have Exhibit 5 in
14 front of me.

15 In any event, could you confirm for me that
16 the reports at tabs 1 and 2 of Exhibit 5 are the
17 reports you reviewed for the purposes of
18 preparing the report at tab 9?

19 A Yeah, they were -- they were not provided as part
20 of the supplemental files that are listed as
21 appendix to my May 26th report, but they were
22 provided by email separately, yes.

23 Q Thank you.

24 Now, Mr. Chair, I want to have Mr. Page
25 identify the other documents that are referenced

1 now at you will see in his report that he
2 reviewed, or at least a sampling of them. You
3 will see paragraphs -- sorry numbered
4 paragraphs 1 through 4 under the heading "New
5 Information." And so to do that, though, they
6 are contained in the eight-volume set of
7 documents from Mr. Lea.

8 And so what I propose to do is have now that
9 eight-volume set marked, and you will recall my
10 position that I would like to do that subject to
11 or reserving the College's rights to object to
12 the admissibility of various documents within
13 this eight-volume set -- of course not the
14 documents I'm going to take Mr. Page to -- but
15 other documents if that's acceptable.

16 MR. HANMAN: I don't have a problem with that. It's either
17 that or mark it as Exhibit A and then put in
18 pieces of it. It's way easier just to put it all
19 in and then have objections to pieces that come
20 out because my friend doesn't know, and frankly I
21 don't know, how many of those I'm going to end up
22 going to, so.

23 THE CHAIR: All right. So, yes, that's fine.

24 MR. UNDERHILL: Yes, thank you. So I'm not sure where all
25 the sets are? Are they still in the boxes?

1 MR. HANMAN: Yes, they are still in the boxes.

2 MR. UNDERHILL: All right. So we'll have to -- just maybe we
3 should go off the record, Mr. Chair, for just a
4 moment to get the volumes in front of you.

5 THE CHAIR: Okay. We will go off the record for a moment.

6 **(DISCUSSION OFF THE RECORD)**

7 THE CHAIR: So we will need these eight volumes of documents
8 submitted by Mr. Lea to be marked as an exhibit.

9 THE REPORTER: Exhibit 6.

10 **EXHIBIT 6: Eight volumes of documents**
11 **submitted by Mr. Lea**

12 THE CHAIR: And we are back on the record. You may proceed.

13 MR. UNDERHILL: Thank you, Mr. Chair.

14 Q So what I would ask, Mr. Page, you do, is turn up
15 and panel members turn up Appendix 1 of your
16 report, please, so page 7 of 7, number at the
17 bottom right-hand corner, and just confirm for me
18 that is a list of the documents you received; is
19 that correct?

20 A That is correct.

21 MS. BEEDLE: Sorry, I'm not with you.

22 MR. UNDERHILL: I'm sorry. So we are at tab 9 in Exhibit 3,
23 and it's the very last page of tab 9.

24 MS. BEEDLE: And that's what's in the box?

25 MR. UNDERHILL:

1 Q I just -- I don't think it's controversial so I
2 want to be careful not to lead the witness. But
3 just again, Mr. Page, if you could confirm this
4 is a complete list of documents you received
5 digitally to review for the purposes of this
6 May 26th, 2018, report; is that correct?

7 A That is correct.

8 Q And I wonder before we go into some -- a couple
9 of those documents you might just summarize for
10 the panel the types of documents that you
11 reviewed under the heading "New Information"?

12 A So included in that appendix list is, at least
13 some of them are the same documents we have
14 already previously talked about in terms of the
15 sensitive ecosystems manual, Saanich's EDPA
16 bylaw, Garry oak woodland description is, you
17 know, these are materials that are more
18 supporting pieces than related to my task at hand
19 which was to review information for those
20 eight -- information that were relevant to those
21 eight reports that I had previously reviewed in
22 October. So I went through all these files but
23 called only some of them relevant files, and
24 that's what I have listed in these four points.

25 Q Right. And could you maybe explain to the panel

1 what you mean by "relevant"?

2 A I was specifically looking for information that
3 was as I just described related to the methods or
4 results of Mr. Lea's work to assess the subject
5 properties that had -- that had been mapped as
6 part of the EDPA.

7 Q So I am going to ask you to turn up each of -- or
8 at least a sampling of the documents in turn and
9 my question will be the same to you: Just
10 explain to the panel what you drew from these
11 documents in terms of the, you know, the opinion
12 or the assessment you have been making of the
13 reports. And so the first document, panel
14 members, is found in Volume 6 at tab 124. And if
15 you could maybe just explain first of all,
16 Mr. Page, what this document is for the panel and
17 what you drew from it?

18 A So my understanding these are maps extracted from
19 the District of Saanich's online mapping tool
20 that allows you to have orthophoto imagery,
21 property descriptions, or property boundaries, as
22 well as a range of other infrastructure or
23 environmental information. And in this case it's
24 showing the sensitive ecosystem polygon that is
25 the subject of our discussions today and the

1 properties that are included in these eight
2 reports.

3 As well, it's very difficult to see in the
4 black and white version of this map but in the
5 top left corner is a round circle that's overlaid
6 on the edge of the SEI polygon, and that's
7 actually a species at risk occurrence that had
8 been incorporated into the District of Saanich's
9 online web mapping.

10 And then the other three maps are -- the
11 other -- the following two pages are the same
12 information just different views that provide a
13 little bit more context.

14 And then the last page is the original
15 mapping from the eastern Vancouver Island/Gulf
16 Islands Sensitive Ecosystem Inventory from
17 March -- I guess this is actually March 20th,
18 2004, is an updated version. But it's the same
19 information. So they map these as map sheets.
20 And if you look in the very bottom left-hand
21 corner of that map you can see the grid of map
22 sheets that covers southeastern Vancouver Island.
23 Quite difficult to see in black and white at this
24 scale.

25 Q So if you could help the panel what role, if any,

1 this played in your -- in the opinions that are
2 expressed later in the report?

3 A Well, I think it's relevant for two reasons. One
4 is that this was the only mapping I reviewed and
5 it was not included with the original letter
6 reports that I reviewed in October. And so it,
7 you know, this is fairly general information on
8 what Saanich had mapped and what goes back to the
9 original sensitive ecosystem mapping. So there
10 had been no kind of additional mapping products
11 provided as part of the assessment reports.

12 As well, the occurrence record for the
13 species at risk, twisted oak moss specifically --
14 you can see the CDC number 37076 -- is relevant
15 because that was not described in the original
16 assessment reports as a relevant piece of
17 information about sensitivity or species at risk
18 occurrences in this polygon or this area I should
19 say.

20 Q All right. Is there anything else from this
21 document that you want to draw to the panel's
22 attention before we move on?

23 A No.

24 Q Could I then ask you, Mr. Page, and in turn panel
25 members, to go to Document 126 in the same volume

1 or tab 126 in the same volume. And could you
2 first, Mr. Page, explain to the panel what we are
3 looking at here?

4 A So my understanding these are field notes from
5 Mr. Lea's field book that he would have written
6 down when he visited the subject properties in
7 May or June, 2016. And so they are labelled by
8 address, the first one being 2801 Tudor, who
9 lives there now is a little bit of information.
10 And then it's a half-page sort of point form
11 description of what was found, what he recorded
12 at each of these sites.

13 So I -- looking ahead, each of them about --
14 several have a full-page specific to single
15 property, most have a half-page description of
16 the property. And the type of information
17 provided in these field notes is just to read off
18 a few examples, "very dense shrub for most of
19 property," "northeast portions dense bromes,"
20 "orchard grass," "broom," all of those being
21 non-native species. The rest is "dense shrub,"
22 "blackberry," "ivy," "broom," "hawthorne,"
23 "orchard grass," "vinca," "golden chain,"
24 "Portuguese laurel." All of those are non-native
25 species. That's not in the notes, that's my

1 comment. And then the last one being "patch of
2 roses," and that's in the notes. And I don't
3 think it's worth reading other than because they
4 are very similar, they are different information
5 but the same type of information provided for the
6 other subject properties.

7 Q And so can you tell the panel why you consider
8 these field notes to be relevant and what you,
9 you know, what you took away from these field
10 notes?

11 A Well, I think they are very relevant from the
12 point of view that I was looking for actual data
13 that was collected from the subject properties
14 and specifically data collected from plots. You
15 know, I wanted to -- I was looking for species
16 lists that described the composition of
17 vegetation in these subject properties or in each
18 of the subject properties and as well as
19 quantification of particularly through visual
20 cover estimates, the typical measure of abundance
21 in plant communities of, you know, what were the
22 abundant species.

23 I understand it says things like "dense
24 ivy." Is that -- how much area is that
25 occupying? You know, I think one -- and I will

1 comment more general comment about non-native
2 species in plant communities is that there is --
3 in many ways there is kind of an inherent bias
4 when we are concerned about the quality of the
5 habitat in some of these sites to focus on the
6 invasive species or the non-native species.

7 And one of the reasons to do plots that I
8 didn't state earlier is to quantify if that kind
9 of initial estimate, that kind of bias of seeing
10 all these, you know, the roses that are
11 introduced, the, you know, the orchard grass
12 embedded within all the deeper soil areas, for
13 example, is, really is abundant and dominant as
14 our estimates.

15 Our visual estimates or visual opinions
16 predict in the sense that often you look and you
17 think there is way more of these species than
18 there actually are. There is a lot more native
19 species still living in there, still embedded in
20 there, and I think that's relevant for
21 understanding condition and conservation value
22 because it points out that there is a host of
23 native species.

24 Typically, and I'm not speaking -- I have
25 not been to these sites, that was not the intent

1 of my assessment -- I am commenting more
2 generally on the value of plots to kind of
3 measure that invasive species effect.

4 Q Could you comment more generally on the quality
5 of these field notes?

6 MR. HANMAN: I'm sorry. I'm not sure where this is going.
7 He has given an opinion, and my friend is
8 entitled to take him through the opinion. That
9 does not respectfully reach to some further level
10 of criticism if that's where we are going, with
11 respect. The report says what it says. The fact
12 that my friend is taking him through it I agree
13 with for the betterment of the panel. But there
14 is a limit to introducing new evidence under a
15 further guise of reviewing the report.

16 MR. UNDERHILL: With respect, again, this is the importance
17 of this morning's application and reminding
18 ourselves of the citation. The Citation 3(b) is
19 about the due diligence that Mr. Lea exercised in
20 preparing these reports. These are notes that
21 Mr. Lea himself produced. And it is in my
22 respectful submission well within the scope of
23 Mr. Page to comment on these notes as part of his
24 analysis of due diligence. It's precisely what
25 he has been brought here to do.

1 THE CHAIR: In any of the reports you are submitting,
2 Mr. Underhill, is there comment from Mr. Page on
3 the quality of Mr. Lea's reports?

4 MR. UNDERHILL: On the quality of his field notes?

5 THE CHAIR: Sorry, on the quality of his field notes, yes, in
6 any of the written reports that are being
7 submitted in this exhibit?

8 MR. UNDERHILL: I might have to have Mr. Page answer that
9 question for you.

10 A In page 3 of 7 of the May 26th report, in the
11 largest paragraph in the mid part I comment on
12 the whether I consider this information in the
13 field notes to constitute a plot, was this a plot
14 based, were these visual inspections, and I will
15 repeat:

16 "I conclude that Mr. Lea did not use
17 plot-based vegetation surveys using a
18 defined and repeatable method."

19 And I based that on information I received from
20 the older reports, the October -- the reports I
21 reviewed in October that had been written by
22 Mr. Lea in 2016, as well as the review of the new
23 information. So that's what I included in terms
24 of commenting on the information in these field
25 notes.

1 THE CHAIR: Mr. Hanman, do you continue to object to the
2 question about the quality of the field notes or
3 are you satisfied?

4 MR. HANMAN: Well, my objection is I don't know where this is
5 going; right? He's -- his opinion is limited to
6 what he delivered in his reports generally. The
7 panel is entitled to make determinations, I
8 concede this, did at the outset, to make
9 determinations as to what they think is relevant
10 and useful to their deliberation. So if the
11 panel thinks that this is something that is
12 useful in terms of their inquiries and they want
13 him to go further, the panel is properly entitled
14 to make that determination. I am simply saying I
15 don't know where this is going, and the witness's
16 report should stand on its own. That's -- I'm
17 not afraid of these -- this evidence.

18 THE CHAIR: Okay. I think we -- I think we need to know
19 whether you want to make a formal objection or
20 not?

21 MR. HANMAN: Well, I made my objection because I thought he
22 was launching into an area that was not part of
23 his report. So I stand by the objection. And so
24 if my friend -- and my friend is quite right, if
25 there was material in here which I didn't see

1 that related to it, he is fully entitled to make
2 those comments.

3 THE CHAIR: Mr. Underhill, do you intend to go further in
4 this exploration of --

5 MR. UNDERHILL: I actually thought --

6 THE CHAIR: -- the quality of the field notes?

7 MR. UNDERHILL: I have been looking at this and I have found
8 another section of the report where the field
9 notes are specifically examined. I think what I
10 am content to do is ask another question and then
11 the specific issue that I was trying to drive at
12 will be addressed, frankly, in the context of
13 Mr. Page going through his comments on page 5 of
14 7 because the field notes are specifically
15 referenced there and what information is there or
16 not there. And so the issue will come out that
17 way. I think that's easier than taking up the
18 time now.

19 Q So the question I would -- I will sort of
20 rephrase the question to simply ask perhaps an
21 obvious question, Mr. Page, and that is that in
22 your review of these field notes did it change
23 your opinion at all that Mr. Lea did not meet the
24 four components or criteria that you have set out
25 both in your first and second reports if I can

1 call them that?

2 THE CHAIR: So I understand, does that resolve your
3 objection, Mr. Hanman, if he rephrases his
4 question?

5 MR. HANMAN: Yes, I'm happy, if he wants to approach it from
6 a different angle, sure.

7 THE CHAIR: Okay. Yes, it's ten to 6:00, okay, thank you.
8 So Mr. Page, will you answer that question,
9 please, the rephrased question?

10 A Could you restate?

11 MR. UNDERHILL:

12 Q It's whether or not your review of these field
13 notes which are at tab 126 of Exhibit 6 changed
14 your opinion with respect to Mr. Lea failing to
15 meet the four components or criteria that you
16 have set out in your reports?

17 A No, so they did not change my opinion, and they
18 confirmed my original finding or opinion that
19 found that there was no plot-based assessment of
20 these -- of the vegetation in these properties.

21 THE CHAIR: Thank you.

22 It's now ten to 6:00. And we planned to
23 wrap up at 6:00 o'clock. We have some scheduling
24 issues, housekeeping issues to discuss. So at
25 this point it's appropriate to adjourn the

1 hearing.

2 MS. FONG: Until tomorrow morning.

3 THE CHAIR: Until tomorrow morning at --

4 MS. FONG: We can discuss that.

5 THE CHAIR: We will discuss that. We will adjourn until
6 tomorrow morning and we'll go off the record.

7 (WITNESS STOOD DOWN)

8 (PROCEEDINGS ADJOURNED AT 5:52 P.M.)

9 **REPORTER CERTIFICATION**

10 I, Lori D. Stocco, RCR, Official Reporter in
11 the Province of British Columbia, Canada, BCSRA
No. 581, do hereby certify:

12 That the proceedings were taken down by me
13 in shorthand at the time and place herein set
14 forth and thereafter transcribed, and the same is
15 a true and correct and complete transcript of
said proceedings to the best of my skill and
ability.

16 IN WITNESS WHEREOF, I have hereunto
17 subscribed my name this 29th day of June, 2018.

18

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Lori D. Stocco, RCR
Official Reporter

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