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BEFORE THE HEARINGS EXAMINER  
FOR THE COUNTY OF SNOHOMISH

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BLUE SQUARE REAL ESTATE POINT )  
WELLS, )  
Appellant, )  
vs. ) CASE NO.: 11 101457 LU  
SNOHOMISH COUNTY DEPARTMENT OF )  
PLANNING & DEVELOPMENT )  
SERVICES )  
Respondent. )

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HEARING BEFORE EXAMINER  
PETER CAMP  
VOLUME V

---



9:00 a.m.  
May 22, 2018

Office of the Hearing Examiner  
3000 Rockefeller Avenue  
Everett, Washington 98020

TRANSCRIBED BY: JACQUELINE L. BELLOWS, CCR 2297



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1

2

THE HEARING EXAMINER: So shall we get started? Good morning, everyone. Class? Class? Class? Thank you. Okay.

5

6

So good morning. Port Wells hearing continued. Mr. Countryman, you're on the stand.

7

Mr. Otten, you are on the redirect.

8

MR OTTEN: Go to the stand first. Yeah.

9

THE HEARING EXAMINER: Just a reminder, please turn your cell phones off or to vibrate, please.

11

12

#### REDIRECT EXAMINATION

13

BY MR OTTEN:

14

Q. All right. Mr. Countryman, good morning.

15

A. Morning.

16

17

Q. Yesterday Mr. Huff on cross referenced a November 13th meeting and requested notes from that meeting. Did you bring those here today?

19

A. I did.

20

21

Q. Could you hand out two copies to the examiner to be added as an exhibit and one copy to the opposing counsel. This is Exhibit P-13.

23

So could you identify what Exhibit P-13 is?

24

25

A. Yes. So P-13 is notes that I took at a November 3, 2017, meeting that included Gary Huff, Paul



1 MacReady, Matt Otten, Steve Ohlenkamp, Jacque  
2 St. Romaine, Doug Luetjen, Dan Seng, Michael Dobesh, and  
3 Michael McCrary and me. I didn't put my own name on the  
4 notes 'cause they're my notes.

5 Q. Okay. Was there discussion on an extension  
6 identified in those notes?

7 A. Yeah. There was discussion of an extension.  
8 My notes say everything through Paul for scheduling.  
9 Then later Gary Huff asked When does Planning and  
10 Development Services need an extension request. Then  
11 Michael Dobesh responded that the June date, being the  
12 June 30 expiration, was the most important and that that  
13 depends on the next submittal. With respect to when a  
14 resubmittal would take place, Mr. Dobesh said that  
15 Planning and Development Services needed time to review  
16 and respond and that was why we had established the  
17 January 8th resubmittal.

18 Q. Okay. Thanks for providing those notes.

19 In cross exam, at parking requirement was  
20 brought up. You testified earlier to BSRE's internally  
21 inconsistent application materials with regard to senior  
22 units and parking; is that correct?

23 A. Correct.

24 Q. Now, if the application materials committed  
25 BSRE to senior unit definition consistent with PDS's



1 interpretation and not the ITE definition, would you  
2 agree that the substantial conflict with -- at least  
3 with regard to the parking would be resolved?

4 A. Yeah. That would address a substantial  
5 conflict. But many minor conflicts relating to parking  
6 would remain.

7 Q. But those minor conflicts aren't part of this  
8 hearing today?

9 A. That's correct.

10 Q. Okay. On the building setbacks from  
11 residential zones, Mr. Huff pointed out that the  
12 building height setbacks only apply to structures  
13 180 feet or less from adjacent residential zones. Is  
14 that correct?

15 A. That's correct.

16 Q. So would you concede that the alternative  
17 block building that BSRE proposed does at least satisfy  
18 that portion of code?

19 A. That's correct.

20 Q. Okay. By does BSRE's variance application for  
21 the setback on building heights -- is it nonetheless  
22 deficient, the variance application?

23 A. Yeah. The variance application is still  
24 deficient.

25 Q. Is the block building they propose and the



1 current three residential towers they propose located in  
2 a landslide hazard area buffer?

3 A. That is correct.

4 Q. And was the deviation request for the  
5 landslide hazard area sufficient?

6 A. No, it was not.

7 Q. So are the buildings proposed there  
8 substantially conflict with several different county  
9 codes?

10 A. That's correct.

11 Q. Are you familiar with the Swift bus service,  
12 rapid-transit bus service operated by Community Transit  
13 in Snohomish county?

14 A. Yes, I am.

15 Q. Can you briefly describe what that is?

16 A. Yes. So the Swift bus rapid transit is a  
17 frequent bus service that runs along right now one major  
18 corridor soon to be a second major corridor with  
19 frequent service, typically eight minutes, every eight  
20 minutes throughout the day. It doesn't stop at every  
21 stop. Thus, if you're going a distance along the Swift  
22 route, you can get to your destination a lot faster than  
23 you could through a typical bus line that stopped at  
24 every stop along the way.

25 Q. Is this bus rapid transit, does it qualify as



1 high capacity transit?

2 A. Yes, it does qualify as high capacity transit.

3 We use that at some the other county urban center

4 locations, for instance, for along Highway 99 and

5 Bothell-Everett Highway.

6 Q. Is "high capacity transit" defined in the

7 code?

8 A. Yes.

9 Q. Do you happen to know, is it defined under SCC  
10 30.91H.108?

11 A. That's sounds right.

12 Q. Okay. Would being on a Swift Bus route be  
13 consistent with SCC 30.34A.040 because there are bus  
14 stops on the route?

15 A. Yes.

16 Q. Okay. So the discussion yesterday on cross,  
17 whether or not there's -- "on the route" has a meaning,  
18 it does have a meaning in the context of bus rapid  
19 transit which is part of high capacity transit; is that  
20 correct?

21 A. That's correct.

22 Q. Okay. Has the applicant proposed meeting the  
23 high capacity transit requirement with bus rapid  
24 transit?

25 A. No, they have not.



1 Q. Okay. Yesterday on cross, Mr. Huff  
2 continually referenced the urban village code. Wouldn't  
3 a resubmittal proposing a development under the urban  
4 village code be a considered a new application?

5 A. I believe that it would, yes.

6 Q. Okay. In fact isn't BSRE vested in the  
7 regulations in effect at the time of their urban center  
8 application?

9 A. That's correct.

10 Q. Do you remember offhand when that date was?

11 A. That was early in 2011.

12 Q. Okay. Did the urban village designation or  
13 regulations even exist at the time when they applied?

14 A. No.

15 Q. Okay. So they couldn't have taken advantage  
16 of the alternative urban village because it did not  
17 exist at the time?

18 A. That's correct.

19 Q. Under Washington's vested rights doctrine, is  
20 an applicant allowed to cherry pick between old  
21 regulations they vest to and new regulations that are  
22 adopted after they have applied?

23 A. No, they cannot.

24 Q. Okay. Is there anything preventing BSRE from  
25 coming in tomorrow with a new application for an urban



1 village?

2 A. No.

3 Q. Okay. Have regulations been updated since  
4 2011 that would be applied to a new application?

5 A. Yes.

6 Q. Can you give me some examples.

7 A. Yeah. There were changes to both the urban  
8 center and urban village regulations made in 2013.

9 Q. Okay. Is there other issues on the site  
10 that -- which codes have been changed, such as  
11 shoreline, landslides?

12 A. Yeah. The landslide regulations have been  
13 changed since that time. Shoreline regulations have  
14 been updated. Federal Emergency Management  
15 Administration is updating some of their requirements,  
16 which the project does not vest to. If the project were  
17 to get resubmitted under urban village, the parking  
18 ratios have been changed, that sort of thing.

19 Q. Just to clarify, you said "resubmitted." But  
20 you said it would be a new application?

21 A. Yes. Thank you. That would be a new  
22 application.

23 Q. Okay. Going back to the growth board  
24 decision, was the language in the urban centers policy  
25 that the growth board looked at similar to the urban



1 centers code with regard to access to high capacity  
2 transit?

3 A. It was.

4 Q. Okay. Would PDS take a position on high  
5 capacity transit that is directly in conflict with the  
6 board's decision on that issue?

7 A. No, we would not.

8 Q. So we're here in a hearing under 36 --  
9 30.61.220. What is the purpose or the code provision  
10 that applies here?

11 A. Yeah. The code provision that applies here is  
12 our recommendation of denial without an environmental  
13 impact statement, that section 30.61.220 allows for  
14 recommendation of denial for substance conflicts with  
15 county code in order to save the applicant and the  
16 county needless future expense.

17 Q. Does it make sense to go through the SEPA  
18 process for a development proposal that has not shown  
19 feasibility or substantial compliance with the county  
20 code?

21 A. No, it does not.

22 Q. That's based on under the standard that you  
23 just explained?

24 A. That's correct; yeah.

25 MR OTTEN: I have no further questions for



1 you.

2 THE HEARING EXAMINER: I would like to ask a  
3 couple questions at this point about that last topic,  
4 which is I want to see where we are procedurally. My  
5 understanding was is that we have started the draft EIS  
6 process. Is that true?

7 THE WITNESS: That is correct.

8 THE HEARING EXAMINER: At what point -- so  
9 walk me through how that normally works for the record.  
10 And then where did you stop in this case?

11 THE WITNESS: So normally the EIS process  
12 starts after a threshold determination of significance  
13 is made. That determination was made in early 2014. At  
14 that point we had already been counting on the applicant  
15 revising the plans based on the April 2013 -- April 12,  
16 2013, first review completion letter.

17 Then -- and it's in the record. But it was in  
18 March or April of 2014 we got the applicant's first  
19 extension request, which committed the applicant to  
20 submitting -- resubmitting those plans in response to  
21 the 2013 letter within one year; in other words, by  
22 spring of 2015. That resubmittal would have likely been  
23 the action alternative studied in the draft EIS because  
24 there's a fair amount of time ramping up for scoping the  
25 EIS or getting preliminary background information.



1 THE HEARING EXAMINER: So if I'm  
2 understanding, then, the EIS work would have been ramped  
3 up in 2015?

4 THE WITNESS: Right. So we were -- we had  
5 started work in 2014 of hiring the consultants. Work  
6 was underway in 2015 with the expectation that we have  
7 on second submittal at that point that would be the  
8 action alternative to be looked at in the EIS. But then  
9 in 2015, we received another extension request asking  
10 for more time.

11 And at that point there was also a lot of  
12 communication back and forth between county staff and  
13 the applicant, kind of describing the flaws with the  
14 2011 plans and to how, if an EIS was drafted based on  
15 the 2011 plans, that it would be necessary to do a  
16 supplemental draft of the EIS because the first draft,  
17 if it were based on the 2011 plans, would simply say,  
18 Yeah, not enough information was provided to identify  
19 impacts and mitigation.

20 And you can't -- I mean I guess procedurally  
21 you could proceed to a final EIS. But the whole point  
22 of recommendation of denial without completing the EIS  
23 is to avoid this process where you end up completing an  
24 EIS that says the project cannot be built.

25 And so then, when we finally got second in



1 2016, we told the applicant that we were putting work on  
2 the draft EIS document itself on hold but continuing  
3 with the SEPA process through revising the plans. And  
4 then, when we got the revised plans in April 2017, it  
5 was clear early on that the revised plans still did not  
6 comply with the county code. They included many  
7 substantial conflicts and internal conflicts and that a  
8 lot of the supporting documentation that was asked for  
9 had not yet been provided by the applicant.

10 THE HEARING EXAMINER: So if I'm understanding  
11 you correctly, then pretty much all that happened was an  
12 EIS consultant was hired and not much else.

13 THE WITNESS: Well, a little bit more than  
14 that. There were some drafts, preliminary drafts of  
15 chapters, that were produced where the county and the  
16 applicant were coordinating on comments for those  
17 revised chapters. In our exhibit list, there's an  
18 example from the first few pages of the chapter on  
19 landslide hazards where the county noted -- it's in the  
20 kind of track-changes format -- where the county noted  
21 on what the applicant had put together a number of  
22 places where the draft EIS would need to disclose that  
23 the plans did not correctly show the landslide hazard  
24 area or other features and that, in fact, only one of --  
25 half of where the landslide hazard area affected the



1 plans, they didn't even show the landslide hazard area  
2 at all.

3 And the nature of the response from the  
4 applicant was that the county's comments were totally  
5 unacceptable to the applicant. But those comments were  
6 necessary based on the materials provided. Therefore,  
7 in addition to other concerns, just using that one  
8 example, we determined that it didn't make sense to  
9 proceed with work on the preliminary draft EIS until we  
10 had a revised application in.

11 THE HEARING EXAMINER: Scoping, there had been  
12 a public comment period for scoping; and that had  
13 closed?

14 THE WITNESS: Yeah. The public comment period  
15 for scoping closed in 2014.

16 THE HEARING EXAMINER: So was the scoping,  
17 then, completed in terms of the scope of the EIS?

18 THE WITNESS: That's correct; yes. What the  
19 scoping looked at was merely the kind of topics to be  
20 studied.

21 THE HEARING EXAMINER: Right.

22 THE WITNESS: Landslide hazards, traffic, most  
23 of the scoping topics were kind of the routine. But  
24 then there was there were a few kind of custom scoping  
25 comments. For instance, there was to be a chapter on



1 fiscal impact to local jurisdictions and a cultural  
2 resources chapter in response to the likelihood of  
3 historic use by native peoples of the site.

4 THE HEARING EXAMINER: Okay. Thank you. That  
5 helps. Mr. Huff, I'm sorry. Of course I'll look  
6 through. For both you and Mr. Otten, that topic is fair  
7 game at this point. That's not beyond the scope because  
8 I interjected. So Mr. Huff, over to you. You may fire  
9 when ready.

10

11

RECROSS EXAMINATION

12

BY MR. HUFF:

13

Q. Mr. Countryman, the EIS that was done actually  
14 went much further than you've described. There were  
15 draft chapters on cultural resources with the full  
16 report backing that up. Fiscal impacts, chapters 1, 2,  
17 and 3 were all done. It was much more than -- you agree  
18 that those documents were all submitted to the county?

19

A. As I said, they were preliminary drafts. That  
20 was the first draft by consultants. And that was not  
21 done. "Done" is not a word I would apply to those first  
22 drafts.

23

Q. They were submitted to you, and you reviewed  
24 them and made comments?

25

A. To some -- we reviewed and made comments to



1 some of them and then stopped work on the rest of the  
2 review because it was clear, based on the back and forth  
3 on topics such as the landslide hazard comments and the  
4 traffic comments, that we were at an impasse until we  
5 got a revised application in.

6 Q. And there were conversations between BSRE and  
7 the county and EA about proceeding with chapters that  
8 weren't affected; correct?

9 A. Yeah. There were conversations about that.

10 Q. And the county refused to let other work  
11 proceed?

12 A. At that point the -- at issue was whether or  
13 not we could get a revised application that had been  
14 promised on number of occasions, each time the applicant  
15 had requested an extension.

16 Q. There were chapters that weren't in dispute  
17 that you would not allow to continue to be written;  
18 correct?

19 A. Well, as we had previously discussed and I  
20 mentioned earlier in my testimony, the fact that the  
21 plans did not add up to the number of units stated on  
22 the plans was of concern. For instance, on the fiscal  
23 impact chapter, because that was based on an assumption  
24 of retail sales for the number of units.

25 Q. Is it a reasonable topic for analysis, when



1 the plans show building footprint and have -- and you  
2 know how many floors there are and you know how many  
3 units there are, what was the purpose from PDS's point  
4 of view of having us to go back and mark internal lines?

5 A. Because the number of floors shown and the  
6 number of units shown at that stage did not add up and  
7 the drawings were inconsistent on how many units they  
8 claimed were in different buildings and including  
9 inconsistent on how many floors several of the buildings  
10 had.

11 Q. You mentioned earlier this morning about bus  
12 rapid transit.

13 A. Right.

14 Q. There's no business rapid transit line close  
15 to Port Wells; correct?

16 A. That's correct.

17 Q. So you mentioned that it -- that that's one  
18 way that it could have been satisfied. It can't be  
19 satisfied at Port Wells using bus rapid transit; right?

20 A. Well, that was to illustrate the context of  
21 what you were saying about the on-a-route part of  
22 yesterday's discussion.

23 Q. We were talking about the code language, not  
24 how other urban centers have satisfied their transit  
25 requirement; correct?



1                   How many other urban center projects are  
2 there, urban-center-designated sites?

3           A.     Well, there's one on Bothell-Everett Highway,  
4 two on I-5, two more on Highway 99, one near Lynnwood.  
5 So that's seven others.

6           Q.     Are any of them on the water?

7           A.     No.

8           Q.     Are any of them along light rail, the light  
9 rail line?

10          A.     Well, Port Wells is not along light rail.  
11 It's along possible commuter rail.

12          Q.     Commuter rail.

13          A.     No. The other commuter rail stations are  
14 inside cities.

15          Q.     Do any of other sites have tall bluffs behind  
16 them?

17          A.     No.

18          Q.     Any of them have shoreline issues?

19          A.     No.

20          Q.     Slope stability issues?

21          A.     Not that I'm aware of. But these are also  
22 things that are -- you know, every project has to be  
23 reviewed for compliance with the county regulations.  
24 And identifying that there may be some unique factors at  
25 Port Wells, doesn't show how the project complies with



1 the code.

2 MR. HUFF: This will be P-14.

3 Q (By Mr. Huff) Mr. Countryman, the document  
4 I've handed you indicates at the bottom that this is  
5 part of ordinance 09.079; correct?

6 A. Correct.

7 Q. That's the ordinance by which the urban  
8 village code was adopted?

9 A. Yeah. It might be. I don't -- I'll take your  
10 world for it because I didn't pay attention to what  
11 ordinance adopted it.

12 Q. And could you read Section 35, please.

13 A. Section 35, "Applicability, the provisions of  
14 this ordinance shall apply to all applicable development  
15 applications submitted on or after the effective date of  
16 this ordinance. The provisions of this ordinance shall  
17 not apply to any development application determined to  
18 be complete prior to the effective date of this  
19 ordinance except that an applicant for a development  
20 application that is complete prior to the effective date  
21 of this ordinance may request in writing that all of the  
22 provisions of this ordinance be applied to his or her  
23 pending development application."

24 Q. Okay. So this says that we can ask that our  
25 application be converted and reviewed as an urban



1 village -- correct? -- without having to reapply?

2 A. That's your reading of the code.

3 Q. Well, isn't that what it literally says?

4 A. Well, we interpret the code in context. And  
5 this is a provision that I've not seen used before. So  
6 we'd have to go and take a look at that.

7 Q. Which of these would have, in your mind, a  
8 greater public benefit: An urban center development  
9 with 3,081 units and a Sound Transit station or an urban  
10 village development with 2,600 units and no Sound  
11 Transit station?

12 A. Well, my job to review a project per code, not  
13 determine what is or is not the public benefit.

14 Q. That would be a tough call to decide which of  
15 those is a better public benefit, I would think.

16 Isn't that the purpose of alternatives in an  
17 EIS?

18 A. That's one purpose of alternatives in an EIS.

19 Q. If this application is terminated, the  
20 possibility of the development of an urban center is  
21 gone forever; correct?

22 A. Most likely, yeah.

23 Q. So isn't it preferable to make sure the  
24 greater good, public good, is served to include both  
25 alternatives in an EIS analysis?



1           A.     Well, our position is that there's no point in  
2 doing an EIS analysis when the alternatives provided by  
3 the applicant are flawed in such a way that there are  
4 substantial conflicts with county code and we could not  
5 be approving either of the alternatives submitted by the  
6 applicant for consideration in the EIS. That's why we  
7 requested revisions to the plans to be used in the EIS  
8 and then the revisions received were not adequate for  
9 the purpose of completing an EIS.

10           Q.     We' are down to comparatively few issues  
11 remaining; correct?

12           A.     We are down to comparatively few issues of  
13 substantial conflict with county code.

14           Q.     And that's the purpose of this hearing?

15           A.     That is the purpose of this hearing. But any  
16 one of those issues would constitute basis for denial of  
17 the project.

18           Q.     Are there -- is there any one of those that  
19 cannot be resolved?

20           A.     Well, we've talked about Sound Transit.  
21 That's one --

22           Q.     Cannot be resolved.

23           A.     The "cannot be resolved" is not the level of  
24 review here. It's reasonable doubt as to whether those  
25 would be resolved in a timely manner. We've got



1 geotechnical issues to look at. We'll have testimony  
2 from our chief engineering officer, Randy Sleight.  
3 Principal Planner Randy Middaugh is going to be talking  
4 about shoreline issues. There's quite a bit that we  
5 haven't yet talked about where substantial conflicts  
6 with county code remain.

7 In an EIS based on the present day  
8 applications, which is all we can review to, would be an  
9 EIS that said the project cannot be permitted due to  
10 substantial conflict with county code, much less  
11 mitigation issues that have not yet even been explored.

12 Q. On the other urban center projects, have you  
13 taken the action to recommend denial on any of those?

14 A. We have not recommended denial on any of our  
15 urban center applications because the applicants have  
16 provided plans that complied with code --

17 Q. Have you ever recommended it in any other  
18 circumstance?

19 A. Most of the time, when a project doesn't move  
20 forward, we -- it's after we request revisions and then  
21 the applicant does not respond to those revisions and it  
22 expires. Planning and Development Services has  
23 recommended denial of projects in the past based on SCC  
24 30.61.220. The last time I'm aware of using that  
25 provision was in 2000 on a project called Tulalip Hills.



1 MR. HUFF: I think that's it, Your Honor.

2 THE HEARING EXAMINER: Mr. Otten?

3

4 REDIRECT EXAMINATION

5 BY MR OTTEN:

6 Q. Just to clarify, Mr. Countryman, the standard  
7 is not whether something can or can't be resolved under  
8 36.61.220. It's whether there's a substantial conflict  
9 with the application that's under review?

10 A. That's correct.

11 Q. Okay.

12 A. 30.220 is recommendation of denial without an  
13 EIS due to substantial conflicts with county code or  
14 other applicable regulations.

15 MR OTTEN: Okay. No further questions.

16 THE HEARING EXAMINER: Anything more,  
17 Mr. Huff? We're good.

18 Thank you, Mr. Countryman.

19 Who's next, Mr. Otten?

20 MR OTTEN: I believe -- Mr. Middaugh, Randy  
21 Middaugh.

22 THE HEARING EXAMINER: Mr. Middaugh, you're  
23 welcome to either sit or stand, whichever you're more  
24 comfortable doing. If you want to sit, just lower the  
25 table. There's a lever on the right-hand side of the



1 table. Or you're welcome to stand, whatever you'd like  
 2 to do.

3 THE WITNESS: I'll stand for a while.

4 THE HEARING EXAMINER: Okay. Raise your right  
 5 hand, please. Do you solemnly swear of affirm the  
 6 testimony you're about to give in this proceeding is  
 7 true and correct?

8 THE WITNESS: Yes, I do.

9 THE HEARING EXAMINER: Your name and address,  
 10 please.

11 THE WITNESS: Randy Middaugh, Department of  
 12 Planning and Development Services, 3000 Rockefeller,  
 13 Everett, Washington.

14 THE HEARING EXAMINER: Ms. Kiselius?

15 MS. KISELIUS: If you indulge us for just a  
 16 minute, I think Mr. Countryman's going to try to pull up  
 17 some exhibits now.

18 THE HEARING EXAMINER: While he's doing that,  
 19 why don't you introduce yourself on the record.

20 MS. KISELIUS: Oh, thank you. Laura Kiselius  
 21 from the Prosecutor's Office.

22 THE HEARING EXAMINER: Thank you.  
 23  
 24  
 25



## 1 DIRECT EXAMINATION

2 BY MS. KISELIUS:

3 Q. While Mr. Countryman is pulling those up, if  
4 it's not too distracting for you, Mr. Middaugh, we can go  
5 ahead and start. And could you please provide your name  
6 and your title for the record.

7 A. Randy Middaugh. I'm a principal environmental  
8 planner.

9 Q. And that's with the Planning and Development  
10 Services Department?

11 A. Yes.

12 Q. All right. And could you please generally  
13 describe your educational background.

14 A. I have a Bachelor's in environmental science  
15 from Western Washington University.

16 Q. Okay. How long have you been with Snohomish  
17 County?

18 A. Thirty-four years.

19 Q. Thirty-four years? And could you generally  
20 describe your current job responsibilities?

21 A. My current job is to -- working in permitting  
22 division is to, to evaluate permit applications for  
23 consistency with the county's shoreline codes and  
24 critical areas regulations, specifically the "Wetlands  
25 and Fish and Wildlife Habitat Conservation" chapter,



1 30.62, 30.62A.

2 Q. Do you routinely review applications for  
3 shoreline conditional use permits, shoreline variances,  
4 and shoreline --

5 A. It's not routine. Only a couple a year maybe.

6 Q. And how familiar with you with critical areas  
7 mitigation and monitoring requirements?

8 A. I'm very familiar with those.

9 Q. Were you involved in drafting the current  
10 chapter of critical areas regulations?

11 A. Yes. I was one of the principal authors.

12 Q. And have you been invited by the Department of  
13 Ecology to present on the county's critical areas  
14 monitoring report?

15 A. Yes.

16 Q. Could you describe that a little bit.

17 A. Well, we had an interest in understanding the  
18 effectiveness and implementation of our code. Was it  
19 doing what we expected it would do? So I spent a little  
20 over a year investigating that and reporting on that.

21 Q. All right. And are you a part of the PDS  
22 review team for the Point Wells project?

23 A. Yes.

24 Q. What are your job responsibilities  
25 specifically with regards to this permit application?



1           A.    Again, it's critical areas 30.62A and  
2 shorelines.

3           Q.    Okay.  And generally can you describe what  
4 documents you reviewed for this project?

5           A.    Oh, I'm not going to remember all those.  
6 Their plans, their critical areas review, their  
7 shorelines review reports, a number of other ones that  
8 I -- geotechnical reports.  I'm sure there are more.  I  
9 don't remember all of them.

10          Q.    And could you generally describe what are the  
11 types of shoreline permit applications that are reviewed  
12 by the county.

13          A.    Well, there are -- it's what's called a  
14 shoreline substantial development permit whenever you're  
15 doing a development activity exceeding a certain  
16 threshold dollar amount.  There are shoreline  
17 conditional use permits.  And then there's something  
18 called a shoreline variance permit or approval.  So  
19 those three things.

20          Q.    And which of those permit types are approved  
21 by the county versus approved by the Department of  
22 Ecology?

23          A.    Only the shoreline substantial development  
24 permit is approved by the county.  The other two, we  
25 write staff reports with recommendations that go to the



1 state Department of Ecology and they approve or deny.

2 Q. That's for the shoreline conditional use  
3 permit and shoreline variance?

4 A. Yes.

5 Q. And what type of shoreline permit application  
6 is involved or has been submitted by the applicant for  
7 this project?

8 A. Shoreline substantial development permit.

9 Q. Okay. Could you describe the substance of the  
10 shoreline substantial development permit application,  
11 for example, how detailed it is.

12 A. Well, it's just a master permit application  
13 form where it's really -- just tells you the bare  
14 essential of what the project is, where it is. It  
15 really -- very little or no detail in exactly what's  
16 involved in the permit.

17 Q. And do applicants for this type of permit  
18 typically submit a narrative or some type of  
19 demonstration with compliance with the shoreline --

20 A. Yes. Yes.

21 Q. Okay. And have you reviewed Exhibit A-36?

22 A. Which is? Which one is that?

23 Q. I'm going to go ahead and hand that to you.  
24 It's A-36.

25 A. Oh, yes.



1 Q. Could you please describe what that exhibit  
2 is.

3 A. Well, it's an applicant's document. It's  
4 titled "Narrative, Consistency with Shoreline Management  
5 Act Policies."

6 Q. Okay. Is that typically the type of report  
7 that would be submitted by a permit applicant?

8 A. No.

9 Q. Could you describe the difference between that  
10 report and what you typically receive?

11 A. Yeah. I think they had misunderstood what  
12 we'd asked them to do. We weren't asking for  
13 consistency with the Shoreline Management Act policies.  
14 We were asking for a consistency analysis of the  
15 county's regulations and policies in the Shoreline  
16 Master Program and in our chapter 30.44, which is a  
17 shoreline administrative chapter.

18 Q. And in that Exhibit A-36, does the applicant  
19 identify which policies from the Shoreline Management  
20 Master Program are applicable to this project?

21 A. No. No.

22 Q. There's no qualitative review of those  
23 policies?

24 A. No.

25 Q. And how much information has been provided in



1 the project application materials regarding development  
2 of the pier?

3 A. Well, enough to understand what their plan is.  
4 And that is to do some maintenance on the existing pier  
5 that's parallel to the water and then remove the two  
6 bridges that go out to the pier from the landward side  
7 and replace those two with a new one.

8 Q. Have you seen any schematics or design  
9 regarding how that development is going to be  
10 accomplished?

11 A. Do you mean how they're physically going to do  
12 it? Or I've seen drawings, yes, of where they're going  
13 to go and nice schematics of what it might look like in  
14 the future.

15 Q. Then, how much information has been provided  
16 in the application materials regarding shoreline  
17 restoration?

18 A. It's pretty generic. But we have a pretty  
19 good idea of what the plan is: Removing the sea walls  
20 and replacing it with a more natural intertidal beach.

21 Q. Okay. What regulations did you use to  
22 evaluate this proposal?

23 A. The 2007 version of chapter 30.68A, which  
24 would be the critical areas regulations. And prior to  
25 to 2011, we didn't have a shoreline chapter other than



1 30.44, which is the administrative chapter. We had a --  
2 we had the shoreline master program. The Shoreline  
3 Management Master Program is a big, thick book with  
4 policies and regulations. That was replaced in 2012  
5 with actually a new chapter, a new ordinance. But  
6 they're under the old master program.

7 Q. Do you have that master program in front of  
8 you? Do you have --

9 A. No. No. But I have it back there on my  
10 chair.

11 Q. Well, I'll go ahead and give you what's been  
12 marked as Exhibit P-12. That's the version of the  
13 Shoreline Management Master Program that applies to this  
14 project review?

15 A. Yes. June 1993, yes.

16 Q. And I did notice the examiner raised an  
17 eyebrow yesterday at that date, 1993. Has this been  
18 more recently replaced by a new program?

19 A. Not a new master program like this but we have  
20 a chapter in the county code, 30.67, which has replaced  
21 this.

22 Q. But that does not -- that does not apply to  
23 the review of this project?

24 A. No.

25 Q. It is this document, P-12.



1 A. Yes.

2 Q. Can you explain for us what an environment  
3 designation is?

4 A. Yeah. It's -- the environment designation on  
5 shorelines is like a zoning designation, where it's an  
6 overlay that goes on the different shoreline reaches and  
7 beaches and just -- and it informs what you can and  
8 cannot do in a state shoreline. So it would range  
9 between the most protective, which would be like a  
10 natural or conservancy type of overlay up to an urban,  
11 where it's less protective.

12 Q. Okay. And what are the environment  
13 designations for this particular project?

14 A. The water part, below the ordinary high water  
15 mark, would be conservancy. And above the ordinary high  
16 water mark, it's all urban.

17 Q. So we're looking at two different environment  
18 designations. So any inwater work would be within the  
19 conservancy environment?

20 A. Yes.

21 Q. Now, based on the application materials you  
22 reviewed, what are the proposed uses for the pier?

23 A. It's been evolving. But last thing I remember  
24 seeing was that it was going to be a place to dock  
25 with -- have recreational boating, a cafe, maybe a



1 little tackle store there, and a water taxi.

2 Q. Could you pull up A-40, please.

3 Mr. Middaugh, I'm going to have you look at  
4 A-40. Could you describe what this document is.

5 A. Well, I think this is -- oh, it's just titled  
6 "Point Wells Development Project Narrative, May 14,  
7 2018."

8 Q. Is this the most recent project narrative for  
9 the project?

10 A. Yes.

11 Q. And could you please go to page 31. Does this  
12 page describe uses of the pier?

13 A. Yes. It says it will "incorporate  
14 water-dependent uses, utilizing the existing renovated  
15 structures, which could include small watercraft rental,  
16 fishing supplies, cafe, public art walk, and access to a  
17 floating dock used by nonmotorized watercraft."

18 Q. Okay. So is there commercial development?  
19 According to this latest narrative, is commercial  
20 development proposed for the pier?

21 A. Yes.

22 Q. And the pier is in the conservancy environment  
23 you mentioned. Are commercial uses allowed in the  
24 conservancy environment?

25 A. No, other than low intensity recreational.



1 Commercial uses, no.

2 Q. And what regulations are you looking at when  
3 you determine whether commercial development is allowed  
4 in the --

5 A. In the shoreline master program, in the "Uses"  
6 chapter, there's a description of the regulations --  
7 actually not a description. Regulations are in that  
8 section of the master program, under the heading  
9 "Commercial."

10 Q. All right. I'll have you turn to F-29 of the  
11 Shoreline Management Master Program. And I believe it  
12 is page 78 of the pdf for those on screen.

13 A. Got it.

14 Q. Could you describe the two regulations that  
15 apply to commercial development in the conservancy?

16 A. Yeah. The first one says that "Commercial  
17 development shall be prohibited on conservancy  
18 shorelines except for low intensity or recreational  
19 developments which do not substantially change the  
20 character of the conservancy environment." And the  
21 second one says: "Any commercial structure, except ones  
22 which requires or is dependent on direct contiguous  
23 access to the water, shall be set back from the ordinary  
24 high water mark by a minimum of 100 feet."

25 Q. Okay. So based on these two regulations, are



1 any commercial uses allowed on the pier?

2 A. No.

3 Q. Okay.

4 A. Well, again except for low intensity or  
5 recreational.

6 Q. In opening remarks and a couple times  
7 throughout this proceeding, applicant has mentioned the  
8 possibility of local ferry service or a water taxi  
9 service. Was that mentioned in this latest version of  
10 the project narrative?

11 A. I don't --

12 Q. Page 31 --

13 A. -- think so.

14 Q. -- of A-40.

15 A. No.

16 Q. If it were, has the applicant submitted any  
17 type of a permit application to operate such a ferry  
18 service?

19 A. No. No.

20 Q. How would you determine if that use would be  
21 permitted on the pier?

22 A. Well, if it's a commercial use -- I'm just  
23 assuming that it would be -- it would be prohibited. If  
24 it's not a commercial use -- let's say, maybe it's a  
25 free ferry service or something -- it would be -- it



1 would need a conditional use permit.

2 Q. How do you get to the determination that it  
3 would need a conditional use permit?

4 A. The -- earlier in the master program document,  
5 it has a matrix of use activities. And, then, it  
6 describes in that matrix, you know, if it's prohibited,  
7 if it's allowed, or if it needs a shoreline conditional  
8 use permit. It says for things that are not listed in  
9 this table -- and ferries are not -- you would need a  
10 conditional use permit. So conceivably, if it were a  
11 noncommercial project, they could obtain a conditional  
12 use permit for a ferry.

13 Q. Okay. And --

14 A. Water taxi.

15 Q. And that compatibility matrix, is that on page  
16 F-2 of that document?

17 A. I believe it is -- let me look. Yes.

18 Q. And then where was the provision you'd  
19 mentioned, if it's a use not identified in the matrix,  
20 it requires --

21 A. Actually on F-1.

22 Q. F-1. Okay.

23 A. It says "unidentified use activities" right  
24 there in the center of the page: "Shoreline use  
25 activities not specifically identified and for which



1 policies and regulations have not been developed are  
2 conditional uses."

3 Q. Okay. So without a conditional use permit can  
4 the applicant operate a water taxi or ferry service?

5 A. No.

6 Q. Has the applicant applied for a shoreline  
7 conditional use permit?

8 A. No.

9 Q. And I believe you mentioned that a shoreline  
10 conditional use permit is reviewed by the county. A  
11 recommendation is made by the county. But it's the  
12 Department of Ecology who ultimately --

13 A. Yes.

14 Q. -- would approve that? Okay.

15 Do you recall? Does the critical areas report  
16 that you reviewed, which I believe is Exhibit C-30, does  
17 that report discuss the impacts of operating a ferry  
18 service on critical species or critical habitat?

19 A. No.

20 MS. KISELIUS: Could you please pull up C-203,  
21 the sheet on the B-7 it's your -- this is a new exhibit.  
22 It is sheet C-203 of Exhibit B-7. It's been highlighted  
23 to point out some features.

24 Q (By Ms. Kiselius) Could you describe what this  
25 exhibit is, Mr. Middaugh.



1           A.    Yeah.  It is one of the applicant's plan  
2 sheets identified as C-203.  And it just depicts the  
3 plan view of the southern half of the site.

4           Q.    Okay.  Could you describe what the red, blue,  
5 yellow, and green lines are?

6           A.    Yeah.  The lines were on the plans already.  
7 They were just hard to see.

8           Q.    Uh-huh.

9           A.    So I believe Ryan highlighted those lines so  
10 it was easier to see where there were.  But there are  
11 four lines.  There's a brown line.  And the brown line  
12 is, oh there they are -- described as the mean high high  
13 waterline.  Then the next line would be the blue line,  
14 which is the ordinary high water mark.  The yellow line,  
15 which is the 150-foot buffer from the mean high high  
16 water.  Then the green would be the shorelines  
17 jurisdiction which would be 200 feet landward of the  
18 mean high high water.

19          Q.    Okay.  And is the 200-foot jurisdiction line  
20 correctly depicted in that exhibit?

21          A.    No.

22          Q.    Why is that?

23          A.    Well, it should be from the ordinary high  
24 water mark.  So it looks like it's been done from the  
25 mean high high water.



1 Q. So the shoreline jurisdiction would actually  
2 be set back farther than it is?

3 A. Yeah. You can actually see, between the brown  
4 and the blue on this site plan, that there's -- I  
5 believe I scaled it out. And there's probably close to  
6 a 50-foot difference on the southern half of the site.  
7 As you get further north, they are closer together but  
8 not exactly the same. But generally the ordinary high  
9 water mark is further landward of the mean high high  
10 water.

11 Q. And could you describe then, based on where  
12 the shoreline jurisdiction line should be, what project  
13 development is proposed within shoreline jurisdiction?

14 A. Yeah. It would be, you know, all the  
15 esplanade and parts of the buildings, especially the  
16 three foremost building on the site.

17 Q. Are there provisions in the -- I'm just going  
18 to call it the SMMP -- the SMMP and critical areas  
19 regulations that deal with shoreline protection measures  
20 for new development?

21 A. Yes.

22 Q. Can you tell us what those provisions are?

23 A. There are several that would probably -- well,  
24 would apply in this situation. We have the residential  
25 development regulations. And then we have shoreline



1 stabilization regulations.

2 Q. Okay. And the could you go ahead and explain  
3 what the residential development general regulation  
4 No. 5 provides? I believe that's on --

5 A. I'll just give you mine.

6 Q. We did a lot of reading yesterday. You're  
7 welcome. It's code. You are welcome to read that.  
8 That's on page F-60.

9 A. Okay. So F-60, regulation No. 5, says that  
10 "Residential development shall not be approved for which  
11 flood control, shoreline protection measures, or  
12 bulkheading will be required to protect residential lots  
13 unless a variance is obtained."

14 Q. Has a variance been applied for --

15 A. No.

16 Q. -- in this project?

17 A. No.

18 Q. You said there was another provision, a  
19 critical areas provision?

20 A. There is. And I don't have it with me. But  
21 it's -- yes, it's 30.62A.

22 Q. Let's he go ahead and pull that out.

23 MS. KISELIUS: Ryan, could you go to K-31,  
24 page 300, towards the top. I believe -- stop right  
25 there. Yeah.



1           A.    Yeah.  So "The project shall be sited and  
2    designed to prevent need for shoreline or bank  
3    stabilization and structural flood hazard protection  
4    measures for the life of the development."

5           MS. KISELIUS:  Ryan, can you scroll so we can  
6    just see what provision that is?

7           A.    It would be --

8           Q.    Thirty -- go ahead.

9           A.    30.62A.330 and there would be 2AI.

10          Q.    Thank you.  Does this project propose  
11    shoreline stabilization or structural flood hazard  
12    protection measures?

13          A.    Yes.

14          Q.    Could you describe those.

15          A.    Well, it's the, it's the esplanade is both, I  
16    guess, a levy and a shoreline stabilization.  It's used  
17    for -- will be used for that.

18          Q.    Okay.

19          A.    It's actually described as that, too.

20          Q.    Described as?

21          A.    As necessary for stabilizing, you know, the  
22    lands behind it.

23          Q.    Do you recall where you saw that?

24          A.    Well, I actually heard it in testimony from  
25    one of the applicant's representatives last week.  It



1 was essentially a levy. But it's described. And it's  
2 at least in the geotech report, I believe.

3 Q. The coastal engineering report? Could you  
4 pull up C-25.

5 A. Then you can see it in a plan view of -- or  
6 cross section of what it's going to look like, too.

7 Q. Oh, sorry. C-25, page 49.

8 A. Okay. So here you're seeing a cross section  
9 of the, of the beach where the landward side -- where  
10 the esplanade is, there's a concrete wall on the  
11 waterward side of the esplanade. And its stated purpose  
12 was essentially to protect the esplanade and whatever's  
13 behind it.

14 Q. Could you scroll up to page 48, just the page  
15 above. Right there, please. Then do you see that  
16 description that you were mentioning? Is that on this  
17 page?

18 A. Yeah, on the very bottom it says: "Finally a  
19 concrete wall is recommended to be placed below grade at  
20 the edge of proposed esplanade, extending down at least  
21 1 foot deeper than layer two to prevent the undermining  
22 of the esplanade. Erosion occurs over time under  
23 repeated, extreme storms."

24 Q. Does that appear to you to be a type of  
25 shoreline stabilization?



1           A.    Yes.

2           Q.    And based on those two provisions that you  
3 read from the SMMP and critical areas regulations, would  
4 that type of shoreline stabilization be permitted for  
5 this project?

6           A.    No, probably not.

7           Q.    Okay.  Are you familiar with Exhibit G-24?  
8 Let me tell you what that is.  You don't remember these  
9 all by numbers.  It's a May 15 memo from Bill Gerkin to  
10 Mr. MacReady.

11          A.    Yes.

12          Q.    Could you go to page 3, please.  Is Mr. Gerkin  
13 from Moffat & Nicol, the firm that prepared the coastal  
14 engineering report that we were just looking at?

15          A.    Yes, I believe so.

16          Q.    And how does he describe now the wall in this  
17 particular document?

18          A.    Well, at the bottom of that, it says:  "The  
19 concrete edge beam below grade separation wall is  
20 included as an integral part of the shoreline esplanade  
21 edge.  The thickened edge beam separation will provide  
22 structural support and separation between the subgrade  
23 and the promenade.  And the beach-fill material is not  
24 considered a shoreline stabilization measure."

25          Q.    Does this conflict with how the wall was



1 described in the coastal engineering report?

2 A. Yes.

3 Q. And has the wall been redesigned between --

4 A. No.

5 Q. Okay. Can you reconcile these two statements?

6 A. No.

7 Q. And do you consider the wall shoreline  
8 stabilization?

9 A. Yes.

10 Q. You mentioned, also, that someone testified  
11 that the esplanade serves as a levy. I believe you're  
12 referred to Mr. Dan Seng when he described the  
13 esplanade, quote, "serves as a levy"?

14 A. Yes.

15 Q. What is a levy? What is the purpose of a  
16 levy?

17 A. If you look up the definition in Webster's,  
18 because we don't have one, it just says it's designed --  
19 its purpose is to provide flood protection.

20 Q. So that would be considered a measure for  
21 flood control?

22 A. Yes.

23 Q. Were you aware that the esplanade was designed  
24 to act as a flood control measure?

25 A. Not until I heard that.



1 Q. And would that be consistent with the  
2 provision of the SMMP and the critical areas regulations  
3 that you mentioned earlier?

4 A. No.

5 Q. Based on your experience, can you describe  
6 what other agency approvals might be needed for any  
7 other inwater work proposed by the applicant?

8 A. Yeah. I may not have a comprehensive list.  
9 But at least Department of Fish & Wildlife hydraulic  
10 permits.

11 Q. What type of permit from Fish & Wildlife?

12 A. Hydraulic permit.

13 Q. Hydraulic permit?

14 A. Yeah. Ecology for the Shoreline permits and  
15 variances and conditional use permits. It's going to be  
16 probably a Section 10, Rivers & Harbors Act type permit.

17 Q. Who administers that?

18 A. Oh, the Army Corps of Engineers. An approval  
19 from DNR for use of aquatic lands.

20 Q. Then any federal action? Does that trigger  
21 NEPA review?

22 A. Yes, because of the presence of threatened and  
23 endangered species.

24 Q. Does it also trigger review under the  
25 Endangered Species Act?



1 A. Yes.

2 Q. What agencies are involved in that review?

3 A. Well, it could be Department of Fish &  
4 Wildlife. It's also National Marine Fisheries Service  
5 and U.S. Fish & Wildlife Service.

6 Q. To your knowledge, has the applicant applied  
7 for any of these other permits or approvals?

8 A. No.

9 Q. You haven't seen any materials in the project  
10 application --

11 A. No.

12 Q. -- that mention them?

13 I'd like to move on to critical areas issues.  
14 Did you review the project for consistency with the  
15 county's critical areas regulations?

16 A. Yes.

17 Q. Let's go ahead and start with the discussion  
18 on buffers. Could you describe what is required as the  
19 standard buffer for marine shorelines?

20 A. Yes. The standard buffer is 150 feet measured  
21 from the ordinary high water mark.

22 Q. From the ordinary high water mark?

23 A. Yes.

24 Q. Could you describe on this exhibit where the  
25 buffer is currently located?



1           A.    Well, they're not really showing a buffer  
2 line.  So they're showing --

3           Q.    What is the yellow line?

4           A.    Sorry.  It's -- I correct myself.  It is at  
5 the yellow line, 150-foot buffer.

6           Q.    Where is that measured from?

7           A.    They measured it from the mean high high  
8 water.

9           Q.    And our Snohomish County code requires it to  
10 be measured from where?

11          A.    From the ordinary high water mark.

12          Q.    So it is not depicted correctly on --

13          A.    Right.  Yes.

14          Q.    And can you approximate where, then, that  
15 buffer would be moved to if it was measured from the  
16 ordinary high?

17          A.    Well, on the southern part of the property, it  
18 would be roughly 50 feet further landward.  Then, as you  
19 get further north, it's less distance landward.

20          Q.    So maybe approximately where the green line is  
21 now, which is where they indicate the shoreline  
22 jurisdiction is?

23          A.    Right, yes.

24          Q.    So then those residential structures would be  
25 set within --



1 A. Yes.

2 Q. -- the standard buffer.

3 The esplanade is within the buffer as well?  
4 Why is it important to measure the 150-foot buffer from  
5 the ordinary high?

6 A. Well, the code requires it. But also it's  
7 assumed that it takes that distance to protect the  
8 functions and values of the -- a marine shoreline or the  
9 critical area.

10 Q. Could you give just a little overview of what  
11 are functions and values. What does that mean?

12 A. Well, the functions would be the functions  
13 that are provided by the critical area, which would be  
14 the marine water in this case. So it would be habitat  
15 for fish and wildlife. I know there's water quality  
16 functions. There's water quantity functions. Those  
17 are the three major ones.

18 Q. And how was a 150-foot standard buffer  
19 determined? Why is it -- why is that number in county  
20 code?

21 A. It was based on a review of the best available  
22 science when we adopted our code back in 2007.

23 Q. Could you describe what innovative development  
24 design is?

25 A. Yeah. It's in 30.62A. It allows an applicant



1 to propose alternative protection that provides  
2 equivalent protection to the critical area. So, for  
3 example, one could -- the standard buffer in this case  
4 is 150. Someone could propose -- use innovative  
5 development saying, Well, we're doing something special  
6 that will provide the same level of protection to the  
7 functions and values of a marine shoreline.

8 Q. Do you expect to see an evaluation of  
9 functions and values?

10 A. Yes.

11 Q. What does that typically -- what does a  
12 proposal typically look like for --

13 A. Well, they would be variable. But they would  
14 kind of go function by function, you know, the major  
15 ones, and compare the two to ensure that the alternative  
16 protection is at least equivalent to the protection we  
17 get from the standard measures.

18 Q. And is the -- let's, let's step back. What's  
19 allowed in terms of development within a standard  
20 shoreline buffer, marine shoreline buffer?

21 A. Usually it's an area you have to stay out of.  
22 But you can go into the buffers, provided you have  
23 mitigation of some kind.

24 Q. So in this particular -- for this particular  
25 project, we're talking about at least the esplanade and



1 the residential structures are within the buffer?

2 A. Yes.

3 Q. Those would not be --

4 A. Well, yes.

5 Q. If it was accurately depicted.

6 A. Yes.

7 Q. Those would not be permitted without  
8 mitigation or the use of innovative development design?

9 A. Correct; yes.

10 Q. So is the applicant proposing to use  
11 innovative development design for this project?

12 A. Yes.

13 Q. And do you know where that's, where that's  
14 described or where that's proposed?

15 A. No. But I hope you're going to tell me  
16 exactly where it is. I don't remember the document.

17 Q. Is it in the critical areas report provided?

18 A. Yes.

19 Q. That's Exhibit C-30.

20 MS. KISELIUS: You don't mind pulling that up,  
21 Ryan. C-30 106. I think if you scroll down -- yeah.  
22 Thank you.

23 A. It's 106.

24 Q (By Ms. Kiselius) It's probably page 106.  
25 That would be pdf -- what page is that? 116. Okay.



1                   Could you describe the IDD proposal?

2           A.    Yeah.  It says the site has been used for  
3 industrial use for over a century.  The existing  
4 hardened shoreline is entirely hardened with sheet pile,  
5 riprap, and other structures.  I'm just paraphrasing.  
6 I'm not going to read the whole thing unless you want me  
7 to.

8           Q.    No.  Thank you.

9           A.    So any development on the property would  
10 include work in the 150-foot shoreline buffer and the  
11 300-foot buffer near salmonid habitat as well as the  
12 administrative buffer of other wetlands and streams.  So  
13 they are proposing to have construction of an esplanade  
14 in the outer portion of the marine buffer, which is a  
15 150-foot buffer, and a number of buildings within the  
16 300-foot buffer.

17                   And then, in addition would they're proposing  
18 development on the landward side of the railroad tracks  
19 in the buffers of wetland and stream on the application.  
20 So they are using -- they are proposing innovative  
21 development.  They're going to enhance the marine  
22 shoreline in lieu of applying the standard buffers in  
23 those areas -- on the marine shoreline as well on the  
24 buffers of the wetland and the stream on the other side  
25 of the railroad tracks.



1 Q. Okay. And so what would you expect to see in  
2 an IDD proposal which would impact buffers for marine  
3 shorelines, wetlands, and streams? What would that  
4 analysis look like?

5 A. For stream and wetland, I would expect them to  
6 evaluate the buffer that are existing now and the  
7 functions and values that you would obtain by having,  
8 you know, the standard buffer on one of those and left  
9 it alone, then compared it to the innovative development  
10 proposal, which is to enhance the marine shoreline, to  
11 see if they're providing -- if that is providing  
12 equivalent protection to those other things.

13 Q. Okay. If you -- in evaluating the applicant's  
14 innovative development design proposal, is there any  
15 discussion of functions and values of marine shorelines?

16 A. Well, there is. I mean they talk about the  
17 use of wildlife and fish. They don't do the same thing  
18 on the wetland and stream buffer.

19 Q. They don't? They don't include it? So in the  
20 IDD proposal, there's a discussion of marine shoreline  
21 functions and values?

22 A. No. It's elsewhere in that report. There's a  
23 description of the wildlife use and fish use.

24 Q. Does the proposal compare the functions and  
25 values of the standard buffer with the functions and



1 values that will be provided by shoreline restoration?

2 A. No.

3 Q. Does the IDD proposal contain any discussion  
4 of functions and values of the wetland?

5 A. None.

6 Q. Does it provide a discussion of the functions  
7 and values of the stream?

8 A. No.

9 Q. In your opinion, can marine shoreline  
10 restoration, the benefits provided by marine shoreline  
11 restoration, compensate for the functions and values of  
12 an upland wetland or stream?

13 A. No. Well, I wouldn't -- it's probably a  
14 qualified no. I mean they would have to do the  
15 analysis. But it's very unlikely they could demonstrate  
16 that the functions and values of the wetland stream  
17 buffer is replaced on the beach: Different wildlife,  
18 different functions.

19 Q. I want to make sure that we identify the  
20 stream and the wetland that we're talking about.

21 MS. KISELIUS: Ryan, could you go to page 76  
22 of the report. I'm not sure what -- actually, try 77 if  
23 you would. There we go.

24 Q (By Ms. Kiselius) Could you describe the  
25 wetland and the stream that we're talking about?



1           A.     Yeah.  The stream we're talking about is  
2  Chevron Creek in the center of the site.

3           Q.     Is that -- is Ryan adequately --

4           THE HEARING EXAMINER:  I'd like to catch up  
5  with you.  What pdf page are you on?

6           MS KISELIUS:  This is pdf page 87.

7           THE HEARING EXAMINER:  Thank you.

8           A.     Chevron Creek, I'll just point to it here.  
9  You can see the buffer's surrounding Chevron Creek,  
10 50 feet.

11          Q     (By Ms. Kiselius) How about the wetland?

12          A.     And there's a wetland to the north of that  
13 here.  You can see that -- (inaudible).  Okay.  So they,  
14 on that -- on that plan, they've crosshatched the areas  
15 that would be impacted by the project, in the buffers.

16          Q.     Is there a wetland that also overlaps Chevron  
17 Creek?

18          A.     Is there a wetland or wetland buffer?

19          Q.     Both.

20          A.     Oh, yes, there is.  So on the southern side of  
21 Chevron Creek, there's a wetland, too.

22          Q.     Can you kind of indicate where that is.

23          A.     It's just south of the stream.

24          Q.     Are those -- what component of project  
25 development is going to be impacting that stream and



1 that wetland?

2 A. Oh, I don't recall --

3 Q. It's hard to tell. Is that around the  
4 location of the secondary access road?

5 A. Yes. It's primarily the access road that's  
6 causing the impacts.

7 Q. Okay. Again, the functions and values and  
8 standard buffers for the stream and the wetland are not  
9 described in the innovative development design proposal?

10 A. No.

11 Q. So without providing an adequate innovative  
12 development design proposal, does the project  
13 substantially conflict with code for impacting buffers?

14 A. Yes. I mean at the very least I can't tell  
15 because they haven't provided the information.

16 Q. If they didn't provide the information, you  
17 couldn't approve the proposal?

18 A. Right; correct.

19 Q. Finally I just want to briefly discuss habitat  
20 management plans. Can you describe what one is and why  
21 it is important?

22 A. Well, in 30.62A we have a section for  
23 protection of threatened and endangered -- state and  
24 federal threatened and endangered species and state --  
25 short list of state sensitive species. So, whenever you



1 are in the habitat of one of those, you have to provide  
2 something called a habitat management plan, which is  
3 where you go through -- you describe its habitat. You  
4 describe the impacts. Then you provide protective  
5 measures to protect those habitat areas.

6 MS. KISELIUS: Okay. Ryan, can you pull up  
7 Exhibit K-31, page 308.

8 Q (By Ms. Kiselius) Is this the provision that  
9 you were discussing?

10 A. Yes.

11 Q. These are the requirements for what's to be  
12 included in the habitat management plan? Okay. What  
13 has the applicant submitted for a habitat management  
14 plan?

15 A. It's more or less a general overview of the  
16 habitat requirements. One of the things that you're  
17 required to do in the county code is to define something  
18 called the primary association areas of those species.  
19 And the primary association area would be the habitat  
20 areas that are used by the animals and any protective  
21 buffers around those areas.

22 The applicant did not do that type of  
23 analysis, didn't tell us what their primary association  
24 areas would be. Instead, they -- on some of them, they  
25 used something called critical habitat, which is a



1 federal term and a federal designation. They're not  
2 necessarily the same thing. In fact, on at least one or  
3 two species, in this case, they're definitely not the  
4 same thing.

5 Q. And is that because there's perhaps a  
6 distinction between county code requirements and what  
7 federal law might require for a species?

8 A. Yes.

9 Q. Is there any indication in the critical areas  
10 report prepared for this project what the difference is  
11 or distinctions between county and federal --

12 A. No.

13 Q. -- requirements are?

14 A. No.

15 Q. Do you need a habitat plan for each species  
16 protected by county code?

17 A. Yeah. That's -- you should have something. I  
18 suppose it's possible that you could group similar  
19 animals if they had similar requirements. But yeah, you  
20 need one.

21 Q. And does the critical areas report provided by  
22 the applicant do that?

23 A. Well, like I said, it does -- it's specific on  
24 some. And others, it's very generic. So it's hard to  
25 tell.



1 Q. At this point would you say that the habitat  
2 management plan complies with county code?

3 A. As a whole, no.

4 Q. Would you consider that a substantial conflict  
5 with county code?

6 A. Yeah. I mean at least there's not enough  
7 information for me to determine if they're complying  
8 with county code.

9 MS. KISELIUS: Okay. I do not have any  
10 further questions. Thank you.

11 THE HEARING EXAMINER: Mr. Vasquez, it's your  
12 turn.

13 MR. VASQUEZ: Thank you.

14

15 CROSS EXAMINATION

16 BY MR. VASQUEZ:

17 Q. Mr. Middaugh, my name is Dino Vasquez; and I  
18 represent BSRE. Just a couple questions. I just want  
19 to get some clarification from your testimony.

20 There was some point in your testimony where  
21 you say -- and correct me if I'm wrong -- about the  
22 wetland stream buffers can't be, in your mind, replaced  
23 by innovative design. And I don't know what the term  
24 IDD, whatever . . .

25 A. Yeah.



1 Q. Yeah. Was that your testimony? I just want  
2 to clarify that. Is that true?

3 A. I didn't say you couldn't propose innovative  
4 development. What I said is that the proposed  
5 innovative development, which is enhancing the  
6 shoreline, does not replace or protect the functions and  
7 values of the stream and the wetland on the other side  
8 of the tracks.

9 Q. Okay. So what you're saying is what BSRE has  
10 proposed as innovative development does not protect or  
11 enhance the wetland stream buffers that are contained in  
12 the --

13 A. No. Correct. That's what I said.

14 Q. Okay. Then you said that what BSRE had to do  
15 is to an analysis of the functions and values. And that  
16 was kind of the expected information from BSRE for you  
17 to be able to evaluate this proposal; correct?

18 A. Yeah. It's the functions and values but also  
19 define what their primary association areas are for each  
20 of those animals --

21 Q. Okay.

22 A. -- or fish.

23 Q. Your expectation for that information, was  
24 that ever communicated to BSRE?

25 A. I believe it was.



1 Q. Do you recall when?

2 A. I believe it was in our staff report last  
3 year, April of last year.

4 Q. Is that April or October?

5 A. Oh, sorry. It may have been -- it may have  
6 been October.

7 Q. I'm not sure. I'm asking you.

8 A. Yeah. I don't remember. I know when I wrote  
9 my recommendation. But then that goes into a larger  
10 staff report. And I'm not sure -- I don't have it in  
11 front of me.

12 Q. Okay.

13 A. It does say something about habitat management  
14 plans.

15 Q. Now, let's go to C-30, page 27, that map  
16 there. And you've identified the Chevron Creek buffer  
17 and the wetland buffer; correct?

18 A. Yes.

19 Q. It was actually the --

20 MS. KISELIUS: Did you want the same exhibit,  
21 page 87?

22 Q (By Mr. Vasquez) -- the first image that you  
23 had on there. Sorry.

24 MS. KISELIUS: Eighty-seven. Yeah.

25 MR. VASQUEZ: I did misspeak. I said 27. So



1 it's not your fault.

2 Q (By Mr. Vasquez) The cross hatches areas, is  
3 where you're talking about?

4 A. Yes.

5 Q. And what's impacted as a feature for BSRE is  
6 the secondary access road; correct?

7 A. Yes. It looks like there is some -- it was to  
8 the west of the road, too.

9 Q. West of the road?

10 A. Well, I'll point to it. There's just to the  
11 west side of the access road, there's some impacts from  
12 the building there.

13 Q. Okay. And so it's your opinion there has to  
14 be some mitigation that's acceptable to allow building  
15 within that buffer?

16 A. Well, it provides, if you're using innovative  
17 development, you have to have equivalent protection  
18 those two critical areas.

19 Q. Equivalent protection?

20 A. Yeah.

21 Q. Correct? Okay.

22 By the way, you stated that, in your opinion,  
23 there appears to be a number of permits or approvals  
24 required by various agencies, federal and state and  
25 local; correct?



1 A. Yes.

2 Q. I think you talked about Fish & Wildlife,  
3 Ecology, Army Corps of Engineers, and DNR; right?

4 A. Yes.

5 Q. With those permits and approvals required,  
6 those affect, potentially, the design of the project;  
7 correct?

8 A. Yes.

9 Q. Okay. And affecting the design of the project  
10 could potentially affect the -- I can't remember what --  
11 the floor area ratio that can be achieved by the  
12 project; correct?

13 A. I don't know. I'm not sure.

14 Q. Okay. If it did, wouldn't the designation of  
15 this property as an urban center or urban village kind  
16 of be eliminated?

17 A. That's not my area of expertise.

18 Q. Okay. All right. Just for historical  
19 context, by the way, what is the current usage of the  
20 pier?

21 A. I believe it was for offloading and on loading  
22 fuel oil.

23 Q. So fuel goes off and on across that pier?

24 A. I believe so, yeah.

25 Q. Okay. And you say that no commercial



1 development is allowed for this pier without either a  
 2 permit or approval by somebody; correct?

3 A. No. I said that it's just not allowed. I  
 4 didn't say without -- commercial development is not  
 5 allowed.

6 Q. All right. Let's take a look at Exhibit P-12.  
 7 You mentioned that there was a matrix of compatibility.  
 8 I think that's on page F-2; correct?

9 A. Correct.

10 Q. Okay. And you know this better than I do  
 11 'cause you wrote this thing.

12 A. I didn't write that.

13 Q. F-2 has a column or a chart and --

14 A. You can't bring that up?

15 Q. Yeah. I guess so.

16 MR. VASQUEZ: Can we bring up P-12?

17 MS KISELIUS: P-12 was introduced yesterday.  
 18 So I'm not -- oh, it is there.

19 MR. VASQUEZ: She's very efficient.

20 MS. KISELIUS: Thank you, Ms. Davis.

21 MR. VASQUEZ: I think it's section F-2. I  
 22 don't really know what page that is because that's . . .

23 MS. KISELIUS: Fifty-one of the pdf.

24 THE WITNESS: Okay.

25 Q (By Mr. Vasquez) That's the chart that I'm



1 talking about. And there is a line that says  
2 "recreation"; right?

3 A. Yes.

4 Q. It goes urban, suburban, rural, conservancy,  
5 natural; correct?

6 A. Yes.

7 Q. And there is a symbol there that looks like a  
8 zero. Okay. From looking at the legend up there, it  
9 says those are used permitted.

10 A. Yes.

11 Q. Right? Now, absent the or disregarding the  
12 potential ferry that was included in the narrative, are  
13 those uses that are suggested by BSRE recreational or  
14 nonrecreational purposes?

15 A. Well, you have multiple uses applied to an  
16 activity. So you can have a commercial recreational  
17 use, for example. So you have to go to the commercial  
18 regulations as well the recreational regulations.

19 Q. Well, let me ask you this: If you're not  
20 renting kayaks but you're allowing the pier to be used  
21 for kayakers, would that be considered a recreational  
22 use?

23 A. Yes. That would be allowed.

24 Q. Okay. What about fishing off the pier?

25 A. Yeah. Yes.



1 Q. Not commercial fishing, I'm talking about.

2 A. No. Yeah.

3 Q. Picnicking on the pier?

4 A. Yes.

5 Q. Any of those uses are considered recreational  
6 uses; correct?

7 A. Yes.

8 Q. I just want make sure I understand your  
9 understanding of the esplanade wall. It seems like  
10 there's conflicting descriptions of the wall from the  
11 applicant's documents; is that correct?

12 A. Yes. And from some testimony.

13 Q. Okay. From some testimony. But your position  
14 is that the esplanade wall is a shoreline stabilizing  
15 function?

16 A. Yes.

17 Q. Correct? And as a levy, as you've heard from  
18 testimony; correct?

19 A. Yeah.

20 Q. Is it your opinion that the esplanade wall  
21 cannot act as a levy?

22 A. Right.

23 Q. And is it it cannot act a levy ever or cannot  
24 act as a levy without a permit or application?

25 A. It was prohibited.



1 Q. Okay. Why is that, by the way?

2 A. I think they were looking at, you know,  
3 subdivisions on near-shore areas that couldn't survive  
4 without a big wall of some kind. So I think they were  
5 really thinking about bigger things, not necessarily  
6 something like this, which is, you know, a beach  
7 restoration. But nevertheless, it does apply.

8 Q. Okay. And there are recommendations (sic.)  
9 from BSRE that they are going to be restoring the beach  
10 to a more natural form; correct?

11 A. Correct.

12 Q. Is that something that you would consider that  
13 requires a permit or variance or application?

14 A. For the beach restoration?

15 Q. Yeah.

16 A. Yeah, it requires approval, a substantial  
17 development permit.

18 Q. Does it give you enough information to know  
19 what the plans for BSRE are?

20 A. At this stage, yes, it does. It's pretty  
21 generic. It gives the plan view, I think a cross  
22 section. So in the early stages of a project, that  
23 would be enough.

24 Q. Would you consider this an early stage of the  
25 project?





1           A.    Yes, certainly it would be.

2           Q.    So would the construction of an esplanade have  
3 an impact on the functions and values of this particular  
4 shoreline?

5           A.    Well, this is a tough -- I mean in this case,  
6 what they're doing is generally beneficial. They're  
7 taking out the bad creosote pilings. Personally, I  
8 think it's a great project. It's a great idea. If they  
9 have to put a 6-inch or 2-foot-high wall in next to an  
10 esplanade, if it were up to me, I'd do it. But the  
11 code, the regulations are pretty I clear. In my mind,  
12 it's pretty clear. It says you just can't do it.

13           MS KISELIUS: Thank you. That's all.

14           THE HEARING EXAMINER: Mr. Vasquez?

15           MR. VASQUEZ: Nothing more, Your Honor. Thank  
16 you.

17           THE HEARING EXAMINER: Thank you,  
18 Mr. Middaugh.

19                    Let's take our morning break. It's 10:30. We  
20 can come back at 10:45.

21           MS. KISELIUS: If it's helpful, Mr. Examiner,  
22 we have Randy Sleight as our next witness. And he is  
23 our final witness if that helps you with witness  
24 preparation.

25           THE HEARING EXAMINER: Okay.



1 MS. KISELIUS: It depends on how talkative he  
2 is. Perhaps an hour and a half.

3 THE HEARING EXAMINER: Why don't we go off the  
4 record. And we can talk about it off the record. Thank  
5 you.

6 (Recess taken.)

7 THE HEARING EXAMINER: Ready? Ms. Kiselius,  
8 back to you.

9 MS. KISELIUS: Thank you. Our next witness  
10 will be Randy Sleight.

11 THE HEARING EXAMINER: Do you solemnly swear  
12 or affirm that the testimony you are about to give in  
13 the proceeding is true and correct?

14 THE WITNESS: I do.

15 THE HEARING EXAMINER: Name and address,  
16 please.

17 THE WITNESS: Randall Sleight, 1603, Lake  
18 Stevens -- 19th Street Northeast, Lake Stevens, 1603.

19

20 DIRECT EXAMINATION

21 BY MS. KISELIUS:

22 Q. And Mr. Sleight, what is your professional  
23 title?

24 A. Chief engineering officer.

25 Q. And that is with the?



1           A.    Planning and Development Services, Snohomish  
2 County.

3           Q.    Thank you.  How long have you been with the  
4 county?

5           A.    I've been with the county for 30 -- almost 33  
6 years.  It will be October 7, 1985, is when I first  
7 started.

8           Q.    Could you briefly describe your educational  
9 background.

10          A.    I graduated from the University of Washington  
11 with a bachelor of science in civil engineering and have  
12 taken subsequent postgraduate studies in rock mechanics,  
13 and surveying, cadastral surveying, and a variety of  
14 other courses.

15          Q.    And you are a professional engineer?

16          A.    Yes, I am a licensed professional civil  
17 engineer and a licensed professional land surveyor in  
18 the state of Washington.  And also I was elected fellow  
19 with ASCE, American Society of Civil Engineering in  
20 2005, the same year I received the government engineer  
21 of the year award from the Puget Sound Engineering  
22 Council.

23          Q.    What is an ASCE fellow?

24          A.    Well, it's something that your peers elect  
25 you.  It's something that you have to go forward and --



1 I actually didn't know I was being nominated for the  
2 position originally. And then I was nominated, got  
3 elected. There's about -- at that time, you're part of  
4 a class worldwide. And there were 30 elected in the  
5 class of 2005 in the world, civil engineers.

6 Q. So as chief engineering officer, could you  
7 generally describe your job responsibilities?

8 A. Well, this morning I started out signing off  
9 on a bunch of construction plans. So and then, I also  
10 have review responsibility on projects of this nature,  
11 more complex projects. Brightwater was a project that I  
12 worked on. That was a fairly significant project that  
13 did both plan review and the reviewed the environmental  
14 and geotechnical aspects of that project, both on the  
15 site and also on the outfall which crosses to the south  
16 of this project.

17 Q. So geotechnical reviews are a routine part of  
18 your job responsibilities?

19 A. I usually look at the majority of the more  
20 complex geotechnical reports that are prepared for  
21 private development.

22 Q. And how familiar are you with the county's  
23 requirements regarding geologically hazardous areas?

24 A. Well, I'm fairly familiar with them because I  
25 wrote the code on them or a portion of it. I worked



1 with the team that helped write that particular part of  
2 the code.

3 Q. And have you assisted in drafting code  
4 provisions relating to geologically hazardous areas  
5 throughout the years or just the most recent provisions?

6 A. No. Pretty much throughout the years, from  
7 '98 to 2007. Ever since the adoption of our critical  
8 areas regulations, I've been involved in working to  
9 draft those regulations. That's correct.

10 Q. And are you generally familiar with landslide  
11 hazards in Snohomish county?

12 A. Yes, I am. I'm fairly familiar with landslide  
13 hazards in Snohomish county. Having worked in private  
14 practice first, 10 years prior to working here, one of  
15 my roles was to survey and map landslides. And I acted  
16 as an expert witness on landslide cases on a variety of  
17 different projects I worked on.

18 And I even wrote geotechnical reports that --  
19 back in the days before GIS, I think the guy's name was  
20 Ralph Hinkle; but don't quote me on that the last name.  
21 He used to put a red pin on the geological maps in the  
22 city of Seattle. And some of those pins were on reports  
23 that I wrote.

24 Q. Are you part of the PDS review team for the  
25 Point Wells project?



1           A.    Yes, I am.

2           Q.    And what are your responsibilities on this  
3 particular project?

4           A.    Well, primarily I was looking at the portion  
5 of the report for landslide hazard.  But I also look  
6 looked at geologic -- hydrogeologic report, the coastal  
7 engineering assessment, anything that would be related  
8 to the engineering of the project, really.

9           Q.    We can start with some of the basics on  
10 landslide hazards.  What is a landslide hazard area?

11          A.    Well, the landslide hazard area is defined in  
12 Snohomish County code as piece of property or land that  
13 has slopes that are 33 percent in grade or steeper.  
14 There is an existence of geologic contact and the  
15 presence of seeps or springs.  That's sort of the basic  
16 definition.  But in addition, areas that have prior  
17 historic movement, slope movement, landslide chutes,  
18 evidence of prior movement on a piece of property would  
19 constitute a landslide hazard area.

20                MS. KISELIUS:  Ryan, could you please pull up  
21 what you pulled up for me.  This is a new exhibit.  
22 Again like with Mr. Middaugh, this is an existing  
23 project sheet A-051 from Exhibit B-7.  We've just marked  
24 some lines for you.  Counsel already has copies of this.

25                THE HEARING EXAMINER:  This will be P-16?



1 THE WITNESS: Yes, P-16.

2 Q (By Ms. Kiselius) Mr. Sleight, are there  
3 landslide hazards on the proposed project site?

4 A. Yes, there are.

5 Q. Using the exhibit behind you or in front of  
6 you, could you please explain where the landslide hazard  
7 areas are?

8 A. Well, it's -- the landslide hazard area as  
9 depicted is labeled No. 6 on the drawing. And No. 6 is  
10 kind of shaded, almost shaded over. So it was a little  
11 bit difficult to depict exactly where it was. It's  
12 identified in the legend in the lower left-hand side.  
13 And then what we've done, we've put a red line over the  
14 top of the line. And it's a little bit more of a  
15 brownish red, right here, coming across. Here's the No.  
16 6 (inaudible).

17 THE HEARING EXAMINER: Mr. Sleight, could you  
18 grab the microphone and take it with you, please. Thank  
19 you.

20 THE WITNESS: Yeah.

21 A. Yeah, it's right about where this square on  
22 this box is pointed, that line right in here.

23 Q (By Ms. Kiselius) That demarcates the edge of  
24 the landslide hazard area?

25 A. That's correct.



1 Q. And then can you show us where the landslide  
2 hazard area setbacks are?

3 A. Yeah. In the 2007 code, the setback of -- for  
4 landslide hazard was described as 50-foot minimum or H  
5 over 2. And height divided by two, the height here was  
6 200 feet. So height divided by two would be 100-foot  
7 setback. So the line for the setback was 100 feet  
8 beyond that. So that's this red line here.

9 Q. Okay. And when was the first time you saw  
10 these particular landslide hazard areas and setbacks  
11 demarcated on the application materials?

12 A. When we got the most recent submittal. It was  
13 in April this year.

14 Q. Have the requirements for defining landslide  
15 hazard areas and setbacks changed since the project  
16 application was submitted?

17 A. Yes. Recently, in 2015, after the Oso event,  
18 Snohomish County adopted a new landslide hazard,  
19 geologic hazard portion of the critical area  
20 regulations. And the requirements became much more  
21 stringent as far as setbacks. And they -- actually the  
22 entire definition for landslide hazard area changed.  
23 Instead of having a setback, the setback is now included  
24 in the landslide hazard area definition. And it's  
25 pretty much been expanded. Instead of H over two, it's



1 2H for the run-out distance. So the extent of run out  
2 at the toe of the slope or the whole edge of the  
3 landslide hazard area, previously extended -- extends  
4 out quite a bit further.

5 Q. So the required setback for this project  
6 vested under the 2007 code is 100 feet?

7 A. H over two, that's correct.

8 Q. So under the new code, if it had been  
9 applicable, the setback would be 400 feet?

10 A. That's correct.

11 Q. But, again, this project is vested to the 2007  
12 code?

13 A. We reviewed it based on the 2007 code.

14 Q. And again using this exhibit, can you describe  
15 what development is proposed to be located within either  
16 the landslide hazard area or its setback?

17 A. Well, as you can see, virtually everything to  
18 the east of the railroad tracks is within the landslide  
19 hazard area. And that's this upper line. Everything to  
20 the east. So that would include the urban plaza. It  
21 would include the three buildings. It would include the  
22 secondary access. And it would also include the first  
23 responder or the fire station that was proposed.

24 Q. When you said "the three buildings," are those  
25 residential towers?



1           A.     Yes.   The three residential towers are all  
2 shown within the landslide hazard area currently.

3           Q.     Okay.  And does the county code allow  
4 development within a landslide hazard area or its  
5 setback?

6           A.     Not, not without a deviation.

7                   MS. KISELIUS:  Mr. Countryman, could you  
8 please pull up Exhibit K-31, page 319.

9           Q     (By Ms. Kiselius) You mentioned a deviation.  
10 So no development's allowed with a landslide hazard area  
11 without first obtaining a deviation.  What are the two  
12 criteria for granting a deviation?

13          A.     Well, first of all, just like any other  
14 critical area aspect, we try avoid the impact of the  
15 critical areas.  So we would try to get folks, if they  
16 could possibly locate outside of the critical area, to  
17 do so if there were opportunities elsewhere on the site  
18 to develop outside of the critical area.  So that's part  
19 of our hierarchy is the avoidance criteria.  So that's  
20 the first thing that one would look at.

21                   Another criteria is then we ask that the  
22 structural aspects be looked at, that they do a  
23 geotechnical evaluation that the actual mitigation or  
24 the way to be able to allow is at least equivalent to  
25 the -- that which is in the current setback.  So they



1 would evaluate the slope and assess it to see whether or  
2 not the landslide were or the risk of sliding is less  
3 after development and compare that to the existing  
4 condition.

5 Q. Okay. And we talked about this a little bit  
6 yesterday in terms of who grants a deviation. Just for  
7 the record, can you explain to deviation are processed  
8 from this particular code provision?

9 A. Okay. Yeah. This is -- in this particular  
10 code, the 30.62B, that's a code that's administered by  
11 Planning and Development Services, the critical areas  
12 regulations. And I'm the one who would be designated by  
13 the director of PDS to evaluate and grant the deviation.

14 Q. Okay. You mentioned you've been with the  
15 county for how many years?

16 A. Just -- well, 32 1/2 or so, something like  
17 that.

18 Q. Almost 33?

19 A. Yeah.

20 Q. In those years, how many deviation requests  
21 from landslide hazard area requirements have you  
22 granted?

23 A. I would say probably about three or four.

24 Q. Three or four over approximately 32-plus  
25 years?



1           A.     Well, recognize that we didn't have those  
2 particular requirement until the first critical area  
3 regulations. So the first 15 years or so or 13 years,  
4 we didn't, we didn't have this particular requirement in  
5 code.

6           Q.     So 2007 was when this requirement was first  
7 adopted?

8           A.     That's correct.

9           Q.     Can you describe the types of development  
10 proposed for those three or four deviation requests that  
11 you've granted? What types of projects were those?

12          A.     First of all, they were single family that I  
13 can recall granting the request. They were -- the  
14 only -- the lot was already created. It had -- it  
15 wasn't a new plat or subdivision or something like that.  
16 It was a situation where the property owner had a  
17 constitutional right to be able to develop their  
18 property.

19                    But the we also, in at least a couple of the  
20 instances, have got a second opinion from a geotech,  
21 geotechnical firm, to verify that where they were  
22 proposing it was going to be equivalent or better or  
23 actually make the slope safer than it currently was.  
24 Usually, in all cases that I can recall that was  
25 granted, they were based on pile foundations or pin pile



1 foundations.

2 Q. Okay. And do you typically work with the  
3 applicant to determine the best place to locate that  
4 single-family structure on that lot?

5 A. Yes, in most cases. There have been cases  
6 where people want to build in a landslide hazard area  
7 and, during the site review process, our staff works  
8 very closely with them. We show them our GIS maps. We  
9 try to get them to avoid and move their building out of  
10 the landslide hazard area as best we can.

11 Q. Okay. Has the applicant for this project  
12 applied for a deviation from the landslide hazard order  
13 area requirements?

14 A. Yes, just recently they did.

15 Q. And when you says "just recently," what was  
16 the date that they applied for the deviation request?

17 A. I think it was the middle of May. It's either  
18 the 15th or 18th. I can't remember the specific date.

19 Q. I believe -- are you familiar with Exhibit  
20 C-27? I'm pulling that up. I don't think I . . .

21 A. Okay. Yes. That's exhibit when they  
22 submitted the landslide area deviation request,  
23 April 24th.

24 Q. Okay. That was the applicant's first --

25 A. -- that's when the applicant submitted it.



1 Recognize that sometimes, when people submit things, by  
2 the time it gets to my desk, it might be May.

3 Q. And fair enough. There's Exhibit C-27 which  
4 is here. And then, this was -- who was the -- who's the  
5 requestor who authored this document?

6 A. It looks like -- well, Hart Crowser is the  
7 party -- professional firm that prepared this request.  
8 And it looks like John Bingham, licensed professional  
9 engineer, who is a geotechnical engineer, works for Hart  
10 Crowser.

11 Q. Okay. Then you mentioned a May request. Did  
12 Hart Crowser then submit a second document?

13 A. Yes, there was a supplemental or additional  
14 request.

15 Q. I imagine, though, are you going to be  
16 focusing on the second request, the May 15th?

17 A. I would focus on the second request of May 15  
18 because it elaborated and clarified some points on the  
19 earlier.

20 Q. That would be Exhibit A-37. Could you  
21 describe what development activities are included in the  
22 deviation request?

23 A. Well, the development activities that they're  
24 requesting to deviate from are two: The secondary  
25 access road as built within the landslide hazard area,



1 that will be proposed for building within the landslide  
2 hazard area. And the second item is the structures are  
3 within the landslide hazard area and they're requesting  
4 deviation to allow the structures to be built within the  
5 landslide hazard area.

6 Q. So there are actually two deviation requests.  
7 You mentioned one focused on the road, the secondary  
8 access road.

9 A. That's correct.

10 Q. And the second for all of the other structures  
11 that would be within the landslide hazard area setback?

12 A. The landslide hazard area and its setback;  
13 that's correct.

14 Q. And do you, do you recall when the applicant  
15 was first told that it would need to address the fact  
16 that it was proposing development within a landslide  
17 hazard area?

18 A. I believe that that was first review comment  
19 letter that Paul Dragoo had prepared back in 2013.

20 MS. KISELIUS: Mr. Countryman, could you  
21 please pull up Exhibit K-4, page 7, please.

22 Q (By Ms. Kiselius) And I didn't give you much  
23 of a chance to look at Page 1. Is this the letter you  
24 were referencing, Mr. Sleight?

25 A. Yes, it is.



1 Q. Do you see the comment regarding landslide  
2 hazard area?

3 A. Yes.

4 Q. So this is this the comment that you were  
5 referring to?

6 A. Yes, that's the comment that the county had  
7 sent to the applicant at that time: "Development  
8 activities and clearing are not allowed within a  
9 landslide hazard area or setback unless there is no  
10 alternate location on the property. Therefore the  
11 proposal to locate buildings, grading, and retaining  
12 walls within the setback and the landslide hazard area  
13 east of the railroad track appears to be a violation of  
14 section -- Snohomish County code 30.62B.340. Please  
15 address."

16 Q. Okay. This was from April of 2013. You  
17 mentioned the first time the applicant applied for a  
18 deviation was April of 2018?

19 A. That's correct.

20 Q. Let's go ahead and start with the first  
21 criterion, which is -- can you remind me what the first  
22 criterion is.

23 A. Try to avoid, get an alternate location as  
24 this No. 3 identifies.

25 Q. What's the purpose of that first criterion?



1           A.    To avoid impacts, not only to the critical  
2    area, but to provide safety, public safety, just general  
3    public, to stay out of the landslide hazard area.

4           Q.    Could you -- let's look at the deviation  
5    request for the road.  What is your opinion regarding  
6    whether this first criterion is met for the request  
7    regarding the road?

8           A.    Well, it does appear, on the one hand, that  
9    the site -- that there is no alternative access that  
10   they have proposed going up the hillside.  Almost the  
11   entire hillside, clearly, is landslide hazard area.  And  
12   there's also no question that this project, given its  
13   magnitude and trip generation, needs a secondary access,  
14   both from average daily trips and from general public  
15   safety, fire access.

16                    You can't build a fire station and have one  
17   road, the only route into a fire station, you know, or  
18   police station.  You know, first responders have to get  
19   out and go places.  They can't just have -- you know,  
20   they have to have multiple access points to get in and  
21   out.

22           Q.    Okay.  So your opinion would be, then, as to  
23   the road that this first criterion has been met?

24           A.    Well, I would say that the criteria that there  
25   is no alternate access -- alternate location for the



1 road, I would say that, yes, it has been met. However,  
2 I wouldn't say that this is the preferred alternative as  
3 far as the way you would design a road. So we'll leave  
4 it at that for this time.

5 Q. Let's stick with this first criterion and then  
6 discuss it with the regards to second request, which is  
7 for all the other development within the landslide  
8 hazard area. Can you -- what is your opinion regarding  
9 whether this criterion's met for the other development?

10 A. Well, we received the geotechnical report. If  
11 you went back to Mr. Bingham's exhibit . . .

12 Q. So this is the May 15th --

13 A. Yes, the most recent one.

14 Q. A-37.

15 A. Yeah. In his, in his report, he identifies  
16 that the -- there really was -- he was silent on the  
17 issue of showing that the structures could be built in  
18 an alternate location. He references the architectural  
19 plan, the architect's plan in his report.

20 Q. Could you please to go to page 6. Can you  
21 go -- stop right there. Is this what you're referring  
22 to, Mr. Sleight? Can you . . .

23 A. Yes, it was item No. 2, about alternate  
24 locations. Instead of actually proposing where  
25 alternate locations should be, based on the best soils



1 on the site, he says that: "We understand from the  
2 project architect that the buildings in the urban plaza,  
3 including the Sounder station, need to be located in the  
4 front part of the site because the multimodal  
5 transportation center -- for busses, trains, cars -- has  
6 to be located here, by the railroad, existing entry  
7 road, and proposed secondary access road. Additional  
8 building site considerations are noted in the April 24,  
9 2018, urban center zoning variance request by Perkins  
10 and Will."

11 So I was thinking, Okay, he did cite that  
12 there's an additional variance by Perkins and Will. So  
13 I decided, since he's citing the architect, the project  
14 architect, in the rationale, I thought, Well, maybe the  
15 architect described it a little bit. Maybe there's a  
16 link.

17 So I went into the project description in the  
18 architect's assessment for the site. And the architect  
19 said that the reason that they should be granted this  
20 type of variance or deviation was because they were  
21 using low-impact development techniques. But the  
22 applicant had just recently told us that, no, they can't  
23 use low-impact development techniques. So we have an  
24 inconsistency between what the architect was saying and  
25 what the geotech was saying here.



1 Q. In your opinion, does this paragraph on  
2 alternate location satisfy the first criterion for a  
3 deviation request?

4 A. No.

5 Q. Could you -- let's move on to the second  
6 criterion. Can you please describe the existing  
7 conditions of the landslide hazard area and setbacks.  
8 Feel free, if it's helpful, to use Exhibit C-33, which  
9 is the subsurface conditions report.

10 A. Okay. Yeah. Probably be best to pull that  
11 particular exhibit up, C-33.

12 Q. I will let you direct Mr. Countryman as to  
13 where you'd like to go.

14 THE WITNESS: Yeah. If you could, go to the  
15 actual cross sections that show the figures, like 13  
16 through 24, something like that.

17 Q (By Ms. Kiselius) Would you like to start with  
18 13?

19 A. Yeah. Figure 13 and -- okay. So start with  
20 13. 13 is -- let's stop there. 13 was an exhibit  
21 showing a cross section of the existing condition, and  
22 this was done in 2015. Now, the thing that I wanted --  
23 the reason I wanted to bring that up, on this particular  
24 exhibit, it shows different layers, that there's advance  
25 outwash that's running on top of -- you know, it says



1 till-like soil up above, Vashon till. That's pretty  
2 common for the Edmonds-Woodway area.

3 Then, on top of that, it shows groundwater  
4 running along on top of both the Lawton clay. And it  
5 also shows that there's interbedded sand and silt  
6 layers. So what you have is a layer-cake situation on  
7 this particular hillside. And then below, it says  
8 pre-Fraser sand and so forth is what the exhibit showed.

9 And, then, what's important also is, when you  
10 look at it, you look at the unit lead of the soils, the  
11 material properties, the friction angles, the cohesion.  
12 And they say that the cohesion for Lawton clay is  
13 1,000 and the different friction angles. So anyway,  
14 that's what it showed in 2015 for section BB.

15 Q. Can I ask you: What are cohesionless soils?  
16 What does that mean? Why do we care?

17 A. Well, cohesionless soils are soils that do not  
18 hold together. They are just almost like liquid. And  
19 the best I can describe it, when they dug the pit or the  
20 tunnel boring on the outside for Brightwater, just to  
21 the south of the site. And they took the spoils, what's  
22 called spoils, out of the tunnel. And they put them on  
23 the site.

24 They used the term called a muck truck. And  
25 the muck would just go out. And they'd dump it. It



1 wouldn't stand in a pile like you have for sand. It  
2 wouldn't stand in like a stockpile or anything. The  
3 soil just would flow. And they needed to actually put  
4 in barriers to sort of cordon it off to keep it from  
5 sliding all over the whole site. And that was what was  
6 coming out of the hillside.

7 Q. So when you have a low cohesion factor, is  
8 that good or bad for construction?

9 A. That's very bad. And not good.

10 Q. Sorry to interrupt, please.

11 A. Okay. So go to -- keep on going up through  
12 the newer information here. In each of these they did  
13 analysis for slip surface. And they went through a  
14 factor safety for BB. Go ahead. And then -- okay.  
15 Stop right there.

16 Then this is section GG. Once they started  
17 looking at all of -- the issue was looking at  
18 alternative accesses for the access up to the top and  
19 try to assess whether or not they could find a more  
20 feasible location than BB. Cross section BB is higher  
21 in slope. Cross section BB had some other issues with  
22 it, too. But . . .

23 Q. Mr. Sleight, can I really quickly ask you:  
24 You're talking about cross sections BB and GG. What are  
25 those?



1           A.    I think it's in Figure 2 or 3 in the  
2 geotechnical report.  Let's go to Figure 2 or 3 so we  
3 can get some context of where BB and GG are.

4           Q.    Oh, it was right --

5           A.    It's in the figures.  I think it's either  
6 Figure 2 or 3.

7           THE HEARING EXAMINER:  I would say 2.

8           Q     (By Ms. Kiselius) It's after 48, actually.  
9 It's page 48.  The figures come after page 48.

10          A.    It is in the back of the report.

11          Q.    There we go.  Thank you.

12          A.    These were cross sections here.  BB is over  
13 here, and GG is closer to right in through here.  And it  
14 goes through, a cross section through the actual  
15 proposed alternate access route.

16          Q.    Those figures you were describing were for  
17 cross section BB over to the north?

18          A.    That's correct.

19          Q.    That's what I'm looking at.

20          A.    And notice that the elevations for this side  
21 of the site or the northerly side of off side was higher  
22 in elevation.  And then the slope trends a little bit  
23 further down to the south.  In fact this roadway in  
24 Woodway drops down and heads out to tie into the King  
25 county roadway network.



1 Q. So for Figure 18, if we can go back, we're  
2 actually looking at cross section GG, which is most  
3 applicable to the access road; is that correct?

4 A. Cross section 18 is, is most applicable to the  
5 access road in comparison to what's been submitted to  
6 date. That is correct.

7 Q. Before we move on, I'm going to ask a couple  
8 more technical questions. Can you explain. You've  
9 mentioned safety factors. Can you describe what a  
10 safety factor is and why that's relevant here?

11 A. The safety, factor of safety, and they've  
12 correctly described it as the resisting forces  
13 essentially divided by the driving forces. And the  
14 geotechs refer to it as the strength of the soil divided  
15 by the stress of the soil, effective stress.

16 Q. And is there relevance to the safety factor or  
17 factor of safety to Snohomish County code? Is there a  
18 specific --

19 A. Yes.

20 Q. -- number we should be looking for?

21 A. Yeah. In Snohomish County code, the building  
22 code, it refers to the factor of safety. And for static  
23 conditions -- static conditions meaning that the forces  
24 in the X direction are zero, the forces in the Y  
25 direction are zero, some of the moments about a point



1 are zero -- you're in a steady state. You're in an  
2 at-rest state, in a static conditions. So in those  
3 situations the factor of safety is 1.5. And the factor  
4 of safety for overturning -- that's for sliding. And  
5 the factor of safety for overturning is also 1.5 for  
6 retaining walls.

7 Q. Okay. That's a code requirement?

8 A. That's a code requirement, international  
9 building code requirement. It's a county requirement.

10 Q. Then how about for pseudostatic conditions?  
11 What is that, and what's the safety factor there?

12 A. Well, the I guess the best way I'll describe  
13 the term "pseudostatic" is a simulated seismic event  
14 that is modeled based on a particular magnitude seismic  
15 event. A maximum considered earthquake is the term that  
16 is used in the building code.

17 Q. And what number is it we should be cognizant  
18 of for pseudostatic issues?

19 A. On the maximum considered earthquake that was  
20 assumed was a 7.0 earthquake event, and that was  
21 identified in the report. And they came up with a --  
22 you run through the numbers and so forth. And they came  
23 up a peak ground acceleration of about 0.336 times G.  
24 And then the horizontal force or the coefficient,  
25 horizontal coefficient they had like 0.168. If you look



1 at the -- if we went -- let's go up; scroll up.

2 Q. Well, if you don't mind me asking, you had  
3 mentioned -- we were talking about code requirements.  
4 And for a static condition, the code requirements --

5 A. Yeah. Going back -- I did skip ahead just a  
6 little bit. 1.1 is the seismic factor of safety that is  
7 required in our code.

8 Q. Okay. So our magic numbers are 1.1 --

9 A. The 1.1 is the number that we're trying to  
10 achieve for a factor of safety for a seismic event.

11 Q. Before I let you move on, you had mentioned  
12 that we're looking at resisting force divided by driving  
13 force?

14 A. Yeah.

15 Q. What, again, is the resisting force; and what  
16 is the driving force?

17 A. The resisting force is all those forces that  
18 are going to resist hillside movement. And they have to  
19 be greater than the driving force or all the forces that  
20 are trying to -- Terzaghi used the term "incipient  
21 movement," trying to force something to move.

22 Q. If we could stick with figures 18 and 19,  
23 could you describe those a little bit 'cause now we're  
24 moving on to section GG. What does figure 18 show us?

25 A. Figure 18 shows us the existing conditions in



1 a static situation. It shows that the factor of safety  
2 is 1.263, which is -- even in the existing condition, it  
3 doesn't meet code. That's what the model is showing us,  
4 that it's more of a risky slope.

5 Q. Again, we're looking at 1.5 as the code --

6 A. 1.5 is what the code required minimum  
7 condition for static condition for evaluation.

8 Q. Okay. What are -- we're looking at the  
9 material names and cohesion factors. Can you explain  
10 what those are on this diagram?

11 A. The sand and silty sand, we would -- having  
12 worked in Edmonds, we used to call that the Esperance  
13 unit. That was the sand above the Lawton clay. And so  
14 there's a usually a fairly permeable surface once you  
15 get beyond the Vashon till cap. Partway down the slope,  
16 it transitions into this sandy material. And then  
17 that's sitting on -- the green layer is labeled the  
18 Lawton clay.

19 One thing I notice here in this particular  
20 exhibit was the Lawton clay cohesion factor that they  
21 assume was actually not very much. It was actually  
22 quite a bit less than BB. BB had the Lawton clay or the  
23 material values assumed at 1,000 PCF previously. And  
24 here they're only showing at 50, which shows you that  
25 the clay is pretty weak in this vicinity.



1 Q. And could you, then, describe --

2 MS. KISELIUS: Ryan, if I could have you focus  
3 in, there's a W to the right on top of the sand and  
4 silty sand layer to the right of the diagram.

5 A. What was the question again?

6 Q (By Ms. Kiselius) What does that W mean?

7 A. Okay. The Ws indicate where seeps and springs  
8 are coming out on the hillside. They actually give us a  
9 location horizontally in the cross section of where the  
10 existence of springs or seeps were found, in this case  
11 offsite, uphill.

12 Q. Offsite? Why is that important?

13 A. Well, it's very important in a situation of  
14 land slides to try to intercept the groundwater prior to  
15 this potential introducing of groundwater and surface  
16 water. You don't want to have surface and groundwater  
17 going over the slope. And you also don't want to  
18 have -- or you want to be able to dewater the hillside  
19 to make it more stable.

20 Q. Okay. Then what is -- there's a blue line  
21 that's running under this surface there. What is that  
22 blue line?

23 A. The blue line is supposed to indicate where  
24 the what's called the piezometric surface is or the  
25 groundwater table, the water level in that particular



1 slope based on the -- usually, it's based on the  
2 information from the boring logs.

3 And I actually went in and looked at the  
4 boring logs: B9, B10, HC11. And I compared the  
5 different elevations that were shown with the elevation  
6 of the top of the boring log with the elevation that was  
7 plotted on this graph, just to confirm that whoever had  
8 developed this model and so forth had not just put in  
9 polygons and, you know, didn't know what they were  
10 doing. They definitely knew what they were doing. I  
11 mean they plotted out with what the boring logs  
12 reflected.

13 Q. Again, so that W represents what with regards  
14 to that blue line? Is it a seep or underground springs  
15 pop up to the surface? Or . . .

16 A. Well, you know, I wasn't able to confirm at  
17 this particular location whether or not it was artesian.  
18 But there was one other spot in the report that  
19 indicated that there were actually artesian springs. So  
20 that may be something we need to ask the other expert  
21 who was out there on that particular site.

22 Q. But you did mention that that's off the  
23 project site?

24 A. That is east of the access rode road. It's  
25 east of their property. And it's outside of the project



1 limits. That's correct.

2 Q. Okay. Then could you go to Figure 19, just  
3 the next figure. What is -- this is Figure 19 now.  
4 What is the difference between this and Figure 18?

5 A. Scoot up a little bit. 19, okay. This again  
6 is the existing condition. When they use term  
7 "pseudostatic," I said it was a seismic condition. And  
8 I was getting into a little ahead of the game. Now we  
9 get back to the pseudostatic conversation.

10 Pseudostatic here tells me that they modeled  
11 this particular event with the 0.168 value, which is  
12 about the half the peak ground acceleration. That's  
13 what they modeled it. And that particular figure is a  
14 reasonable figure normally. It's not like a worst-case  
15 scenario. But it is a reasonable standard of care,  
16 standard of practice around locally. When I look at  
17 geotech reports, most people are missing point or a  
18 third to a half of the peak ground acceleration when  
19 they come up with this number for the modeling.

20 Q. Okay. And then there's the number in the box  
21 to the left: 0.855. What is that?

22 A. Again, the 0.855 shows that folks during the  
23 seismic event, don't be surprised if this hillside  
24 fails. That's what it says. I mean it's less than one.  
25 So if you go back to look at the original lidar on this



1 particular site, you can see the slopes are hummocky.  
2 In the lidar imaging, you can see the whole hillside has  
3 lots of little landslides throughout this particular  
4 hillside.

5 Q. Was there a relatively large landslide to the  
6 north of this site fairly recently?

7 A. Yes. The Woodway landslide was a significant  
8 landslide. And it was very, very large landslide. And  
9 it did about 2H. It went out at the base, went over the  
10 tracks. Yeah, it was a very significant landslide.

11 Q. When you say 2H, that's two times the height?

12 A. Two times the height, yeah. Actually, when we  
13 came up with the 2H, I had done a best available science  
14 research looking worldwide, looking at all sorts of  
15 factors for seismic events. I looked at factors that  
16 caused landslides. And the 2H figure was something that  
17 one of the papers was written in China had 2H as the  
18 number. Woodway was one that we looked at that had 2H  
19 as a number. And it was a reasonable assessment.

20 MS. KISELIUS: Okay. So, Ryan, if you could,  
21 go to Exhibit A-37.

22 Q (By Ms. Kiselius) So what you've just  
23 described to us for existing conditions on the site,  
24 A-37 is the Hart Crowser May report submitted to the  
25 county. Then we're looking for Figure 23-B. Yeah,



1 towards the back of that report.

2 Mr. Sleight, could you describe what this is  
3 we're looking at now.

4 A. Okay. What we're looking at here is one  
5 proposed mitigation to try to arrest the potential for  
6 the landslide and stabilize the hillside. The --  
7 originally, when I first saw this, I didn't have all  
8 the -- it didn't print out on my copy. But I see that  
9 they did come in with some tie backs being proposed.  
10 They're showing the model.

11 The model that was being run was a version of  
12 slope referred to as "slope." And in the model they  
13 used something called Morganstern-Price, which is a  
14 method of slices. And that model breaks up the area  
15 underneath the existing surface down to the slip plane.  
16 It's presumed they're going to figure the volume or the  
17 area of that. That would be one of the driving forces  
18 would be the weight of that soil as it goes down. So  
19 that's one of the driving forces during a seismic event,  
20 you know. You've got the static condition if the word  
21 is applied. You also have the seismic condition. So  
22 that's an additional load that's applied.

23 So anyway, the model picks out this value of  
24 78,000 pounds per foot resisting at the retaining wall  
25 is needed.



1 Q. Okay. So this, is this figure -- you had  
2 mentioned this as proposed mitigation. Is this figure  
3 intended to demonstrate that the second criterion for  
4 granting a deviation request has been satisfied?

5 A. I think that that's what the intent of this  
6 particular exhibit was.

7 Q. Okay. And before we get into further  
8 description, it's yes-or-no question. Does this figure  
9 ultimately provide you the information you need to  
10 approve a deviation request on the second criterion?

11 A. Not quite. But that's because of a couple of  
12 other things. So . . .

13 Q. Let's talk --

14 A. It shows me enough to say, Hey, wait a minute;  
15 I have other issues.

16 Q. Other issues? Okay. So can you -- I  
17 understand you have three primary categories of issues.  
18 Can you generally tell us what those are. Then we can  
19 go into detail for each of those.

20 A. Well, the first one we touched on a little bit  
21 already: The idea of arresting a landslide, you want to  
22 intercept the groundwater and surface water at above the  
23 head scarp of the slide and some way, whether it's  
24 interceptor trenches, horizontal drains, vertical  
25 drains, anything to dewater the slope. Those are



1 techniques that are used and in fact are suggested.

2 But there's no easements or authorizations or  
3 anything of that type that are as been shown nor offered  
4 by the applicant, signed easements to authorize that  
5 work going on somebody else's property.

6 Q. So one category is drainage, groundwater  
7 issues?

8 A. Right.

9 Q. What's another category of concern?

10 A. Well, the other category was that -- it had to  
11 do with the phasing diagram. We saw there was a phase  
12 map that showed where the proposed access route was  
13 proposed for Phase 1. If we put that map up -- well,  
14 hold on.

15 Before we leave this, think about this. This  
16 says this is the urban plaza area here. Basement right  
17 here. The plaza basement is a key element of this  
18 exhibit. And part of the resisting force needed to  
19 resist that wall has to do with the floor slab of that  
20 basement. But that basement it shown to be built in  
21 Phase 2.

22 So that is my conflict: How can the work in  
23 Phase 2 be done and hold up this wall for construction  
24 in Phase 1?

25 Q. Okay. So the second category of concern is



1 the phasing plan for the project. Then how about your  
2 third category of concern?

3 A. Well, again, the third category of concern is  
4 basically the show-your-work piece of it. Just like I  
5 said here, it shows that, when they excavate for this  
6 foundation, it shows they're going to intercept the  
7 groundwater and likely the groundwater is going to fill  
8 up that basement, be a big -- that's what that shows.

9 I don't know, you know, whether they're going  
10 to put pumps on here to have to dewater the whole site  
11 in Phase 1 and what the relationships of that dewatering  
12 plan will be toward the existing contamination. I don't  
13 know. There's a lot of aspects of this that I don't  
14 know, you know, given what was shown there.

15 Also the other thing that I was concerned with  
16 was more like the show-your-work question. They could  
17 have described a little bit better to me why the unit  
18 weights, the cohesions and so forth were. And  
19 presumably the feed angle is going to be different on  
20 different cross sections. You're going to have  
21 different slopes. So that made sense that there will be  
22 differences.

23 But I didn't know whether these material  
24 numbers -- they were so different between section BB and  
25 section GG, that is that a function the nonhomogeneous



1 nature of the hillside, that we have areas that are more  
2 stable and less stable? Or is it because somebody made  
3 an error. And I just can't tell with what they've  
4 submitted. And assuming certain materials types,  
5 because those values should be available directly from  
6 their lab tests.

7 Q. Okay. So the three areas of concern, I'll  
8 call it show your work, phasing of development, and  
9 drainage. Which one would you like to start with?

10 A. Let's start with the first one, the drainage.

11 Q. The drainage?

12 A. Yeah.

13 Q. Okay. So can you describe your -- you've  
14 generally described your concerns with regards to  
15 drainage. Can you go ahead and provide some more detail  
16 about why you're concerned about drainage?

17 THE WITNESS: Okay. Go to the alternate  
18 access map that showed going across the landslide  
19 features on the site. That was figure 2 or 3 again.

20 MS. KISELIUS: In C-33.

21 THE WITNESS: The one that had all the soil  
22 logs on it, monitoring wells, borings, everything.  
23 Okay. We're getting close. There we go. Okay.

24 A. Well, this is part of the story right here.  
25 But there's another one that's -- let's see -- just



1 before that, that shows the -- there, that one. That's  
2 the one. Okay.

3 See where it says "Drainage No. 1." This is  
4 Chevron Creek coming right through here. There's a  
5 wetland right in here, just to the south of the  
6 drainage. The geotech in his mitigation report did not  
7 identify the fill in the wetland as being a component.  
8 In other words, the geotech wasn't working with the  
9 critical area on the team, it didn't appear. There was  
10 no mention of wetlands right there. And the influence  
11 of this drainage course, they were talking about  
12 rerouting Chevron Creek to go around the -- what we  
13 would be the north side of the road.

14 What was more interesting to me was, when I  
15 looked at monitoring well No. 122, monitoring well  
16 No. 122 is right next to the railroad tracks.  
17 Monitoring well No. 122 was identified as an area of  
18 high liquefaction. Granted, they want to intercept the  
19 surface runoff and the creek and try to relocate around  
20 on this side. But a lot of times topographic draws of  
21 this nature, they have a groundwater component and that  
22 groundwater component continues to feed that particular  
23 area.

24 And monitoring well No. 122 being an area of  
25 high liquefaction, I can't think of a worse proposed



1 location to locate a station or a bus route and a  
2 turnaround and everything in an area where you have the  
3 whole hillside coming down that draw subsurface. And,  
4 then, to think that you have an active rail line at the  
5 same time to try to stabilize that rail line and make  
6 sure that it remains active and causes no vertical  
7 displacement or consolidation due to the excavation  
8 necessary for the work on that side of the railroad  
9 right of way, so that's an area of concern that hasn't  
10 been addressed at all. It's totally silent.

11 Q. And that's silent in the subsurface conditions  
12 report as well as the drainage plan?

13 A. Well, silent -- silent it points out that,  
14 yeah, that says monitoring well No. 95 is solid. It's  
15 good. It has a better bore count blow count, and so  
16 forth. Monitoring well No. 122, on the other hand, was  
17 identify as an area of high liquefaction.

18 So those were -- this again shows me that you  
19 have a variable location on the site where some hills  
20 are better than others. That's what's disclosed in the  
21 report. But it also tell me that there may be other  
22 design aspects about, Well, maybe we shouldn't have the  
23 applicant try to fill this ravine in right here. Maybe  
24 they need to set a bridge or something, let the  
25 groundwater flow and somehow intercept the groundwater,



1 in addition, if you're going to be proposing to do  
2 something right next to the railroad track.

3 Q. But the subsurface condition report, C-3, does  
4 not propose a plan for how it's going to deal with this  
5 particular water source?

6 A. No.

7 Q. What other concerns do you have about  
8 drainage?

9 A. The other thing, on the north side where the  
10 roadway gets up even offsite -- and now I have to go  
11 back and say, Mr. Examiner, in my former life in private  
12 practice, I did the short plat for the property up here.  
13 It was called the Flicker New (phonetic) property. I  
14 did the drain field design for Jay Bollinger for two  
15 homes right here.

16 The area, it drained over here on this  
17 proposed secondary access road. That was the wetter  
18 portion of the property. The property just drained. It  
19 did drain a little bit to the south and west. It was  
20 wetter over in this corner of that particular area.

21 So the area that we're talking about is in the  
22 vicinity of HC10, HC11. Up on top here, soils were good  
23 for septic. Vashon till, great foundation. But the  
24 closer you got to the bank, it got worse. And it also  
25 exhibited more groundwater and seepage along that side



1 of the property.

2 Q. That would be approximately where we were  
3 looking at the letter W on that figure regarding seeps.  
4 Is that around that general area?

5 A. Yeah. Well, that was actually even to the  
6 east of where we were seeing. In the wintertime,  
7 there's kind of surfacer water. But in the summertime,  
8 you don't see it. It goes away. But it does show up in  
9 the form of seeps a little bit further down. And I  
10 don't know the exact location where they mapped it. And  
11 that's something we'll have to ask the expert, that  
12 particular seep.

13 Q. Is there any indication in this report,  
14 subsurface conditions report, regarding how that water  
15 is going to be collected?

16 A. Well, I don't see how the water is going to be  
17 collected in that vicinity. Nor do I see how the water  
18 is going to be collected in the vicinity, coming across  
19 in this draw where Chevron Creek is. Those are the two  
20 areas, yeah.

21 Q. Is that critical regarding long-term stability  
22 of the proposed access road retaining wall?

23 A. Well, I think that's one of the components  
24 that Heberlein Road had some instability problems 'cause  
25 there's seeps and springs over on the lower portion of



1 that road also.

2 Q. You would need to know how that groundwater is  
3 going to be dealt with?

4 A. Right. Exactly. And that they have the  
5 authority to be able to get onto those properties to do  
6 that work.

7 Q. Because they're offsite?

8 A. They're all offsite. Normally we'd get an  
9 easement or somebody -- you know, we'd have some sort of  
10 documentation they've been talking to the neighbor. The  
11 neighbor says, I'm going to grant the easement to do  
12 that work and get that physically constructed on their  
13 property.

14 Q. But we don't even have an indication that  
15 that's being planned --

16 A. No.

17 Q. Let alone --

18 A. No.

19 Q. -- discussed?

20 A. That's the normal procedure.

21 MS. KISELIUS: Okay. Mr. Countryman, could  
22 you please go back to A-37. Figure -- exactly.

23 Q (By Ms. Kiselius) Could you please tell us  
24 what note 3 provides down at the bottom?

25 A. Which one are we talking about?



1 Q. The lower left.

2 A. Okay. I only see notes 1 and 2. You must be  
3 looking at a different exhibit.

4 Q. Okay. Well, try what's numbered 2, note 2.

5 A. Okay. Note 2 says: "Building basement floors  
6 will support lateral earth pressures below existing  
7 grade. Permanent wall drainage required since existing  
8 groundwater level is above the base of the excavation."

9 Q. Could you speak to that, please, and whether  
10 that raises any concerns for you.

11 A. Well, I was saying to one of the other fellows  
12 here, years ago I had a client named Han Park. He was  
13 in the Esperance unit. I told him that the gravel pit,  
14 sand and gravel pit next to him, don't excavate at the  
15 two because it might give way. He did, and he died on  
16 the weekend. And we have a park named Han park now in  
17 Edmonds.

18 The issue there is this area of groundwater,  
19 it's an area of weakness in the hillside with this  
20 saturation. So whatever they do they have to dewater  
21 first before they start excavating or building a sheet  
22 pile wall in here for this larger wall.

23 This is a significant wall, by the way. It's  
24 been identified as potentially 60 feet in height. So  
25 it's 40 feet above grade and 20 feet -- it's described



1 as 20 feet below surface, in cohesionless soil, by the  
2 way.

3 Q. You mentioned 20 feet below the surface. It  
4 this is diagram the first time you've seen the wall  
5 extend below the surface?

6 A. Yes. It actually, it is. The first time or  
7 the prior version of this, I said, How's that going to  
8 work? There was no embedment for the wall.

9 Q. And this diagram was submitted Tuesday of last  
10 week?

11 A. Yes. Just this last week is the first time I  
12 saw any concept of how they're going to deal with this.

13 Q. Okay. And so when you're -- what is the blue  
14 dashed line coming out of the wall? That's --

15 A. Well, that's what they're saying the water's  
16 going to spurt out the side of that cut. And, you know,  
17 basically they're also showing that's where it would go  
18 if they weren't to dewater. But they're saying that  
19 they are going to dewater. I don't have the numbers on  
20 that. But they're saying they are going to dewater and  
21 presumably get the water underneath the floor slab.

22 Q. Would you like to see the numbers on that?

23 A. I would. I mean normally we would like to see  
24 that it's feasible.

25 Q. Without seeing the numbers or knowing how



1 they're proposing to dewater, you can't say whether it's  
2 a feasible design?

3 A. Especially in highly liquefiable areas and in  
4 areas where they're proposing, you know, high-rise  
5 structures. This isn't area, folks -- this is a  
6 high-rise structure. It's not a little single-family  
7 residential structure. This is three towers that have  
8 very high occupancy. And we want to make sure that, if  
9 you're going to put towers there, you better know what  
10 you're doing. And none of that data has been provided.

11 Q. You had mentioned liquefiable soils around the  
12 location of the retaining wall. Can you explain how  
13 liquefiable soils interact with groundwater  
14 infiltration?

15 A. Well, first of all, you can't infiltrate at  
16 that location because water is coming out of the ground.  
17 It's almost a discharge location. It's a groundwater  
18 discharge rather than infiltration at that location when  
19 they do the excavation.

20 So the issue of liquefiable is a function  
21 of -- they did assume in the model that the slope was  
22 fully saturated. They did take a conservative approach  
23 in that regard. But even so, it required a substantial  
24 fill -- excuse me. Let's go back. Lower that down --  
25 substantial fill and the building, the weight of the



1 building, to resist plus an additional fill that is  
2 being shown on the other side of the area to buttress  
3 the slope and allow meeting the factor of safety.

4 Q. Okay. Have you seen anything in the  
5 subsurface conditions report or the targeted drainage  
6 plan that deals with dewatering the basement foundation  
7 or how drainage of the retaining wall is going to take  
8 place?

9 A. No. There was nothing in the targeted  
10 drainage report that addressed dewatering or quantifying  
11 or, you know, describing that to any degree that I could  
12 see. It did, you know, modify the earlier proposal in  
13 the targeted report to indicate that they're going to  
14 try to direct discharge to Puget Sound and not do  
15 low-impact development which was identified in the  
16 targeted drainage report.

17 MS. KISELIUS: Ryan, could you please go to  
18 page 35 of C-33. Before we move off drainage to the  
19 next issue, page 35 -- sorry. Yeah, not that. Page 35  
20 of the report, not the pdf.

21 Q (By Ms. Kiselius) So this report does talk a  
22 little bit about drainage. Could you summarize what  
23 that first paragraph under "landslide hazard areas"  
24 says?

25 A. It says: "The slope reconnaissance, existing



1 historical data, and preliminary slope stability  
2 analysis suggest that additional slope stability  
3 analysis would need to be performed during design.  
4 Groundwater pore pressures are a key factor in  
5 estimating slope stability. Additional investigations  
6 by advancing borings and installing piezometers for  
7 analysis should be performed to estimate how groundwater  
8 pore pressures vary perpendicular to the bluff face and  
9 along its length.

10 "The results of this stability analysis would  
11 be used to design engineering solutions to mitigate  
12 slope instability and/or minimize impacts to structures  
13 if the slope becomes unstable."

14 Q. So this paragraph indicates that additional  
15 studdies will be done in the future. Is that to your  
16 satisfaction at this stage when determining whether to  
17 grant a deviation request?

18 A. Well, in granting a deviation request, it's  
19 sort of a last chance the county has got or has agreed  
20 to place these structures in that location. And at this  
21 particular point in time, I don't see how I could  
22 possibly from a structural standpoint with these  
23 high-rise towers without this additional information to  
24 be able -- 'cause these are buildings being placed in  
25 that particular location on the site plan.



1           We're not talking about a plan -- they haven't  
2 proposed any other plan where they're going to put the  
3 buildings elsewhere, although we did hear a little bit  
4 of testimony about that from Mr. Huff earlier. But that  
5 was the first I had heard that they were thinking about  
6 that.

7           Q.    Okay. Before we move on to one of your other  
8 areas of concern is, did we cover everything with  
9 regards to drainage that you wanted to discuss?

10          A.    Yes.

11          Q.    How about if we go to an easy one. Let's talk  
12 about the phasing. You wanted Mr. Countryman to pull up  
13 a specific exhibit as to phasing?

14          A.    Yeah. The one that showed the access road, I  
15 think was --

16          Q.    Shows the most recent --

17          A.    Yeah. The most recent one with the -- had the  
18 dark blue and the light blue: Phase 1, phase 2. It was  
19 something the architect had put together. There we go.  
20 That's it. Yup. Okay. This is covered up a little  
21 bit.

22                    But when I looked at this and I see these two  
23 buildings -- those three buildings, the high-rise towers  
24 at 180, 170, and 150 feet in height, they're all  
25 labeled, as is the urban plaza and all these



1 improvements here, to be part of Phase 2.

2 How could the geotech tell me they're going to  
3 build these foundation and all these walls and all this  
4 concrete to buttress the retaining wall if the work is  
5 going to be done years later at another phase? It's an  
6 inconsistency that troubled me. And it was not -- it  
7 troubled me to the degree I wasn't -- I'm not willing to  
8 grant a deviation until I get this understood, what's  
9 going on.

10 Q. Let's look at A-37, Figure 23-B again. Can  
11 you show what you were talking about in terms of  
12 building foundations?

13 A. Yeah. It says right here: "Proposed urban  
14 plaza." And it shows existing grade in red is the  
15 existing grade. Then to talks about urban plaza  
16 basement building. So it shows excavation of the urban  
17 plaza basement concrete foundation. And in the report,  
18 it says that they're going to buttressing this retaining  
19 wall with the basement floor slab, take care of that  
20 part of this 78,000 pounds per foot to get a horizontal  
21 coefficient to resist the driving forces coming down the  
22 hill.

23 And driving forces, they haven't looked -- at  
24 least I haven't seen any documentation. This wall has  
25 to take a traffic surcharge. I doubt if -- it's beyond



1 the slip circle of the Morganstern-Price analysis. So I  
2 don't think they've included the fill behind the  
3 retaining wall because it's above existing grade.

4 This is a significant surcharge. And I don't  
5 know for sure whether that 78,000 includes that  
6 surcharge for this fill or not.

7 Q. Okay. That isn't show-your-work concerns?

8 A. That's part of the driving force. You know,  
9 there various -- we've got the seismic. We've got the  
10 weight -- excuse me. I keep on touching the fan. It  
11 just blasts it.

12 Q. Do you want to go ahead and move to your  
13 show-your-work concern? Are you done discussing the  
14 essential --

15 A. Yeah. I think the bottom line was -- just the  
16 main thing on the second one was we've got an urban  
17 plaza building basement and its resisting -- retain --  
18 holding the forces resisting the retaining wall.

19 Q. So without being able to demonstrate that that  
20 building basement of the urban plaza is going to be  
21 constructed and serving as a resisting force, this  
22 figure doesn't work?

23 A. Well, this proposal doesn't appear to work.  
24 They have shown me that there's some tie backs here that  
25 goes back, again into cohesionless soil. They have come



1 up with a number of what they think that those design  
2 loads need to be for the three different tie backs.

3 So we have traffic surcharge. We have the  
4 fill surcharge, driving force. We've a rain-on-snow  
5 type event.

6 Q. Okay. We should move on to the show-your-work  
7 concern?

8 A. Yeah.

9 Q. You're talking about surcharges. Can you talk  
10 about what a surcharge is in the context of resisting  
11 and driving forces.

12 A. Okay.

13 Q. Set up the math problem that we need to solve.

14 A. So a surcharge would need to be a force that  
15 is part of the driving forces, something that would  
16 cause the hillside to move, you know. And usually  
17 there's also a surcharge above the road or above this  
18 fill if there's a slope if -- for example, on a roadway,  
19 if you have a slope above the road, you have the weight  
20 of the soil above that on that slope, that's a surcharge  
21 for that slope. You also have the fill itself, the  
22 weight of the fill. You also have the weight of the  
23 traffic. There's a traffic surcharge on that wall.

24 And our requirement says that the -- it has to  
25 take an H25 loading, which is about 16,000-pound axial



1 load, even a little bit more in some areas. So anyway,  
2 those are some of the things in addition to the seismic  
3 condition.

4 Q. Okay. So let me make sure we captured all of  
5 these. You talked about the potential landslide  
6 surcharge?

7 A. Right.

8 Q. That's --

9 A. That's the area under this slip circle, the  
10 volume of material under the slip circle.

11 Q. That's the potential landslide surcharge?

12 A. Yeah.

13 Q. Then you talked about a fill surcharge. What  
14 is that?

15 A. That's the area outside of the slip circle.  
16 But the fill that they're proposing to fill for -- to  
17 meet grade for the secondary access road. So that's a  
18 fill, a weight, that is pushing against the side of the  
19 actual wall itself.

20 Q. Okay. Then you mentioned the traffic  
21 surcharge.

22 A. Yeah. We also have a traffic. Because this  
23 is an access road, there's a traffic surcharge that we  
24 have to deal with, traffic loading for the wall.

25 There's also a potential -- and this is the reason why



1 the water is so important, to get rid of the water.  
2 There's what's called a hydrostatic surcharge. That's  
3 this water coming back behind the wall.

4 One of the issues that happens in the  
5 northwest, occasionally we have several weeks of  
6 freezing water like this last year. And water that  
7 seeps out the side of a wall like this, it may freeze  
8 against that surface for a foot or two, back behind. So  
9 what you have is essentially is a dam that is created  
10 behind the wall if it not free draining. And water  
11 builds up. Hydrostatic forces build up.

12 That type of analysis has not been done. And  
13 that type of surcharge has not been looked at.

14 Q. Okay. Then did you mention -- is there a  
15 rain-on-snow surcharge?

16 A. Well, the only reason I mentioned that one is  
17 the lessor load. But in the reality is the saturated  
18 condition along our coastal bluffs, the rain-on-snow  
19 event in -- I think it was end of '96, early '97, or  
20 something like that time frame. We had hundreds and  
21 hundreds of mudslides that came down, many of which hit  
22 the railroad tracks all up and down the coast from  
23 Everett to the Seattle. And I was up in a helicopter  
24 with the sheriff's office. We were counting the  
25 hundreds and hundreds of landslides on the coast.



1                   And so there was also strong correlation  
2 between -- and if I ever went back to school and got my  
3 master's, I'll write a theses on putting swimming pools  
4 next to landslides at the top of the bluff. That,  
5 frankly, is a terrible idea. And the building code  
6 doesn't, doesn't account for it because it lets them  
7 build a swimming pool right next the bluff. Every  
8 single one of the ones we had a pool, we had a landslide  
9 downhill side, from Main's out in Monroe, Larrimer, all  
10 these different places out on our coastal bluff.

11           Q.    Is that the year, '96 was the year, also, you  
12 saw lot of collapse of carports? That was the rain --  
13 so it snowed. Then it rained on top of the snow.  
14 That's what the --

15           A.    During that day, I was actually called out to  
16 deal with some collapsed carports. That's true down  
17 south in the Esperance area. And also I happen to see  
18 the Edmonds marine sink at the time because the loads  
19 were higher than the marina was designed for, on top of  
20 the roof.

21           Q.    So are resisting forces, the wall, the driving  
22 forces consist of at least these five surcharges?

23           A.    Those are the five principal ones I'm  
24 concerned about, yeah.

25           Q.    Tell us now about the number 78,000. What is



1 that, and how does that relate to our --

2 A. Well, I'm just -- I have to assume, because  
3 it's not -- this is the show-your-work. I have to  
4 assume that that's the number the slope model kicked out  
5 of the program that told the designer I need that amount  
6 of horizontal force to resist these other forces. I  
7 don't have the documentation. It didn't describe that  
8 in words. But I suspect that's what it is.

9 But this is where before -- I would want to  
10 know that, meet with the engineer, go over that sort of  
11 thing.

12 Q. Okay. So you have maybe an answer there. But  
13 there is no work demonstrating the math that got to that  
14 particular answer?

15 A. I guess the best I can say is I'm relying on  
16 John Bingham's stamp at that point. You know, that's  
17 the only thing that, you know -- he, presumably under  
18 his authority, his responsible, charge authority, asked  
19 somebody or he, himself, came up with that number and  
20 generated that report.

21 Q. You'd mentioned the Morganstern-Price model  
22 that was used by Mr. Bingham in this report. Does that  
23 model typically capture all of the surcharges that you  
24 discussed?

25 A. It captures all the surcharges within that



1 slip circle, typically. If there's anything -- I mean  
2 the model itself that they use was called "slope." And  
3 within slope, a model, you can pick different  
4 methodologies. Morganstern-Price is just one  
5 methodology back in -- back when I was going to school  
6 in '75. Other -- well, Janbu, Spencer, those are three  
7 different models that can be chosen. I don't know if  
8 slope includes Spencer. But I know it includes Janbu  
9 because it's another model they could select.

10           There is a method of slices where it slices  
11 up. And all three of those models, they take into  
12 account moments in addition to to just a little simple  
13 wedge or a simple diagram like Fellenius or some of the  
14 other models.

15           Q.    Okay. What is the safety factor or the factor  
16 of safety that's demonstrated here or depicted with this  
17 design?

18           A.    According -- after they ran the model, they  
19 came up to 1.109. So according to the model, it says it  
20 meets the seismic condition with this design. So that  
21 was one of the tests. They have to meet 1.5 and 1.1.  
22 According to the math, it looks like maybe they've got  
23 it okay from a factor of safety standpoint if some of  
24 these other questions are explained.

25           Q.    How big of a margin of error is there with a



1 1.109 safety factor?

2 A. Yeah. That's a loaded question. I don't know  
3 exactly. Basically, what they've done is they've taken  
4 the cross section data from GG and the borings that were  
5 closest to GG.

6 The problem I see is that the site is  
7 nonhomogeneous. In other words, it's not consistent  
8 throughout the site. So soils could be different  
9 someplace else. You know especially if the cross  
10 section had been taken right up the draw, up where  
11 Chevron Creek, aimed right at that one crossing that I  
12 was concerned about, that would be an area, if I was  
13 looking at it, I think that's probably the riskiest spot  
14 for the secondary access road.

15 Q. Okay. So I just want to summarize your three  
16 major concerns here. We talked about the basement  
17 foundation and the fact that the basement foundation is  
18 proposed in Phase 2 of the project but Phase 1 of the  
19 project, which includes the retaining wall, relies on  
20 that basement foundation.

21 A. That's correct.

22 Q. Okay. You are also concerned that the  
23 applicant hasn't demonstrated how it's going to provide  
24 permanent wall drainage, hillside drainage, and basement  
25 foundation drainage. Is that correct?



1 A. Correct.

2 Q. Okay. And then your third concern here that  
3 we just discussed is that the materials don't provided  
4 calculations or otherwise show work regarding how the  
5 retaining wall is actually going to resist the driving  
6 forces that you indicated.

7 A. That's correct.

8 Q. Is that correct? Okay.

9 Do you need all these three of these concerns  
10 to be resolved before you can conclude that the second  
11 criterion for granting a deviation has been satisfied?

12 A. Yes, I would.

13 Q. Okay. Have you ever reviewed the comment  
14 letter that was submitted by Susan Chang that's  
15 Exhibit I-397? Would you like that?

16 A. The answer to that is yes, I did read her  
17 letter. I read both her earlier comment letter and then  
18 her later letter.

19 Q. Are you familiar with Susan Chang?

20 A. Yes, I am. She's a member of the long-time  
21 ASCE Geotechnical Group, which I've been a member of for  
22 years, too. And most geotechs that are in this area are  
23 party to that group. I think there's over 500 folks  
24 that are members of the ASCE geotechnical group of the  
25 Seattle section. The Seattle section comprises a



1 nine-county area, so from King, Snohomish north to the  
2 Canadian border, Jefferson, Clallum. Again in 2005 I  
3 was president of the Seattle section.

4 Q. You're familiar with Susan? Again, you're  
5 familiar with Susan Chang?

6 A. Yes. Yes. She's Ph.D., doctorate in  
7 geotechnical engineering. She's one of the -- and she  
8 heads up the group in down in City of Seattle.

9 Q. Do you agree with the comments that she raises  
10 in her opinion letter or her comments?

11 A. Yes. I mean she's identified a marginally  
12 stable to unstable slope. "Given the significant height  
13 and steepness of the slope as well as landslide history  
14 in the site and nearby sites, it is apparent that  
15 stabilizing the slope will be necessary to provide the  
16 required second access road." So yeah, I basically  
17 concur with what she's written here.

18 Q. Okay. Is the purpose of the retaining wall  
19 we've discussed to protect people and structures behind  
20 the wall or structures and people on top of the wall?

21 A. Well, when I looked at the design, it looks  
22 like the purpose was to protect the urban plaza, the  
23 buildings on the downhill side of that particular  
24 structure. It's not detailed at this point to see how  
25 high -- we obviously don't have a 40-foot drop-off at



1 grade with the access road. There will be a requirement  
2 for a handrail, pedestrian-access railing and a small  
3 extension of that wall up above the road grade. The --

4 What is problematic and what hasn't been  
5 looked at is, if they did have a small landslide on the  
6 uphill side that came down -- I'm talking like a little  
7 mudslide, even, from one of these rain-on-snow events,  
8 any pedestrian that is on that roadway would, then, be  
9 trapped right up against that wall. There's no way of  
10 escape with that type of design.

11 Q. So we haven't seen any design measures that  
12 would protect anybody on the road if they --

13 A. It would not protect anybody on the road with  
14 that particular design. Earlier there was another  
15 version that had a double wall with an opening on that  
16 other side. And that would provide at least some  
17 catchment for this type of slide. So this is a  
18 different -- it's a different design.

19 Q. That does not appear to be preferred design by  
20 the applicant?

21 A. It didn't appear to be the preferred design  
22 based on information that was provided.

23 MS. KISELIUS: Okay. Then Mr. Examiner, I  
24 think we have about 10, 15 more minutes. We can  
25 conclude if you're okay that, given the hour.



1 THE HEARING EXAMINER: What I propose is let's  
2 finish the direct. Then we'll take an hour break.

3 Q (By Ms. Kiselius) Let's talk little bit about  
4 liquefaction.

5 MS. KISELIUS: Mr. Countryman, if you can,  
6 pull up Exhibit K-4, page 7.

7 Q (By Ms. Kiselius) Could you either read or  
8 summarize the comment provided in this document  
9 regarding seismic hazard areas. I should probably ask  
10 first: What is this document, please? Do you need to  
11 see the first page?

12 A. It's a review completion letter, again,  
13 April 12, 2013.

14 Q. Then what was the comment regarding seismic  
15 hazard areas?

16 A. Comment No. 2, "Seismic Hazard Area,  
17 development of activities within 200 feet of a seismic  
18 hazard area may be allowed with an approved technical  
19 report that confirms that the site is suitable for the  
20 proposed development and that it meets the International  
21 Building Code, Chapter 3051A under SCC 30.62B.350.  
22 Please have a geotech engineer confirm the site is  
23 suitable for the proposed development."

24 Q (By Ms. Kiselius) So the key phrase is the  
25 site must be suitable for development?



1 A. Right.

2 Q. Okay. And do you believe that this issue has  
3 been adequately addressed in the subsurface conditions  
4 report, particularly with regards to liquefiable soils?

5 A. I believe that the subsurface conditions  
6 report identifies the areas of liquefiable soils. So --  
7 but it doesn't address the issue of -- to any great  
8 degree of whether the site is suitable for proposed  
9 development, what can be done.

10 Q. Okay. Let's break that down. What does the  
11 report say about liquefiable soils?

12 A. Well, it does identify, like I said, that  
13 certain areas -- let's go ahead and pull up C-33.

14 Q. In particular are you looking for Figure 10,  
15 or do you want the -- do you want discussion?

16 A. Let's go back to the A -- did we get this  
17 A-051 introduced? Let's talk about that. This is the  
18 one that shows the liquefiable soils.

19 Q. Yes, we did. That was -- didn't we? Okay.  
20 Thank you. It seems like such a long time ago now.

21 A. But we've talked about a different subject on  
22 that one. Liquefiable soils are shown and mapped on  
23 this one.

24 Q. Yes. Yes. This one?

25 A. Yeah. That's fine.



1 Q. Okay.

2 A. Okay. In the legend, it wasn't -- the legend  
3 of this exhibit has showed the crosshatch here on the  
4 diagonal as, if you blow that up a little bit,  
5 liquefiable soils, liquefaction zone, as geologically  
6 hazardous area, area of high liquefaction. Okay?

7 Virtually the entire site, the entire site  
8 almost, is subject to high liquefaction. And the  
9 borings support that. The boring logs, the monitoring  
10 wells, in many of the instances support that.

11 Let's pull it down a little bit more. There's  
12 another piece of that exhibit on the original A -- it  
13 was A-051. The other thing I wanted to point out about  
14 that is typically you don't see a liquefaction zone end  
15 at a property line. They cross -- the crosshatches all  
16 of you sudden suddenly disappeared when they went to the  
17 urban plaza. And yet, when you go to the monitoring  
18 well No. 122, and in the text it says that's an area of  
19 high liquefaction.

20 So we have a misrepresentation on the map that  
21 A-051 has areas that are highly liquefiable that are not  
22 being disclosed to the public or not being disclosed to  
23 us, the county. This is a situation where the lot line,  
24 it all of sudden the high areas of liquefaction are  
25 shown here. All of a sudden -- this maybe just a



1 drafting error. But it's still an exhibit that is being  
2 presented which I'm to base a decision on. And I have  
3 borings in here that tell me it's highly liquefiable.  
4 Something's wrong. So that's one of the major concerns  
5 I have on that particular exhibit.

6 Q. Okay. What studies has the applicant  
7 conducted to determine whether the site is suitable for  
8 constructing the proposed buildings?

9 A. In the subsurface report, it says that they  
10 will have to do specific additional borings when they  
11 finally decide where to put each building. So they --  
12 basically, the way I'm seeing it, they don't really know  
13 where the best spots are at this point because they're  
14 having flexibility, saying, we need to do additional  
15 geotech work to confirm where on the site is the best  
16 place to set these high-rise buildings.

17 Q. So they proposed a design without knowing  
18 whether the buildings were feasible to be constructed  
19 there?

20 A. I think to begin with, that may have been the  
21 case. I think they have a better idea with the borings  
22 and the consultant. If they were given the opportunity,  
23 rather than the architect driving the game, so to speak,  
24 saying, This is the site plan; You have to work with  
25 this site plan, if the geotech was to able to influence



1 on the site the decision-making process, This is the  
2 best place on this site to build this building because  
3 these are the best soils on the site, I think we'd have  
4 a better and safer site.

5 Q. It that what a geotechnical report is supposed  
6 to indicate? Where the best sites are for building?

7 A. The construction. They normally, they  
8 provide -- at the feasibility stage, that's a normal  
9 part of report; that's true.

10 Q. Does this report do that?

11 A. No.

12 MS. KISELIUS: I do not have any further  
13 questions.

14 THE HEARING EXAMINER: Let's take a noon break  
15 and come back at 1:30. Thank you. We'll be in recess.

16

17 (Hearing recessed at 12:28 p.m. to be  
18 reconvened at 1:30 p.m..)

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AFTERNOON SESSION

1:34 p.m.

--oOo--

MR. VASQUEZ: Thank you, Your Honor.

CROSS EXAMINATION

BY MR. VASQUEZ:

Q. Good afternoon, Mr. Sleight. How are you doing?

A. Good. Good.

Q. Good lunch?

A. I had a banana.

Q. All righty. Just a couple questions for you. Would you characterize this phase of the project as the feasibility phase? Or how would you characterize this phase of that project that we're in right now?

A. I would say that it is in the feasibility stage. That's correct.

Q. Okay. In your experience -- and you've been doing this for 30-some years -- the level of detail that county's requiring, is this the normal for the feasibility phase of the project?

A. Certain portions of the submittal certainly



1 meet those requirements, and certain portions don't.

2 Q. Okay. What's required right now is really  
3 kind of a generalized site plan -- correct? -- not a  
4 detailed site plan?

5 A. Well, a generalized site plan that assumes  
6 certain buildings are placed in certain locations.  
7 That's correct.

8 Q. And at this point aren't the -- aren't you  
9 really looking at the processes and methods that the  
10 applicant is proposing to see if this project is  
11 feasible or not?

12 A. We're looking at the compliance with all of  
13 different aspects of the county code for this particular  
14 submittal. That's what we're looking at.

15 Q. Let's take a look at that Exhibit A-51. No.  
16 Sorry. It's A-61; and it's your Exhibit P-16, that one  
17 that's up there.

18 A. Okay.

19 Q. In your testimony, you said that -- I can't  
20 even barely read it because my eyes are so bad. But  
21 liquefaction zone, it's hashmarked. And it's hashmarked  
22 primarily through the entire -- this entire diagram  
23 except for the area around the urban plaza; correct?

24 A. That's what it shows on this drawing. That's  
25 correct.



1 Q. Okay. But you're not saying that the  
2 applicant intentionally misrepresented the liquefaction  
3 zone on this site, are you?

4 A. What I'm saying is that the boring logs for  
5 MW-122 which is outside of that area and also an area  
6 that was identified as an artesian spring on another  
7 exhibit north -- or excuse me -- east of the railroad  
8 track are areas that would normally be considered areas  
9 of high potential liquefaction.

10 Q. And that information, that information was  
11 obtained from submittals by the applicant; correct?

12 A. What was the question again?

13 Q. The areas of liquefaction in the urban -- in  
14 the urban plaza, especially the borings and the site  
15 samples from monitoring well 122, that information, was  
16 that information provided the applicant?

17 A. That was prepared by the geotechnical  
18 engineer.

19 Q. That was a consultant for the applicant?

20 A. For the applicant; correct that.

21 Q. So you had information to indicate that that  
22 area in the urban plaza was a liquefaction or potential  
23 liquefaction zone?

24 A. That's correct.

25 Q. By the way, were you here yesterday during the



1 testimony of Mr. Countryman?

2 A. Yes, I was.

3 Q. Okay. So let me ask you -- kind of going back  
4 a little bit here, did you have any outside geotechnical  
5 engineers review any of the reports?

6 A. No, we did not hire an independent consultant  
7 in this particular case to review this particular most  
8 recent submittal that was just received in April.

9 Q. Just chronologically, do you have kind of an  
10 idea or a time line as to when BSRE was definitively  
11 told that it needed a second access road?

12 A. I'd have to go back and look and see what that  
13 date was. I don't know the exact date, whether it was  
14 in the 2013 letter. That would have been a Public Works  
15 requirement.

16 Q. Were there any discussions at all about not  
17 have a second access road at the beginning of the  
18 project, perhaps?

19 A. I do recall Jack Molver in his early reports  
20 indicating that a secondary access road was not  
21 feasible. That was one of the earlier reports.

22 Q. Would it refresh your recollection if I told  
23 you that Jim Bloodgood, on December 4, 2015, told  
24 Mr. Molver that a secondary access road was needed?  
25 Does that sound familiar to you?



1           A.    I wouldn't be surprised that that sounds --  
2    Jim Bloodgood is the county traffic engineer.  So it  
3    would be very appropriate for Jim Bloodgood to be the  
4    one telling the applicant that a secondary access road  
5    is necessary.  So . . .

6           Q.    So you were here when Mr. Countryman was  
7    testifying yesterday.  Did you hear him say that a  
8    deviation would likely be granted for a secondary access  
9    road?

10          A.    I would think that the secondary access road  
11   met the first criteria, that there is essentially no way  
12   to get a secondary access road up to the top in an  
13   alternate location without having to go through a  
14   landslide hazard area.  I do believe that's true.

15          Q.    Okay.  Have you determined or have you made --  
16   do you have an opinion as to whether the location of the  
17   secondary access road proposed by the applicant is the  
18   best location for a secondary access road on this site?

19          A.    It's my opinion that the location further to  
20   the south is better than further to the north.  So from  
21   that standpoint, I agree with the overall alignment.

22          Q.    Okay.  And I just want to make sure I  
23   understand.  What is the basis for that opinion?

24          A.    Based on the cross sectional information for  
25   BB and GG that were provided and the geotech report.



1 Q. A secondary access road is going --

2 A. And the overall height. And the overall  
3 height is higher to the north than further to the south.

4 Q. Okay. Mr. Countryman had said in his  
5 testimony that there was a previous secondary access  
6 road out there; correct? Do you recall that testimony?

7 A. Yes.

8 Q. Okay. Do you know if that location is on  
9 BSRE's property or not?

10 A. The other prior second secondary access road,  
11 Heberlein, a portion of it is in the upland town of  
12 Woodway and outside of the ownership.

13 Q. So it is your opinion that at some point a  
14 deviation is going to have to be granted for that  
15 secondary access road, otherwise there will be no second  
16 access road; correct?

17 A. That's correct.

18 Q. Have you reviewed the May 15th submission from  
19 Hart Crowser?

20 A. Yes.

21 Q. And based upon your review of that, that  
22 submission, it doesn't change any of your opinions or  
23 comments regarding the adequacy of the design for slope  
24 stabilization or deviation requests, either for the road  
25 or for the buildings?



1           A.     The -- it did not change the overall opinion,  
2     although it did address additional items that had  
3     been -- that were of concern earlier.  And so several of  
4     them essentially went away.

5           Q.     Okay.  Now, you talked about your three basic  
6     issues with the applicant's submittals.  They were  
7     drainage, the show-your-work, and the phasing issue;  
8     correct?

9           A.     Right.  The Phase 2 and the buttressing with  
10    the Phase 2 of foundation basement.

11          Q.     Okay.  Are there any other issues that create  
12    a substantial conflict with the code from your  
13    perspective?

14          A.     The only thing that is a potential conflict is  
15    the area of liquefaction and the bearing capacity of the  
16    soils in that the geotech report indicates that the  
17    bearing capacity or the competent soils are down  
18    46 feet.  If bearing soils aren't down, you know,  
19    50 feet, then the piles have to be much deeper than  
20    that.  So the question arises:  For high-rise towers,  
21    how is that going to be -- how is that going to work?  
22    What is the design and seismic of that during -- if you  
23    have highly liquefiable soils.

24          Q.     In your 30-some years of experience -- and  
25    you've raised all these questions about the feasibility



1 of some of these design issues -- how do you normally  
2 deal with them with the applicant? Is this a  
3 conversation that you're having with the applicant? Or  
4 this telling them that you're going to deny their  
5 application because it doesn't comply with the code?

6 A. Well, first of all, I try to get them to  
7 comply with code as much as they possibly can in the  
8 site design and planning process. And then I would try  
9 to design something that would meet the code or  
10 essentially engineer a system to -- that would work.

11 Q. Have you undertaken that process in this in  
12 this project?

13 A. I have not gone that far in this project, no.

14 Q. Why not?

15 A. Because, first of all, I'm not the one doing  
16 the design, you know. And I'm a reviewer. So I review  
17 the information that is provided by the consultant team.

18 Q. If you had questions about the information  
19 provided by the consultant, could you talk to them  
20 directly? Is that one of the things that you can do as  
21 a reviewer?

22 A. I could, and I've done that. I mean that's  
23 during a normal process, we have done that on other  
24 projects. That true.

25 Q. Have you done that in this project?



1           A.    We've had one or two meetings early on,  
2           several years ago.  But I haven't had any recent  
3           discussions with the consultant team in the last two  
4           weeks, since they've submitted or since late April.

5           Q.    With respect to the issues regarding the  
6           secondary access road, is that something you believe  
7           could be resolved by conversations between you and the  
8           geotech consultant?

9           A.    I don't know whether that can be or can't be  
10          at this point in time.  I don't have enough information  
11          to be able to say whether that can work out.  That's --  
12          part of that is show-your-work to show that the -- what  
13          they've done is going to address all the concerns.

14          Q.    So I guess part of the issue is that you think  
15          they need to show more work, and they probably believe  
16          that they've shown you adequate work?

17          A.    That's correct.

18          Q.    Is that how you'd characterize the issues?

19          A.    I guess that's the way I see that issue right  
20          now.

21          Q.    Okay.  Thank you.  Earlier in your testimony,  
22          you've indicated that you've granted deviations about  
23          three or four times since 2007; correct?

24          A.    Yes.

25          Q.    Okay.  And these deviations were for



1 construction in landslide buffer zones or landslide  
2 areas; correct?

3 A. Yes.

4 Q. Okay. And were they for multiple-family homes  
5 or single-family homes?

6 A. All single family that I can think of.

7 Q. And one of the deviations that you've granted  
8 involved application of pin piles or deep piles. Is  
9 that underneath a building or underneath a road or is  
10 that --

11 A. Underneath the building, single-family  
12 residence, underneath the foundation of the building.

13 Q. Okay. Have you seen any suggestion or  
14 information from the applicant in this case talking  
15 about potentially using deep piles or pin piles  
16 supporting foundations for buildings on the site?

17 A. I haven't seen -- the recommendation in the  
18 report indicated that they would be using stone columns.  
19 They even suggested micropiles, which are pin piles,  
20 essentially, in my mind. Pin piles would be  
21 inappropriate for -- they don't meet our rule for pin  
22 piles design because of the length of the pin pile is  
23 the lower area is to hit competent soils. If it's at  
24 46 feet the pin pile rule doesn't allow pin piles deeper  
25 than 35 feet. And so that's one of the -- and that's



1 the same pin pile, very similar requirements for pin  
2 piles that Bob Host put together with McDowell, the  
3 contractor, tested the pine piles. We looked at the  
4 data. City of Seattle adopted pin pile rule. We saw  
5 something similar and wrote something similar.

6 Q. So on this site it would probably be necessary  
7 to have deep piles -- right? -- to hit --

8 A. It would have to be --

9 Q. -- solid ground?

10 A. -- deep, deep pile foundation if you were  
11 going to try to transfer the loads from a high-rise  
12 structure of this type from what I can see.

13 Q. Okay. You don't recall seeing that at all in  
14 any of the submissions from BSRE?

15 A. I don't remember seeing a deep pile foundation  
16 design for the tall buildings.

17 Q. Is that a fairly common way to construct in  
18 areas of questionable soil and questionable ground, the  
19 pile foundation?

20 A. It's a technique to carry the loads back into  
21 the soil at a deeper level, below the slip plane area.

22 Q. And there's other ways, too -- right? -- like  
23 compaction and things like that?

24 A. I refer compaction as another technique;  
25 that's correct.



1 Q. Okay. Let's talk about the slopes stability  
2 recommendations from BSRE. Is a retaining wall a  
3 reasonable method to stabilize a slope as far as  
4 increasing the slip resistance of a slope and trying to  
5 prevent slide and runoff?

6 A. It's a technique that is used commonly for  
7 shallow landslides or buttress wall, retaining wall,  
8 earth-reinforced wall, anything that would lessen the  
9 vertical height and also to resist the movement of the  
10 slip plane.

11 Q. How would you characterize, generally, the  
12 slope where the secondary access road is located? Would  
13 you characterize that as an area of shallow slide  
14 potential or a deep slide potential slope?

15 A. I would say right now, from what I've seen,  
16 the -- and what the report seems to indicate based on  
17 the borings and soil logs, it looks like 13 to 21 feet  
18 in that area would be most likely where the area could  
19 slide because of the blow counts and the areas of  
20 saturation.

21 There are some areas of deeper, weaker planes  
22 below what's referred to as a fat clay. And that clay  
23 unit is also weak. It also has a -- this transitional  
24 bed of groundwater going through. So that would be, in  
25 my mind, a deeper, a deeper landslide if the fat clay



1 gave way.

2 Q. Would a retaining wall be able to stabilize  
3 that slope in the area of the deeper slide potentially?

4 A. I didn't see any indication, other than the  
5 analysis and the psuedoseismic where they beefed up that  
6 wall. That's the only information. I don't have  
7 information to know whether or not all of the driving  
8 forces were included in that calculation.

9 Q. So would it be a question of modifying the  
10 wall to be able to deal with those issues?

11 A. That's a possibility except for the area that  
12 I raised about this general safety of the public along  
13 that area. If the fill and the buttressing was made --  
14 filled to the point where the risk of landslide and  
15 factor of safety was sufficiently high, greater than the  
16 minimum required, then we wouldn't have a situation  
17 where the general public would be at risk. It wouldn't  
18 slide, in other words.

19 Q. Okay. Let me ask you this, then: If a  
20 deviation were granted for the secondary access road,  
21 how can a deviation be granted for the buildings?

22 A. Well, the issue on the buildings is that they  
23 have the opportunity to locate someplace else. As part  
24 of our critical area regulation, when you go through the  
25 hierarchy of evaluation on this, the first thing you try



1 to do is avoid the potential impact to the critical  
2 area. But you also try to avoid the risk to the public,  
3 if you can, by locating those buildings in a different  
4 location. You have that opportunity here. The county's  
5 not depriving the applicant to build in an area that is  
6 not landslide hazard. There's all sorts of area that is  
7 not landslide hazard on the site.

8 Q. So what you're really focusing on in  
9 30.62B.340 is that there are no alternate locations for  
10 the structure on the subject property; correct?

11 A. Right. That's basically it.

12 Q. Because if you can fulfill the requirements  
13 for slope stabilization on the road, then you can  
14 fulfill the requirements for slope stabilization for the  
15 buildings?

16 A. That's right.

17 MR. VASQUEZ: I think that's all the questions  
18 I have.

19 Thank you, Mr. Sleight.  
20  
21  
22  
23  
24  
25



## 1 REDIRECT EXAMINATION

2 BY MS. KISELIUS:

3 Q. Just a few more questions for you,  
4 Mr. Sleight. As you're standing here today, are you  
5 evaluating the information that has been provided by the  
6 applicant? Or are you evaluating hypothetical solutions  
7 to fix the minimal wall design that had been submitted  
8 by the applicant?

9 A. I have to look at what the applicant has  
10 submitted and then compare that to code. And that's  
11 pretty much the way we look at things.

12 Q. A couple questions to clarify a line of  
13 questioning regarding the deviation on the road. Can  
14 you remind us what the two criteria are that might be  
15 applied to a deviation request?

16 A. Well, first of all, they have to take a look  
17 and see whether or not there is no other access or no  
18 other location to build the access that wouldn't hit the  
19 landslide hazard area. On this case, I couldn't -- when  
20 I looked at the plans, the whole hillside has landslide  
21 hazard area. There wasn't a way to get from the bottom  
22 at Point Wells to the top of the hill up at Woodway  
23 without going through landslide hazard area.

24 So I would say there is no alternate way  
25 without impacting the landslide hazard area.



1 Q. That addresses the first criterion --

2 A. The first --

3 Q. -- as to the road?

4 A. The first one. The second one that really  
5 hasn't been looked at and that has to do with -- in a  
6 sense it has been in one sense because the geotech  
7 report has evaluated the existing condition. The  
8 existing condition shows that it's bad news. It's not  
9 good. The existing will slide in a seismic event. And  
10 the existing static condition on the hillside doesn't  
11 meet the 1.5 factor of safety in a static condition.  
12 That with the existing conditions.

13 But what they didn't do is analyze what the  
14 code requires is to evaluate that all the way down to  
15 the setback. And with the additional 100-foot setback,  
16 is this hillside with its setback, the landslide hazard  
17 area with its setback, what they're proposing equivalent  
18 to that particular with the setback? And that level of  
19 analysis has not been done.

20 Q. Okay. At this moment, you don't believe the  
21 second criterion was met?

22 A. I don't believe the second criteria was ever  
23 done. They're just silent on it. And so that's the  
24 type of thing, though, that the applicant could show  
25 their work and possibly prove that it works. But they



1 haven't done it.

2 Q. So when you and Mr. Countryman testified  
3 regarding the road and the first criterion, were you  
4 both agreeing that the first criterion as to the road  
5 had been met?

6 A. I believe it had been, yes, the first  
7 criteria, There is no other alternate access for the  
8 road.

9 Q. I believe Mr. Vasquez mentioned that a  
10 deviation had to be granted for the access road?

11 A. That's true. It has, it has -- to be able to  
12 make this work, we would have to be able to grant two  
13 deviations, one for the road and one for the structures.

14 Q. In order to make the project work, the  
15 deviation has to be granted?

16 A. Right.

17 Q. Do you have to grant the deviation for the  
18 access road if it doesn't meet both criteria?

19 A. No.

20 Q. When did the applicant -- when was the  
21 applicant first told that it could not build structures  
22 in a landslide hazard area?

23 A. I'd have to go back and look. I can't  
24 remember that date. I'd have go back. I presume it  
25 would have been the original letter that went out, we



1 asked them to describe the landslide hazard. That was  
2 2013. The memo or review completion letter that went  
3 out in 2013, in April, from Paul Drago who was the  
4 engineer who was looking at that time. Allan Murray  
5 took over the project after Paul left for a while. Now  
6 I have taken over the project when Alan retired.

7 Q. Okay. So that was 2013. When, again, did you  
8 say that the applicant submitted a deviation request for  
9 this project?

10 A. Just in the last month.

11 Q. So when would you say the applicant started a  
12 dialogue about building in a landslide hazard area, with  
13 the county?

14 A. Well, I can recall a meeting. But I'd have to  
15 go back and look. I don't keep a lot of meeting notes.  
16 I have too many meetings. But it was several -- maybe a  
17 year or two ago in our conference room. I recall  
18 Mr. Bingham and other a couple of others there.

19 Q. Would it be fair to say that, from the purpose  
20 of project review, that a dialogue regarding a deviation  
21 started when the applicant submitted the deviation  
22 request a month ago?

23 A. As far the deviation request?

24 Q. Yes.

25 A. I think "dialogue" is kind a strong statement.



1 I don't think that we've had much conversation with  
2 them. I mean I haven't got a call, asking, Hey, let's  
3 have a meeting; let's talk about this. I haven't had  
4 any request for that sort of input.

5 Q. All you have is the deviation request  
6 submitted a month ago?

7 A. That's all.

8 MS. KISELIUS: I don't have any further  
9 questions.

10

11 RE CROSS EXAMINATION

12 BY MR. VASQUEZ:

13 Q. Just a couple follow-up questions. Sorry to  
14 keep you longer, Mr. Sleight. Just a couple questions,  
15 though. The urban center code requires a second access;  
16 correct?

17 A. That's really more of a planning question. I  
18 haven't gone through that particular -- I presume it is.  
19 But I haven't taken a look at that part of it. I look  
20 at it more from a traffic standpoint, along with Jim  
21 Bloodgood. If there's a certain ADT, average daily  
22 trips, then it triggers. And also, like so many trip  
23 generation, that type of things, there are certainly  
24 enough trips to warrant a second access.

25 Q. I guess that's the question, then. The urban



1 center code is designed for high density residential  
2 projects, mixed-use residential projects; correct?

3 A. Yes. I mean that --

4 Q. It would likely generate --

5 A. Higher density; that's correct.

6 Q. It would likely generate amount of trips where  
7 a secondary access road would be required; correct?

8 A. That's normally where we would see a secondary  
9 access.

10

11 Q. Would that be the same for an urban village  
12 application?

13 A. You know, I don't know where the cut off would  
14 be for urban village. But I think it would be the  
15 pretty much the same, based on the density, yeah.

16 Q. So if you couldn't get an secondary access  
17 road there, you couldn't build either an urban center or  
18 an urban village; correct?

19 A. That would be my understanding based on what I  
20 can see, yeah.

21 Q. Okay. I guess my question was: Is a  
22 deviation going to be required, then, for that second  
23 access road to be able to build an urban village or an  
24 urban center on that site?

25 A. Yes, because that's what's required by code.



1 Q. Okay. By the way, these meetings -- you said  
2 that you would be amenable to a meeting request with the  
3 applicant; is that correct?

4 A. I'd be amenable to meet with either side.

5 Q. Is that your call, or is that Mr. Countryman's  
6 call?

7 A. It's usually the person who calls me, I meet  
8 with.

9 Q. Okay. Good to know. Thanks.

10 A. Yeah.

11 THE HEARING EXAMINER: Thank you, Mr. Sleight.

12 MS. KISELIUS: My apologies. The county has  
13 no further witnesses.

14 THE HEARING EXAMINER: Okay.

15 MR. VASQUEZ: Yes, your honor, we have. And  
16 I'd like to call Mr. John Bingham as our first witness.

17 THE HEARING EXAMINER: Do you solemnly swear  
18 or affirm the testimony you are about to give in this  
19 proceeding is true and correct?

20 THE WITNESS: Yes.

21 THE HEARING EXAMINER: Name and address,  
22 please.

23 THE WITNESS: John Bingham. I work at Hart  
24 Crowser in Edmonds at 190 West Dayton Street.

25



## 1 DIRECT EXAMINATION

2 BY MR. VASQUEZ:

3 Q. Mr. Bingham, the instructions have been that  
4 you can actually grab that microphone so that people can  
5 hear you and it could be recorded.6 THE HEARING EXAMINER: Yup, pick it up and  
7 carry it around.

8 THE WITNESS: Like that?

9 Q (By Mr. Vasquez) 'Cause you speak kind of  
10 softly.11 So, Mr. Bingham, can you please tell me what  
12 your education is.13 A. I received a bachelor of science degree at  
14 Colorado State University in civil engineering and then  
15 also a master's of science also at Colorado State  
16 University with a focus on geotechnical engineering.

17 Q. When did you receive those degrees?

18 A. The first was in 1997. Actually, sorry. That  
19 was the master's. The other was three years before  
20 that, so 1994.

21 Q. Are you licensed professionally in any states?

22 A. I'm licensed in a civil engineer in Washington  
23 state.24 Q. Do you have -- and forgive me if I don't  
25 understanding the licensing. Is there a specific

1 license for geotechnical engineer?

2 A. Not in the Washington state.

3 Q. Okay. Are there in other states?

4 A. There are in other states.

5 Q. Do you consider yourself a geotechnical  
6 engineer?

7 A. Yes.

8 Q. And how long have you been a geotechnical  
9 engineer?

10 A. For 20 years.

11 Q. And how much experience have you had with  
12 this, what we'll call the entitlement process for  
13 developments?

14 A. I have worked on some large projects with  
15 entitlements, really planning stages.

16 Q. Can you tell me what those projects are?

17 A. One project was an engine helix project that  
18 was done in Seattle and, more currently, the Expedia  
19 project at Pier 88 and 89.

20 Q. Where are you currently employed, Mr. Bingham?

21 A. At Hart Crowser.

22 Q. And what is your current title at Hart  
23 Crowser?

24 A. Senior associate geotechnical engineer.

25 Q. And what are your responsibilities and duties



1 as a senior associate geotechnical engineer?

2 A. To obtain work, write proposals, do  
3 engineering analysis, manage junior geotechnical  
4 engineers and field geologists who are doing engineering  
5 and geologic work, as well as developing construction  
6 documents and performing and managing construction  
7 oversight.

8 MR. VASQUEZ: Your honor, I'm not sure if I  
9 have to do this. But I'll move to admit Mr. Bingham as  
10 an expert in geotechnical engineering.

11 THE HEARING EXAMINER: I'll accept that. As a  
12 general rule, these things, just like the exhibits,  
13 unless there's an objection, I'm going to assume it.  
14 And that's because of the nature of our hearing examiner  
15 rules, we have a one-size-fits-all set of rules for both  
16 unrepresented proceedings and represented proceedings.  
17 So basically I'll rely upon you folks to object.  
18 Otherwise, I'm happy to accept Mr. Bingham as an expert.

19 MR. VASQUEZ: Thank you.

20 Q (By Mr. Vasquez) Are you familiar with the  
21 Point Wells project, Mr. Bingham?

22 A. Yes.

23 Q. And how are you familiar with the project?

24 A. I've worked on it quite extensively in the  
25 past year and a half and reviewed documents that were



1 previously completed for it.

2 Q. When was Hart Crowser retained for this  
3 project?

4 A. Hart Crowser only began work back in 2005  
5 which was more environmental work in nature. And  
6 geotechnical work was started back in 2010, I believe.

7 Q. Is that when you began your work on this  
8 project?

9 A. I began my work in 2017.

10 Q. And what was the work that you were assigned  
11 to do for this project?

12 A. The work was predominantly looking at slope  
13 stability and geotechnical issues related to the  
14 secondary access road but also addressing county  
15 comments that were raised regarding geotechnical issues.

16 Q. You've sat here through the testimony of  
17 Mr. Sleight; correct?

18 A. Yes.

19 Q. Okay. And he talked about three issues that  
20 BSRE's application has. They are -- and I'll hopefully  
21 get them right -- drainage, the show-your-work issue,  
22 and the phasing issue. Do you understand that?

23 A. Yes.

24 Q. Okay. First of all, let me ask you this just  
25 to make sure the record's clear: What applicable codes



1 were you working with in evaluating the slope conditions  
 2 and designing slope stability for this project?

3 A. The Snohomish County Critical Area Code, the  
 4 2007 version that the project is vested to.

5 Q. Do you know off the top of your head what  
 6 those code numbers are?

7 A. The predominant three would be 30.62B.140 for  
 8 the geotechnical engineering reporting, then 320, which  
 9 is kind of a geotechnical erosion hazard areas, and 340,  
 10 which is the landslide hazard area portion specifically.

11 Q. Did you produce any reports for this, for this  
 12 project?

13 A. Yes, multiple.

14 Q. Do you recall what those reports are?

15 A. Do you want me to list them out?

16 Q. Yes, please.

17 A. There's a geotechnical report that was  
 18 submitted back in April. There was two landslide hazard  
 19 area deviation requests. There was a subsequent  
 20 geotechnical report addendum that was submitted on the  
 21 geotechnical side.

22 Q. And the April report is April 20th, 2018;  
 23 correct?

24 A. Yes.

25 Q. I have it here in my hand. It is -- I believe



1 it is C-24. Is that correct? Is that the right report?

2 A. That is the report.

3 Q. What is enclosed in that report generally?

4 A. Generally speaking, it talks about subsurface  
5 conditions and talks about geologic hazard areas as well  
6 as slope stability for the secondary access road and  
7 feasibility of structures for the site development.

8 Q. How did you determine the subsurface  
9 conditions on this site?

10 A. Geotechnical subsurface explorations as well  
11 as site reconnaissance of the slopes.

12 Q. Can you tell me what the site exploration  
13 consisted of?

14 MS. KISELIUS: Can I ask a quick clarifying  
15 question. You identified that as Exhibit C-24. We had  
16 it marked as C-33. Can we confirm they're the same  
17 document?

18 MR. VASQUEZ: Good question. Yeah, I have it  
19 here as C-24.

20 MS. KISELIUS: They might be duplicative. I  
21 just want to make sure we're all referring to the --

22 MR. VASQUEZ: 'Cause it's called -- 33 is  
23 called something different. But I bet you it's the same  
24 thing.

25 MS. KISELIUS: Can we use C-24 and C-33



1 interchangeably?

2 MR. VASQUEZ: How about if we strike one of  
3 those so there's no issue?

4 MS. KISELIUS: Would it be okay if we referred  
5 to C-33 since that's the one we started?

6 THE HEARING EXAMINER: Either way is fine. I  
7 agree. I prefer to have not duplicative exhibits for  
8 just this reason. So whatever we started with, let's  
9 try to keep to that.

10 MR. VASQUEZ: Okay. Can we strike C-27, then,  
11 and refer -- C-24. This is what happens, exactly.

12 MS. KISELIUS: You want to keep C-27. Yeah.

13 THE HEARING EXAMINER: Basically, in the  
14 record, any time there's a reference to C-24, we mean  
15 C-33. Or if it's C33, it means C-24. We'll try to  
16 stick to referring to it as C-33.

17 MR. VASQUEZ: Okay. Thank you, Your Honor.

18 THE HEARING EXAMINER: 33.

19 Q (By Mr. Vasquez) C-33, then, Mr. Bingham.  
20 C-33 is your subsurface conditions report; correct?

21 A. Correct.

22 Q. And you evaluated the subsurface of the site;  
23 correct?

24 A. Yes.

25 Q. And was it the entire, entire site? Or were



1 you focused on specific areas of the site? Or what  
2 exactly were you looking at?

3 A. It addressed the majority off the site. But  
4 it was focused on the secondary access road. It was --  
5 it's a similar report to what was submitted in 2015 with  
6 an update to include the secondary access road.

7 Q. Okay. Now, back again, how did you accomplish  
8 this evaluation?

9 A. I completed subsurface explorations as well as  
10 slope reconnaissance and looking at existing subsurface  
11 explorations that may have already existed.

12 Q. In your sub surface explorations, can you  
13 describe what those were?

14 A. Those were predominantly geotechnical borings  
15 where they had drill down and take samples, determine  
16 the soil density when you take those samples.

17 Q. How did you locate the borings?

18 A. I located the most recent borings based on the  
19 location of the proposed work, secondary access road.

20 Q. And your report indicates where those borings  
21 are located; correct?

22 A. Yes.

23 Q. And then there is a corresponding chart or  
24 document that shows what those subsurface borings  
25 resulted in or what the soil conditions were?



1 A. Correct; there's boring logs.

2 Q. And based upon those boring logs, were you  
3 able to characterize or at least have an idea of what  
4 was going on down there?

5 A. Yes.

6 Q. Okay. By the way, there's monitoring wells on  
7 the site, too; is that correct?

8 A. That's correct.

9 Q. Were those monitoring wells that were placed  
10 on the site by Hart Crowser or by somebody else?

11 A. The monitoring wells were placed on the site  
12 by others. Our recent explorations included what's  
13 referred to as a vibrating wire piezometer. It's used  
14 for determining water levels. But it's not exactly the  
15 same details as a monitoring well.

16 Q. Do you have access to the data from the  
17 monitoring wells?

18 A. Yes. It's included in our report.

19 Q. Okay. Where did you obtain that access?

20 A. You mean to physically get to the locations?

21 Q. Did you need permission to use those  
22 monitoring wells?

23 A. We had talked with the current property owner.

24 Q. The subsurface conditions report, other than  
25 the conditions, what else did it include?



1           A.    It included slope stability analysis for the  
2 secondary access road as well as a previously completed  
3 slope stability analysis for a location further to the  
4 north on the site.

5           Q.    What was your purpose for conducting a slope  
6 stability analysis?

7           A.    To address comments and concerns raised by the  
8 county comments on our report.

9           Q.    And do you recall what those comments were  
10 specifically?

11          A.    Their discussions about slope stability and  
12 drainage as have been previously raised today.

13          Q.    And those comments, were they enclosed in an  
14 October 2017 report?

15          A.    Yes, there was a comment letter.

16          Q.    That comment letter was a 400-page letter;  
17 correct?

18          A.    Yeah. I don't recall the exact page number,  
19 but it was large.

20          Q.    Was this April 20, 2018, the first time you  
21 focused on the secondary access road?

22          A.    That was the first time that I personally did.  
23 There was some prior discussion in 2015 in a report and  
24 actually some subsequent reports that discussed  
25 alternatives for secondary access road.



1 Q. And why is there such a focus in 2018 on that  
2 secondary access road?

3 A. Based on our meeting with the county, we  
4 understood that was the predominant geotechnical  
5 concerns on the project currently.

6 Q. Your meeting with the county, when was that?

7 A. I believe it was November of 2017 if I  
8 remember correctly.

9 Q. So shortly after that October comment letter?

10 A. Yes.

11 Q. Correct? Do you recall what the comments of  
12 the county were with respect to the secondary access  
13 road?

14 A. The need for providing additional geotechnical  
15 information, slope stability analysis to address  
16 concerns about stability of the secondary access road.

17 Q. Did they talk specifically about what  
18 information was required in those particular areas?

19 A. Yeah. There was discussion about, some  
20 discussion about drainage but also slope stability of  
21 that area and concerns about some methods that may or  
22 may not be preferred.

23 Q. Now, you've submitted subsequent or  
24 supplemental reports since then; correct?

25 A. Yes.



1 Q. Okay. And you submitted one in May -- on  
2 May 15, 2018; is that correct?

3 A. Yes.

4 Q. Okay. And I believe that's A-37. Can you  
5 pull up A-37 for me. It's not in color in my copy.

6 So what was the purpose for this May 15, 2018,  
7 letter, Mr. Bingham?

8 A. The purpose was to submit a landslide area  
9 deviation request.

10 Q. And did you accomplish that purpose in this  
11 letter.

12 A. In our opinion, we did.

13 Q. And your opinion is based on what?

14 A. My opinion is based on the analysis that we  
15 had performed to address the slope stability concerns  
16 raised by the county.

17 Q. In your opinion, is this May 15, 2018, letter  
18 compliant with the code requirements?

19 A. In my opinion, it addressed the concerns about  
20 slope stability that are in the code, yes.

21 Q. But Mr. Sleight's complaint was that it was  
22 inadequate in that it didn't show your work. Do you  
23 agree with that analysis, Mr. Bingham?

24 A. Could you restate that question, please.  
25 Repeat that question.



1 Q. Mr. Sleight says that the applicant has not  
2 shown their work. That was one of the issues that he  
3 raised. Do you believe that you have shown your work?

4 A. This is actually a second revision of it where  
5 we included some figures on the slope stability to  
6 attempt to show our work more completely in this version  
7 to address some of that comments that were raised on the  
8 initial version of this letter.

9 Q. Let's take a look at page 4 of that letter.  
10 Paragraph 2, it says: "The geotechnical report  
11 demonstrates code-required protection is provided." Do  
12 you see that?

13 A. Yes.

14 Q. Is that one of the areas where you believe  
15 you've provided or shown your work, so to speak?

16 A. Yes. We attempted to clarify questions that  
17 were raised on the first version that we received.

18 Q. What questions were you responding to?

19 A. We were clarifying some of the questions  
20 regarding retaining wall height that was in the slope  
21 stability analysis as mentioned in the bullet here. And  
22 there was several different things about slope  
23 stability, clarifying some the things that were included  
24 in the slope stability as far as parameters used, soil  
25 program tears and various and sundry things, other



1 things related to drainage and -- excuse me. Not  
2 drainage in this one. But . . .

3 Q. Let me take you back for a second. There was  
4 a comment by Mr. Sleight saying that he wasn't quite  
5 sure if your analysis of the strength of the wall  
6 included or took into account the fill surcharge behind  
7 the wall and the vehicle surcharge over and above the  
8 seismic condition you were trying to address. Do you  
9 recall that testimony?

10 A. Yes.

11 Q. Did your analysis include evaluation of the  
12 fill surcharge?

13 A. We did. I could point it out if you'd like to  
14 see it on the figure.

15 Q. Yes, please.

16 THE WITNESS: Could you please scroll to the  
17 end figure. Who's got -- am I controlling this? Just  
18 go to the very end, the two figures. If you go up --  
19 this one will work.

20 A. So what's depicted here, there's two slip  
21 surfaces. This one here, these are the two critical  
22 slip surfaces. And then the slope stability model, it  
23 looks at all critical surfaces basically between this  
24 side of the page and there's a little light blue arrow  
25 over here. Sorry, on that side.



1           We look at all the stability in between those  
2 locations. We have only illustrated the final, most  
3 critical ones, the surface here. Then there was another  
4 question. So we included a surface here but also  
5 searched for surfaced but not found them as a critical  
6 surface for one that went down either underneath this  
7 wall or coming through the toe of this wall.

8           This particular area did have a separate  
9 analysis to come up with this resisting load --  
10 resisting force that this retaining wall would need to  
11 provide to keep that material in place. It didn't,  
12 admittedly, include a traffic surcharge here. But the  
13 traffic surcharge is usually equivalent to about 2 feet  
14 of soil. So compared to 40-foot high wall, consider  
15 that something that is not significant in comparison.

16           Q. Now, when you say equivalent to traffic -- the  
17 traffic surcharge is equivalent to 2 feet of soil, what  
18 do you mean by that?

19           A. It's fairly typical for geotechnical engineers  
20 to consider that traffic loads would be equivalent to  
21 about 250-pounds per square foot vertical load based on  
22 traffic, vehicles trucks, whatnot. And in a way, it's  
23 the soil that works out to 250 feet is about equivalent  
24 to, if you had two additional feet of soil stacked above  
25 this point. So that's kind of what I'm referring to



1 with the traffic surcharge and equivalent 2 feet of  
2 soil.

3 Q. Okay. Let me be clear: You didn't take into  
4 account the vehicle surcharge in arriving at your 78,000  
5 pounds per foot?

6 A. No, we did not. Again, there's some other  
7 factors at play.

8 Q. But you did take into account the fill  
9 surcharge that was behind that wall; correct?

10 A. Correct. This zone of soil above the red  
11 line, which represents the existing grades, that weight  
12 of soil was included in calculating that 78,000 pounds  
13 per length of wall.

14 Q. And that 78,000 pounds per length of wall,  
15 does that have a safety factor or -- let's call it a  
16 fudge factor in there?

17 A. In this analysis, we were trying to look at  
18 the target required factors of safety in the county  
19 code. As was mentioned previously, 1.5 is for static  
20 conditions. 1.1 is for pseudostatic conditions that are  
21 representing an earthquake type of loading scenario.

22 We were purely trying to see to what load we  
23 needed as a wall resistance here in order to achieve the  
24 target factors of safety. There are other projects  
25 where we have done the design, and it has actually come



1 out to a number that's been more like 190-pounds per  
2 cubic foot. So based on that experience, I feel there  
3 is definitely some margin or room for changing this  
4 around as might be needed to cover some final design  
5 details, say, traffic surcharge of 2 feet, for example.

6 Q. In your opinion, those would be in the final  
7 design details; correct?

8 A. We were focused on showing feasibility of such  
9 wall and there's -- yes, there would be other design  
10 details and items that would need to be addressed later  
11 as stated in our reports.

12 Q. Well, in order to increase the strength or  
13 safety factors of that wall, what else could you do?

14 A. Basically, it would just be a matter of number  
15 of tie backs that you would have install for this  
16 particular type of wall system. In our original letter,  
17 we did not include the specific details of a certain  
18 type of wall system but rather just indicated what  
19 resisting force the wall would need to provide and in  
20 our report provided some different methods that could be  
21 done to achieve that. In this subsequent update, we  
22 provided more details to address trying to show more of  
23 our work.

24 Q. Since we're on that diagram, a lot has been  
25 made of the phasing issue and the fact that the phasing



1 doesn't show construction of the urban plaza building  
2 basement until the second phase, well after this wall is  
3 supposed to be there. Do you recall that testimony?

4 A. Yes.

5 Q. And can you explain, then, how does this  
6 design work if you don't build that basement until the  
7 second phase?

8 A. So again, this analysis was focused on  
9 feasibility. So we included certain conservatisms that  
10 we didn't feel were needed to drill into the details.  
11 In this particular case, we put in a wall that would  
12 represent the construction of the tower at that  
13 location. So that there was an initial question about  
14 there being a 60-foot wall. Part of this wall is, yes,  
15 there would be 60 feet once the excavation for the  
16 basement was excavated. So that 60 feet would be needed  
17 in order to construct the building.

18 However, once the building is constructed,  
19 there would basically be floor slabs and structure back  
20 up to approximately the existing grade, which is this  
21 red-dashed line, such that all those earth load would be  
22 transferred basically to the other soil on the other  
23 side here. And there would only be need for a -- this  
24 portion of exposed retaining wall of 40 feet.

25 So this is kind of a conservative case that,



1 Hey, if we had the situation, even in a seismic event,  
2 we can come up a load needed to resist it. It was a  
3 conservative, simplified way of showing feasibility.

4 Q. I just want to make sure I understand and  
5 everybody understands. You're putting up the retaining  
6 wall first; correct?

7 A. Correct.

8 Q. And then, by putting up that retaining wall,  
9 you're able to stabilize the slope; correct?

10 A. Correct.

11 Q. And then, when the urban plaza building  
12 basement is built, that provides additional stability or  
13 protection? Or . . .

14 A. It's more of a just where the permanent loads  
15 would go. And I guess to clarify your question about  
16 building this retaining wall first, with the wall, you  
17 would typically drill vertical element portion. And  
18 then you would put in tie backs as you're excavating  
19 down. In this case, several of them are above what at  
20 the time the wall's constructed would be the current  
21 grade. So they would be installed. You wouldn't  
22 necessarily have to install the lower rows of tie backs  
23 until you excavated to complete the basement for the  
24 building.

25 Q. Okay. So I just wanted to make sure I got



1 this. You don't have to build that basement at the same  
2 time as the retaining wall?

3 A. No.

4 Q. Okay. And the slope will still be stabilized;  
5 correct?

6 A. That slope would still be stabilized. There  
7 would be things, as been mentioned. But there are  
8 considerations for dewatering while installing actually  
9 before that could be a factor. But again, it's  
10 something that could be addressed, in my opinion, during  
11 final design.

12 THE HEARING EXAMINER: So I'd like to ask a  
13 question just to make sure I understand what Mr. Bingham  
14 said.

15 So what you're saying is the basement doesn't  
16 need to be excavated because, until the excavation is  
17 done, the soil is taking that portion of the load  
18 horizontally. Then, when you excavate, then you'll need  
19 to do additional tie backs lower down.

20 THE WITNESS: You'd need to do additional tie  
21 backs, yes, basically.

22 THE HEARING EXAMINER: But you don't need to  
23 do the additional tie backs until you've actually  
24 excavated that far down?

25 THE WITNESS: You would need -- again, this



1 would be something that, during final design, you  
2 determine do I need two, three, whatever, tie backs.

3 THE HEARING EXAMINER: Right.

4 THE WITNESS: If I'm just building this top  
5 portion and I have to wait until some later time to  
6 built that basement and then in that final design you  
7 determined, Okay, yeah, I need to now build my third row  
8 of tie backs.

9 THE HEARING EXAMINER: Until you remove that  
10 lateral support, if you will, you don't need do those  
11 additional tie backs?

12 THE WITNESS: Correct. It's kind a balancing  
13 of what earth loads I'm having and how much resisting  
14 anchor load, ground anchor load I need at the time. So  
15 there's flexibility in what happens when.

16 THE HEARING EXAMINER: Got it. Thank you.

17 Q (By Mr. Vasquez) Since we're talking about  
18 groundwater and since we're still on this diagram, there  
19 was testimony about really, in kind of no detail, on how  
20 the existing groundwater was going to be dealt with in  
21 that particular area. Do you recall that testimony?

22 A. Yes.

23 Q. And is that accurate, Mr. Bingham?

24 A. In my opinion, it's again, I think, something  
25 that can be dealt with and is very feasible and is done



1 routinely just to have permanent drainage. We  
2 illustrated the fact that, you know, what's currently  
3 illustrated is permanent groundwater around this  
4 particular area. We showed that, Hey, here's what the  
5 existing groundwater was with this light dashed blue  
6 line, illustrating the fact that, yes, we're going to  
7 need some permanent drainage or dewatering in that area.

8           There's multiple ways you can do that. So in  
9 my opinion, that was just a design detail that can be  
10 done later, based on my experience.

11           Q. Well, in the information that you provided,  
12 you clearly indicate that you have to deal with the  
13 existing groundwater; correct?

14           A. Yeah.

15           Q. Yup? And --

16           A. But excuse me. In what aspect?

17           Q. That you're going to have to either remove the  
18 existing groundwater or redirect it.

19           A. I would just want to clarify that this is  
20 particular to this specific location here which is a  
21 different situation than the overall slope stability and  
22 existing groundwater levels.

23           Q. Okay. You have identified that you need to  
24 deal with groundwater in both those locations; correct?

25           A. Actually we've identified that we only need to



1 deal with groundwater around this shoring wall. This  
2 model uses existing groundwater levels based on our  
3 existing borings with vibrating wire piezometers. And  
4 it was mentioned in prior testimony that the kind of  
5 layer-cake scenario of a section further north, this  
6 also indicated perched water levels.

7 But as one of the conservatisms in this  
8 analysis, we around assumed the highest groundwater  
9 level applies for all these soils rather than saying it  
10 might have a sandy zone in this clay material, that I  
11 might have a sand seam. I might have a water head that  
12 raises up some lower point. We conservatively just  
13 picked the highest one for our analysis, again, because  
14 it's done for feasibility.

15 Q. So you've identified the maximum potential  
16 groundwater in those areas as opposed to trying to  
17 categorize them or make a determination about whether  
18 different levels are correct?

19 A. That's correct. It's a simplification for  
20 feasibility.

21 Q. By the way, that area where you indicate  
22 existing groundwater surface and that's the area that  
23 has to be dealt with, why did you focus on that  
24 particular area?

25 A. That was -- it was just something we wanted to



1 be clear and communicate. I know there was, based on  
2 prior discussions with Mr. Sleight in November, concerns  
3 about groundwater drainage and how to address that. So  
4 we wanted to be clear about that.

5 Q. By the way, there was also some testimony  
6 about the liquefaction condition in and around  
7 monitoring well 122. Do you recall that testimony?

8 A. Yes.

9 Q. Have you tried to -- well, let me strike that  
10 question.

11 Do you recognize that there is a potential  
12 greater liquefaction area at that monitoring well?

13 A. At that particular exploration, there -- yes,  
14 I do.

15 Q. And did you identify or have you at least  
16 given thought about how to deal with that?

17 A. That's something that this kind upper plaza  
18 area, in particular -- well, here's 122 right there. So  
19 it is on this upper plaza. There were two explorations.  
20 One had more indication of liquefaction. The other  
21 didn't. What's not depicted here is the fact that, in  
22 the grading plans, there's a retaining wall over at the  
23 this location. So it's an item that we feel could be  
24 addressed based on the design of that retaining wall  
25 there. That retaining wall is much shorter in height,



1 relatively speaking, than the one that has a slope above  
2 it here. So . . .

3 Q. So I just want to make sure I understand.  
4 There's -- that second retaining wall isn't depicted  
5 there. But it's depicted somewhere else; correct?

6 A. That's correct.

7 Q. Where is it depicted?

8 A. It's depicted on grading plans.

9 Q. And in your professional opinion and  
10 experience, you believe that additional retaining wall  
11 will take care of the potential liquefaction zone in and  
12 around monitoring well 122; correct?

13 A. That's one alternative. There could be ground  
14 improvement as mentioned, like the stone-column ground  
15 improvement option that was also mentioned in our  
16 geotechnical report.

17 Q. Okay. Go ahead. No, I didn't want to cut you  
18 off.

19 A. So there's probably several ways that it could  
20 be addressed. But a retaining wall is one possibility.

21 Q. And you mentioned ground improvement. What  
22 ground improvement modifications or recommendations did  
23 you mention in your report?

24 A. There was several different ones. There was  
25 stone columns. There was grouting, soil mixing. There



1 was mention of over excavation which -- and replacement  
2 with basically denser fill, which is usually only  
3 typical when you've got a shallow depth of the poor  
4 soil.

5 Q. And Mr. Sleight mentioned that there was also  
6 a reference to soldier piles and --

7 A. I think it was micropiles and pin piles.

8 Q. And micropiles and pin piles, yeah.

9 A. That's correct.

10 Q. And that might not be adequate for the rest of  
11 the site. Do you have an opinion as to that?

12 A. I think that that might be a limited case in  
13 some case. But there is mention of other foundational  
14 alternatives for building foundation.

15 Q. You have at least addressed or indicated  
16 partially how it would be feasible to build buildings on  
17 on this site; correct?

18 A. Yes.

19 Q. Let's talk about this area around the -- I  
20 guess it's called the Chevron wetland or Chevron -- how  
21 would you describe it, Mr. Bingham?

22 A. Chevron Creek currently goes and in a -- I  
23 think in the right term it's basically kind of a  
24 collection area and it gets conveyed in a pipe to an  
25 outfall.



1 Q. That's what's currently on the property;  
2 correct?

3 A. That's correct.

4 Q. Okay. And you're still good. What is your  
5 design recommendation for dealing with water and  
6 collecting into the Chevron Creek?

7 A. Our understanding from discussions with the  
8 civil engineer is that basically that collection of  
9 Chevron Creek would just move up the stream. So it  
10 would basically be the same condition, just moved up the  
11 drainage a little ways.

12 Q. Would it collect more or less water?

13 A. It would be collecting the same surface creek  
14 water as it has essentially. A question about  
15 groundwater that might be potentially different. But I  
16 don't see that as a feasibility level concern.

17 Q. Why not?

18 A. I think there's things that can be done.  
19 Currently it's not being -- to my knowledge, the  
20 groundwater and Chevron Creek, it's not being -- there's  
21 no kind of impervious wall that forces the groundwater  
22 to come up above ground. But, again, that's just to my  
23 knowledge.

24 Q. Would the secondary access road have an effect  
25 on that?



1           A.    In my opinion, it wouldn't because you would  
2    just be moving that collection of the water for Chevron  
3    Creek further up if the secondary access road is  
4    basically a fill in that area.

5           Q.    Do you have a design drawing for that,  
6    Mr. Bingham?

7           A.    Not a design drawing.  But I can pull up a --

8           Q.    Or a depiction?

9           A.    I don't think I'm misspeaking here.  But I'm  
10   pretty sure that's Chevron Creek right there.  This  
11   structure currently, right there, is the one that  
12   captures the water from Chevron Creek.  This blue is the  
13   depiction of the secondary access road.  So basically  
14   this structure would end up to having to be moved up, up  
15   the stream away, up the drainage.

16          Q.    So water is collecting into the drainage  
17   further east of the secondary access road; correct?

18          A.    It would be in the -- my understanding of  
19   what's proposed for the drainage.

20          Q.    And it's is keeping water off the road or at  
21   least attempting to; right?

22          A.    Correct.

23          Q.    Okay.  By the way, Hart Crowser evaluated  
24   potential alternate locations for the secondary access  
25   road; correct?



1 A. That's correct.

2 Q. And based upon your evaluation, what did you  
3 determine?

4 A. They were considered and basically similar to  
5 what was mentioned previously today that the northern  
6 location extends through more landslide hazard area than  
7 the southern alternative depicted on these figures of  
8 our -- in our report.

9 Q. And you have submitted two separate  
10 deviations; correct?

11 A. Correct.

12 Q. And what were those deviations for?

13 A. Deviations for the secondary access road as  
14 well as buildings in the urban plaza, this upper parcel.

15 Q. Under the code, in order to have a deviation  
16 granted for the landslide hazard areas, you have to show  
17 that there is no alternate other location for the  
18 structure on the subject property. Let's just talk  
19 about the road first.

20 Do you feel you've complied with that  
21 requirement?

22 A. Yes. Based on the landslide hazard areas  
23 mapped at the site.

24 Q. Now, the second requirement is a geotechnical  
25 report demonstrates that alternative setbacks --



1 alternative setbacks provide protection which is equal  
2 to that provided by the standard minimum setbacks. Do  
3 you believe you've complied with that requirement?

4 A. I do.

5 Q. Show me how.

6 A. So in our geotechnical report, this is a table  
7 that summarizes the slope stability factor of safety.  
8 And section G is the work that we focused on in 2018,  
9 and that's for the secondary access road. The target  
10 factors of safety required in the county code are 1.5  
11 for static conditions, 1.1 for seismic conditions.

12 What I want to focus on here is this  
13 particular road here is existing conditions. And it  
14 shows -- and this was discussed previously, for the  
15 static case factor of safety for existing conditions was  
16 basically 1.3, which is lower than 1.5. So it's not up  
17 to the county required code. Likewise, for the  
18 pseudostatic conditions, it was less than the target  
19 1.1.

20 We looked at a couple different options for  
21 different wall configurations. The one that we've --  
22 that has been focused on, even though there are  
23 different ones, is this particular one here that we're  
24 looking at a figure of, a little bit ago, where it's  
25 basically got one wall, then it's got backfill to the



1 adjacent grades with a retaining wall that supplies  
2 basically 78,000 pounds per foot of wall and achieves  
3 the -- exceeds the 1.5 static factor of safety required  
4 in the county code and is slightly above the  
5 pseudostatic factor of safety in the county code.

6 Q. Do you believe you've provided the level of  
7 detail for the county to understand what your process  
8 and methods are to achieve that stability?

9 A. We've attempted to provide sufficient  
10 clarification for questions that we're aware of.

11 Q. Have you rejected any of those questions or  
12 just completely ignored any of those questions?

13 A. Some of the ones that are kind of outside my  
14 area of expertise, as far as siting locations that I  
15 haven't been able to address from my own technical  
16 expertise.

17 Q. Now let's go that the buildings issue. Were  
18 you the individual that was asked to locate the  
19 buildings in the landslide hazard areas?

20 A. No. We were not responsible for building  
21 siting considerations.

22 Q. Do you know who was?

23 A. I believe it was probably the project  
24 architect. But I'm not entirely sure.

25 Q. Okay. So you had really no involvement in



1 trying to meet the first requirement of the deviation,  
2 the deviation requirements for the landslide hazard  
3 area?

4 A. As far as the building location, no.

5 Q. Okay. But let's talk about the geotechnical  
6 report demonstrates that the alternative setbacks  
7 provide protection equal to that provided by the minimum  
8 setbacks for the buildings.

9 A. In our minds, that's very similar to the  
10 secondary access road, that, if we've achieved the code  
11 requirements for factors of safety for slope stability,  
12 that we would have addressed those similar concerns for  
13 the buildings. There's still some probably final design  
14 details to work out related to the buildings.

15 Q. So if I can summarize, not being a geotech, if  
16 you fix the road issue, you've fixed the building issue?

17 A. Predominantly yes.

18 Q. In your experience, at this stage of a  
19 project -- we're talking about the feasibility  
20 project -- what, in your mind, is the level of detail  
21 that should be provided to the county?

22 A. That's kind of a difficult question. Every  
23 municipality's a little different. We felt that we were  
24 providing what was adequate for demonstrating  
25 feasibility and addressing questions that were raised by



1 the county that we knew about as far as slope stability  
2 and drainage and felt that we've -- we have, by no  
3 means, provided final design recommendation, as has been  
4 stated in various of our different reports. We felt  
5 like we had provided sufficient information to  
6 illustrate the concepts that were being considered and  
7 demonstrating that they were feasible.

8 Q. So I take it, from your testimony, that this  
9 really isn't the end of the road -- correct? -- for  
10 design details and information?

11 A. No. Not anticipated on my part that there  
12 would still be more final design work needed.

13 Q. In fact, in your reports, you've indicated  
14 areas where the additional design detail is required;  
15 correct?

16 A. Correct.

17 Q. What about for the deviation requests?  
18 Additional work is necessary to try and push that  
19 deviation request through, don't you think, Mr. Bingham?

20 A. Yes. There's -- you know, as prior testimony  
21 indicated, there's some -- probably showing some more  
22 work of what we've done in our analysis and calculations  
23 to provide the information that is needed by the county.

24 Q. So you're not denying at all in your testimony  
25 that more information is needed. But you have, in your



1 opinion, provided enough information on the process and  
2 methods to determine that this is a feasible project;  
3 correct?

4 A. No. In our opinion, as I mentioned, there  
5 might be some clarifications that are needed to  
6 demonstrate that.

7 Q. Okay. Is there anything else I missed,  
8 Mr. Bingham, that you need to testify to as far as the  
9 project's specifics?

10 A. I guess I would add, on some of the comments  
11 about foundation alternatives with regard to  
12 liquefaction and seismic design for the project overall,  
13 we presented items in our reports that discuss about a  
14 variety of options. And I'm just going to flip  
15 hopefully quickly here to the site overall.

16 I would say that pretty much areas west of the  
17 railroad tracks, as noted on the liquefaction hazard map  
18 included in our report, there's -- there is liquefaction  
19 hazards. We had mentioned ground improvement methods  
20 such as stone columns and other things that could be  
21 done and are done routinely to address that type of  
22 concern as well as deep foundations mentioned road  
23 shafts, driven piles, cast piles, all very common deep  
24 foundation methods that could be used to support  
25 buildings, both on the urban plaza area but also the



1 lower area where there's questions about liquefaction.

2 We had not gotten into design details and  
3 recommendations to address the specifics of that. But  
4 it's something that's done routinely in my experience  
5 and just not a one of the details we got into this -- at  
6 the feasibility stage but likely something like a deep  
7 foundation with ground improvement used in conjunction  
8 to address the concerns for especially this part of the  
9 project that's west of the railroad tracks given the  
10 liquefaction considerations.

11 Q. You know, thanks for reminding me about that  
12 diagram, Mr. Bingham. I just want to ask you a  
13 question: There's no hatched area or indicated area  
14 around the urban center plaza of liquefaction zone. I'm  
15 not sure if that's one. As A-51 in the --

16 A. Just give me a second. This depicts the same  
17 thing as the architectural figure A-051. This blue line  
18 is the high liquefaction susceptibility. That source is  
19 from the Department of Natural Resources. It's a little  
20 hard to read in the notes. We took that straight from  
21 DNR. We just pulled that from theirs. As was  
22 mentioned, there might be some specific areas where  
23 borings got liquefaction susceptibility. And it  
24 doesn't -- in my mind, there's deep foundation and  
25 ground improvement alternatives that can be used to



1 address.

2 Q. The part of the urban plaza center that isn't  
3 hatched, did you intentionally leaving that unhatched to  
4 misrepresent potential liquefaction zones?

5 A. No. I'm just going to try to show the note  
6 here if I can get to it, maybe. So it mentions that the  
7 liquefaction susceptibility map of Snohomish County from  
8 Washington State Department of Natural Resources -- and  
9 we just pulled that directly from their source.

10 Q. Okay.

11 MR. VASQUEZ: I think those are all my  
12 questions for the day. Thanks, Mr. Bingham.

13 MS. KISELIUS: Mr. Examiner, you know we are  
14 set to concluded at 3:00 o'clock today.

15 THE HEARING EXAMINER: Yes. Ironically, the  
16 planning commission had already booked the room.

17 MS. KISELIUS: Oh. It is 10 till. And I  
18 would also request, this diagram that seems to be, this  
19 figure 23-B, the foundation for the assertion that  
20 stabilizing the slope is feasible, was submitted on  
21 Tuesday. It was a figure. And we received a lot of  
22 information in Mr. Bingham's testimony today that I  
23 would like to have a chance to review with my client  
24 before cross exam.

25 Can we continue with that first thing in the



1 morning?

2 THE HEARING EXAMINER: Okay. We'll then be in  
3 recess. And we'll start again at 9:00 in the morning.

4 MS. KISELIUS: Thank you.

5 THE HEARING EXAMINER: Thank you. Thank you,  
6 Mr. Bingham.

7 (Hearing continued at 2:57 p.m.)

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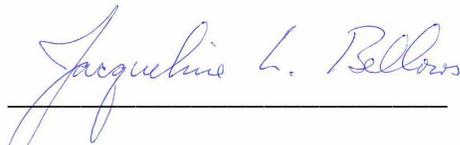
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--ooo--	<b>1/2</b>	511:20 514:4	<b>1:30</b>	<b>2010</b>
597:4	543:16	579:24	596:15,18	621:6
<b>0</b>	<b>10</b>	<b>150-foot</b>	<b>1:34</b>	<b>2011</b>
	510:16 537:14	503:15 512:5	597:2	473:11 474:4
	591:24 593:14	513:4,18	<b>2</b>	477:14,15,17
		516:10,15		495:25
<b>0.168</b>	<b>100</b>	<b>15th</b>		<b>2012</b>
557:25 562:11	499:24 540:7	545:18 546:16	<b>2</b>	496:4
	541:6	550:12 602:18	480:16 540:5	<b>2013</b>
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