STATE OF CONNECTICUT SITING COUNCIL

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CONNECTICUT SITING COUNCIL

NEW CINGULAR WIRELESS

June 11, 2013

APPLICATION FOR A CERTIFICATE OF ENVIORNMENTAL COMPATABILITY AND PUBLIC NEED FOR THE CONSTRUCTION

Docket No. 409A

BEFORE:

JAMES J. MURPHY, Acting Chairperson

BOARD MEMBERS:

Robert Murphy Robert Hannon, DEEP Designee Philip Ashton

THE STAFF:

Robert Mercier, Siting Analyst Melanie Bachman, Staff Attorney

APPEARANCES:

FOR THE APPLICANT, NEW CINGULAR WIRELESS PCS, LLC:
Cuddy & Feder, LLP
445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
By: Christopher B. Fisher, Esq.
Lucia Chiocchio, Attorney

FOR THE PARTY, MARC ROSEN & SUSAN PINSKY:
Marc Rosen and Susan Pinsky, Pro Se
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1 . Verbatim transcript of a hearing before the State of Connecticut, Siting Council 2 Relations, held June 11, 2013, at the Siting Council Franklin Square, New Britain, Connecticut at 1:30 4 o'clock p.m., at which time the parties were represented 5 as hereinbefore set forth . . 6 CHAIRMAN STEIN: Good afternoon. for the delay. 10 I call the meeting to order today, Tuesday, June 11, 2013 at 2:00. 11 12 My name is Robin Stein, Chairman of the 13 Connecticut Siting Council. 14 This hearing is a continuation of a hearing previously held on April 30, 2013 and also on 15 May 20th, the first one, 2013. 16 17 The hearing is held pursuant to provisions of Title 16 of the Connecticut General 18 Statutes and of the Uniform Administrative Procedure Act 19 20 upon a motion to reopen the final decision on 21 application from New Cingular Wireless PCS, LLC for a certificate of Environmental Capability and Public Need 22 for the construction, maintenance and operation of a telecommunication facility located at 8 Barnes Road in 24

Canaan, also known as Falls Village, Connecticut.

This motion to reopen was filed with the Council and the parties and interveners of the original proceedings on February 15, 2013. During a public meeting the Council held on March 7th, 2013, this Council reopened the docket pursuant to Connecticut General Statues 4-181(a) Subsection b, and specifically limited this hearing to Council consideration of change and conditions to revise tower location and modify the facility.

A verbatim transcript will be made of this hearing and deposited with the Town Clerk's Office in the Falls Village Town Hall for the convenience of the public.

We will proceed in accordance with the prepared agenda, copies of which are available here.

And we have the appearance of the party, Mr. Rosen and Ms. Pinsky.

We need to swear in -- I don't know if you have any witnesses other than yourselves.

The answer is no.

And to verify exhibits marked as Roman Numeral VI Items B 1-6 on the Hearing Program.

I will just start though by swearing you

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two in. So, if you would please rise, and Attorney Bachman will swear you in. (Whereupon the witnesses were sworn in.)

1	MARC ROSEN and SUSAN PINSKY,
2	called as witnesses by the New Cingular Wireless, PCS,
3	LLC, having been duly sworn, was examined and testified
4	on their oath as follows:
5	CHAIRMAN STEIN: Now we will go through
6	the process of verifying the exhibits we filed in the
. 7	matter. And I'll just go through asking you a series of
8	questions.
9	Mr. Rosen and Ms. Pinsky, you've offered
10	the exhibits listed under the hearing program as Roman
11	Numeral VI B 1-6 for identification purposes.
12	MR. ROSEN: That's correct.
13	CHAIRMAN STEIN: Is there any objection
14	to marking these exhibits for identification purposes
15	only at this time?
16	ATTORNEY CHIOCCHIO: No objection.
17	MR. ROSEN: I have one
18	CHAIRMAN STEIN: Wait a minute. I'll get
19	to that.
20	MR. ROSEN: Okay.
21	CHAIRMAN STEIN: If I assume, it's you're
22	making a modifications or
23	MR. ROSEN: Yes.
24	CHAIRMAN STEIN: We'll get there.

1	Mr. Rosen and Ms. Pinsky, did you prepare
2	or assist in the preparation of Exhibits 1 through 6?
3	MR. ROSEN: Yes.
4	MS. PINSKY: Not all of them.
5	MR. ROSEN: Well, let me see
6	MS. PINSKY: Number one, number two,
7	number three and number four.
8	MR. ROSEN: The numbers five and
9	MS. PINSKY: and six. The only one
10	not is five. That's the letter to my house.
11	MR. ROSEN: Correct.
12	That letter, number five, she did not
13	assist with.
14	MALE VOICE: That's a letter from Charles
15	Bryant.
16	CHAIRMAN STEIN: So, you're saying you
17	did in items one through four and six.
18	MS. PINSKY: Well, six we just offered.
19	MR. ROSEN: We excerpted it from a Town
20	in Connecticut Website.
21	CHAIRMAN STEIN: Do you have any
22	additions, clarifications, deletions or modifications to
23	these documents?
24	MR. ROSEN: Yes. Only to Exhibit 6, the

1	description of Exhibit 6. This is excerpted from a Town
2	in Connecticut.
3	MS. PINSKY: Canaan.
4	MR. ROSEN: Canaan. The Town of Canaan
5	Website, other than the Historical Society.
6	It serves as a kind of equivalent to a
. 7	Town Mission Statement.
8 .	CHAIRMAN STEIN: Are these exhibits true
. 9	and accurate to the best of your knowledge?
10	MR. ROSEN: Yes.
11	CHAIRMAN STEIN: Do you offer these
12	exhibits as your testimony here today?
13	MR. ROSEN: As part of our testimony
14	yes. As part of our testimony, and I would provide you
15	with a statement as well.
16	CHAIRMAN STEIN: Just let me finish or
17	let us finish this part of the process.
18	And do you offer them as full exhibits?
19	(Pause).
20	Do you offer these as full exhibits?
21	MR. ROSEN: Yes.
22	CHAIRMAN STEIN: Is there any objection
23	to these items previously marked being admitted as full
24	exhibits?

1	ATTORNEY CHIOCCHIO: No objection.
2	CHAIRMAN STEIN: By hearing none, these
. 3	items should be admitted as full exhibits in this
4	proceeding.
5	COMMISSION MEMBER: Could I ask you to
6	speak up.
7	MR. ROSEN: I will.
8 -	COMMISSION MEMBER: Your voice isn't
9	carrying down this end. Thank you.
10	CHAIRMAN STEIN: Okay. Before we go to
11	cross-examination I understand you have a short
12	statement you wish to add?
13	MR. ROSEN: Yes.
14	CHAIRMAN STEIN: Please go ahead.
15	MR. ROSEN: We did submit this with the
16	maps, so for some of you. So, for some of you we
17	submitted it only early this morning.
18	My wife and I live at 6 Barnes Road.
19	Immediately adjacent to the proposed access road.
20	Approximately thirty-five hundred feet of the access way
21	proposed on the wireless, AT&T cell tower runs along
22	our property line.
23	As a party to the proceedings we
24	submitted a letter on May 5, 2013 indicating some of our

concerns about the proposed location of the cell tower, and also with the planned development of the access road itself.

2.2

AT&T's May 14, 2013 responses to the Siting Council Interrogatories, particularly Set 2, Tab 2, CO-2a included a map of the beginning of the access way from Barnes Road, showing that AT&T has adjusted its plans to respect our property line.

AT&T includes a paragraph in response to the Siting Council's Question 7 explicitly acknowledging these changes.

I wanted to say that we are pleased that AT&T has taken another look at the property boundaries and the easement to which we are not a party; though we are surprised that this was not done at an earlier stage.

AT&T's inattention to detail leads us to wonder whether AT&T has studied the easement with respect to other aspects of the proposed access drive, including the Realigned Drive section to Shift Drive on Parcel 2 with perpetual easement. This is also on Tab 2, CO-2a.

With respect to the construction and use of the access road, we are concerned not only that the

construction may affect our property, but also the heavy commercial or emergency vehicles might be in danger of losing control on the steep dissent posing a danger to the driver and to anyone passing on Barnes Road where it lets out.

Aside from the above issues we are very concerned that this project poses a serious threat to the rural and residential character of Falls Village and to the historic character of this neighborhood in particular.

We submitted a letter from Todd Bryant of the Heritage Resources, who is in the process of writing an individual nomination for our property to the natural register to the starred places.

Legally it's that the cluster of houses surrounding the meeting house in South Canaan would be eligible for listing as a historic district.

Further, under Malgine Road, which is known as one of the most beautiful and scenic roads in the area would be blighted by painfully conspicuous use of the cell tower.

We submit excerpts from the Town of Canaan/Falls Village Website which explain that for the stunning and unspoiled natural beauty of Falls Village

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remains its most prized and most closely guarded asset.
 1
     And its rich New England Heritage remains firmly in
 2
     place and guides its future. That is our Exhibit 6.
 3
 4
                     Since AT&T's present proposal provides
     for less coverage, but more environmental impact due to
 5
     the new location of the tower and the need for
     construction of a significantly longer, and in parts
 7
     steeper access road, we cannot understand how AT&T could
 . 8
 9
     view this revised version as an improvement on its
10
     original denied application.
11
                    Sincerely, Marc Rosen and Susan Pinsky, 6
     Barnes Road, Falls Village, Connecticut.
12
13
                     CHAIRMAN STEIN:
                                      Thank you.
14
                     So, now we will begin with the
15
     cross-examination by staff.
16
                    Mr. Mercier.
17
                    MR. MERCIER:
                                  Thank you.
18
                    On April 30th, that was when the original
     field review was held for the Council. Were you able to
19
20
     attend that?
21
                    MR. ROSEN:
                                Yes.
22
                    MR. MERCIER: Okay. Did you go to the
23
     actual site?
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                    MR. ROSEN: Oh, we have been to the site,
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and at about that time we walked the road the to area of 1 the proposed Realigned Drive section. 2 3 MR. MERCIER: Okay. When you were out looking around in the field review did you get the 4 opportunity to look from your property towards where the 5 6 tower would be looking for the balloons particularly? MR. ROSEN: We actually missed the balloon period, but I know that the tower would not be visible from our --10 MR. MERCIER: Okay. 11 MR. ROSEN: From our home. 12 MR. MERCIER: When you were walking the existing drive along your property line did you notice 13 -- are there any erosion issues associated with that 14 15 existing driveway? 16 MR. ROSEN: There's a -- well, there's a 17 fair amount of erosion on --18 MR. MERCIER: Erosion onto your property? Any discharge of debris? 19 20 MR. ROSEN: As far as we walked it I don't remember conspicuous -- anything conspicuous out 21 to the tower, all the way down. 22 23 MR. MERCIER: Okay. MR. ROSEN: Although, this road gets 24

1	quite steep as you go further up, so
2	MR. MERCIER: Okay. Thank you.
3 -	I have no further questions at this time.
4	CHAIRMAN STEIN: Thank you.
5	Senator Murphy.
6	SENATOR MURPHY: I have no questions,
7	Mr. Chairman.
8	CHAIRMAN STEIN: Mr. Ashton.
·9	MR. ASHTON: Mr. Rosen, insofar as there
10	are ontricks in or near your house, are there any that
11	you consider upsetting to the, quote, stunning,
12	unspoiled natural beauty of the area?
13	MR. ROSEN: A Citgo Station.
14	MR. ASHTON: A Citgo Station?
15	MR. ROSEN: Yes.
16	MR. ASHTON: Can you see this tower from
17	your property?
18	MR ROSEN: The tower?
19	MR. ASHTON: Yeah. The proposed tower.
20	MR. ROSEN: I do not believé so, no. No.
21	In this present location now that it's moved further
22	east.
23	MR. ASHTON: Are you aware that CL&P is
24	now installing 40 foot poles as a standard in all of the
1	

service area where 35 foot used to be the standard, oh, 1 2 about ten years ago. 3 MR. ROSEN: I just haven't. 4 MR. ASHTON: Do you think they might spoil the stunning and unspoiled beauty of the area with 5 6 their utility poles? MR. ROSEN: Utility poles have a close fit on the part of the American landscape for a heck of a long time, and I don't think they -- I don't think they enter so much into people's visual consciousness. 10 However, I wouldn't mind at some point having those 11 12 lines buried. I think it would be a significant 13 improvement. 14 MR. ASHTON: Do you think that a cell tower might vanish from visual consciousness over a 15 16 period of time? 17 MR. ROSEN: Well, we've been looking at 18 cell towers as we drive around the northeast quite a 19 bit, and we certainly see them and don't enjoy them. 20 MR. ASHTON: That's not quite the The question is do you think they will 2.1 question. 22 disappear from visual consciousness? 23 MR. ROSEN: Visual consciousness. 24 MR. ASHTON: You've got a particular ax

to grind, if I may, so that you would be -- might be looking at all these things. But in terms of a broad breach of society do you think that they will have a lower visual context as time passes?

MR. ROSEN: Well, my illustration for quite some time, when we drove our car around the northeast and with our child in the car when he was young and we played the "I Spy With My Little Eye", and we said something like I see something terribly wrong in the distance, and someone would always guess what that thing that looked terribly wrong was, of which it's usually a cell tower.

No, I don't think they'll disappear very easily from my viewpoint.

MS. PINSKY: I think there's so out of scale, whereas a utility pole is normally made out of wood sort of does blend in between 35 feet and 40 feet.

MR. ASHTON: Don't you think that they are a substantial scale though when they're right in front of your house?

MS. PINSKY: Well, I -- you know, they're not -- they do blend in because they're wood. And they tend to look like some of the big Maple Trees in a way because their color is the same. Really it's not as --

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1 MR. ASHTON: I never thought of it in 2 that context. 3 MS. PINSKY: But when you look at a -- we 4 were driving today and we passed the tunnel in New 5 Haven, and right above it on these beautiful hills there's this one huge tall tower that really doesn't 6. look good. And I don't think that will vanish from consciousness. I think the technology might become obsolete quite soon though. So, maybe that's not a long 10 11 term problem. 12 MR. ROSEN: I imagine they'll be demolished or abandoned in the next actually decades. 13 14 MR. ASHTON: What will be? 15 MS. PINSKY: Cell towers. MR. ROSEN: Cell towers are likely to be 16 17 -- likely to -- although some towers -- I remember when 18 you drive from Manhattan into New Jersey there was some communication towers of some sort up there for years. 19 That finally fell into the swamp because nobody took 20 them down but they're not of any use anymore. 2.1 eventually died and collapsed. 22 23 MR. ASHTON: But may I ask what makes you 24 think they will vanish in 20 years or so?

MR. ROSEN: Well, it's when one 1 technology springs up, another one springs up and then 2 the prev -- proceeding technology becomes obsolete. 3 You know, since these things use underground lines to communicate with each other -- one 5 tower to another, you know, in some bunch, perhaps not 6 in the so distant future they might communicate entirely 7 6 8 underground. . 9 MR. ASHTON: Well, sure. In the realm of conjecture I don't know if this is going anywhere --10 ATTORNEY CHIOCCHIO: We're going off --11 12 MR. ROSEN: One way or the other it's all 13 conjecture, so 14 MR. ASHTON: Okay. Nothing further. 15 Thank you. 16 CHAIRMAN STEIN: Mr. Wilensky. MR. WILENSKY: Mr. Rosen, just one 17 Is your main objection the visibility of the 18 question. 19 tower? 20 MR. ROSEN: No. 21 MR. WILENSKY: Or the scheduled road? 22 MR. ROSEN: No. 23 MR. WILENSKY: Is it the road to the 24 tower or is it tower visibility?

MR. ROSEN: Well, the tower visibility I think is a concern for those who do have a view of it.

And that's also for those who live on and drive on Under Mountain Road that would be a significant and shocking factor.

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For us individually, our concern is, is it visible and naturally to the road that is within inches of our property line. Fortunately, on the other side of the property line now, since that should have been noticed -- noted. But we are also in turn with other aspects of that road. I mean, you know, it's not so much a matter of traffic as a matter of when it does happen what the risks are. I'm getting ahead of myself here, but there are -- there are some steep parts of that road that come just immediately before rather sharp turns in the road and it's not outside of the realm of possibility. One always says there's a chance. You know, it's a fifty year storm or a hundred year storm or a ten year accident or a twenty year accident, but a vehicle coming down the steep part of the newly devised access drive could have difficulty making that turn and end up coming down, you know, down the slope at the top of our property there. Not hitting our house or anything, but it could -- could kill a driver, I

1	imagine. And also a vehicle exiting onto Roue 6. If it
2	had any breaking problems or conditions on to Barnes
. 3	Road, if it had any problems in breaking and could end
4	up going down a considerable slope and exiting there.
5	MR. WILENSKY: What road did you say,
6	sir?
7	MR. ROSEN: Hummm?
8	MR. WILENSKY: What road did you say?
9	MR. ROSEN: I said I meant, Barnes
10	Road, because the outlet of the access road is on Barnes
11	Road.
12	MR. WILENSKY: Thank you. Thank you very
13	much.
14	Thank you, Mr. Chair.
15	CHAIRMAN STEIN: Mr. Hangus.
16	MR. HANGUS: I do not have any questions
17	at this time.
18	CHAIRMAN STEIN: Mr. Lynch.
19	MR. LYNCH: I don't have any questions.
20	I was just going to ask, again, your
21	voices are fading down at this end. If you could speak
22	up a little bit more please.
23	MR. ROSEN: I'm sorry.
24	MR. LYNCH: No I'm hard of hearing
1	l la companya di managantan di managantan di managantan di managantan di managantan di managantan di managanta

1 anyhow. So, it's good. 2 CHAIRMAN STEIN: We will now move to 3 cross-examination by the applicant. Attorney Chiocchio. ATTORNEY CHIOCCHIO: Thank you, chairman. Just one question. 5 6 Good afternoon. Lucia Chiocchio from 7 Cuddy & Feder here on behalf of AT&T. .8. Were you aware of the history of your house and your property when you purchased it in 1986? 9 10 MR. ROSEN: Yes. 11 ATTORNEY CHIOCCHIO: And the first time 12 you sought designation of a natural register was now. 13 At this time? 14 MR. ROSEN: We got the application forms 15 at the time and considered doing that, and we will fax 16 the requirements. We weren't sufficiently sophisticated at that point about being first to realize you can hire 17 somebody to help with that. So, we finally got around 18 19 to it. 20 ATTORNEY CHIOCCHIO: Thank you. 21 Thank you, Chairman. 22 CHAIRMAN STEIN: Thank you. 23 And now -- stay where you're seated. Now 24 you get to be the cross-examiner.

Wait a minute. We want to see if any of 1 the other -- other parties or interveners -- Mr. and 2 3 Mrs. Rovezzi, are they here? No? 5 Is the Chairman of Planning and Zoning б here? 7 Mr. Sinclair, do you wish to cross-examine the witness? MR. SINCLAIR: I've got no questions. 10 Thank you. 11 CHAIRMAN STEIN: Now, do you have any --12 you get to cross-examine the applicant. So, if you have 13 specific questions to the applicant. 14 MR. ROSEN: I've got just a few questions. 15 16 One -- my first thing is I've been wondering if there are any Connecticut DOT, Department 17 of Transportation, regulations or guidelines. The 18 19 design of the driveways or subdivision roadways, which 20 may, by example -- I know they wouldn't govern before this, so Barnes Road is a town road, not a state 21 road, but are there any DOT regulations or guidelines 22 that, by example, would be relevant to the proposed 23

access road; particularly as concerns the slope

approaching the outlet, onto a crossing road, Barnes 1 2 Road. 3 MR. PERKINS: The approximately -- the 60 feet -- the first 60 feet off of Barnes Road of the 4 access road is a grade of 14 percent, which is within, I 5 believe, the Town's Regulations for Development. 6 think it's 10 percent of the 50 -- 50 percent, if I'm 7 not mistaken. And there are no notes about the slope. They just did their part as it approaches. I mean, that 10 would be the -- the guidelines for the Road in the 60 . 11 feet as it approaches the -- the outlet. 12 13 The guidelines don't specify the length of grade approaching the street. They just give 14 15 a grade. So, I'm saying, for instance in this particular case we're about 60 feet approaching Barnes . 16

MR. ROSEN: If it was a safe road would that be different? If it had DOT regulations then you defer it to the town regs, and the state regs if one was dealing with a dissenting --

Road on a 14 percent grade.

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MR. ROSEN: I just wondered if there was something in the DOT regulations that would normally

MR. PERKINS: I'm not aware of --

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     have called for a leveling out before a road exits?
                    MR. PERKINS: If the DOT has some
 2
     standards for driveways I don't have that information.
 3
 4
                    CHAIRMAN STEIN: Excuse me, Mr. Lynch has
 5
     a -follow-up.
 6
                    MR. LYNCH: Mr. Rosen, if I may ask a
 7
    question?
                    Mr. Perkins and Mr. Vivian I, on your
 9
     construction site do heavy equipment operators have to
10
     have a CDL?
11
                    MR. PERKINS: Yes, they do.
12
                    MR. LYNCH: Thank you.
13
                    Thank you, Mr. Rosen.
14
                    MR. ROSEN: And if I may also .... this
15
     is an unmanned facility, public utility facility. So,
16
     it wouldn't normally be -- there are regulations that
     address that type of activity.
17
                    MR. PERKINS: Well, I was talking about
18
19
     during the construction phase.
2.0
                    MR. ROSEN: You've answered my question.
21
     Okay.
            Thanks.
22
                    And just as a follow-up to my first
     question. I've just been looking at this -- this map,
23
24
     and so, I'm wondering what is the distance -- what would
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the distance be in feet from the point where they
 1
 2
     altered on CO2-A? What would the distance in feet be
     from the point where the altered access road departs
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     from the course of the existing road to the point where
 5
     it strings out more or less at the iron pin that marks
 6
     the common law property. How long a stretch is that?
7
                    MR. PERKINS: Are you talking to --
                    MR. ROSEN: I'm trying to interpret -- I
 8
     see the --
 9
10
                    MR. PERKINS: I'm drawing CO2-A.
11
                    MR. ROSEN: I'm trying to --
12
                    MR. PERKINS: You're referring from
13
     Barnes Road to --
14
                    MR. ROSEN: No, not from Barnes Road.
15
     -- as you go downhill. From the point where the revised
16
     Realign Drive section departs from the old access road
17
     down to where it curves back around and then begins to
1.8
     straighten out at the -- iron pin. That marks our
19
     property line.
20
                    MR. ROSEN:
                                Thank you.
21
                    MR. PERKINS: It's at the bottom of this
22
     page.
                    MR. ROSEN: And that distance is about 50
23
24
     feet?
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1 MR. PERKINS: Yes. 2 MR. ROSEN: From the southern -- from the southeastern pin of your property to the point where 3 the .--MR. PERKINS: To the -- to the -- well, then to the southern point, or the southeastern point of 6 7 where the new -- the new proposed access drive mergers into where the old drive was, down towards the end of 8 9. the map. Toward the match line. 10 MR. ROSEN: No. The other end. 11 MR. PERKINS: The other end. This is 12 where is sort of hits you. 13 MR. ROSEN: That's about 250 feet? 14 MR. PERKINS: That's about 250 feet. 15 And in that distance the drop is from about 800, and the slope is from about 850 feet to 745 16 17 feet -- 745 -- something like that. A little over a 18 hundred foot vertical drop in; what did you say now --350 feet? 19 250? 20 MR. ROSEN: That's right. 250 feet. MR. PERKINS: 250 feet. So, there's the 21 22 drop of about 100 feet over a course of 250 feet. how steep is that? 23 MR. ROSEN: The steepest part in that 24

section is 30 percent. It varies from --

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9.

MR. PERKINS: 100 feet seems to me to be more like a third of 250 feet. It would seem like it would be more than 33 something. It looks like it. But we use approximate numbers.

MR. ROSEN: So, that's why I'm asking.

In approximate numbers if you have a 100 foot drop in a distance of 250 feet, that's more than 33 percent. Isn't it? Closer to 40 percent.

MR. PERKINS: The numbers that you are stating would mean that we have a profile for the design and the profile is 30 percent within that.

It varies from about -- where it first turns away from your property at 23.5 percent and increases to about 30 percent, and then decreases to 25 and a half percent back to where that proposed realignment rejoins the existing location.

MR. ROSEN: It just seems to me just logically that 100 foot drop in 250 feet is even more than a third, but anyway

The thing is when I walk that line -- the reason I get around to this is when I walked the access road to the point where the new plan digresses from the existing road, and I presume that the holders of the

easement have agreed to the relocation of the road, and 1 2 they've been asked -- I don't know. It's appropriate to presume that -- but looking up that slope to where the 3 new road is going to be cut, I was very much reminded of 4 5 looking up the slope of what amounted -- it seemed like -- it looked like the kind of -- I mean, it looked like a good intermediate ski slope, and I just wondered how 7 comfortable drivers -- I mean, a driver in an emergency 8 9 vehicle would feel coming down that slope under mixed conditions and making the turn at the bottom of it. 10 11 know, racing down a -- well, it looks like a fair steep 12 slope visually. I mean, I looked up that hill. It was 13 pretty impressive. 14 So, I do remain concerned about that, 15 that particular segment. I mean, even the bit down at

So, I do remain concerned about that, that particular segment. I mean, even the bit down at the -- this is just where the access road comes out onto Barnes Road where the apron is also going to have to be a fair degree of slope, because --

CHAIRMAN STEIN: MR. Rosen --

MR. ROSEN: It would mean that --

CHAIRMAN STEIN: Mr. Rosen, excuse me.

Can you frame these as questions as opposed to

23 | statements.

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MR. ROSEN: Okay. So, I'm just looking

1 at the plan, CO2-A, and I see a slope line of 665, just 2 a little bit outside where the present gate is, and going down past the SNET pole to 660 at the road 3 surface, so that's a five foot drop in -- well, I'm 4 5 wondering about the distance between the 665 footline 6 and the 660 footline because I'm not sure if this is the 7 scale of the original map. So, I don't know how long that distance is. 8 9 This just relates to disclosure again 10 from 665 feet to 660 feet. Looking at the plan it looks 11 like a fairly short distance. 12 CHAIRMAN STEIN: It is, but are you asking the question? 13 MR. ROSEN: I'm asking the question what 14 15 disclose -- what the distance would be from the 665 line to the 660 line 16 MR. PERKINS: It looks to be 17 approximately in the range of 60 feet or so. 18 19 MR. ROSEN: Oh, 60 feet. That much. Okay. Okay. 20 21 Let me see. Then oh, yeah. 22 other question about the access road then is are there 23 any setback requirements for subdivision drive built

adjacent to another person's property line. Are there

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any such thing as setback requirements for that? I have
 1
     no idea?
 3
                    MR. PERKINS: I'm not specifically aware
     of that. This is not a subdivision so we didn't --
 4
 5
                    MR. ROSEN:
                                The access road which you
     referred to, in some places it says subdivision roadway
 6
 7
     or driveway. Are there any setback requirements?
                    ATTORNEY CHIOCCHIO:
                                          Just to clarify,
     this is an access drive for an unmanned public utility
     facility.
10
11
                    MR. ROSEN:
                                I see.
12
                    ATTORNEY CHIOCCHIO: So, it's not subject
13
     to the local subdivision regulations for roads that are
14
     used by the public on a daily basis.
15
                    MR. ROSEN: I see.
1.6
                    MR. PERKINS: You can go up to one inch
17
     or one centimeter.
18
                    ATTORNEY CHIOCCHIO:
                                          It would be -- we
19.
     are within the confines of our easement area.
20
                    MR. ROSEN: Well, whatever the easement
21
     area is.
22
                    ATTORNEY CHIOCCHIO: Right.
                                                  Which is in
23
     the deed.
                The easement area is described in the deed
24
     for the properties.
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1 MR. PERKINS: Okay. Well, the easement 2 as we know -- the easement area described in the deed had certain impossibilities. It goes in ground 15 feet 3 to either side in the center line, and that would land the access road on our property, which is why you 5 shifted it over. So, I guess there was some questions 6 about usage of the terminology and the easement right. MR. ROSEN: Thanks. Perhaps I should leave it there. 10 CHAIRMAN STEIN: If you would like to 11 have any other questions you may. 12 Unless either of you have any other 13 questions --14 MR. ROSEN: I think I've taken enough of 15 your time. Thank you. 16 CHAIRMAN STEIN: Okay. Thank you. 17 Thank you very much. 18 I quess you could sit there or sit 19 (indiscernible). We're going to continue cross-examination of the applicant by the Council. 20 Several of us already did this. I believe Mr. Hannon 21 has -- oh, Mr. Mercier, do you have something? 22 23 MR. MERCIER: Yes. Thank you. Staying with the plans TO-2a we were just 24

```
talking about, the note by the iron tin over on Barnes
 1
     Road it says proposed paved driveway apron, what's the
 2
     length of that apron? Roughly.
 3
                     MR. PERKINS: I was going to say 10 feet.
 4
 5
                     MR. MERCIER:
                                  Ten feet?
 6
                    MR. PERKINS: 60 feet I would say.
 7
                    MR. MERCIER: Okay. So, from elevation
     665 which Mr. Rosen was talking about to elevation 660
 8
     on that diagram that's probably about maybe 15/20 feet
     according to the scale on this map?
10
                    Where it says iron pipe all the way to
.11
12
     Barnes Road.
13
                    MR. PERKINS: I've got elevation 660 just
14
     after the D in Barnes Road.
15
                    MR. MERCIER: That's correct.
16
                    MR. PERKINS: And I've got 775 almost up
17
     to the property line?
18
                    MR. MERCIER: That's correct.
19
                    MR. PERKINS: So, going down the driveway
     and going down Barnes Road is about 60 feet to get from
20
21
     665 to 660.
22
                                 Okay. Well, how about just
                    MR. MERCIER:
23
     the section -- your new road terminates at Barnes Road.
24
     From the existing Barnes Road to elevation 665 to iron
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pipe?
 1
                    MR. PERKINS: I'm not sure which iron
     pipe you're referring to. Are you referring to going
 3
 4
     down towards Barnes Road to where SNET2942?
 5
                    MR. MERCIER:
                                  That's correct.
 6
                    MR. PERKINS:
                                  From the property line,
 7
     what's that distance?
                    MR. MERCIER:
                                  That's right.
 9
                    It goes to what Mr. Rosen was talking
10
     about.
11
                    MR. PERKINS: Basically where this arrow
12
     says proposed winding of access drive for large vehicle
     access to -- from the proposed 665 in the driveway, the
13
14
     contour --
15
                    MR. MERCIER: Yes.
16
                    MR. PERKINS: -- to what looks like the
17
     fence line.
18
                    MR. MERCIER: Okay.
19
                    MR. PERKINS: That's about 20 -- a little
     more than 20 feet. So, that would be elevation 665 to
20
     661.
21
22
                    MR. MERCIER: Okay. So --
23
                   MR. PERKINS: Four feet drop in
     elevation.
24
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MR. MERCIER: So roughly ten feet of that would be paved? MR. PERKINS: Yes. 3 MR. MERCIER: Let's move on. 5 Oh, the balloon fly that occurred on April 30th, please describe what actually occurred. 6 The number of balloons that were flown and what heights they 7 were flown at please. MR. PERKINS: We used two weather 10 balloons. The original certificate site was utilizing a black colored balloon, and the new site, or the proposed 11 modified location was demarcated by a red balloon. They 12 were both tethered at the proposed heights, with the 13 original at 150 feet and the certificate site and the 14 modified location at 120 feet. So, the string length 15 were those lengths and the balloons were on top of that. 16

The balloons for the most part stayed up.

We did lose the red balloon at the proposed modified

location right near the conclusion of the evidentiary

hearing. I want to say it was about quarter to five or

so. It was put back up within a half hour, and stayed

up for the duration, until 7:00 that evening.

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day. We did get some strong gusts, but for the most

1 part we had relatively calm conditions. So, the 2 balloons for the most part were at their respective 3 heights. MR. MERCIER: Thank you. 5 In regards to emergency power, would a 6 battery system be sufficient for this site rather than 7 using the generators, diesel generators? 8 MR. PERKINS: I suppose that would depend on what you're talking about as far as sufficiency. 9 Battery back up likely would only provide about four to 10 11 six hours. 12 MR. MERCIER: Is AT&T installing batteries at any new sites in Connecticut, or are they 13 14 using typically generators? 15 There are that but they MR. PERKINS: 16 made plans with the FCC mandate where we're looking 17 whenever we can to do emergency generators to provide 18 for that. You know, say 48 hour backup. But there are some sites where we don't have the space for the 19 20 generator, and so we do have outdoor cabinets at some of those which we don't have adequate backup. 21 22 MR. MERCIER: Okay. Thank you. 23 There as previous testimony about vehicles having to backup off the driveway or back down 24

1 the driveway as they were loading gravel and things for the construction of the road. Are there any challenges 2 with vehicles backing up? 3 First of all, the vehicles, will they have to back up down the road once they unload their 5 material? MR. VIVIAN: No. Not necessarily. vehicles could drive up and dump their load and continue up, turn around at the top and then drive forward back down. .10 MR. MERCIER: Is that what you -- AT&T 11 plans on doing? 12 13 MR. VIVIAN: We can make stipulations, I quess, on the contract. Typically that's a means and 14 15 methods. 16 MR. MERCIER: Okay. There was mention in the interrogatories May 14th that the Woodbury site had 17 a steep grade with some switch backs. Do you know if 18 1.9 vehicles could turn around on that site or they had to 2.0 back up.

MR. PERKINS: There was room at the top of that site for vehicles to turn around in. I don't know whether they backed up or not, but there was room at the top to turn around.

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1 MR. MERCIER: Now, there was also previous testimony about the use of potentially assist vehicles to get some heavier trucks up there. Are there any concerns regarding the use of assist vehicles? Are there any hazard concerns? Typically what's it involve? MR. PERKINS: Well, it's not atypical for remote sites like this. Assist vehicles have been used when you're doing -- typically doing grades, anything over about 20 to 25 percent. And it's been done on many cell sites. MR. MERCIER: Do you know if any were used at that Woodbury location that was previously described? MR. PERKINS: They were there, yes. And, in fact, there's also several sites, like ski areas and things of that sort. MR. MERCIER: Referring to interrogatory responses of May 16th there was questions 15 and 16 in regards to public safety coverage plots. Could you just please explain what the three plots are trying to show? Again, that was on May 14th. MR. PERKINS: And what question was that, do you know?

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1 MR. MERCIER: It was 15 or 16. I think 2 it was a supplemental response. 3 MR. PERKINS: Right. MR. MERCIER: That included some maps. 4 Coverage plots for safety services. 5 MR. VIVIAN: I don't recall how the 7 question arose regarding the public safety network, but 8 these are plots that were publically available from the public safety network. And what it shows is general 9 gaps in the area, further substantiating that coverage 10 is difficult to achieve from surrounding towers. 11 12 MR. MERCIER: I guess I'm looking at figure 4 as it's labeled. It says talk in portable all 13 sites. I'm not sure what the terminology means. 14 If you 15 could elaborate I would appreciate it. Yeah. Typically in a two 16 MR. VIVIAN: way system they refer to talk-in and talk-out, where 17 talk-out is the path from the base station to the mobile 1.8 Talk-in is probably the mobile receiver. 19 receiver. And if you look at -- you can see there 2.0 21 are substantial gaps from talk-in from portable coverage because the portable is much lower power than mobile. 22 Then the next plot is talk-in, which is mobile. You can 23 24 see significant gaps. Some less gaps from talk-in

through mobile because it's higher power.

So, neither of those are completely equivalent to cellular service. It's just -- again, it's further substantiation of the difficulties of providing service to an area like this.

MR. MERCIER: What's the portable compared to mobile? What kind of equipment are we talking about?

MR. VIVIAN: The equipment is -- a portable is a hand-held unit and typically less than a watt, compared to the mobile hands (indiscernible) in our industry which is two tenths of a watt at the highest power.

A two-way system is approximately a watt through the hand-held. And then for a -- a mobile system you can use a higher gain antenna associated with it. And I believe those are around seven watts, but I don't know if those numbers are completely accurate, but I know they're in the ball park.

MR. MERCIER: Now, looking at these maps up in the Canaan area -- it's hard with this scale, but I do see a slender gap going north to south. Is that in the vicinity of Topple Hill?

MR. PERKINS: Which map are you referring

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1 to? MR. MERCIER: 86. Figure 86 and Figure 3 2. MR. PERKINS: 4 Oh. The second -- two maps. 5 MR. MERCIER: MR. PERKINS: Right. 7 Yeah. It's also hard for us to tell 8 exactly which area that is. I thought I had a 9 . (indiscernible) near that area. 10 We do have some zoomed in maps, and then Group 63 is part of that -- that slender gap. 11 MR. MERCIER: Okay. So, it's Route 63. 12 Does it also encompass Under Mountain Road based on your 13 zoom in, if you can tell? 14 15 MR. PERKINS: Yes. Yes. Depending on a 16 course and whether you're talking mobile transmit or the hand-held. Certainly with the hand-held there's gaps in 17 18 Under Mountain Road, 63 and Route 7. 19 Okay. Thanks. MR. MERCIER: 2.0 Do you think emergency services, like the 21 TPS or any other state entity would want to locate on 22 your tower to fill in a gap on Route 63 there, or -- do you think that given the -- they're happy with the 23 coverage they have now. 24

MR. PERKINS: My guess is they're not happy with the coverage that they have now, given maps that we've seen. So, whether they have the budget -- I don't have any insight into where that would fall into the priority of the coverage area. I'm fairly confident they're not happy with the coverage, but whether they could budget to cover that area they don't have any visibility.

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MR. MERCIER: Okay. Thank you.

Through some interrogatories I asked for some coverage models regarding the hypothetical site the Town presented. One was provided by you, Mr. Wells, and the other one by Mr. Cooper. They look, however, vastly different, just glancing at that. Do you have any reason as to why they're so different?

MR. PERKINS: Frankly, I don't think
Mr. Cooper's model is very accurate. And that
discussion came up during Mr. Cooper's testimony
regarding propagation and drive testing. We did do a
drive test of the area to do with our model accordingly
and -- any model is going to have a variance because
that's what it -- it is a model. But we're looking at
the aggression analysis we did for our model. We feel
it's fairly accurate.

And also we did some profiles from the suggested site. Some simple elevation profiles where you simply draw a line -- you can do this in Google Earth even -- from the site at a particular height to the point of interest. And if you draw some simple lines from there -- which is not the way to do propagation, but you do first analysis, you can see that signal we basically had to propagate through dirt and come out with some rock to get to those areas that Mr. Cooper shows coverage. And in all my years of experience have I never seen a signal like these -- that these frequencies drill through dirt or mountains.

You know, further -- I don't want to belabor the mountain -- the modeling too much, but Mr. Cooper also asserted that his model was a deterministic model, I think he referred to it as, which didn't require any model tuning. In all my years of experience I never experienced a model that didn't require tuning. If you think about the reason that you tune a model, you have to tune a model, because a model in somewhat simplified terms takes into account two effects. One is the drain and, you know, how are you blocked, is the signal blocked by terrain and how much.

And the other is we refer to as clutter,

for lack of a better term. Which is trees, houses, the surrounding environment. And you think about how the surrounding environment -- how a signal is effected by its surrounding environment -- let's take trees for example. If you have a cluster of trees you need to know how tall that cluster of trees are. How separated those trees are, because if you have a dense cluster of trees and the signal is propagating through those trees, that's significantly different than a loose cluster of trees that are separated out. Or even the height of those trees, or even what type of trees those are, because any propagation model is significantly affected by the type of trees. Whether they're a coniferous tree or disiduous how many branches they have on them, which all leads to some variances in the models, but there is not enough -- there is not a database accurate enough to say, okay, we have a span of trees here. These are separated by this distance, and they're this height, and they have this type of easel, let's assign this model to that. And that's just trees.

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Then when you get into buildings and other effects, that's the reason you have to tune a model. And with all the carriers and years of experience I've never heard -- well, I've -- I've had

companies try to sell stuff that say you don't have to do this model, but Field Tests prove that that's not an accurate model. So, there is a significant difference -- back to your original question. There is a significant difference, because there's a difference in the modeling.

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And, again, two things one, I don't believe there is such a thing as a deterministic model because of situations I've described. With variances in the clutter they have to be identified or tuned for it.

And, two, even if you take it back to a simpler step of just symbol to a rain blockage. The areas covered from Mr. Cooper's model show that you can go from the proposed site to those target areas basically through -- drill through dirt and rock to get that signal to those areas, which just doesn't happen.

MR. MERCIER: Thank you.

What is the minimum level of service AT&T is seeking in building -- there was a term called street level views in previous testimony.

THE WITNESS: Street level was used on -not in our testimony, and I've heard the term before,
but it's not a useful measure because it assumes you
are, as it sounds, like you're standing on a street to

1 | make a measurement.

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And we've shown plots at both -- in building and in a vehicle level. So, wherever possible we want to achieve even building levels. Certainly there's a lot of areas in this where buildings don't exist. So, if there are no buildings, you certainly don't eat those same building levels, but we do show both the building and vehicle levels.

MR. MERCIER: Okay. So, I guess what you're saying is the minimum in vehicle, but you prefer in building where you can get it?

THE WITNESS: Yes, because -- users these days, there's the in building -- or the in vehicle is certainly -- but record in metric, but the use between buildings has grown and continues to grow.

MR. MERCIER: Thank you.

Let's see. Looking at that fragmentation map, that was provided in -- Nancy's responses to the Siting Council Interrogatories. Set 2 I think that is,

I'm trying to understand how -- again, was this prepared by -- this information is by DEEP?

The Department of Environmental --

MR. GUSTAFSON: It's information -- Dean

Gustafson. It's information and it's available through 1. the center. UConn's -- UConn's center for -- let me 2 3 just get the name -- Center for Landuse in education and research. There is a published document that goes along 5 with it, and the information that's presented in that graph is digitally available as a GIS link as well. 6 MR. MERCIER: Do you know how the information is contained in it? Whether it repairs the 8 9 map, how it's obtained. 10 MR. GUSTAFSON: I believe it was a compilation of the various studies that were done in 11 12 2006 though aerial photo interpretation. 13 MR. MERCIER: Do you know if it's periodically updated? 14 MR. GUSTAFSON: 2006 is the date of the 15 16 To my knowledge it hasn't been updated since 17 then. 18 MR. MERCIER: Okay. I'm just looking at 19 the map and it says proposed site is next to a cleared area, which is shown on your map as a noncore or forest 2.0 21 That's a cleared area. 22 Then there's the dotted line you drew, 23 which is the existing driveway. But that doesn't show

that as a forest fragmentation area, so I was wondering

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if you knew what -- with the rooter can it clear and 7 what they use to generate this data.

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MR. GUSTAFSON: I don't know. some comparison of -- and if you look at their photograph of the existing road, it can be.

And if you look at their photograph of the existing road, the canopy is fairly well closed leading up to the cabin. And what would -- the dotted line that!s projected on this graph represents existing access drive up to the cabin, as well as the extension for the proposed modified location.

So, if there was an encroachment that was represented by -- by this graph whole depiction of the forest fragmentation it would only show up to the cabin. But I believe that the canopy closure is strong enough that they didn't -- they didn't interpret that as a fragment -- existing fragmentation.

MR. MERCIER: Okay. Because I also see that on this map with two roads. It's Lower Barrack Road and Aspen Hill Drive, which are in the southern portion of this map, where -- I can understand why it showed -- it doesn't show on the fragmentation there.

MR. PERKINS: I can speak to that only having driven the area quite a bit. Those are both

1	paved roads, at least for portions, and they're public
. 2	access with some residence off them. And I think it's
3	just a matter of fact that they are also very heavily
4	canopied and are likely not quite as wide as some of the
5	main roads.
. 6	MR. GUSTAFSON: That's just our
7	conjecture with really there isn't the information
8	that's published by Clair for this study doesn't have
9	the details on what the metrics were for determining how
10	they were identifying less than minimum area to show an
. 11	existing fragmentation.
12	MR. MERCIER: Okay. Thank you.
13	I have no further questions.
14	CHAIRMAN STEIN: Thank you.
15	We will just go through all the members
16	to see if anybody has any additional questions.
. 17	Senator Murphy.
18	SENATOR MURPHY: I have nothing further.
19	CHAIRMAN STEIN: Mr. Ashton?
20	MR. ASHTON: Nothing.
21	CHAIRMAN STEIN: Mr. Wilensky.
22	MR. WILENSKY: Just give me one second,
23	Mr. Chairman. (Pause.)
24	Yes. In the wintertime how often will

1	you go up to that tower?
2	MR. PERKINS: Probably only if there was
3	an outage that required maintenance.
4	MR. WILENSKY: In other words, you're
5	saying if it was necessary?
6	MR. PERKINS: That's correct.
7	MR. WILENSKY: I thought it was necessary
8	at least to service these units at least once a month?
9	MR. PERKINS: Um
10	MR. WILENSKY: And my question really is
11	how do you plan to get access during the winter weather
12	when there's so much snow on the ground? In fact, I
13	remember going back a year or so ago and we couldn't get
14	up the mountain.
15	How do you plan getting up that mountain?
16	MR. PERKINS: They wouldn't they would
17	not access it unless they had to for an outage.
18	MR. WILENSKY: Could I just follow that
19	up. What about checking your back up? Does that have
20	to be done on a periodic basis?
21	MR. PERKINS: That can be done remotely.
22	MR. WILENSKY: Oh, okay. Thank you.
23	Is there ever a situation or ever a time
24	that fire equipment is needed at one of the sites?

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                    You haven't ran into a situation of that
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     type?
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                    MR. PERKINS: I haven't, but I'm aware of
     -- there was a -- there was like an electrical fire at
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     one --
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                    MR. GUSTAFSON: I'm aware of only one.
 7
                    MR. PERKINS:
                                   That is the one that I
 8
     remember.
 9
                   MR. GUSTAFSON:
                                    There was a case -- it
     was actually during the construction process. Somebody
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11
     was adding something to a tower and doing some welding
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     and got a little too close to the existing co-ax.
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    That's the only fire situation that I've been aware of.
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     And that was -- again, that was during construction.
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                    MR. WILENSKY: Do you have or do you have
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     access to equipment or to the subcontractor to plow that
17
     road if necessary?
18
                    MR. GUSTAFSON: We could.
19
                    MR. WILENSKY: (indiscernible)
20
                    MR. GUSTAFSON: I would think so.
21
     -- if we needed to get up there we would -- would be
22
     able to move vehicles and clear land it as needed to get
23
     up there.
24
                    Likely what would happen would be -- it
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would be worked the same as, say, cell sites that are up 1 on ski mountains. Things of that sort where you'd go up 2 -- you'd go up with a skidoo with your equipment. 4 MR. WILENSKY: Oh, okay. Thank you, 5 Mr. Chairman. MR. PERKINS: Plus I guess -- you know, regarding your question of fire too. The shelters are all -- are generally equipped with a line type system so that if something happens during -- after construction is over that that would take care of a fire that 10 Say the electronics somehow went south. 11 occurred. 12 CHAIRMAN STEIN: Thank you. 13 Mr. Hannon. 14 MR. HANNON: Thank you, Mr. Chairman. 15 I believe at he first meeting you stated 16 there would be no blasting on site; correct? 17 MR. PERKINS: That's correct. 18 MR. HANNON: Okay. I'm looking at the document that's dated April 15th so you have the correct 19 2.0 reference. On tab 3, page 2, you talk about encounters 21 with bedrock and the rock out process anticipated, 22 therefore rock cutting activities are expected during 23 construction. Can you be more specific what you mean by 24 rock cutting activities?

MR. PERKINS: Yeah. That would be with the retanicle means of rock removal. Not explosive.

So, it would be either devices on hydraulic equipment or hydraulic mechanical ramps, breaking rock.

MR. HANNON: On, again, tab 3, page 5 you talk about swales shall be designed where the minimum three inches -- if no out of bank damage would be expected. What do you mean by that?

MR. PERKINS: That is if the -- if the swale is over top and water froze out of the swale and down the slope. If there is a condition where that would wash out the slopes you would typically design for a greater free board, a greater factor of safety if you exceed in the capacity of the swale.

In this particular case we don't anticipate that there's going to be any conditions substantially different than the swale itself so we do not expect damage to occur from overtopping the swale.

MR. HANNON: But is that based just on the ten year peak storm? Or did you also look at the 25, 50 and 100? I'm just curious as to whether or not an analysis was done on that and whether or not there would be any problems with the proposed swale?

MR. PERKINS: I believe the design storm,

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according to the hydraulics made for designing soil is the ten year storm, and that's what we used.

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MR. HANNON: So, you did not do an analysis of any larger storms?

MR. PERKINS: I believe the pads -- the outflow pads, I believe are designed to a higher storm level. I would have to check that.

MR. HANNON: Okay. Then -- you have a section then dealing with the culverts. On page 6 you talk about -- I guess there are a couple of different swale designs and it also -- it states that the swales were graded to have a trapezoidal cross section. That's one good deed. It has the one foot flat bottom to the one side slopes. Where space was constrained V shaped swales were used. But I didn't see anything on the plans that identified what type of swale you were proposing in a given area. Is there information on that?

MR. PERKINS: Not at this time. It can be picked up if you look -- if you study the contours you would be able to tell which ditches, which swales have the flat bottom and which have the V bottom. If this moves forward, as the plans become more detailed that information will become -- will be labeled

accordingly.

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MR. HANNON: And part of the reason I bring that up is because then on like pages 8 and 9 where you do have some information about the culvert design and talk about the outlets must be protected, as you look at some of the details on Map 4E and also CO-2D it shows what I would consider to be little detention basins, but yet the explanation about the culvert system does not talk about that at all. Is there a reason why that was omitted from that section?

MR. PERKINS: I'm not sure I know what you mean by detention basins.

MR. HANNON: Well, based on the design -based on the details that are provided I believe that
you call it a depression. But seeing as how one of
those depressions looks to be about four feet deep, and
those are upgrading of the two pipes. There's one at -upgrading of each of the pipes. But yet it's shown on
map 4-E. It's also shown on CO-2D, but yet it is not
described whatsoever in the culvert analysis. I'm just
curious as to why?

MR. PERKINS: It's just part of the swale design before you do the inlet analysis of the culvert.

So, it's not designed as a retention basin. It's part