

RED HILL VALLEY PARKWAY INQUIRY

TRANSCRIPT OF PROCEEDINGS
HEARD BEFORE THE HONOURABLE J. WILTON-SIEGEL
held via Arbitration Place Virtual
on Tuesday, May 10, 2022 at 9:30 a.m.

VOLUME 11

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1 Arbitration Place Virtual

2 --- Upon resuming on Tuesday, May 10, 2022

3 at 9:30 a.m.

4 MR. LEWIS: Good morning.

5 JUSTICE WILTON-SIEGEL: Good
6 morning.

7 MR. LEWIS: Good morning
8 Commissioner, Mr. Moore. May we proceed?

9 JUSTICE WILTON-SIEGEL: Please
10 proceed.

11 MR. LEWIS: Thank you.

12 GARY MOORE; (previously affirmed)

13 EXAMINATION BY MR. LEWIS (cont'd):

14 Q. Good morning, Mr. Moore.

15 I would like to move next to the issue of the MTO
16 skid testing that took place ultimately on
17 October 16th, 2007 on the Red Hill Valley Parkway.
18 And just to set that in time for you, I'll ask you
19 about the lead up to that, but we know it took
20 place on the 16th of October and Dr. Uzarowski
21 sent the results to you and Mr. Oddi on the 18th
22 of October. So that's just the -- so you have
23 that timeframe in your mind.

24 So with that, what is your
25 recollection as to how and why the MTO skid

1 testing of the Red Hill Valley Parkway took place
2 in October 2007?

3 A. I recall, you know, being
4 asked at if the MTO could do the skid testing on
5 the roadway.

6 Q. Being asked by who?

7 A. I believe it was Ludomir.

8 Q. Ludomir Uzarowski?

9 A. Yes.

10 Q. Continue.

11 A. I'm not sure when or how.

12 I did understand that they were having an issue
13 with their SMA and that they wanted to see how
14 ours was performing. I believe that was the gist
15 of it.

16 Q. Is that the extent of
17 your recollections outside of the documents that
18 are in the overview document?

19 A. I'm not sure. I'm not
20 sure what your -- you want more, what you're
21 looking for.

22 Q. So was it Dr. Uzarowski
23 who first came to you about this?

24 A. I believe it was, yes.

25 Q. Do you recall when that

1 was in relation to the SMA paving commencing on
2 August 1st, 2007 and the testing actually
3 occurring in October 2007?

4 A. I -- I'm feeling is it
5 was closer to the end after we just about finished
6 or were done the paving.

7 Q. And your understanding is
8 who wanted the testing to be done? Was it the MTO
9 or was it Dr. Uzarowski? Who was -- at whose
10 instance was it being done did you understand from
11 your conversations with him?

12 A. From my recollection I
13 thought it was the MTO that was requesting it to
14 be done because they wanted the knowledge -- there
15 was another SMA being placed and they wanted to
16 increase their knowledge base on that regard.
17 That's -- that's my feeling on the recollection.

18 Q. All right. You indicated
19 that your feeling or recollection was that it was
20 to do with the MTO and having an issue with the --
21 with that type of pavement; is that right? Did I
22 catch that correctly?

23 A. Yeah. I believe that was
24 the case because I'm sure if Ludomir come to me
25 and said MTO wanted to do testing that I might

1 have asked why, what's -- and I don't know whether
2 I fully understood what the issue was at the time
3 or that they were just having some issue and they
4 wanted to test our road.

5 Q. When you were at least
6 first discussing with him, do you recall if there
7 was any issue discussed about skid resistance of
8 the pavement?

9 A. I'm trying to recall any
10 specific -- like, it may have been but I can't be
11 sure.

12 Q. Okay. Then just to place
13 it in time, if we can go to overview document 4,
14 Registrar, images 52 and 53. Actually, bad start
15 to the day. I'm going to ask you to go back to
16 image 50, please.

17 We know that there was a
18 discussion that Dr. Uzarowski had back on
19 July 31st that you were not involved in with Chris
20 Raymond at the MTO, but the next mention of skid
21 testing in the MTO is on -- is in September and
22 specifically September 10th and 11. There's some
23 indications in Dr. Uzarowski's notebook about
24 mentioning your name, you see in paragraph 110,
25 and on September 11th Mr. Raymond at the MTO

1 e-mailed internally at the MTO about having a
2 telephone call with Dr. Uzarowski.

3 So now we're in September and
4 certainly by that time the SMA paving, perhaps all
5 of the paving, was done by that point. You said
6 that your thought was that the -- that you were --
7 that you had your first discussion with
8 Dr. Uzarowski sometime -- when the paving was
9 done. Does it make sense it was sometime in
10 September then? Does that make sense?

11 A. It could have been, I
12 mean....

13 Q. But you're still not sure
14 about it?

15 A. No.

16 Q. Then if we could go to
17 where I took you originally, Registrar, images 52
18 and 53. There's a series of e-mails which are
19 internal to the MTO on September 27th and
20 following, following an e-mail from Dr. Uzarowski,
21 which you'll see in paragraph 116 there to Chris
22 Raymond at the MTO about conducting the testing on
23 the Red Hill. You weren't copied on it privy to
24 these e-mails at the time.

25 Just to take it through and

1 place it in time, and I'm going to ask you some
2 questions about the issues that are raised in
3 there.

4 In paragraph 117, if you could
5 expand that, please. In paragraph 117 there's --
6 Mr. Raymond is discussing with Becca Lane at the
7 MTO about doing the testing on the perpetual
8 pavement, speaking of the Red Hill, and then in
9 the second paragraph it says:

10 "Ludomir is requesting
11 friction testing and the City
12 does not have objections to
13 the testing but the City is
14 not making a request to the
15 Ministry."

16 Then -- you can take that
17 down.

18 Then in 119 Tom Kazmierowski,
19 at the time the MTO says to Ms. Lane:

20 "Yes, but we should have
21 Ludomir instruct the City to
22 either request the testing or
23 at least approve Ludomir's
24 request for testing and give
25 permission for us to test on

1 their facility."

2 Take that down please.

3 And then at paragraph 121 of
4 the following page, actually both that and the
5 next part as well. The next paragraph, 121 as
6 well. So Ms. Lane indicates:

7 "We don't need a letter of
8 request but we do need their
9 approval." (As read)

10 Meaning the City. And Mr.

11 Raymond responds:

12 "Yes, the City is in agreement
13 but it is strange that the
14 City are not willing to write
15 a request. I asked Ludomir to
16 specifically send me a request
17 from the City a few weeks
18 ago." (As read)

19 Take those down, please.

20 Do you recall having any
21 discussions with Dr. Uzarowski about the need for
22 a written request by the City to the MTO for the
23 skid testing?

24 A. No, I don't specifically
25 recall in that regard, no.

1 Q. You don't recall one way
2 or the other?

3 A. I don't.

4 Q. Following that, do you
5 recall if the City did not want to make or you did
6 not want to make a request on behalf of the City?

7 A. I don't recall in not
8 wanting to. I don't know why we wouldn't, you
9 know, why we would -- it appears from -- that we
10 agreed to the testing but I don't recall being
11 asked to make a formal request, but I don't
12 remember being -- if it had been our initiative I
13 would have thought, you know, been something we
14 would have done but I don't -- I don't recall it
15 being our initiative at all.

16 Q. By this point in time --
17 so we're now in late September 2007 -- you
18 mentioned before again about your recollection of
19 there being an issue with the MTO's pavements
20 potentially and that was related to that. Were
21 you by this time aware or unaware of the SMA early
22 age low friction issue that the MTO had
23 identified?

24 A. I can't say for sure when
25 I became aware of that. I know I was aware but at

1 sometime in light of the fact that they were
2 giving us the information, you know, we wanted to
3 know well how is it. So I have to say that I
4 became aware of it at some time but I don't know
5 exactly when that was.

6 Q. Giving us the information
7 what are you referring to?

8 A. The results from the
9 testing.

10 Q. So then in October?

11 A. Yes.

12 Q. Do you recall if you were
13 -- became aware of the early low age friction
14 issue regarding SMA prior to or after the SMA
15 paving on the Red Hill?

16 A. I can't say for sure but
17 I would -- it's my feeling it was after, closer to
18 when this testing was being arranged.

19 Q. So as I said, we know
20 that the skid testing took place on October 16th,
21 and if we could go to images 62 and 63, Registrar.
22 Image 62, paragraph 139, if you could call that
23 out. This is on October 18th, so two days after
24 the testing.

25 Mr. Raymond e-mailed

1 Dr. Uzarowski and Mr. Delos Reyes of Golder the
2 MTO friction testing results, and this gets
3 forwarded to you subsequently by Dr. Uzarowski so
4 you did see it after but we'll just look at it
5 here. Wrote:

6 "Attached please find the
7 friction testing results for
8 the Red Hill Valley Parkway.
9 Please pass the results on to
10 those involved with the
11 project. You may wish to note
12 that some of the friction
13 numbers, less than 30,
14 correlate with being located
15 under a structure. Should you
16 have any questions regarding
17 the results please do not
18 hesitate to contract us." (As
19 read)

20 Take that down, please. Then
21 paragraph 141 on image 63, if we could call that
22 out. Dr. Uzarowski forwarded that e-mail from Mr.
23 Raymond with the test results to you and Mr. Oddi
24 indicating:

25 "Please find attached the

1 results of the friction
2 testing on the Red Hill Valley
3 Parkway completed for us by
4 MTO. I will call you to
5 discuss the results." (As
6 read)

7 Did you discuss the results
8 with Dr. Uzarowski.

9 A. I believe we did.

10 Q. What's your best
11 recollection of what he told you?

12 A. That they found that our
13 initial friction numbers were higher than what MTO
14 would get on their roadways and that we were good
15 to go.

16 Q. When you say higher than
17 the MTO generally got it its roadways, did he
18 specify what kind of pavement?

19 A. Well, with the SMA.

20 Q. Specific. So that was
21 specific to the SMA?

22 A. Specific to the SMA. I
23 believe I was aware of the early age friction at
24 the time of receiving these results.

25 Q. So aware of it at the --

1 like by the time you received it, so prior to
2 speaking to Dr. Uzarowski?

3 A. I believe so.

4 Q. Do you know how you
5 became aware of that?

6 A. I have to think that it
7 was during discussions about -- they are having
8 this issue and they want to see if it's consistent
9 with mixes or aggregates or whatever and let's do
10 ours -- they want to do ours just to see. There
11 was no downside to them doing it.

12 Q. Who would that discussion
13 have been with?

14 A. With Mr. -- Ludomir.

15 Q. Ludomir Uzarowski. Okay.

16 In your conversation with
17 Dr. Uzarowski about the results did you have any
18 discussion with him about prospectively what was
19 anticipated to happen with friction on the Red
20 Hill?

21 A. I think I understood that
22 the friction numbers would go up, as the as the --
23 after the initial traffic surge, you know. They
24 were still looking to see what was the cause,
25 whether it was thin film of asphalt on the

1 aggregate after paving or, you know, initial wear
2 on the aggregate to develop the macrotexture. I
3 don't know what they were -- what they eventually
4 came up with, but whatever it was it didn't seem
5 that ours was experiencing the same low numbers
6 that they were getting initially. I don't believe
7 there was any long term issue with the SMA, it was
8 just this initial number until the traffic got on
9 it.

10 Q. Was this information
11 prior to you receiving the results on the 18th of
12 October? You were already aware of these things,
13 if I understand you correctly?

14 A. In or about that same
15 time period. I mean, whether it was during the
16 testing or, you know, in the explanation of why
17 they wanted to do the testing, it's my sense that
18 that's when I started to understand what they were
19 looking for and why.

20 Q. So again, do I understand
21 correctly you are talking about from discussions
22 with Dr. Uzarowski?

23 A. Yes, sir.

24 Q. Not from another source?

25 A. No.

1 Q. Okay. In Mr. Raymond's
2 e-mail on October 18th to Dr. Uzarowski that he
3 forwarded to you, his reference -- he makes
4 reference, as we looked at, to noting that some of
5 the friction numbers less than 30 correlate with
6 being located under a structure. What did, at the
7 time, you take from that paragraph, if anything?

8 A. Maybe develop a question.
9 What does that mean?

10 Q. At that point in time you
11 did not have an appreciation of what that meant?

12 A. No, I don't. I don't
13 know what the -- is it the fact that it's under a
14 structure, is there something that the structure
15 is having an effect that causes the number? Is
16 there anything -- you know, the fact there's one
17 or two spots. What does that mean? I don't know
18 what the importance of an individual measurement
19 is or was.

20 Q. What about the number 30
21 itself? Is that something that you had any
22 appreciation of at that time?

23 A. No, sir.

24 Q. Is that something that
25 you discussed with Dr. Uzarowski in your

1 discussions with him about the -- discussion or
2 discussions with him about the results?

3 A. Not that I recall. My
4 recollection is that once we heard that all our
5 numbers were better than UTOs and we didn't seem
6 to be experiencing that low initial friction
7 number that we were -- that there wasn't any
8 issue.

9 Q. Now, yesterday we were
10 talking about the Burlington Street SMA placement
11 done in 1999 and the MTO test results reflected in
12 the CTAA paper written in 2002. You'll recall the
13 MTO friction number results were reported in the
14 paper as being 45 to 51, which was reflected as
15 being considered by the MTO as, quotes, "to be
16 consistent mixes having excellent skid resistance
17 properties." Do you recall that?

18 A. I think that I recall
19 from yesterday, yes.

20 Q. So when you were looking
21 at these results, on October 18th or thereafter,
22 did you consider how these results compared with
23 the results reported in the CTAA paper that you
24 co-authored by in 2002 respecting the Burlington
25 Street SMA placement?

1 A. I don't believe it came
2 to mind. I mean, there are two different
3 roadways. One is 50 kilometres an hour and one is
4 90 kilometres an hour, so I don't know that I
5 would have any ability to -- whether those numbers
6 meant anything against each other. So I can't
7 recall it coming to mind.

8 Q. So there's a couple of
9 things there. First of all, with respect to the
10 speed. At this point in time did you appreciate
11 that the speed at which locked-wheel skid testing
12 took place affected the skid number or friction
13 number obtained from that testing?

14 A. No, I don't believe so.

15 Q. So that wouldn't have
16 been something that -- that distinction then would
17 not have come to your mind at that time between
18 the two -- the test done on Burlington Street and
19 on the Red Hill, correct?

20 A. Right, other than it was
21 a different facility, I don't think.

22 Q. So right. It's a
23 different road.

24 A. Yes.

25 Q. But both using SMA

1 pavement, correct?

2 A. Correct.

3 Q. And both projects in
4 which you were involved?

5 A. I was involved yes. And
6 for that report to some minor extent, yes.

7 Q. Okay. And the only two
8 SMA projects at that point in which you have been
9 involved in, correct?

10 A. We did do some other
11 paving in the City with SMA but -- I don't think
12 we did any sort of report to our analysis of that.

13 Q. Fair enough.
14 Nevertheless, you're saying you did not -- if I
15 understood you correctly, you didn't think about
16 at the time any comparison between the MTO
17 friction test results on Burlington Street and on
18 the Red Hill. Did I understand you correctly?

19 A. That's correct.

20 Q. You indicated you did
21 not, at that time in October 2007, understand what
22 the FN30 referred to in Mr. Raymond's e-mail,
23 about what it meant and its significance at the
24 time. Is that something that you did come to
25 learn, what the significance was of FN30, or no?

1 MR. LEDERMAN: Sorry, it's not
2 clear as to what point in time you are talking
3 about with respect to that question.

4 MR. LEWIS: I just want to
5 know if he did. If it's much later -- I
6 appreciate he's going to be attending again, but
7 if he did become aware we would like to know that
8 and just be able -- I'm not going to pursue it
9 beyond that, but if you did come to learn about it
10 later then that's something we should know. If
11 it's at a later point in time we can pursue at a
12 later date.

13 MR. LEDERMAN: I guess that's
14 what I was seeking clarification on your question
15 because you said at some point in time. Do you
16 mean in the 2007 timeframe or are you talking
17 about at a later period of time, which I
18 understand Dr. Moore be speaking to at the next
19 attendance.

20 MR. LEWIS: I just want to
21 know when it was and then we can put a pin in it,
22 so to speak, if it comes into a later period of
23 time. I don't want to suggest anything to him
24 so....

25 MR. LEDERMAN: All right.

1 THE WITNESS: It was much
2 later. It wasn't any time in the 2007 or '8
3 timeframe.

4 BY MR. LEWIS:

5 Q. So you're talking about a
6 number of years later?

7 A. Yes.

8 MR. LEWIS: I'll anticipate
9 Mr. Lederman will have a question about -- so the
10 subsequent questions I would like to ask, and
11 again ask Mr. Moore not to answer and perhaps we
12 could have a discussion about it, is how did he
13 learn that and from whom at a -- and when that was
14 to the best of his recollection. Again, so we
15 have a sense of that and then it can be addressed
16 later on.

17 MR. LEDERMAN: I think are
18 documents that will deal with that in the later
19 timeframe, so rather than having the witness
20 speculate or think about that at this stage
21 without seeing the documents or the portions of
22 the OD that deals with that, I don't know that it
23 makes sense to address that now.

24 MR. LEWIS: If he actually has
25 a recollection without the documents then I would

1 like to hear it, but of course I'm in the
2 Commissioner's hands on that.

3 JUSTICE WILTON-SIEGEL: I
4 think we'll remit the question to later. We have
5 the answer it was passed 2008. Let's deal with it
6 when we're dealing with that section.

7 MR. LEWIS: Thank you.

8 BY MR. LEWIS:

9 Q. Mr. Moore, did you review
10 the actual MTO test results and see one of the two
11 lanes as reflected above there on page 62 of the
12 overview document? The other one is on the
13 previous page. Maybe you could put up 61 and 62
14 together, Registrar.

15 Did you review the actual
16 results? Did you look at them? They were
17 attachments to the e-mail forwarded by
18 Dr. Uzarowski.

19 A. I don't have a specific
20 recollection of looking at them. I'm trying to
21 remember if there's something there that might
22 have twigged me but not -- I would imagine I did
23 look at them but I don't know whether there was
24 anything there that meant anything to me at that
25 time.

1 Q. So you probably did,
2 can't say for sure, and do you then recall if you
3 took anything from it? Did you understand what
4 they meant?

5 A. No, I did not.

6 Q. No?

7 A. No.

8 Q. Okay. I think you
9 indicated with Dr. Uzarowski that he had indicated
10 to you that the results were better than the MTO
11 was typically getting on its SMA pavements, and I
12 think he used the words that we're good to go. Is
13 that --

14 A. That's my -- just on my
15 recollection, yes.

16 Q. Are you saying he used
17 those exact words, good to go or is that just your
18 --

19 A. No, probably my words.

20 Q. That's what you took from
21 it though?

22 A. That's what I took from
23 it, yes.

24 Q. I take it from what you
25 said that about FN30 and not really understanding

1 how to interpret the results that we're looking at
2 here on pages 61 and 62, that you didn't consider
3 yourself at that time to have the expertise to
4 interpret the results and so you relied on what
5 Dr. Uzarowski told you about them; is that fair?

6 A. That's correct.

7 Q. And Dr. Uzarowski didn't
8 recommend to you that any further investigations
9 ought to be taken; is that right?

10 A. That's -- I don't recall
11 anything else, that there was any remedial or
12 follow-up or anything else that we needed to do in
13 that regard.

14 Q. And you don't recall him
15 suggesting anything of that sort?

16 A. No, I don't.

17 Q. I take it you didn't
18 question him about that. He said good to go, or
19 words to that effect, that you understood it and
20 you said, okay, fine, we're good to go?

21 A. We had a lot of other
22 issues on the go and -- was one thing down and
23 let's get on with whatever else we need to get
24 this open.

25 Q. If Dr. Uzarowski had said

1 to you that the skid resistance was low and
2 recommended that a more detailed investigation be
3 conducted, would you have then correlatively
4 followed his recommendation?

5 A. At that time likely. We
6 would have wanted to be sure. We may have said,
7 well, if it's low it's low, if it's not it's not.
8 If it's -- we would have had a thorough discussion
9 at least.

10 Q. Ultimately I expect you
11 would have followed his advise, if that's what his
12 advice was -- have the expertise; is that fair?

13 A. At that time, yes.

14 Q. Do you recall if you
15 communicated the MTO's results to Dufferin or
16 Philips?

17 A. No, I don't. I don't
18 recall whether I did or not.

19 Q. Did you send or tell
20 anyone else at the City, other than Mr. Oddi who
21 obviously received the results, did you tell
22 anyone else at the City about the MTO test
23 results?

24 A. I don't believe I did. I
25 don't recall anything specific. I don't -- I

1 don't think I did.

2 Q. At that point in time is
3 there anyone else other than Mr. Oddi that you
4 would have shared with or brought it into the loop
5 at that point?

6 A. The fact we had no
7 director and, you know, general manager wasn't
8 aware of the day-to-day stuff, I don't know who I
9 would have passed this on to.

10 Q. If we could go to image
11 65, Registrar. One last question about the test
12 results and your discussion with Dr. Uzarowski
13 about it.

14 Do you recall if you had your
15 discussion with Dr. Uzarowski in the presence of
16 Mr. Oddi or separately from him? Do you know?

17 A. I don't, because I don't
18 know whether it was a phone call or whether he was
19 in the office on another matter and we discussed
20 it then or not.

21 Q. It could be either way?

22 A. It could be either way.

23 Q. So in paragraph 146 the
24 next day, October 19th, Dr. Uzarowski e-mails
25 Chris Raymond and Andros Delos Reyes at Golder

1 about British pendulum testing on the Red Hill in
2 that paragraph. That e-mail is excerpted here and
3 expanded. Do you recall if you were aware of it
4 being contemplated that the MTO conduct British
5 pendulum tests on the Red Hill at that time?

6 A. I don't recall that
7 initiative, no.

8 Q. Again, is that something
9 you just don't recall one way or the other?

10 A. Yeah, I don't recall it
11 at all, no.

12 Q. Take that down,
13 Registrar. Thank you.

14 We know that the MTO conducted
15 further skid testing on the Red Hill Valley
16 Parkway in each of 2008, 2009, 2010, 2011, 2012
17 and 2014. Were you aware of that testing being
18 conducted at the time?

19 A. No.

20 Q. When did you become aware
21 of it?

22 A. Only through this
23 process.

24 Q. Through the inquiry and
25 the lead up to it?

1 A. Yes.

2 Q. Registrar, can you go to
3 image 65. That's wrong then. Yes, it is. We're
4 in overview document 4. It's overview document 3.
5 Hold on. 69 and 70. It's paragraph 146 that I'm
6 interested in.

7 On February 4th, 2008 Mr. Oddi
8 sent an e-mail to Dennis Billings at the MTO with
9 the subject line "Red Hill Valley Parkway - Stone
10 Mastic Asphalt." And then he sets out a
11 description of the Red Hill and the pavement used
12 on it and references the trial section placed on
13 the ramp at the Mud Street intersection --
14 interchange.

15 Were you aware at the time of
16 Mr. Oddi sending this e-mail or its contents?

17 A. I don't believe so.
18 Doesn't -- my mind or tweak anything that I
19 recall.

20 Q. You don't know why he
21 sent this?

22 A. I don't. It appears to
23 be a response to something but I don't know what
24 it was.

25 Q. Did you know Dennis

1 Billings at the MTO?

2 A. I knew the name. I may
3 have met Dennis at other conferences but I'm not
4 sure whether we dealt in his capacity there or
5 not.

6 Q. Go to image 90, 9 zero,
7 back to overview document 4, please. Keep my
8 overview documents straight. Go to overview
9 document 4. This is in paragraph 2, 112 and 213.
10 It pertains to a November 15, 2010 communications
11 internal to the MTO.

12 In paragraph 212 you see that
13 Frank Marciello of the MTO wrote to Becca Lane
14 about -- just call that up, please -- setting out
15 a somewhat, a very short history of the skid
16 testing that had taken place on the Red Hill by
17 the MTO to that point.

18 And then -- you can take that
19 down -- in paragraph 213, if you could pull that
20 up please, Ms. Lane responded:

21 "Good stuff, Frank. Thank
22 you. Perhaps I'll call
23 Ludomir for a City of Hamilton
24 contact." (As read)

25 And she asked Mr. Marciello

1 for the most recent friction testing results from
2 the spring of 2010 for the Red Hill, which he
3 provided.

4 So the first of all, is Becca
5 Lane someone at that time who you knew at the --

6 A. I know Becca, yes.

7 Q. Did you know her then?

8 A. What timeframe is this,
9 2010?

10 Q. 2010, yes.

11 A. I believe I knew Becca
12 from CTAA and the Ontario Hot Mix Producers
13 functions. I had seen her present, so I knew
14 Becca yes.

15 Q. She had asked
16 Dr. Uzarowski for a City of Hamilton contact. Do
17 you recall if she contacted you around 2010 around
18 these issues or for any other reason?

19 A. I don't ever remember
20 speaking to Becca in this regard, no.

21 Q. Pertaining to --
22 (Speaker overlap)

23 Q. -- and skid testing
24 issues on the Red Hill?

25 A. No.

1 Q. Thank you. Take that
2 down. Go back to overview document 3, image 70,
3 please.

4 In paragraph 147 there's a
5 reference to a couple of papers that you were
6 involved with Dr. Uzarowski respecting, and these
7 are presented at the 2008 Annual Conference of the
8 Transportation Association of Canada, otherwise
9 known as TAC, and the first one in paragraph (a)
10 is the one entitled "Innovative Comprehensive
11 Design and Construction of Perpetual Pavement on
12 the Red Hill Valley Parkway in Hamilton."

13 I'm going to take you to your
14 edits to that in a minute. What do you recall
15 about your involvement in authoring this paper?

16 A. Again, it would be a
17 limited -- Ludomir would send me the paper or ask
18 for maybe a forward or what's the background or
19 make sure he's got the correct people, places and
20 times type of thing but....

21 Q. Is it similar to the 2002
22 CTAA paper that we're talking about, a review and
23 edit and providing information function?

24 A. Yes, and that's -- that's
25 the same for most of the papers that I was

1 involved with.

2 Q. Which is why you're not
3 listed as the first author?

4 A. Well, yes. They were
5 Ludomir's papers.

6 Q. But as you said, you did
7 review the entire paper and you provided your
8 edits; is that fair?

9 A. Oh, I would look closer
10 at the sections I knew about. Once he got into
11 the technical and the -- I don't know that I gave
12 any close scrutiny to any of that. It was --

13 Q. Why don't we have a look
14 at it. So this is -- if you look at footnote 199,
15 and this is what we'll be going to, call that out,
16 please.

17 You revised Dr. Uzarowski's
18 draft and e-mailed them -- your edits to him on
19 May 20th, 2008, and that's just what we're going
20 to have a look at. So the e-mails, the first one
21 there, we don't need to go to that. We can go to
22 Golder 7417. There's the title page of it. If we
23 go to image 2, call it the first paragraph. A
24 little hard to see here.

25 Off the bat you'll see you

1 just added grammatically in that last paragraph
2 "this approach included a feasibility study." You
3 added the "a" grammatically, yes?

4 A. That was -- a lot of my
5 edits were grammar.

6 Q. Right. And fair enough,
7 but you would agree with me that if you're able to
8 make edits for minor and non-substantive edits for
9 grammar that you are looking at the paper pretty
10 carefully, if you're correcting grammar?

11 A. Oh, okay. I don't....

12 Q. If we go to image 3.
13 Under the introduction, the last two paragraphs
14 there, thank you.

15 At the end of the first
16 paragraph is a description of perpetual pavement
17 and the obtaining longer life from perpetual
18 pavement while -- you see in the last sentence:

19 "...while replacing
20 periodically approximately
21 every 20 years. Only the
22 surface top 25 to
23 50 millimetres of the
24 pavement." (As read)
25 So you crossed out the 20 and

1 changed it to 14 to 17. So this is now in 2008.

2 Do you recall why you were changing it at that
3 point?

4 A. That's the standard we
5 used in the City when we're estimating the
6 replacement for surface course. You don't know
7 whether it's 14. It could be 12 or it could be
8 19, it could be 22 before we got there. So to say
9 20 years, a hard 20 wasn't correct. It was more
10 appropriate to give a range.

11 Q. Wasn't the SMA intended
12 to have a longer life than be more durable, that
13 was one of its qualities, than the conventional
14 dense friction force?

15 A. The SMA was made not to
16 rut or have a higher resistance to rutting, and we
17 did use premium asphalt cement, so yes. It was
18 hoped it would give us a longer life but -- you
19 know, I mean it says:

20 "These improvements as well as
21 -- advance payments allows
22 obtaining a -- long-term
23 performance for asphalt
24 structures while replacing
25 periodically only the top

1 surface." (As read)
2 I mean, that's a standard
3 blurb that is more correct in the 14 to 17 than it
4 is 20.

5 Q. I think thought that the
6 2006 CTAA paper that you wrote with Dr. Uzarowski
7 back in 2005, as is the primary author, that it
8 referred to 20 years, and that's where this came
9 from. You're saying this is the standard that you
10 would have used for --

11 A. It's the rule of thumb
12 for the term when you would replace surface course
13 asphalts normally. If it lasts longer that's
14 good. The idea -- this paper was based -- was
15 about the perpetual pavement, not what surface you
16 chose.

17 Q. The next you paragraph
18 you see you made some again minor changes there in
19 the next paragraph. Go to image 4, please. In
20 table 1, if you could call out that second box.
21 Perpetual pavement there. Sorry, no wrong one.
22 First box. I said second; I meant first.

23 It's talking about the pros
24 and cons of deep strength, and then the next one
25 being the perpetual pavement. This is in --

1 A. Could we adjust that so
2 you could read it -- the people are blocking out
3 the -- that's better. Great. Thank you.

4 Q. It said on the bottom
5 right there:

6 "A detour will be required for
7 some sections during pavement
8 rehabilitation/repair work."

9 And you deleted "for some
10 sections." We talked earlier about the detour
11 issue. Do you know why you deleted that one part?

12 A. If you are using just
13 normal deep strength asphalt, in order to replace
14 the entire section you can't have traffic on it.
15 So if detour will be required for all pavement
16 rehabilitation repair work in that regard, you
17 can't have traffic on it. So it's not some
18 sections, it's all sections.

19 Q. We can go to image 5,
20 please. If you could expand all of section 3.0,
21 including the chart. Here you change some of the
22 wording in the text above table 2, and then you
23 corrected the layer thickness for the subbase and
24 the total thickness at the bottom there. I take
25 it you're correcting errors in the thickness that

1 was actually placed; is that right?

2 A. I believe I knew that at
3 the time, yes.

4 Q. As I said, if there were
5 factual issues that you were aware of you would
6 correct them?

7 A. That's correct.

8 Q. And then at image 6, go
9 there, please. It's a little hard to see there
10 but under figure 1, if you could call that out,
11 Registrar. This is a -- a little easier to see.

12 Again, corrections to the
13 layers both in conventional deep strength design
14 and in the perpetual pavement design you -- in the
15 granular layers, not the pavement layers. You
16 made those corrections, right?

17 A. Yes, I think these were
18 standard ones that he used and I just made them
19 more specific to our project.

20 Q. Right, because that's
21 what it's talking about, was the Red Hill
22 specifically?

23 A. Yeah.

24 Q. If we go to image 9.
25 Under construction 6.0, call that out.

1 A. That's good.

2 Q. Added some details about
3 the management consultant and contractor team
4 working together?

5 A. Right.

6 Q. Image 10. In the top
7 paragraph, call that out, please. This paragraph
8 is referring to degradation of the aggregates for
9 the SMA surface course in the ignition of it and a
10 description of how that was dealt with. You added
11 that:

12 "This change in testing
13 procedure has all been a
14 discrepancy in correlation
15 issues. The flexibility of
16 the owner and the consultant
17 to move past the costs
18 involved allowed the issue to
19 be resolved." (As read)

20 Yesterday I asked you if you
21 had been made aware of issues to do with the
22 aggregates in the lead up to paving. Does this
23 suggest to you that you did have some awareness of
24 some issues?

25 A. At least at the time of

1 this paper. This may have -- I don't -- I do know
2 that I was made aware of it but I don't know when,
3 didn't appear to be -- I don't think it was at the
4 time. I think I had to do some research in order
5 to do this but....

6 Q. Research. I mean, this
7 is something that happened.

8 A. Well, yeah, but it's like
9 -- when I'm reading this it's like what is this
10 about, and then I could ask Marco or somebody.
11 What was this -- or even Ludomir. What was this
12 about? What happened here. So --

13 (Speaker overlap)

14 A. I knew prior to this or
15 not.

16 Q. You mean talking to
17 someone when you say "research"?

18 A. Yes.

19 Q. But you're not sure when
20 you became aware?

21 A. No.

22 Q. You could take that down,
23 please. Under compaction, paragraph 3. Then you
24 edited a sentence about paving in echelon for the
25 SMA course. And again, did you have -- was that

1 something you were aware of what they had done at
2 the time?

3 A. I knew paving in echelon
4 was an initiative that we instituted in. We
5 wanted the paving in echelon because we didn't
6 want any joints. So I knew that paving in echelon
7 was a primary consideration of our specifications,
8 but -- I mean, the initial thing thanks (ph) to
9 paving in echelon there were no particular
10 problems. I mean that just a re-word.

11 Q. Then lastly on this page
12 -- take that down, Registrar. Under "other
13 issues" -- sorry, all three paragraphs. Just more
14 information and corrections specific to the
15 paving. Again, was that something that you were
16 aware of during the paving?

17 A. I knew the specification.
18 You know, you couldn't allow the trucks on the RBM
19 because you've only got one layer of asphalt to
20 support that load and you didn't want to pre-crack
21 the bottom of the RBM, so that was -- again, that
22 was in the specifications that we -- I knew was
23 what we wanted going in. So again, I don't see
24 anything here other than the -- for me to write it
25 clearer than....

1 Q. And then last thing is
2 image 11, if we could go to that, Registrar.
3 Pavement instrumentation, if you call up those
4 three paragraphs. This is about the pavement
5 monitoring instrumentation that was installed at
6 the time of the construction, right?

7 A. Right.

8 Q. And then there's some
9 edits that you making. The big one is there is
10 you are just moving some text up from -- to
11 upfront, right?

12 A. Yes.

13 Q. And then there's some
14 other edits in there as well?

15 A. I was very involved in
16 this instrumentation and getting it in and why it
17 was needed and what was included in it, so this
18 was something I was very familiar with.

19 Q. You can take that down,
20 Registrar. The level of attention to detail. I
21 appreciate what you said about what you were
22 interested in, what you were -- but is the level
23 of attention to detail reflected by your edits
24 here, something that you typically applied when
25 you were editing, reviewing, turning drafts on

1 documents with others?

2 A. If I'm going to be
3 involved in the paper and I can contribute, then
4 I'm not doing it from a technical point of view,
5 then reviewing it from a grammatical point of view
6 and ensuring that I was very comfortable writing
7 reports to council and getting technical words out
8 in a more straightforward, understandable, plain
9 English type of way. So that's what I tended to
10 contribute. You needed to read the paper to be
11 able to do that, so yes.

12 Q. I'm not suggesting that's
13 a bad thing. I'm just -- what your practices
14 were.

15 Now, one thing that there is
16 not mention of in this paper is anything to do
17 with the MTO skid testing that took place on
18 October 16th, 2007. Do you know why that was not
19 mentioned?

20 A. Well, I don't, but other
21 than the papers about the perpetual pavement, not
22 the SMA. It's not about performance or problems
23 putting down SMA. It's about the perpetual
24 pavement. It's about the --

25 Q. That's not quite right.

1 I mean, we already looked at the sections on
2 compaction issues that are specific to the -- they
3 were about SMA and about the ignition oven issues.
4 So overall it's about perpetual pavement, but
5 talked about the RBM as well, talked about the
6 different layers. We can go back to them if you
7 want, but there's specific discussion about, among
8 many other things, the SMA and some issues that
9 that arose during the placement and -- prior to
10 and during the placement. So in that context I'm
11 wondering if you know why it did not mention the
12 skid testing?

13 A. I -- my only thought is
14 the skid testing only tells you about the surface
15 that you put down. I mean, the ignition of them
16 was about testing of materials in general. I
17 don't know that that was specific to only one
18 course or that it was the first course and after
19 that they did it a different way so it was
20 something that was encountered.

21 The placement and the RBM and
22 the depths and the pavement instrumentation and
23 the assumptions that went into it, why we did the
24 perpetual pavement is the primary for the paper.
25 It could've included it but it didn't. The paper

1 is what it is.

2 Q. Did you have any
3 discussion with Dr. Uzarowski about whether the
4 paper should or should not include mention of the
5 MTO skid testing?

6 A. I don't believe so.

7 Q. The last topic I would
8 like to cover now is at overview document 3, image
9 76, I guess 77 too. This paragraph 162 and 163
10 reflect a number of awards that were given in
11 respect of or in relation to the Red Hill Valley
12 project, and it's the one at 163(e) that I want to
13 talk about. If you could call that out,
14 Registrar, bottom right of image 77. Thank you.

15 Golder received the 2009
16 Ontario Consulting Engineering Willis Chipman
17 Award from the Consulting Engineers of Ontario for
18 perpetual pavement Red Hill Valley Parkway
19 Hamilton. That was presented on June 2nd, 2009 at
20 the Chateau Laurier Hotel in Ottawa. Golder paid
21 for Mr. Moore and his wife to attend, specifically
22 return airfare to/from Toronto for two nights --
23 sorry, for two, \$538.30 and two nights hotel at
24 the Chateau Laurier, \$350 plus taxes and tickets
25 for the event.

1 Do you recall that event?

2 A. I do.

3 Q. Do you acknowledge that
4 this Golder offered to and paid for the
5 transportation, hotel and attendance at these
6 awards for Golder's work on the Red Hill for you
7 and your wife?

8 A. I do, yes.

9 Q. The June 6th, 1995 code
10 of conduct and conflict of interest policy was
11 what was in place at the time. Did you turn your
12 mind to that policy before accepting this from
13 Golder?

14 A. I don't believe I did.

15 Q. Nonetheless, as a senior
16 city staff member were you aware of the code of
17 conduct and conflict of interest policy at that
18 time?

19 A. I believe I was aware
20 there was one, yes.

21 Q. If not perhaps all of the
22 specific details, I'm taking your answer? Or did
23 you?

24 A. I don't know whether I
25 knew all the specific details. I believe at that

1 time I was still manager.

2 Q. In June of 2009?

3 A. Yeah. Didn't become
4 director until September? I lose timeframe.

5 Q. Were you aware at the
6 time that the code of conduct prohibited receipt
7 of gifts of more than a nominal value from any
8 business that has a contract with the region or
9 the City?

10 A. I couldn't quote what it
11 said, no, but --

12 Q. Were you aware it
13 prohibited gifts from someone that the City is
14 contracting with?

15 A. I knew that that was the
16 gist of it, yes.

17 Q. Are you saying that the
18 gist -- the nominal value part of it, that's the
19 exception? Was that part of the gist that you
20 understood, or not?

21 A. Well, I don't -- whether
22 I understood it or not, I didn't turn my mind to
23 it because I didn't -- I didn't at that time see
24 this as gifts. This was -- to me this was a work
25 thing. The City was involved in this consultant

1 receiving the highest award for engineering for
2 that year. We were very proud that this award was
3 being bestowed and to be the City's representative
4 there. That was I guess my view at the time.

5 Q. If we could just call up
6 the policy then. It's at HAM58896. It's image 2.
7 It's the second paragraph, third and fourth
8 paragraph. You call those out, please.

9 So I understand what you said
10 there about your reason for attending and so
11 forth. Did you, however, not see this as a
12 benefit or -- that you were receiving from Golder?

13 MR. LEDERMAN: Sorry. I
14 thought Mr. Lewis already asked -- started this
15 questioning by asking Mr. Moore whether he turned
16 his mind in 2009 to the 1995 policy, and I
17 understood the witness to say he did not turn his
18 mind to it but had a general recollection of the
19 terms of it. So I'm just struggling now, having
20 heard that evidence, what Mr. Lewis is intending
21 to do to now put the specific provisions of the
22 policy to the witness.

23 MR. LEWIS: Happy to address
24 that. I thought it would be helpful rather than
25 doing it in the abstract to have it in front of

1 the witness. And the next question I wanted to
2 ask was whether -- since Mr. Moore already said
3 that he did not see it as a gift, I'm going to ask
4 if he saw it as a benefit.

5 MR. LEDERMAN: I guess what
6 I'm struggling with to what end, what is the
7 relevance of this generally but -- I've obviously
8 sat quietly while Mr. Lewis has raised these
9 issues with the witness. The witness has given
10 his evidence with respect to it and so I'm just
11 raising this as a concern here.

12 JUSTICE WILTON-SIEGEL: Well,
13 you've raised two separate issues. Which one do
14 you want to concentrate on?

15 MR. LEDERMAN: Why don't we
16 start with the first, which I guess is what is the
17 value of putting the policy, making -- questioning
18 him with respect to gifts versus benefits in light
19 of the witness's evidence that he didn't consider
20 the policy at the time that he was -- at the time
21 of this event in 2009. He told you what he viewed
22 the reason or the rationale behind his attendance.
23 So that's the first issue.

24 And then the second issue is a
25 broader issue which is --

1 JUSTICE WILTON-SIEGEL: Just
2 dealing with the first issue. So the first issue
3 is, is there any merit to asking whether he saw
4 this as a benefit. Do you want to speak to that,
5 Mr. Lewis?

6 MR. LEWIS: Yes. I think in
7 fairness to the witness since the issue has been
8 raised we should get his perspective on it and get
9 his answers on it, and if his answer, as we've
10 already heard that he didn't turn his mind to it,
11 and I want to ask whether or not he saw it as a
12 benefit and he can give us his answer on that
13 question and I would like to ask whether or not he
14 considers it to be of nominal value.

15 We could not ask those
16 questions and simply let it stand as it is and
17 interpret the policy and ask the commissioner at
18 the end of the day to interpret the policy against
19 the facts which have been acknowledged. Those are
20 the alternatives. But I think in fairness to the
21 witness we should put those questions to him.

22 JUSTICE WILTON-SIEGEL: So
23 then let's turn to the second question, which is
24 the purpose of this, and I'll invite you to speak
25 to that.

1 MR. LEWIS: Well, the overall
2 purpose we're going to be hearing -- we anticipate
3 there's going to be evidence which deals with --
4 from later witnesses, that deals with the
5 relationship between city staff, including
6 Mr. Moore, and consultants. And this particular
7 instance provides some insight and colour into
8 those relationships.

9 MR. LEDERMAN: I must say I
10 don't understand that connection at all in terms
11 of insight or colour into these relationships.
12 He's asking him about whether he turned his mind
13 to this policy. He said that he didn't.

14 Now he's asking him to -- he's
15 now asking him to put the policy in front of him
16 and saying how do you interpret it sitting here
17 today. And then saying well, either we give the
18 witness an opportunity to answer it or you can
19 just make your own conclusions from this policy.
20 But in my view, that doesn't answer the question
21 as to how one's assessment of this policy relates
22 in any way to the terms of reference in this
23 inquiry.

24 JUSTICE WILTON-SIEGEL: Well,
25 first of all, I think it's very clear that one of

1 the issues in this inquiry will be the
2 relationship between city staff and consultants.
3 This is clearly one of those. So in the broadest
4 sense the questions about this are clearly
5 appropriate.

6 Now, if the specific question
7 is did he regard this as a benefit, did he regard
8 this as nominal, I'm really in Mr. Moore's hands.
9 If he wishes to answer the question he can do so.
10 If he doesn't answer the question the clear
11 implication will be that these are not to be
12 treated as -- that he didn't think these were
13 benefits and he didn't think this was nominal; in
14 other words, he didn't turn his mind to the
15 question and ask whether perhaps this fell outside
16 some provision in the policy. And this -- I'm
17 really in Mr. Moore's hands as to whether or not
18 he wants to answer this question.

19 MR. LEDERMAN: I have no
20 difficulty with having Mr. Moore answer it as long
21 as he's being asked -- it sounds to me like what
22 he is being asked about is his view of it sitting
23 here today in 2022, given the fact that he has
24 already said he did not consider the policy at the
25 time of the attendance at this event.

1 So I just want the record to
2 be entirely clear as to what it is Mr. Moore is
3 being asked to comment on sitting here today.

4 JUSTICE WILTON-SIEGEL: If the
5 question is simply avoiding -- if your objection
6 is to avoid asking him what his interpretation is
7 of the policy today I think Mr. Lewis can probably
8 rephrase the question in a way which avoids that
9 concern.

10 MR. LEDERMAN: That's fine,
11 and I'm content to have Mr. Moore answer the
12 question. I just want to be clear on the value of
13 this.

14 MR. LEWIS: To be clear, the
15 question I was asking was what it was at the time.
16 I'm looking at what I wrote (sic) from the real
17 time transcript and I asked him, "Did you not see
18 this as a benefit that you were receiving from
19 Golder," and that was the intention of the
20 question.

21 MR. LEDERMAN: Yeah, but I
22 guess in the face of the earlier evidence, which
23 is that he didn't consider the policy at the time,
24 I just don't know how you square that question
25 with what the witness has already said.

1 JUSTICE WILTON-SIEGEL: I
2 think you can simply say did he consider it a
3 benefit, (garbled audio) a gift, did he consider a
4 benefit, that's essentially what is being asked.
5 The fact that those words -- you can take the
6 words down from the screen.

7 MR. LEWIS: Please do that,
8 Registrar.

9 JUSTICE WILTON-SIEGEL: That
10 makes this line of inquiry any easier, and simply
11 phrase the question in those terms.

12 MR. LEDERMAN: Appreciate
13 that. Thank you.

14 BY MR. LEWIS:

15 Q. At the time, Mr. Moore,
16 in 2009, did you see the flight and accomodation
17 in respect of this award as a benefit?

18 A. I have to say at the time
19 no, I did not.

20 Q. Do you have a view of
21 what a nominal amount is, a nominal benefit or a
22 nominal gift would be?

23 MR. LEDERMAN: Again, he's
24 asking, I presume, in the context of the policy.

25 MR. LEWIS: No, I'm just

1 asking what his understanding of the concept is.

2 JUSTICE WILTON-SIEGEL: You
3 know what, Mr. Lewis, I think on this point if he
4 said he didn't regard it as a benefit and he
5 didn't regard it as a gift, the nominal feature of
6 this becomes moot.

7 MR. LEWIS: Fair enough, I'll
8 move on.

9 BY MR. LEWIS:

10 Q. Do you recall, Mr. Moore,
11 if you discussed attending the event at Golder's
12 expense with Mr. Jerry Davis, who at the time was
13 still the general manager and your immediate
14 supervisor?

15 A. I don't specifically
16 recall, no.

17 Q. Did you tell anyone else
18 that you recall?

19 A. Specifically no, but I
20 mean there was no secret I was going to be out of
21 the office for a couple of days and going to
22 Ottawa and I brought back the City's plaque type
23 of thing for it and showed it off in the office
24 and displayed it. So I mean, it wasn't a secret
25 that I went or was going.

1 Q. Right, but did you tell
2 anyone that Golder was paying for your going?

3 A. I mean, any time you're
4 going anywhere you usually had to get approval
5 first. Usually -- we usually involved getting a
6 per diem or advance or money for tickets or
7 whatnot, but I don't -- I don't recall preparing
8 any of that so that should have at least raised
9 some questions from at least my admin or the
10 general manager's admin who usually received that
11 type of stuff. Whether that did it at the time I
12 don't know, but that would have been the standard
13 procedure when you were going someplace.

14 Q. Sorry, are you suggesting
15 they should have inferred that -- someone else
16 should have inferred that Golder was paying for it
17 because you had not made any request for a per
18 diem or travel expenses?

19 A. I don't know that they --
20 I don't know whether it -- it would -- infer to
21 them, but I don't specifically recall discussing
22 it, but these types of things usually raised
23 questions, you know, why don't you need this, or
24 why are you asking for per diem. While I don't
25 specifically recall any of that stuff, it seems

1 that it should have at least raised that
2 discussion.

3 Q. I don't have any further
4 questions. Thank you, Mr. Moore.

5 A. Thank you.

6 MR. LEWIS: Commissioner,
7 subject to any questions that you have at this
8 time, I would turn it over to counsel for the
9 participants who have agreed on an order of
10 operations, which I can advise you of.

11 JUSTICE WILTON-SIEGEL: Fine.

12 MR. LEWIS: First would be
13 counsel for Golder, then for --

14 JUSTICE WILTON-SIEGEL: For
15 how long?

16 MR. LEWIS: My understanding
17 it's approximately 60 minutes, unless that has
18 changed; then counsel for the MTO, which I
19 understand will be approximately ten minutes; then
20 counsel for Dufferin, again approximately ten
21 minutes; and then counsel for the City, which I
22 understand will be approximately 60 minutes.

23 JUSTICE WILTON-SIEGEL: Okay.
24 So Ms. Roberts, if you're examining on behalf of
25 the City, we'll turn it over you to now. It's

1 10:53. We should probably take our break about a
2 quarter past in the usual manner, if that's
3 convenient in terms of your own presentation.

4 MS. JENNIFER ROBERTS: Just
5 for clarity, I'm counsel for Golder. I think you
6 said I will be examining on behalf of the City.

7 JUSTICE WILTON-SIEGEL: I'm
8 sorry. It's been a long morning for all of us
9 already.

10 JENNIFER ROBERTS: Good
11 morning, Mr. Moore, I'm counsel for Golder.
12 Commissioner, may I begin?

13 JUSTICE WILTON-SIEGEL: Yes.

14 EXAMINATION BY JENNIFER ROBERTS:

15 Q. Mr. Moore, you'll have to
16 forgive me, I'm going to jump around a little bit
17 in the evidence, which is just sort of the nature
18 of the process, and if there's a point at which
19 I'm unclear we can pause and I'll go back to the
20 documents. I just want to begin though with
21 some of your evidence this morning.

22 You said -- and this is in the
23 context of the friction testing that was done by
24 MTO in October of 2007. And my understanding is
25 the question that was asked of you is whether

1 Dr. Uzarowski had recommended further
2 investigation and further friction testing,
3 whether you would have followed that. I
4 understand your answer to have been at that time
5 likely. Do you recall that?

6 A. I remember saying that,
7 yes.

8 Q. I'm going to take you
9 back to the Stantec NCR sustainability plan. Do
10 you remember talking about that yesterday?

11 A. Yes.

12 Q. Do you remember the
13 advice that's contained in that plan which
14 provides for friction testing every two years? Do
15 you recall that?

16 A. I recall that that was
17 what was in the plan, yes.

18 Q. I believe your response
19 was that that was a matter of ongoing maintenance
20 and asset management would have managed that issue
21 of ongoing testing. That's my recollection of
22 your evidence. Is that what you recall?

23 A. I think it was in -- I
24 think we went back to see what section it was in
25 because I thought it might have been in -- but it

1 was in -- I believe it was in pavement management,
2 so that would have fallen under -- I'm assuming
3 that they would have put the initiatives under the
4 sections who are relevant to that. If that was
5 asset management, if that was pavement management
6 then it's asset management.

7 Q. In any event, sir, the
8 point is is that that ongoing maintenance issue of
9 having repeat (indiscernible) study was something
10 for another department and not yours to deal with.
11 Do you understand that right?

12 A. That's correct.

13 Q. In any event, the choice
14 -- you told us yesterday the choice was made not
15 to implement the sustainability plan and not to
16 ongoing friction testing; is that correct?

17 A. That was my recollection,
18 that that report didn't get approved.

19 Q. Thank you. Just to
20 follow up. Was it usual for a municipality after
21 paving a road to implement follow-up friction
22 testing?

23 A. Other than the issues
24 with the Red Hill and the LINC, in my 30 years at
25 the City I don't remember us doing friction

1 testing on any other roadway.

2 Q. In any event, following
3 your discussion with Dr. Uzarowski you didn't
4 understand that there was anything in the data
5 which would have necessitated follow-up testing?
6 Do I have that right?

7 A. I'm sorry, in regard to
8 what?

9 Q. Well, you had the
10 discussion. Your evidence is you had the
11 discussion with Dr. Uzarowski about the friction
12 testing and I suggest to you that there was
13 nothing in -- that arose from that discussion that
14 you understood would have necessitated follow-up
15 friction testing; is that correct?

16 A. In regard to the --

17 Q. Yes.

18 A. -- we received from the
19 MTO?

20 Q. Correct.

21 A. Yes. No, I did (ph)
22 understand that there was any follow-up that
23 needed to be done.

24 Q. Thank you. Just another
25 point on sustainability plan. Registrar, can you

1 please pull up Hamilton 320? I think I have that
2 right. There we have it. And could I please ask
3 you to turn to image 93. Can we go to the page
4 before, 92? I think this is the end of the body
5 of the report. You see the conclusions there?

6 A. Yes.

7 Q. And then, Registrar,
8 please can you go to 93. As far as I can figure
9 the sustainability report looks as though it
10 doesn't even have a signing lines, and there are
11 certainly no signatures. Was that unusual for the
12 City to have reports that had no signing lines?

13 A. I can't say in regard --
14 I mean, I was a participant in this report. I
15 wasn't part of the team that put this report
16 together, so whether there was a covering letter
17 that sufficed that, I don't know.

18 Q. In any event, whether it
19 was implemented or not had nothing to do with
20 whether there was signatures on it. That's
21 correct, is it not?

22 A. Signatures within the
23 report, I don't think so. I don't know.

24 Q. Can we please go to
25 overview document 3, image 23, paragraph 45. So

1 this was the perpetual pavement design study phase
2 2. You talked a little bit about the proposal.

3 I'm not going to take you to
4 it, but my understanding is that in the April 10,
5 just as it says here, that you received the draft
6 perpetual pavement design study phase 2, and that
7 included in that e-mail the special provisions,
8 including the SMA (indiscernible), including SMA,
9 specifications and the special provisions. Do you
10 remember that part?

11 Can we go to the document? I
12 think that might be easiest. It's 55, which is
13 Golder 3739, just to frame this in reference.
14 This is just before you're going to tender.

15 So at the top in the
16 attachments you can see there's a whole pile of
17 attachments. Is there any way of -- there they
18 are. Okay. Do you see that, sir?

19 A. I can, yes.

20 Q. That's great. So here's
21 my point. So we've got the tender that's just
22 about to be issued. Am I right in interpreting
23 what happens here is that you receive the mixes --
24 the proposal for the pavement, the special
25 provisions and the specifications and those

1 immediately get incorporated into the tender for
2 the paving contract.

3 A. You'll have to go back.
4 I'm a little -- what was received your -- are you
5 saying that we got the proposal to do it and he
6 already had some of it done and sent it directly
7 to us?

8 Q. No, no, this is later in
9 the timeframe. This is April of 2006.

10 A. Right.

11 Q. My understanding is
12 that's just before tender, correct?

13 A. It seems about that
14 timeframe, yes. So he sent us the draft or the
15 SPs that he wants us to incorporate, okay. I'm
16 sorry, what was your question?

17 Q. My question was whether
18 these specifications and the special provisions
19 are what gets incorporated in the tender.

20 A. Yes. I don't have any
21 specific recall, but I mean that's what we asked
22 Ludomir to do, was prepare these and send them to
23 us and then they would be sent to the prime
24 consultant who was putting the tender together.

25 Q. Yesterday in your

1 testimony commission counsel suggested to you that
2 in general you would want a signed copy of a
3 report and you responded that in general yes, but
4 not necessary if you're acting on the information,
5 it was more important to have the information. Do
6 you remember that evidence you gave yesterday?

7 A. I do.

8 Q. And is this an instance
9 where the most important thing was the content of
10 the report, because you were going to use it?
11 That's correct?

12 A. Well, these are
13 specifications. They are not a report with
14 conclusions or direction or recommendations. They
15 are output from an assignment, so they are a
16 little different.

17 Q. Okay. Fair enough.
18 Let's just go to the report and I think I've just
19 jumped ahead too fast. 3741, please, Registrar.

20 THE REGISTRAR: Sorry,
21 Counsel, still Golder?

22 MS. JENNIFER ROBERTS:

23 Q. Yes, please. Okay.
24 So if I can ask you to go
25 through -- this is the body of the report and,

1 Registrar, can we please go through this because
2 it's got I think page 2. There we go. This is
3 what I understand to be the perpetual pavement
4 design. Do you see that, sir?

5 A. Okay, yes.

6 Q. Does that generally
7 accord with your recollection of what it was?

8 A. Of what the perpetual
9 pavement was, yes.

10 Q. And, Registrar, can you
11 please turn up the next page. Page 5 I need
12 actually. Next one. There with go. The hot mix
13 asphalt specifications. You will agree with me,
14 sir, that this report actually provides a list of
15 the OPSS specifications as well as special
16 provisions that Golder is recommending for use in
17 the perpetual pavement?

18 A. It's a summary of them,
19 yes.

20 Q. As we saw in the e-mail,
21 that list of attachments in fact included them.
22 Do you want to go through those specific -- or can
23 we take it that they are attached?

24 A. Well, if they are
25 standard OPS I don't think they would be attached.

1 I think what he sent with this were the specific
2 amendments to those that needed to go with these.

3 Q. By amendments you mean
4 the special provisions?

5 A. Special provisions, yes.

6 Q. So let me rephrase my
7 question that I had. Would you agree with me that
8 this is an instance where what is important in
9 this report is the content so that the City would
10 have the specifications, special provisions to act
11 on and implement in the paving contract?

12 A. I would agree it's the
13 contents that are most -- at that time were most
14 important so we could get the tender out. This --
15 I don't believe this document went in the tender
16 so it was more of a summary to back up how our
17 approach was for the perpetual pavement.

18 Q. So what was important was
19 that content, those specifications identified and
20 the special provisions, that's what you were
21 looking for and that's what you got, right?

22 A. I believe so.

23 Q. Thank you. I'm going to
24 go to a different -- I want to go back in time
25 now, Mr. Moore, to the preliminary design report.

1 That's -- Registrar, if you could please turn up
2 Hamilton 8905, image 18. There's a couple of
3 issues in here.

4 So 2.1.3, interchange spacing.
5 I just want to look at this. So this is east-west
6 corridor. Registrar, can you please -- east-west
7 corridor. So that's the Lincoln Alexander,
8 correct?

9 A. That's correct.

10 Q. Can we please go to the
11 next image, image 19. You'll see the second full
12 paragraph on that list. Can you please call that
13 out, Registrar, spacing of the interchanges. Up.
14 There we go. Thank you.

15 This is for the north-south
16 corridor, so this is for the Red Hill. That's
17 correct?

18 A. Okay, yes.

19 Q. The spacing of the
20 interchanges in the north-south corridor was based
21 on an optimized -- sorry, I can't read it. It's
22 now too large -- optimizing traffic distribution.

23 "Since the major east-west
24 arterials in the lower
25 mountain are located much

1 closer than 3 kilometres
2 appropriate design measures
3 have to be taken to provide
4 adequate weaving distance
5 between ramps."

6 Do you understand this
7 correctly in this section that they generally
8 recommended distance between interchanges has to
9 be shortened to address what's need for -- the
10 need of that area; is that correct?

11 A. The crossing roads
12 crossing the valley were fixed. Barton Street,
13 King Street, Queenston Road. So you have to
14 design the road to fit within that framework and
15 design appropriately.

16 Q. So in the result that's
17 much closer than the two or three kilometres
18 distance between interchanges that's recommended
19 in the MTO guide, that's correct?

20 A. Yeah. I'm not sure what
21 the MTO guide is based on, whether it's a desire
22 to have a certain distance between onramps and
23 offramps and approaches and whether it's based on
24 120 kilometres an hour design speed. So the fact
25 that they have a desired distance doesn't really

1 -- without further explanation doesn't really come
2 into play here. You just have to design
3 appropriately.

4 There's standards with regard
5 to weaving distances and the amount of traffic
6 that's coming on or off and, you know, whether you
7 take one ramp over another ramp. Those were the
8 types of things that were initially considered
9 when the initial -- I believe this is the initial
10 design, preliminary design that came out --

11 Q. Yes, it is, you're right.

12 A. So there were different
13 orientations at that time for what -- how the
14 ramps were going to be oriented at each
15 interchange and they were significantly amended
16 once we went to the 2003 version after all of the
17 environmental concerns were addressed.

18 Q. So it's actually that
19 evidence I'm looking for, sir. My understanding
20 in a general sense is that this -- the design
21 phase clearly was extremely protracted and that
22 you had a number of challenges, including
23 environmental ones, and what I want to understand
24 better, and I think, Commissioner and the public
25 probably does, is how it was and why it was that

1 sorts of design decisions were made. So I'm going
2 to go through a couple of these and this is one of
3 them.

4 Can we please go to overview
5 document 3.1 point -- at image 4. Sorry, image 5.
6 Go back. Got the wrong paragraph number.
7 Paragraph 7. So one of the issues that seems to
8 have been changed is the issue of the illumination
9 in the 1990 preliminary design report it provided
10 for illumination. Do you see that?

11 A. I see that, yes.

12 Q. Do you remember that?

13 A. I remember we changed
14 that.

15 Q. And why was the -- first
16 of all, let's just address how was it changed?

17 A. Well, we went to decision
18 point illumination eventually, so illumination
19 only at the interchange offramps, which was
20 consistent to what we did across the east-west so
21 I believe the -- one of the desires was to keep a
22 facility consistent across its entire length. So
23 that was one thing.

24 The other thing was that the
25 -- there were concerns in the environmental

1 discussions for full illumination with regard to
2 not only wildlife within the valley but its
3 implication on backyards and effect on the
4 adjacent residents.

5 Q. So could I frame that as
6 the issue of the lights village to the
7 neighbouring properties was an issue?

8 A. It was one of the issues.

9 Q. Indeed this change
10 between the original preliminary design report and
11 the November 2003 preliminary design report that I
12 think you provided comments on, that's correct?

13 A. Yes.

14 Q. Just mention the design
15 criteria. Can we please go to Hamilton 50707. I
16 think this is the preliminary design report that
17 has your comments on it that you went through
18 yesterday. Can we please turn up image 11. Sir,
19 this references the design criteria that the
20 roadway design criteria conforming to those in the
21 MTO to metric design manual have been adopted for
22 this project. Do you see that?

23 A. I see that.

24 Q. Do I take it from that
25 what I've got is -- what that is is the 1985

1 Ontario guide -- sorry, 1985 Geometric Design
2 Standards for Ontario Highways. Is that what's
3 being referenced?

4 A. I believe so. I don't
5 know whether there was a version change or
6 anything else. It probably should have stated a
7 version and a more appropriate name in the design
8 criteria, but I believe that's the manual that's
9 being referenced.

10 Q. In any event, it was the
11 MTO guidance that was referred to as -- for the
12 design standard -- sorry, design guide, I should
13 say more accurately, for the Red Hill Valley
14 Parkway?

15 A. I believe so.

16 Q. Thank you. Can we please
17 turn up image 12, table 2. So here's what I
18 understand to be the design criteria for the Red
19 Hill Valley Parkway; is that correct?

20 A. Yes, it appears to be,
21 yes.

22 Q. So let's just go through
23 this briefly. UFD, I've forgotten what that
24 means.

25 A. I believe it's urban free

1 divided.

2 Q. Thank you. And the 100

3 -- as you said yesterday, that refers to --

4 A. Design speed, I think.

5 Q. Thank you. And so we go

6 down, we've got the minimum stopping distance,

7 it's 185 metres?

8 A. That's what it says.

9 Yeah, I believe -- I believe they are metres, yes.

10 Q. The superelevation this

11 is the maximum superelevation, .06?

12 A. Usually expressed as a
13 percent, yes. Point -- would be 6 percent, yes.

14 Q. And here the grades,
15 we've got maximum upgrade and downgrade of
16 4 percent?

17 A. That's what it says, yes.

18 Q. I just want to go down.

19 We've got also the minimum radius turn. Is that
20 the minimum radius on the main line of the Red
21 Hill?

22 A. Given that it says "urban
23 freeway divided 100," yes, I would say these are
24 all main line standards.

25 Q. You gave evidence

1 yesterday that the detailed design was done by
2 three consulting firms, Stantec, Philips and
3 McCormack Rankin?

4 A. Yes.

5 Q. I take it -- you can come
6 out of that document now. As part of the detailed
7 design drawings were prepared by each of those
8 consultants, correct?

9 A. That's correct.

10 Q. Who at the City was it
11 that reviewed the drawings?

12 A. Be myself, early in the
13 design I believe Marco was involved, and John
14 Vandermark likely.

15 Q. Was John Vandermark an
16 engineer?

17 A. Yes.

18 Q. Can we please go to --

19 A. This was for the
20 north-south. John -- in 2003 he wasn't involved
21 in the project anymore. It was just Marco, Chris
22 and I, may have been Jim Rockwood, depending on
23 whether it was environmental issues on the plans
24 as well.

25 Q. Do I take it there were

1 four of you in the civil design, that would be you
2 and Mr. Oddi?

3 A. Correct.

4 Q. Can we please turn up
5 Dufferin -- let's go first to the overview
6 document, 3.1, image 10. Thank you. So this is
7 the part A to the Stantec. Do you see that?
8 Sorry. So part A of the Red Hill was part of the
9 Stantec design; is that correct?

10 A. Pritchard to Greenhill, I
11 believe, yes.

12 Q. So this depicts -- if
13 we're going from the top to the bottom, from the
14 south to the north, as it is, were turning and
15 then there's a reasonably steep gradient at the
16 top, that's where you got the 4 percent; is that
17 right?

18 A. Yeah. Yes, I believe it
19 was 4 percent up through the escarpment.

20 Q. So can you please turn to
21 Dufferin 2534, image 2 first of all. Registrar,
22 there's a column, second column in that's the
23 longer column. Can you please call out that.
24 It's quite difficult to read.

25 My understanding is that this

1 table identifies the spirals and the turns on the
2 Stantec section and shows what the radius of the
3 turns are. Do you agree with that?

4 A. Yes.

5 Q. On the Stantec section
6 we've got radius turns of about 700. If we go to
7 circular curve, the second one, 700, and then
8 spiral, then the second from the last is the other
9 circular curve that's another 700 metre?

10 A. Yes.

11 Q. Can we please then turn
12 to image 53 -- sorry, 54. My understanding of
13 this drawing is it's got a typical superelevated
14 sections, you can see at the top drawing and the
15 bottom. Do you see that?

16 A. I'm sorry, what am I
17 looking at?

18 Q. Looking at the depiction
19 at the top of that page, typical superelevated
20 section.

21 A. Right.

22 Q. It's telling you -- my
23 understanding of this drawing is that it's telling
24 you where that typical superelevated section goes
25 by station 22 plus 430 to 22658?

1 A. In the northbound lanes,
2 yes.

3 Q. If you go to the
4 depiction at the bottom there's another typical
5 superelevated section that's for the next -- looks
6 like it must be the next turn, 22689; is that
7 correct?

8 A. Next curve, yes, correct.

9 Q. Can we please go to 55.
10 Again, you've got drawings depicting -- sorry,
11 you've got these -- typical superelevated section
12 for the next turn 23184 on the northbound lane,
13 23246 on the southbound lane. Do you see that?

14 A. I see that, yes.

15 Q. I understand this is
16 Stantec describing what the superelevations are at
17 the turns at particular points along the
18 alignment. Do I have that right?

19 A. These are cross sections
20 so they are typically showing the widths of lanes
21 and their orientation to each other as they move
22 through the curve. The grades, as you're going up
23 and down the hill, would obviously change and
24 there's usually a table associated with the curve
25 and coming out of the curve and through the spiral

1 associated that you would have to calculate what
2 the cross section or the superelevation is.

3 You'll see there's a note on
4 there that says S4.9 percent max. And then
5 there's parts on the break overs for the shoulders
6 that says "see table." So while it's a typical
7 cross section the grades and the orientation with
8 respect to each other change as you go through the
9 --

10 Q. It would be helpful,
11 Registrar, if you could please call out the first
12 typical superelevated section on this page, just
13 to make it a little easier to read. Just as you
14 say, the S4.9 max, that identifies the maximum
15 superelevation for the turn at that location?

16 A. I believe that's correct,
17 yes.

18 Q. I think what you are
19 referring to is the fact that the superelevation's
20 transition between where they are greatest at the
21 Apex of a turn and then through the spiral to
22 where they might come down to a tangent section?

23 A. That's correct.

24 Q. Can we please turn up 18.
25 Sorry, when you say they transition, I think the

1 first table we looked at at image 2 is showing you
2 where those -- the transition because it shows you
3 the circular curves to the curves. Do you want to
4 go back to it? Let's go back to image 2. Can we
5 call out the second table again. So hard to read.
6 I think -- am I right in understanding that this
7 is giving an indication of the transition that you
8 were just referring to?

9 A. So the tangent pieces of
10 the roadway or the straight pieces of the roadway,
11 they move into a curve where -- curve has a
12 standard, it's uniform throughout the curve, the
13 700 metre radius, but the point between where that
14 curve becomes uniform and the point on the road
15 that's tangent, that's where you have what they
16 call the spiral curve. And it's a transition, it
17 changes every metre as you go through from a
18 tangent section to the standard curve section. So
19 they often refer to that as the spiral.

20 So through a curve that has a
21 standard radius in this case of 700, you would
22 have -- usually have a -- depending on whether
23 there's vertical change as well, but if this was
24 not a flat roadway you would have a uniform
25 superelevation through the curve but it would

1 change from nothing to the full superelevation
2 through the spiral.

3 I know that was a little
4 longwinded but I just wanted to make sure
5 everybody understood what that was about.

6 Q. I think that's important,
7 sir, and I don't -- so what you're saying is that
8 there would be specific direction from the
9 engineer, the designer, to tell you how to
10 transition from the curve through the spiral curve
11 to a tangent. Do I have that correct?

12 A. There's -- I believe
13 there's other sheets that are profile sheets that
14 show the profile of the road and then you take
15 that profile and you apply all of the other
16 guidelines in order to come up with the grades at
17 the edge of the pavement and the edge of the
18 shoulder and then you have to calculate all of the
19 grades below those for each level of the
20 earthworks below and then the first level of
21 granular and second level of granular and then --
22 usually you don't set the grades for the
23 pavements, it's usually based on pavement
24 thicknesses until you get to the top.

25 Q. Can we please turn up

1 image 18. Thank you for that. That's helpful.

2 This is just one example.

3 And, Registrar, can you enlarge this please for my
4 old and tired eyes. So this is just part of the
5 alignment design by Philips, but I think we can
6 see -- first of all, on the left side 22650, that
7 shows you the location of where this particular
8 drawing begins, and if we went to the right we
9 would show the end; is that correct? That's a
10 station?

11 A. I'm sorry, I think you
12 referred to this as Philips, but I think this is
13 the Stantec.

14 Q. Stantec. Thank you. Can
15 we call out just the left side of this drawing,
16 please. Somebody has highlighted it along the
17 way. But we see the station where this begins,
18 22650, that's correct?

19 A. For main line drive, yes.

20 Q. Looks as though there are
21 percentages. As I understand this, the left side
22 is showing essentially a tangent with a 2 percent
23 slope. On the northbound lane you see 2 percent
24 just below 115 and 117?

25 A. Oh, I see where you're

1 talking. Yeah, it appears so.

2 Q. If we move along --
3 Registrar, can you please highlight or -- sorry,
4 can you then call out the middle section. So if
5 you see just below where it says 123 and then from
6 the below 127 you'll see there's a percent again,
7 and I would understand that to be the
8 superelevation for the turns part of this
9 alignment.

10 A. It appears to be.

11 Q. In other words, Stantec
12 has shown you where the tangent is, where the
13 slope is on the tangent and it's showing you here
14 what the superelevation is for the curve section,
15 correct?

16 A. I believe so because it
17 seems -- if you look down farther there seems to
18 be a station given there that's -- that aligns
19 with those points where the superelevation is
20 given. So I assume that that's consistent with
21 the other curve data that was given in those other
22 tables.

23 Q. I think so, and we could
24 go back but I think that would probably impose
25 more on the patience of Commissioner. I think

1 what it does is it does match and so you can cross
2 reference where the superelevations are actually
3 to be on the alignment. That's what it's supposed
4 to do; is it not?

5 A. It's been a long time
6 since I read drawings.

7 Q. Just to recap --

8 MR. LEWIS: Sorry, go ahead.
9 We're past the normal time for break and I don't
10 want to cut in but whenever we get to a good
11 natural point would be good.

12 MS. JENNIFER ROBERTS: I'm so
13 sorry, I got so excited about superelevations I
14 forgot to look at my clock.

15 JUSTICE WILTON-SIEGEL: I
16 didn't want to interrupt your excitement when I
17 thought it was a fairly discreet section, it's
18 best all dealt with at once.

19 MS. JENNIFER ROBERTS: Thank
20 you for your patience, Commissioner. So let's
21 take our morning break, and thank you, Mr. Moore,
22 for your patience on this.

23 JUSTICE WILTON-SIEGEL: Let's
24 take 15 minutes and come back at couple minutes
25 before, two minutes before -- three minutes before

1 noon; is that right? No, not right. Come back at
2 5 to 12.

3 --- Recess taken at 11:37 a.m.

4 --- Upon resuming at 11:55 a.m.

5 BY MS. JENNIFER ROBERTS:

6 Q. Mr. Moore, I just want to
7 go back to a point and cover it off.

8 What's your understanding of
9 what a superelevation does?

10 A. I don't know whether I
11 can express it properly but it aids a vehicle in
12 transitioning around the curve of the roadway.

13 Q. So it's assisting the
14 driver in navigating the turn. It assists with
15 the forces, the lateral forces on a car around a
16 turn, the centrifugal and centripetal. Isn't that
17 how it's happening?

18 A. I believe that's what
19 it's supposed to do, yes.

20 Q. So you've got extreme
21 examples, if you sort of look at the Daytona
22 dramatic track, for instance. Consider that with
23 like a superelevation of I think 30 percent,
24 30 degrees. It's assisting the car staying on a
25 track going very fast. But in our roadways it

1 achieves the much more subtle superelevations
2 assist in the same way. Do I have that, right?

3 A. I believe that's correct,
4 and it's a function of speed.

5 Q. I want to go back to the
6 Philips drawing. First of all, if we could please
7 call up overview document 3.1, image 13. Call it
8 -- thank you, Registrar.

9 First of all, am I right that
10 this is the section designed by Philips?

11 A. I think there's some
12 overlap there with the section from McCormack
13 Rankin, but for the most part yes.

14 Q. As we go right below
15 Barton street that's McCormick Rankin?

16 A. I forget the exact
17 station where there's a transition there, yes.

18 Q. And do you agree this is
19 the most complicated section of the parkway in
20 terms of geometry?

21 A. It is fairly complicated
22 yes, and that you have to meet all the existing
23 crossings and incorporate the creek and the storm
24 water ponds and the environmental impacts, yes.

25 Q. The curve linear

1 alignment is tracking in part the creek valley?

2 A. For the most part, yes.

3 Q. I think you mentioned it
4 earlier, that the -- you have existing cross
5 streets of Greenhill, King, Queenston, Barton. So
6 you are stuck with distances for those
7 interchanges on the main line?

8 A. Yes.

9 Q. Can we please go to --
10 let me just say -- let's go to Dufferin 2535,
11 image 7, please. This is the first turn on the
12 Red Hill. Can you please -- Registrar if you can
13 please call out this drawing, in particular middle
14 section. No, not the table, the drawing. Thank
15 you. Too much please. There we go. Okay.

16 This is showing the -- if I
17 understand to be the first turn on the alignment
18 and this is the R420, that's the radius of the
19 turn?

20 A. I believe so, yes.

21 Q. If -- can we cross
22 reference, go to image 25. This is actually the
23 depiction on the drawings of that same turn, I
24 think, if we can -- top right. Can you go the box
25 at the top right, Registrar, so we can match this

1 up. Top right, very top. Bit smaller. Shows you
2 what this is. So this drawing shows the first
3 turn on the Red Hill because this is -- can you
4 see that, Mr. Moore?

5 A. I can see that, yes.

6 Q. If we go back -- you can
7 take out that call out now. Just placing it and
8 if you look at the right that's the drawing. The
9 one on the left tells you what the radius is. Do
10 I have that right? Sorry, the one on the left
11 tells what you the radius is for the turn and the
12 drawing on the right shows you the road. Got it?

13 A. There's a very short
14 curve in there that's 420 and then the very long
15 spiral.

16 Q. Okay. So can we please
17 -- that's the first turn. Let's go to the next
18 turn which is image 8. Can you please, Registrar,
19 just that area where you've got the two ramps and
20 the main line, can you call that out so we can
21 actually read it. Top right, please. Make it go
22 to the right, please. There we go.

23 Again, this is -- the main
24 line is the line through the middle and the radius
25 450, that's the radius for that turn; is that

1 correct?

2 A. For the curved portion of
3 that yes, it appears to be 450.

4 Q. So we've got 420. If
5 we're going to the north we've got a right turn,
6 420 left turn, 450. So we've got two tight turns
7 right in a row then?

8 A. Okay.

9 Q. Do you disagree with
10 that?

11 A. No.

12 Q. If we go please go to
13 image 10. Take you through this hopefully
14 quickly. So that's next turn. Third turn here.
15 Can you please call out the middle section where
16 those ramps are, Registrar. Thank you. There we
17 go. Again, this is third turn in the radius is
18 depicted at 690. Do you see that?

19 A. I see the alignment calls
20 it 690, yes.

21 Q. Image 11. This is easier
22 to see. Can you please call -- so we can see,
23 yeah, thank you. This is the fourth turn and the
24 radius 525.

25 A. That's what it says, yes.

1 Q. The superelevations
2 aren't depicted on these drawings so we have to
3 actually go to image 71. This is Philips. This
4 is again a cross section of the left side.
5 There's a cross section for a tangent, and on the
6 bottom is superelevation on expressway. Do you
7 see that?

8 A. Yes.

9 Q. The stations -- just as
10 Stantec did, it's showing locations for where this
11 cross section is, only here what Philips does is
12 it's got a cross section for superelevation but
13 it's basically applying this to the whole of the
14 alignment that it designs, 23900 to 27. Do you
15 see that?

16 A. Yeah, I see that.

17 Q. Do you disagree with that
18 interpretation, that that's the cross section
19 that's applied to the entirety of the Philips
20 section of the alignment?

21 A. That's what it says,
22 2390, 27,5 and then there's a number of asks first
23 that refers to, you know, different cross
24 sections, whether be a truck climbing lane or not
25 so --

1 Q. Those are different
2 stations?

3 A. Different stations, yes.

4 Q. And you'll agree with me
5 -- can you please call out this superelevated
6 section so we can read that a little bit more?
7 Registrar, can you make that bottom larger, the
8 whole drawing? Thank you. That's it.

9 This applied to -- the whole
10 of the Philips section has got a maximum
11 superelevation of 6 percent.

12 A. It says S percent or
13 6 percent, so I'm not quite sure. There must be a
14 table some place or other direction that shows
15 what that is.

16 Q. The maximum
17 superelevation is 6 percent. Is that how you read
18 it?

19 A. Yeah, that's a max.
20 Whether it applies to that section you would have
21 to go to the other table that tell you what it is.
22 In some sections the maximum may only be 4 percent
23 or 4.3 percent or 5.2 percent, whatever it is for
24 that. It's a little now not knowing the context
25 or being, you know, why it said S percent or

1 6 percent.

2 Q. Indeed, sir, so the
3 6 percent would apply to, for instance, the radius
4 for 20 turn but it wouldn't apply to the 690;
5 that's correct? There would be a lesser
6 superelevation for the less acute turn?

7 A. Typically that's the
8 case.

9 Q. And you would expect
10 though for each radius turn for the superelevation
11 to be identified for the turn, would you not?

12 A. There's got to be a table
13 some place and a grading that indicates what that
14 is. I mean, that's just -- this is just -- for
15 typical you wouldn't be able to calculate grades
16 off of this section. I mean, the other thing
17 that's given is your -- the alignment drawing is a
18 single line but I don't know where on this cross
19 section that line is, whether it's the right edge
20 of pavement or the left edge of pavement or the
21 centre line of the northbound lane of the
22 southbound lane or the centre -- the centre of the
23 right-of-way all together. So you need all of
24 that information in order to be able to calculate
25 that.

1 Q. Wait a second. It does
2 show you balancing. The right side of that
3 drawing is the northbound lanes and it's got the
4 future concrete barrier and it's got the
5 southbound lanes on the left side.

6 A. Right, but if you go to
7 the alignment drawing that showed you your curve
8 radiuses and your spiral tangents and tangents to
9 curves, I don't know on this drawing where that
10 line is.

11 Q. Oh, I see what you mean.
12 The single line that was --

13 A. The single line. It
14 didn't have five different lines, it only had a
15 single line. So somewhere on this drawing that
16 line applies to.

17 Q. That's an interesting
18 problem. So let us go to -- for instance, image
19 27. This is the alignment just at the King Street
20 interchange. Do you see that?

21 A. Yes.

22 Q. So this is a 450 turn, I
23 think. So unlike the Stantec drawing can we
24 enlarge the main line, Mr. Registrar? That's King
25 Street. Main line is on the bottom. These

1 drawings don't show you where the superelevations
2 are. Do you agree with that?

3 A. It doesn't appear to show
4 -- doesn't seem to have the same indication as the
5 other drawings. The consultants have different
6 ways of providing that information.

7 Q. Mr. Oddi yesterday said
8 that he expected there to be grading templates
9 which would show the detailed change in
10 elevations?

11 A. I would agree with that.

12 Q. But it's not -- okay.

13 A. There appears to be a
14 centre line down this drawing which would
15 coordinate with the alignment drawing, that that's
16 -- that line is actually the centre -- the exact
17 centre of the two northbound and southbound lanes.

18 Q. I see. So is that what
19 you're saying, it goes through the very middle?

20 A. Goes through the very
21 middle of the median, yes.

22 Q. That's the --

23 (Speaker overlap)

24 A. That's where that curve
25 is. That's where that curve measures that.

1 Q. That's helpful. Thank
2 you. We've heard a lot of evidence about what was
3 done in order to verify that the paving, mix
4 design met the specifications. What did Hamilton
5 do to ensure that the elevations and the
6 superelevations were constructed in accordance
7 with the design?

8 A. That's what the contract
9 administrator of their on-site inspection does.
10 The -- typically the contractor lays out the
11 grading stakes and provides a grade sheet for the
12 contract administrator to use and check the grades
13 and, again, it all starts with what they call a
14 subgrade which is the earth grade and that gets
15 graded and it's usually shot with a level to
16 ensure that it's within certain tolerances by the
17 CA to give the contractor approval to proceed with
18 the next layer. And subsequently with each layer
19 of granular up to -- ready to place the asphalt.

20 Q. So there's elevations are
21 shot at each level of placement of granular and
22 then the paving and verified. Is that what you're
23 saying?

24 A. Paving isn't typically
25 done, isn't typically shot. It's typically based

1 on depth. Once you set that final granular level
2 it's a very -- that final granular level has a
3 very tight tolerance rather than the other levels,
4 so that once you place -- you know, you're being
5 asked to place 50 millimetres or 60 millimetres,
6 whatever it is, of rich bottom mix. If you place
7 an equivalent 60 millimetres across then you've
8 met the grade and you subsequently build on each
9 layer.

10 Q. Got it. Would you not go
11 at the final asphalt layer, verify the grades?

12 A. I don't know whether we
13 did that or not.

14 Q. I just want to go -- just
15 look at some of these interchanges. Can we please
16 turn up image 23. I just want to go through. So
17 this is effectively beginning of that, I think
18 beginning of the Philips section. This is at
19 Greenhill?

20 A. Yes.

21 Q. Can we please go to image
22 24. Goes through -- and here we've got on the
23 bottom we've got the lane coming off Greenhill
24 onto the main line?

25 A. Yes.

1 Q. Can we please go to image
2 25. We looked at this before. This is where the
3 420, 420 radius turn is. You'll see, sir, that
4 the northbound lane has three lanes here; one has
5 just caught people coming off from Greenhill and
6 the next one we're going to see the exit lane. If
7 we can please then go to 25 -- sorry, 26. You see
8 that?

9 A. Yes.

10 Q. As between those two
11 roads that you've got an extra lane that's to
12 allow, as I understand it -- do I understand it
13 right that is there to allow traffic to come off
14 that Greenhill and onto the main line and then
15 traffic exit main line onto King?

16 A. Yes.

17 Q. Can you please go to 27.
18 So we just looked at this. So again this is the
19 turn that's just at King Street. This is a 450
20 radius turn for -- headed northbound. This is a
21 turn to the. Left so we've got from a right turn
22 a left turn and we've got ramps coming off King
23 Street onto the main line. Do you see that?

24 A. Yes.

25 Q. On the southbound side of

1 the top part of this drawing we've got the exit
2 from King onto the main line?

3 A. Correct.

4 Q. I just want to note
5 something and get your view on it. As I read this
6 we've got that ramp coming onto the main line on
7 effectively that 450 radius turn. You see that?

8 A. Okay.

9 Q. Am I interpreting it
10 right, sir?

11 A. Well, I mean, depends.
12 There's a very long speed change lane there, so, I
13 mean, I don't know whether it meets the roadway --
14 I can't be sure from this drawing exactly where
15 along that curve it intersects. It transitions
16 along the length of that all the way to Queenston
17 Road.

18 Q. But the bullnose from
19 that turn is basically -- sorry, the bullnose on
20 that ramp looks as though -- can you please call
21 out the middle part of that drawing of the main
22 line, just the main line. So this is the ramp.
23 Looks as though the bullnose of that turn is
24 essentially where it's saying the 4.75 and the --
25 is it T25? You see that?

1 A. Are you looking at the
2 one going south or the one going north?

3 Q. Southbound.

4 A. Southbound. Okay. I
5 don't know where on that curve that bullnose is.
6 Suffice to say it's on either the spiral or the
7 curve proper.

8 Q. Am I correct in
9 understanding that that's not preferred and
10 designed because it affects -- it affects your
11 site distance if you're coming onto a main line on
12 a turn?

13 A. I'm not a geometrics guy
14 in what's preferred and how you handle it. I
15 mean, there's preference but then there's design
16 details and given that these went through
17 professional consultants providing these designs
18 and subsequently reviewed by MTO prior to any
19 tenders, I wouldn't have thought there would be
20 any problem with this type of orientation.

21 Q. You just said something
22 interesting that I don't think I knew, that the
23 drawings for the alignment were also reviewed by
24 the MTO?

25 A. MTO was a funding partner

1 of this project up to 60 percent. So they were --
2 I don't know what detail now, what the level of
3 detail was, but they were involved in all aspects
4 of the design and tender of this project.

5 Q. If I just ask the
6 question in terms of a more general one, given
7 that you have confined right-of-way where you're
8 building this following the creek. Am I correct
9 in understanding some of these geometric decisions
10 as a consequence of really confined space?

11 A. I'm not quite sure I
12 understand the direction. I mean, the road was
13 designed according to standards and within the
14 constraints that existed at the time.

15 Q. Exactly what I'm trying
16 to understand, the constraints that it was
17 designed under.

18 A. There was challenges but,
19 I mean, I believe that we overcame those
20 challenges with more than appropriate answers to
21 those challenges in getting this built.

22 Q. As for the exit for the
23 ramp coming out on the main line on the turn,
24 you're saying that's something the designers
25 accepted and end of story?

1 A. I don't know that that's
2 -- I don't know that's unique to hear. I can of
3 several other places along MTO roadways where
4 that's the case and where the ramp comes out, the
5 LINC ramp out onto the 403, and at Ancaster comes
6 out on a curve. The LINC 403 southbound comes out
7 on a curve. A lot of the ramps down through the
8 valley on 403 from Main Street and King Street
9 transition on curves. So it's not a unique
10 situation.

11 If you look in our manual is
12 it desirable, if you are building a brand new
13 roadway across a flat land that might be -- this
14 is what you want if you can get it. But that
15 doesn't necessarily mean that's -- that there's
16 other -- not other avenues or opportunities to put
17 those in.

18 The fact that these ramps came
19 down off of a curve did more than visual
20 opportunity for drivers merging and for drivers
21 allowing them to merge. The length of the speed
22 change lane. You may not want a very short speed
23 change lane, a direct ramp where you come off the
24 ramp and then are forced into the lane, but with a
25 long speed change lane especially on the

1 northbound lane where the lane runs all the way to
2 Queenston Road gives you an opportunity to be in
3 your lane, stay in your lane, pick your
4 opportunity merge if you are leaving that. And
5 the same with the length and speed change lane on
6 the King Street ramp southbound. Those are the
7 types of things you use to mitigate your
8 challenges.

9 Q. You're anticipating the
10 very place I was going to go to next. Let us just
11 look at that. If we now look at the northbound
12 lane what -- on the left side -- actually, can we
13 take out the call out? So we've got on the
14 northbound lane, which is the bottom of this
15 drawing, northbound lanes, you see that in the
16 alignment?

17 A. Hm-hmm.

18 Q. We've got the entrance
19 onto the main line from King. Is that what that
20 is?

21 A. At the bottom, at the
22 east-west, north ramp, yes.

23 Q. If we could please go to
24 28, image 28. So these are the three lanes on the
25 main line at this point. And again, am I right in

1 understanding the bottom line here is the speed
2 change lane as people come off that ramp from King
3 and were just about to go on the ramp to
4 Queenston?

5 A. Two through lanes and
6 what they call an auxiliary lane at this point.

7 Q. Is that the weaving lane?

8 A. It fundamentally becomes
9 that. I mean, if people are -- there's a double
10 exit at Queenston Road so you don't have to get
11 into that lane if you want to exit. But you do
12 need to get out of the axillary lane if you don't
13 want to exit. So it gives the lane -- the
14 extending the lane for the entire length between
15 the two -- between the onramp and offramp gives
16 sufficient opportunity for those drivers to make
17 those decisions.

18 Q. Can we please go to 29,
19 just to finish the point, the exit. As you say,
20 there's two exit ramps for -- this is Queenston.

21 A. Right.

22 Q. So notwithstanding there
23 is actually not much distance between King and
24 Queenston. You're saying you provided for people
25 coming on and off the main line with that

1 additional moving lane, as it becomes.

2 A. No, there's sufficient --
3 that weaving length, I mean I believe that we
4 moved the ramp to the other side of King Street to
5 provide for that extra lane. I mean, there's a
6 calculation somewhere in traffic planning that
7 says you're going to have this many vehicles and
8 if this percentage comes on and this much
9 percentage goes off then you should provide this
10 much length type of thing.

11 Q. Thank you. Just want to
12 go to the signage. It's part signage part B
13 drawings, Dufferin drawings again. Stantec's
14 design, I think. 2537. Dufferin 2537, please,
15 Registrar. One short point there.

16 So my understanding is that
17 Dufferin did this -- part D drawings which include
18 -- is that right -- so it's providing for signage.

19 A. (Indiscernible reading).

20 Q. Can we please go to image
21 23. There we go. Let's just -- can we go to the
22 top right box so we can show the location. Thank
23 you. This is the area just before King Street.
24 So again this is the 420 radius turn.

25 A. Okay.

1 Q. This is showing the exit
2 and the signage for the exit, as I understand this
3 drawing. Let's go back to the drawing, please.

4 This shows the location for
5 the signage for this ramp. Is that what --

6 A. It's showing all the
7 signage along the expressway, both north and
8 southbound.

9 Q. I just want to note
10 something. There's something missing from this
11 drawing. Do you know from this drawing if there's
12 a railway crossing?

13 A. There's a bridge, a grade
14 separation over top of the roadway at this
15 location.

16 Q. Right. We can't see it
17 on the drawing. I think it's shown -- if we can
18 go back to where that top right again, I think
19 it's shown on that. Registrar, can we please go
20 back to the small box top right? Thank you. Is
21 that line crossing the main line. Is that where
22 the --

23 A. I believe it is, yes. I
24 believe that's the location, approximate location
25 of the (indiscernible) crossing.

1 Q. Thank you, Registrar.
2 Can we go back to the drawing. So it's not shown
3 here. So you'll agree with me that Stantec's
4 provided for the drawing showing location for the
5 signage but they haven't shown where the railway
6 crossing is on their main drawing here.

7 A. I'm not sure why that's
8 relevant but....

9 Q. I'm going to suggest it's
10 relevant because if you got the crossing over top
11 of the road you can't see the sign until you've
12 got under the railway bridge.

13 A. The railway bridge in
14 this location is very, very high and expands way
15 up the slopes. So it's not like a closed portal
16 where it's like a tunnel. It's a very high bridge
17 so it doesn't restrict the view along the freeway.

18 Q. I see. Mr. Oddi
19 yesterday evidence that it wasn't necessary --
20 sorry, he gave evidence and I think you agreed
21 largely with it, that it wasn't necessary to have
22 as-constructed drawings where you're essentially
23 constructing what was designed. Do you agree with
24 that?

25 A. I mean, if there's

1 changes you would like to have them recorded. If
2 there's not then you can -- you don't need them.
3 But again, I mean, if in 35 or 40 years you're
4 going to do changes here -- you are going to have
5 to go back and resurvey it anyways, so there's not
6 going to be any real use for as-built drawings.

7 It's a little different in
8 that this corridor is separate from a normal
9 roadway where you might be relocating Bell, gas,
10 hydro, you know. You would have a number of water
11 surfaces and sewer services that in the short term
12 future you would want to know where those are.
13 This is not the case. The only thing there is the
14 road and the structures that are apparent.

15 Q. But isn't it the case,
16 sir, that it was the intention from the outset
17 that you would add lanes of traffic as soon as the
18 numbers, vehicle numbers warranted it? So you are
19 always are going to construct more here?

20 A. Yeah, the -- I believe
21 that thought was that that was not until you were
22 beyond the -- at least the first maintenance
23 requirement on the roadway. So if they had
24 thought it was going to be within the first
25 10 years it would have been more cost-effective to

1 build it initially, but I think the thought was it
2 was going to be beyond 10 to 25 years.

3 Q. But before you got the
4 as-builts here is, in this instance at least for
5 the Philips section, you don't actually know --
6 you don't actually know much of what's necessary
7 to know for the alignment. You don't know the
8 superelevations and you don't have elevations on
9 these drawings.

10 A. Well, you're not going to
11 change those. You're simply going to build in the
12 centre when you add the lanes. That's the way it
13 was done as a design.

14 Q. So you're saying the fact
15 it doesn't have that detail didn't matter?

16 A. Doesn't matter. You
17 remove the asphalt to the edge of the shoulder,
18 you dig out the centre portion, you add the
19 granular -- because even the drainage is already
20 all in place. You just build the centre median,
21 put the barrier on the overhead signs are in their
22 ultimate location. That's the way it was designed
23 so that -- there's nothing really to design beyond
24 that.

25 Q. If the superelevations

1 weren't constructed as they should have been, sir,
2 you are just repaving over the top and repeating
3 it, aren't you?

4 A. I'm sorry?

5 Q. If the superelevations
6 weren't in fact designed or constructed as they
7 should have been, aren't you just repeating the
8 error?

9 A. I have no reason to
10 believe they weren't built as per specifications.

11 Q. Thank you. Those are my
12 questions. Thank you, Mr. Moore. Thank you
13 Commissioner.

14 JUSTICE WILTON-SIEGEL: Ms.
15 McIvor.

16 MS. MCIVOR: Thank you,
17 Commissioner.

18 EXAMINATION BY MS. MCIVOR:

19 Q. Mr. Moore, you just
20 stated that MTO was involved in all aspects of
21 design and tender of the Red Hill project. We've
22 now reviewed thousands of documents in this case,
23 all of which indicate that the City and its
24 contractors set the design standards for the
25 project and devised all of the tender documents.

1 We've also now heard from many other City
2 witnesses and contractors and none of them have
3 indicated that the MTO had input into this
4 project, and certainly not a right of approval.

5 Is your evidence really that
6 MTO personnel were involved in the design and
7 tender of this project?

8 A. Central region planning
9 and design was involved in this because of the
10 funding agreement and they reviewed our plans to
11 make sure which items were fundable and which ones
12 weren't in that regard.

13 Q. And Mr. Moore, who from
14 the Ministry of Transportation are you referring
15 to?

16 A. I mean, Roger Hamner was
17 the director I think of central region at the
18 time.

19 JUSTICE WILTON-SIEGEL: Sorry,
20 who?

21 THE WITNESS: Sorry, Roger
22 Hamner. I know Joe Constantino. There are others
23 but time obliterated their names. I can see their
24 faces but I can't....

25 BY MS. MCIVOR:

1 Q. Is your evidence there
2 was a funding agreement that gave MTO input or a
3 say in how the Red Hill was ultimately designed?

4 A. Absolutely. When the
5 funding was withdrawn there were years of constant
6 meetings between the City and MTO with what could
7 be -- what could be lived with in terms of
8 alignment and how would it tie in with the QEW
9 interchange. The eventual agreement between our
10 regional chair and the minister on the funding
11 between MTO taking the QEW and the City getting
12 the 403 interchange. All of that was ongoing from
13 the time that we started the project and flipped
14 to the east-west.

15 Q. So, Mr. Moore, I
16 understand and appreciate that MTO has
17 jurisdiction over the interchange from the QEW.
18 Are you indicating that MTO has jurisdiction over
19 the main line of the Red Hill in terms of this
20 being a joint provincial/municipal project?

21 A. They were a funding
22 partner.

23 Q. Right. They were a
24 funding partner --

25 A. City initiative, a

1 funding partner, and they were quite involved in
2 saying what they were going to share funding in
3 and what they weren't.

4 Q. Right. So what you're
5 saying is that the province provided funding,
6 historical funding for this project; is that
7 right?

8 A. That's correct.

9 Q. Okay. And these are
10 discussions about the level of funding that were
11 drawn out over the course of several years; is
12 that right?

13 A. That's part of it, yes.

14 Q. Okay. Are you going a
15 step further and saying that the Ministry of
16 Transportation had personnel that were involved in
17 the design of the main line Red Hill Valley
18 Parkway in the course of those design efforts with
19 Golder and with the City?

20 A. I don't know whether it
21 was to that degree. I do remember that they were
22 reviewing the, for lack of better words, the
23 tender drawings and quantities and items so that
24 when we submitted invoices, for lack of a better
25 word, for our funding that they were already

1 approved, that yes, we're are going to pay for
2 that, we're not going to pay for this.

3 Q. Mr. Moore, the Ministry's
4 funding, if I recall, ended in -- I believe the
5 last payment was made in early 2005. Does that
6 sound accurate?

7 A. No, I would have thought
8 it wouldn't have ended until the -- it was for
9 60 percent I believe for the north-south portion,
10 so I don't know why we would get money ahead of
11 that unless it was -- they had upfronted some
12 money but I don't -- I would have expected that it
13 would have been after 2007, but I don't recall.

14 Q. So what I'm hearing is
15 that you have assumed that the MTO had some
16 involvement in your project, a project you
17 facilitated, you engaged a contractor for, you
18 decided on the use of materials, and you oversaw
19 the procurement on in 2005 and thereafter. Is
20 that in fact what you are saying?

21 MR. LEDERMAN: I think the
22 witness has answered the question.

23 JUSTICE WILTON-SIEGEL: No,
24 no, Mr. Lederman. I'm going to allow this
25 question.

1 MR. LEDERMAN: Very well.

2 THE WITNESS: I just want to
3 understand clearly. Yes, MTO was involved in our
4 project and did review our drawings. It's my
5 recollection.

6 BY MS. MCIVOR:

7 Q. And on what dates did
8 they review your drawings and which drawings?

9 A. I couldn't -- I couldn't
10 tell you.

11 Q. You can't say. Can you
12 say whether that's just in the context of coming
13 up with their own drawings for the interchange?

14 A. There was a lot of back
15 and forth because obviously we had to meet at the
16 same spot coming for the -- them coming south from
17 the Queenston Road, or from the QEW interchange
18 and us coming out over the creek to meet and have
19 the same cross sections and (indiscernible) works.

20 Q. My question is over and
21 above that, over and above what would occur for
22 the interchange on the QEW, is your evidence
23 really that MTO had a say in the drawings and the
24 design of the Red Hill Valley Parkway?

25 A. No, that's not -- I

1 didn't say that they had that level of -- I'm
2 saying they were familiar with the drawings in
3 that they were reviewed for the context of
4 payment. If they told us, listen, the way you're
5 doing this isn't the way we're doing it, we're not
6 paying for that, that was a discussion.

7 Q. And so our evidence will
8 be, I expect the MTO witnesses will say that they
9 are not familiar in that way with any design
10 drawings or any tender documents put together for
11 the Red Hill Valley Parkway. Does that change
12 your evidence?

13 A. No. That would surprise
14 me.

15 Q. I trust that there are
16 documents to support what you are saying because
17 now we've provided hundreds of thousands of
18 documents to the inquiry, none of which indicate
19 that there was any sort of approval or feedback
20 solicited from MTO, so I trust you have documents
21 to support this?

22 MR. LEDERMAN: I don't think
23 that's an appropriate question, Mr. Commissioner.

24 JUSTICE WILTON-SIEGEL: We
25 have to remember that is not litigation at this

1 point. This is an inquiry.

2 If you put the question in
3 terms of are there any documents, you can allow it
4 to go forward. I will allow it to go forward.

5 BY MS. MCIVOR:

6 Q. Mr. Moore, are the
7 documents to support your assertion that MTO
8 approved the design of the Red Hill Valley
9 Parkway?

10 A. I don't have any
11 documents.

12 Q. Are there any documents
13 to support that the MTO had involvement in the
14 design of the Red Hill Valley Parkway?

15 A. I don't know.

16 Q. And you've mentioned
17 Roger Hamner and Joe Constantino. In what aspects
18 were each of them involved in what you're saying
19 they were involved in?

20 A. I know they were, in
21 their positions during the work -- we did work
22 with them closely. We had constant meetings with
23 them. There were others but I can't remember the
24 names right now. There was one or two people
25 assigned to this project for the funding review

1 purposes.

2 Q. In what years were those
3 meetings being held?

4 A. During the project.

5 Q. Could you be more
6 specific, please. The funding discussions
7 occurred over the course of decades. So I would
8 appreciate it if you could be more specific.

9 A. We were discussing with
10 the MTO about the -- all the alignment work and
11 how we were going to build it and that type of
12 thing as early as I think '98 and through until
13 the end of the project, would be my recollection,
14 in 2007.

15 Q. Mr. Moore, I'm going to
16 suggest to you, and it sounds like you now agree,
17 that MTO did not have any form of approval or
18 formal involvement in the design of the parkway.
19 Is that your evidence now?

20 A. I don't remember any
21 formal agreement that gave them that. They
22 definitely were involved in the review of the
23 drawings and the quantities for the funding
24 payment purposes.

25 Q. Will that be the evidence

1 as well from Golder personnel who were involved in
2 the design of the Red Hill Valley Parkway?

3 MR. LEDERMAN: How does that
4 --

5 JUSTICE WILTON-SIEGEL: I'm
6 not sure that I understand how Mr. Moore can
7 answer that question.

8 MS. MCIVOR: I'll rephrase it.

9 JUSTICE WILTON-SIEGEL: Yes.

10 BY MS. MCIVOR:

11 Q. Is your evidence, Mr.
12 Moore, that you worked collaboratively with Golder
13 and personnel from MTO when designing the
14 specifications for the Red Hill Valley Parkway?

15 A. I don't know whether our
16 consultants were involved during our meetings with
17 the MTO or not.

18 Q. And, Mr. Moore, you
19 mentioned a funding agreement. Do you know the
20 year that the funding agreement was executed?

21 A. I would say the original
22 one was in either '87 or '88, because that's when
23 the project first got kicked off after the
24 consolidated hearing board approval and the final
25 judicial review and the province came through with

1 the funding. So I'm not quite sure of the exact
2 timing of that agreement because it may have been
3 before I joined the project. And then there may
4 have been an amendment to that agreement when
5 Minister Palladini meant with our original chair
6 and the QEW, 403 cost came in.

7 Q. Mr. Moore, this may be
8 more appropriately put to counsel, but I trust
9 that those funding agreements have been produced
10 in the context of this inquiry?

11 MR. CHEN: I'll have to look
12 into it.

13 MS. MCIVOR: Commissioner, I
14 would just like to clarify MTO will speak to the
15 level of their involvement in this project, of
16 course. I would also request that we look into
17 the production of these funding agreements given
18 that Mr. Moore has asserted that they speak to MTO
19 involvement in the design of the parkway as well.
20 And subject to those concerns, those are my
21 questions.

22 JUSTICE WILTON-SIEGEL: Well,
23 thank you. And with respect to the last point,
24 Mr. Chen said they will look into it and we'll
25 address that if and when there's an issue that's

1 raised.

2 MS. MCIVOR: Thank you,
3 Commissioner.

4 JUSTICE WILTON-SIEGEL: It's
5 now 12:55. Dufferin said they had ten minutes.
6 Is that still your expectation?

7 MS. LAURION: We have no
8 questions at this time.

9 JUSTICE WILTON-SIEGEL: That's
10 even less than ten minutes. Then I think it would
11 probably would be best if we took our lunch break
12 now rather than starting into the City's
13 examination. It's five to, so let's come back at
14 10 past 2:00. We'll stand adjourned until that
15 point.

16 --- Recess taken at 12:56 p.m.

17 --- Upon resuming at 2:10 p.m.

18 EXAMINATION BY MR. CHEN:

19 Q. Good afternoon,
20 Commissioner, Mr. Moore, I just have a couple of
21 questions for you this afternoon.

22 To start, I would like to
23 continue off with a discussion where you were --
24 you had mentioned a formal agreement between the
25 MTO and the City of Hamilton or the region of

1 Hamilton-Wentworth. Over the lunch break we were
2 able to locate some documents. Our review is not
3 complete, Mr. Commissioner, that touched on what
4 Mr. Moore had raised in terms of that funding
5 agreement and the MTO's role in reviewing designs.

6 So Mr. Moore, in your
7 evidence, I just reviewed the real time
8 transcript, although we didn't recall any formal
9 agreement offhand, you testified that the MTO was
10 involved in the review of the drawings and I think
11 quantities for the funding payment purposes, and
12 as I say foreshadow we believe we may have located
13 some documents to that effect.

14 We had just sent over to
15 Mr. Registrar a couple of documents, which I hope
16 he has received, and the first document we would
17 like to pull up is HAM18501.

18 THE REGISTRAR: It's going to
19 take me two seconds to put it in. I just received
20 it a sec ago. I apologize.

21 JUSTICE WILTON-SIEGEL: Can I
22 ask Mr. Chen, have the other counsel seen these
23 documents yet?

24 MR. CHEN: So they are in the
25 database and I believe they are part of the

1 productions, unless my team corrects me. They
2 have not.

3 JUSTICE WILTON-SIEGEL: Beg
4 your pardon?

5 MR. CHEN: They are part of
6 the productions so I believe the parties have
7 access to them.

8 JUSTICE WILTON-SIEGEL: So are
9 they -- do you know if they are included in the
10 overview document?

11 MR. CHEN: They are not
12 included in the overview document but they are in
13 the database.

14 JUSTICE WILTON-SIEGEL: Okay.

15 THE REGISTRAR: If you could
16 just repeat the call out?

17 MR. CHEN: HAM18501. Thank
18 you, Mr. Registrar.

19 BY MR. CHEN:

20 Q. Mr. Moore, this is the
21 first page, as you can see, is the MTO proposal
22 dated October 27, 1997 and there's the title
23 "Funding Agreement." Have you seen this document
24 before?

25 A. I may have but I don't --

1 I should have but I don't recall at this point in
2 time, no.

3 Q. That's fine. Let's just
4 take a look at some of the bullets in this
5 document. If we can first start with the heading,
6 the first heading, "Principles."

7 In the first bullet, if you
8 have a look at that, where it says the MTO and RHW
9 agree to enter into an agreement whereby MTO will
10 contribute \$106.75 million towards implementation
11 costs of the parkway. The video is blocking the
12 words. December 31st, 1995.

13 When you're done reviewing
14 that -- I appreciate this is a document --

15 A. Okay.

16 Q. I appreciate this is a
17 document that obviously arose, was put up here and
18 arose out of your discussion just right before
19 lunch, but is that bullet here consistent with
20 your understanding of the arrangement between the
21 MTO and region of Hamilton-Wentworth?

22 A. I believe this is the
23 revised one where they take over the entire
24 funding for the QEW interchange. The initial
25 funding agreement I believe they were only

1 contributing 25 million towards it, and this
2 appears to set the -- an upset limit 106.75 for
3 all those costs after 1995.

4 Q. So as I understand your
5 discussion with MTO counsel, there was what
6 appeared to me to be some dispute as to the
7 existence of a funding agreement at all and issues
8 with respect to MTO reviewing the design. So I
9 appreciate what you've just told me but I just
10 have a couple of questions about a couple of
11 bullets below this. So if you can take down this
12 call out. We don't need to call out at the
13 moment.

14 Move down to the next image,
15 which is under the heading "Administration."
16 First, Mr. Moore, look at the first bullet.

17 A. Yes.

18 Q. Is that consistent with
19 your understanding as to how this agreement
20 unfolded?

21 A. It was -- they needed to
22 know for cash flow purposes how we were going to
23 tender and how much we planned to spend each year
24 in general so that they could do their budgeting,
25 so that's what that -- that's what that bullet

1 would cover off.

2 Q. Now, looking at the
3 second bullet in bold, which appears to be
4 (indiscernible) execution. If you can review
5 that. I think it might be helpful to call this
6 one out, Registrar. Thank you.

7 A. Okay.

8 Q. Is that consistent with
9 your understanding?

10 A. That's -- that's
11 consistent with my recall, that we had to send
12 them all those details on every contract.

13 Q. Why is it that you would
14 have to send those contract documents which
15 included, as it says there, plans and general
16 specifications and cost estimates and so on?

17 A. It would be my
18 understanding that they -- the previous one that
19 they were building what's consistent with the
20 approval so they would want to see what we're
21 actually building and that it's consistent with
22 the approvals we received, and as far as I know
23 that were building the road according to some sort
24 of highway specifications that they could support.

25 Q. We can take that down.

1 Finally the third bullet under this heading, if
2 you can take a look at that.

3 A. Right.

4 Q. Does that go, in part,
5 the explanation you just provided with respect to
6 why documents were provided?

7 A. You wouldn't be able to
8 determine whether they were direct costs unless
9 you reviewed the documents in this regard.

10 Q. Right. We can take that
11 down, this call out.

12 Just take you to one last
13 bullet in this document under "Financial
14 Arrangements," the first one. In your evidence I
15 understood you make reference to the figure
16 60 percent. Is this consistent or reflect your
17 evidence from earlier today?

18 A. That was my recall, that
19 it was 60 percent in the north-south which was
20 from the QEW to Upper Gage and 50 percent in the
21 east-west.

22 Q. Perfect. Thank you. We
23 can take this document down.

24 Perhaps we can mark that as
25 the next exhibit, Mr. Commissioner. I understand

1 it will be 37.

2 JUSTICE WILTON-SIEGEL: 37?

3 MR. CHEN: Correct.

4 JUSTICE WILTON-SIEGEL: Yes.

5 I'll leave that to the registrar to mark.

6 EXHIBIT NO. 37: Funding

7 Agreement dated October 27, 1997, HAM18501

8 BY MR. CHEN:

9 Q. If we pull up another
10 document, Mr. Registrar, HAM51118. Mr. Moore,
11 this is an agreement dated October 22, 1998. We
12 have to go do the bottom. It's signed. Have you
13 seen this document before?

14 A. I don't recall
15 specifically.

16 Q. I just want to show you
17 the section on administration which I believe is
18 the next image, Mr. Registrar. Administration --
19 thank you.

20 If you can just look at these
21 three paragraphs, Mr. Moore. This is -- it
22 reflects what we saw before but I would like you
23 to let us know if there are any other details to
24 add. I understand this to be the formalization of
25 the proposal we looked at before.

1 A. I don't see any material
2 difference between this and what was in the
3 previous document in this regard.

4 Q. Perfect. Thank you. If
5 we can make this document the next exhibit.

6 JUSTICE WILTON-SIEGEL:
7 Hm-hmm.

8 THE REGISTRAR: Counsel, so it
9 will be Exhibit 38.

10 MR. CHEN: Thank you.

11 EXHIBIT NO. 38:
12 MTO-Hamilton-Wentworth Red Hill Creek Expressway
13 Agreement dated October 22, 1998, HAM51118

14 BY MR. CHEN:

15 Q. Just to change topics,
16 Mr. Moore. Yesterday you were asked about the
17 JEGEL testing. You recall that?

18 A. I recall that.

19 Q. And we can take this down
20 now, Mr. Registrar. Could we pull up HAM61641.
21 This is a document that you were shown yesterday,
22 Mr. Moore and commission counsel and Mr. Lewis had
23 asked you several times the purpose for which the
24 JEGEL reports were commissioned. And as I
25 understand your evidence you testified that to the

1 best of your recollection what the report itself
2 says is the testing was the track the performance
3 of the steel slag relative to the conventional
4 aggregate. Is that a fair recap?

5 A. Yeah.

6 Q. So when you used the word
7 "performance" what did you mean by that?

8 A. I guess it's the --
9 performance of the aggregate especially, or the
10 comparison of the steel slag with the aggregate in
11 the terms of overall roadway, you know, did it --
12 there was an inherent question on steel slag with
13 regard to the asphalt cement. That was always an
14 issue with steel slag in that it seemed to soak up
15 the asphalt cement more and tended to get brittle
16 faster than normal. So some of these tests would
17 show ravelling or loss of the fines, especially
18 the sand patch test, not necessarily the British
19 pendulum test, as I understand. That's where I'm
20 looking at in performance, is the overall -- is
21 the roadway holding up in all aspects. Is it
22 cracking prematurely, is it breaking apart, is it
23 still performing a smooth surface for the vehicles
24 that are travelling there.

25 Q. So yesterday you had used

1 a phrase "overall wear of the mix." Is that
2 consistent or reflect what the description you
3 just private or?

4 A. Yes. In a broad view,
5 yes.

6 Q. Mr. Lewis had put to you
7 the purpose for skid resistance was ultimately for
8 traffic safety. From your understanding is there
9 anything in these reports that indicate that the
10 testing was undertaken to assess safety as opposed
11 to explanation just you provided?

12 A. We were more concerned
13 with the actual mix, the actual pavement, and its
14 performance and when we would have to replace it
15 and those types of things. When someone says
16 safety to me it usually is -- refers to the
17 operation of the road, which we weren't -- that
18 wasn't our specialty in terms of its operation
19 because it has so many other aspects. Our concern
20 here was of the road itself.

21 Q. Thank you for that
22 clarification. We can take this document down and
23 we can bring up HAM10055.

24 Mr. Moore, following from the
25 JEGEL reports yesterday you were asked questions

1 from an excerpt in the pavement design and
2 management guide that was faxed to you by Dave
3 Hein on July 20th, 1999. The document you see
4 here was I think shown to you yesterday and --
5 there's the cover page.

6 I just want to that understand
7 why this was sent to you because it was not clear
8 to me if we were discussing yesterday with
9 Mr. Lewis, and there's a little reference to a
10 request by you in the body of this fax. So what
11 is your recollection, if you have one, of why this
12 was sent to you?

13 A. I don't have any direct
14 recollection in that regard, but, I mean, it seems
15 that he's either responding to a request or giving
16 me -- I don't want to speculate. I don't know
17 really why -- you know, he's just sending me some
18 general information. So whether I didn't have the
19 knowledge to understand a previous report and he
20 was giving me some additional information, I don't
21 know.

22 Q. So I just want to
23 understand what it is that you reviewed at the
24 time and understood about the contents of the
25 excerpts that are attached to this fax.

1 The next document, Mr.
2 Registrar, is HAM10056. This is the first page,
3 the excerpt from this guide, Mr. Moore. You had
4 testified yesterday that you were familiar with
5 the pavement design and management guide by TAC.
6 When you said you are familiar with it, what did
7 you mean by that?

8 A. I'm aware of the guide.
9 In fact, I was on a TAC committee to revise the
10 guide sometime in late 2014, '15, I would say,
11 whenever the last revision came out. Before that
12 -- I mean, it's an all-inclusive guide. It tells
13 you everything from subgrade to the final
14 maintenance on what -- you know, it's a very
15 comprehensive guide. So if you're looking for
16 pavement information or anything like that this
17 would be would the guide to turn to, but it's not
18 -- it's not something we used routinely, or even
19 non-routinely, other than I was aware of the
20 guide.

21 Q. Understood. Would you
22 have been familiar with the guide at the time you
23 received this fax in 1999?

24 A. When was this?

25 Q. This was sent to you on

1 July 20th, 1999.

2 A. 1999, I would say no.

3 Q. So before we go into the
4 excerpts of the chapter again, what was not clear
5 from yesterday is to what extent you reviewed the
6 document. Did you have a independent recollection
7 of receiving this document?

8 A. I don't.

9 Q. Do you have an
10 independent recollection of -- this may have been
11 answered, but by form of question, reviewing any
12 part of this document?

13 A. I don't.

14 Q. I want to look at some of
15 the sections that you were shown yesterday by
16 Mr. Lewis. If we can turn to image 4. You were
17 asked about these two diagrams yesterday, so
18 starting with the top one, Mr. Moore. You
19 testified, you'll see some handwriting there at
20 the top, that that's not handwriting; is that
21 correct?

22 A. I don't recognize it to
23 be mine, no.

24 Q. For the questions
25 yesterday it was not clear to me whether you had

1 seen this graph prior to this inquiry commencing.

2 Had you seen this graph before?

3 A. Not that I recall, no.

4 Q. Yesterday you were asked
5 to interpret what this graph was showing and you
6 provided various answers and you made reference to
7 (indiscernible) 55 and 66. Were your answers on
8 this graph based on knowledge that you had at the
9 time in July 1999 or was that based on your
10 (indiscernible) when you just reviewed it
11 yesterday with Mr. Lewis?

12 A. I think yesterday was I
13 think the first time I really seen this or talked
14 about it. I don't -- I don't ever recall seeing
15 this before.

16 Q. So similarly, if we can
17 just scroll down, the diagram at the bottom, and a
18 similar question. Prior to yesterday had you seen
19 this diagram before?

20 A. I may have seen diagrams
21 like this before. I don't know whether it was
22 this one or not it and it may have been in school
23 but -- because it's a -- I think it's a standard
24 illustration type of thing. I don't have any
25 specific recollection of where or when I might

1 have seen it.

2 Q. Just so we're clear. You
3 were asked questions by Mr. Lewis about this graph
4 and you provided various answers. So were your
5 answers yesterday on this diagram based on what
6 you knew at the time in 1999 or from your review
7 of it yesterday?

8 A. I think maybe I was aware
9 at the time that there was a difference in
10 macrotexture and microtexture, but I don't -- you
11 know, two components of aggregates and asphalt,
12 but I don't know beyond that whether I had any
13 other clear knowledge within -- in that regard.

14 Q. Thank you for that
15 clarification.

16 In the next section 2.6.4
17 titled Uses of Friction Data -- I've lost the
18 image number but this is it. Thank you
19 Mr. Registrar. Changes in friction 2.6.3 and Uses
20 of Friction Data 2.6.4. Just starting with
21 changes in friction, Mr. Moore.

22 Just to recap, you were asked
23 yesterday about I think the second paragraph which
24 refers to factors that may contribute to friction
25 changes. You see there are no notations here from

1 Mr. Hein. So it was not clear from the evidence
2 yesterday that -- is this a section that you have
3 an independent recollection of reviewing back in
4 1999?

5 A. No, because I don't -- I
6 don't remember -- I don't remember seeing the
7 document so I don't remember specific -- any
8 section within it.

9 Q. So to the extent that you
10 answered questions in relation to this section
11 yesterday, I take it it was just based on your
12 reading of your knowledge as of yesterday?

13 A. I would have to say so,
14 yes.

15 Q. And then moving -- take
16 that down and call out the next section, 2.6.4
17 Uses of Friction Data. Again, you were asked
18 questions by Mr. Lewis about the information in
19 this section, and again there are no notations
20 from Mr. Hein. Is this a section you had an
21 independent recollection for viewing back in
22 July 1999?

23 A. No, I don't. I don't
24 have recollection of looking at the document.

25 Q. Mr. Lewis -- it's the

1 fourth line down, first paragraph. Mr. Lewis
2 asked you if friction test data may be used in the
3 pavement management system to rank safety-related
4 rehabilitation treatments, and you had answered
5 that it is something that could have been used.
6 Was your answer based on the knowledge that you
7 had back in July 1999 or was it based on your read
8 and knowledge as of yesterday?

9 A. I don't -- I would have
10 to say it was -- I didn't have that knowledge in
11 1999 in that regard.

12 Q. You can take that down.
13 And my last question on this document is more
14 generally. These excerpts you received from Mr.
15 Hein, would you have consulted them at any point
16 after this time?

17 A. Would I have or did I?

18 Q. Do you have a
19 recollection of doing so?

20 A. No, I don't.

21 Q. Thank you. You were also
22 asked -- now we're changing -- take that down.
23 Going on to another paper that Mr. Lewis asked you
24 about, and, Mr. Registrar, the document ID is
25 GOL1567. That's just the cover of the book. Turn

1 to image 9.

2 So, Mr. Moore, Mr. Lewis had
3 asked, referring to table 5 at the bottom right
4 corner there. Mr. Lewis had asked whether you
5 were the one that provided the information
6 contained in this table to Paul Anderson, who is
7 the lead author of this paper, and he suggested to
8 you that the data must include at least results
9 from the JEGEL testing. Do you remember that?

10 A. I remember the question,
11 yes.

12 Q. At the end of that
13 discussion about what data may or may not have
14 been provided, you were taken to reference 8 which
15 is at image 10. Mr. Registrar, could you just go
16 to that very quickly. It's a reference 8 which
17 was the, call it footnote in that table, appears
18 to be where the data was drawn from, and you were
19 asked whether you knew the author and your answer
20 was you did not. Do you recall that?

21 A. I do.

22 Q. Just to close the loop on
23 that, do you recall providing this report to
24 Mr. Anderson?

25 A. No, I do not. I don't

1 recall even the existence of this report but....

2 Q. That was going to be my
3 next question. So was yesterday the first time
4 that you were made aware of this report?

5 A. I believe it was.

6 Q. We can go back to table 5
7 just to clarify the role that you had, Mr. Moore.
8 Do you have an independent recollection of
9 providing any historical data to Mr. Anderson for
10 table 5?

11 A. I can't say that I do. I
12 don't know whether I give him any copies of any
13 reports from the LINC work or not, I have no idea.

14 Q. There's no indication
15 here it is there's any data other than what's
16 referenced in reference 8.

17 A. That's true.

18 Q. Do you have any -- are
19 you able to say with any certainty whether table 5
20 incorporates the results from the JEGEL testing?

21 A. Now that I see the
22 (indiscernible) that's the reference to the -- to
23 where the information came from then I would have
24 to say it didn't include any of the JEGEL stuff,
25 otherwise the JEGEL -- if he had that it should

1 have been referenced in his summary at the end.

2 Q. Thank you. Just looking
3 at the fourth column that raises the steel slag
4 aggregates. So we know about the LINC. I believe
5 you touched on this yesterday, but can you tell us
6 if the City of Hamilton used steel slag on any of
7 its street (ph) historically prior to 2002?

8 A. Extensively they did. It
9 was -- it was an approved aggregate in our list of
10 things for contractors to use in the pavements.

11 Q. Just in terms of
12 timeline, how far back are you thinking?

13 A. Well, I was only at the
14 region since '88, really wouldn't be familiar with
15 beyond -- other than -- I know that they used it
16 for lots of projects before that but....

17 Q. Thank you. I just want
18 to confirm -- we can take this down,
19 Mr. Registrar. Moving on to a next point which is
20 largely clarification, Mr. Moore.

21 There's been discussion about
22 this your understanding of the structure of the
23 perpetual pavement used on the Red Hill, and Ms.
24 Roberts may have clarified this with you in her
25 questions. If you can pull up HAM50815.

1 Mr. Moore, yesterday you were
2 asked by Mr. Lewis whether the perpetual pavement
3 structure was as set out in the e-mail, which
4 shows a 40-millimetre SMA (indiscernible) -- rich
5 bottom layer. You said you believe it was.

6 Just so I understand your
7 answer, was it that as of this date this is what
8 the perpetual pavement design was?

9 A. It's my e-mail so I would
10 -- I mean, I don't have any other recollection and
11 I wouldn't say any different than what I knew at
12 the time so....

13 Q. It was probably a poor
14 question on my part, but if we can also bring up
15 just to the side a bit OD3, image 72, as a
16 side-by-side. You'll see photograph 2 on the
17 right side there with the caption "The asphalt
18 pavement structure on the main line of the Red
19 Hill Valley Parkway." I understand the binder of
20 course is the SP19 and SP25; is that correct?

21 A. Right.

22 Q. That's a total of 120
23 (indiscernible)?

24 A. It appears so, yes.

25 Q. So is that your

1 understanding of what the final perpetual pavement
2 structure was?

3 A. It appears to be. I
4 couldn't tell you when it was changed or modified
5 to increase those depths but....

6 Q. I wasn't seeking those
7 details. I just wanted to make sure that what
8 your evidence was in terms of the design as of the
9 date of the e-mail that you sent and what it
10 ultimately was. If you take both of those down.

11 Mr. Moore, I think at the
12 start of today's examination by Mr. Lewis you were
13 asked a hypothetical question as to -- this is in
14 relation to the friction testing by the MTO -- you
15 were asked a hypothetical question as to what you
16 would have done. Mr. Uzarowski advised you that
17 the friction testing results obtained by the MTO
18 were low and recommended a more detailed
19 investigation be conducted. Do you recall that?

20 A. I think I do.

21 Q. And then you were asked
22 whether you would follow the consultant's
23 recommendation that if the consultant had made
24 any. Does that jog your memory better?

25 A. Okay.

1 Q. In response to that
2 question you said that you would have likely
3 followed the recommendation but would have first
4 wanted to have a thorough discussion about it with
5 the consultant.

6 A. Yep. I don't know
7 exactly what I would have done but, I mean, you
8 got to have that discussion and do that fulsome
9 investigation and look at your options. I don't
10 know -- I don't know what all the other conditions
11 were at the time but....

12 Q. On that though, Mr.
13 Moore, I just wanted to understand what pieces of
14 information would be pertinent to you as part of
15 that thorough discussion that you mentioned before
16 determining whether to follow through on the
17 recommendation?

18 A. Well, it really depends
19 on what the recommendation was. I mean, was it
20 going to have an implication on cost? Was it
21 going to have an implication on opening the
22 roadway? Was it a pretty straightforward -- you
23 know, many additional monitoring or was there some
24 sort of a remedial action that needed to be
25 replaced. All those types of things had to be

1 taken -- always have to be taken into
2 consideration.

3 Q. So would an understanding
4 of why the friction testing results were
5 considered to be low in part of that discussion?

6 A. I mean, yes, someone
7 would have to example to me why I needed to do
8 what you're recommending me to do.

9 Q. So that information would
10 be relevant to your consideration, of course, as
11 to whether to follow the advice or recommendation.
12 That's obvious to you?

13 A. Yeah. What's the basis
14 of your recommendation, is it part science, is it
15 a number, is it -- or it is, you know, I've a
16 feeling. Hopefully those types of things are all
17 things you know when you're getting these
18 recommendations.

19 Q. Thank you for that. I
20 promise this is the last paper I'm going to take
21 you to. GOL7417. You were asked questions by
22 Mr. Lewis of the 2008 paper titled "Innovative
23 Comprehensive Design and Construction of Perpetual
24 Pavement on the Red Hill."

25 I want to clarify your

1 involvement with this paper, and I appreciate
2 you're an author but I understand that
3 Mr. Uzarowski led the charge on this paper?

4 A. That's correct.

5 Q. In terms of your role, I
6 understand from your evidence that you took just a
7 review and edit role; is that correct?

8 A. Primarily, yes.

9 Q. You don't recall if you
10 reviewed -- you would have reviewed the entire
11 paper or not?

12 A. I may have glossed
13 through the entire paper concentrating on the
14 portions that I could contribute to or have
15 knowledge of, but I don't even remember whether
16 there's a bunch of -- I wouldn't typically get
17 into tables and those types of things that were
18 setting out certain things, although this is I
19 think more on the design of the current
20 construction.

21 Q. Mr. Lewis showed you
22 today a minor grammar change, I think it was the
23 inclusion of an 'a' in a sentence, and I put to
24 you from that inclusion that you must have looked
25 at the paper pretty carefully. And just looking

1 at the real time transcript again, I don't believe
2 there is a response, or it was cut off. Just to
3 be fair to you, what is your response at the
4 suggestion that you would have looked at the paper
5 pretty carefully?

6 A. In terms of grammar and
7 was it clear and concise, you know, conclusions or
8 recommenda- -- technical -- of a technical nature
9 then I don't -- I wouldn't tend to have knowledge
10 of or therefore review. So it was more of a
11 grammatical spelling to give that type of input to
12 it that it's -- reading it for that is not the
13 same as the in-depth making comments on the
14 findings or those types of things.

15 Q. Thank you. If I can just
16 have one minute for my colleague. Apologies,
17 Mr. Commissioner. I just have another minute or
18 so.

19 Could we bring back up, Mr.
20 Registrar, HAM51118. Just as -- this is the
21 funding agreement. Have a look at that first page
22 again, Mr. Moore.

23 A. So this is the first
24 agreement.

25 Q. So can you scroll to the

1 signing page of this, which would be image 4. We
2 see that document signed by both parties, Mr.
3 Moore?

4 A. Yes, we see that.

5 Q. I heard you, you muttered
6 something, but this is -- do you agree that this
7 is the signed -- one of the signed --

8 A. I'm sorry, yes, this
9 appears to be the signed copy of the document.

10 Q. Perfect. Now,
11 (indiscernible) pointed out to me that there are
12 amending agreements which I would like to bring
13 up. The first is HAM7237. You see at the top
14 here it says "In many agreement made
15 (indiscernible) 15th day of August, 2000."

16 A. I see that.

17 Q. I won't take you through
18 the contents but if you can go to image 4. It's
19 signed by the parties?

20 A. Yes, the regional chair
21 and minister of transportation yes.

22 Q. Have you seen this
23 document before? Do you recognize this document?

24 A. I don't recognize it, no.

25 Q. You're aware there was an

1 amending agreement?

2 A. I believe this is the one
3 that transferred the cost of the 403 interchange
4 to the City so -- or the region at the time.

5 Q. If we can make this the
6 next exhibit?

7 JUSTICE WILTON-SIEGEL: What's
8 that number, 39?

9 MR. CHEN: 39, correct.

10 EXHIBIT NO. 39: Amendment
11 Agreement signed August 15th, 2000, HAM7237

12 BY MR. CHEN:

13 Q. Then there was another
14 amending agreement, Mr. Registrar, if you're
15 ready, is HAM7235. Mr. Moore, do you recognize
16 this document?

17 A. Just giving it a quick
18 read. I don't recognize it but....

19 Q. But you're aware --

20 A. I'm aware of the
21 information contained within the document.

22 Q. If we can also just
23 scroll to the signing pages so Mr. Moore sees it.
24 I apologize for not being helpful with the image
25 number. You see it's signed there, Mr. Moore?

1 A. Yes, it's signed, yes.

2 Mayor and Ministry of Transport, yes.

3 Q. If we can make this the
4 next exhibit.

5 THE REGISTRAR: Exhibit 40.

6 EXHIBIT NO. 40: Amendment
7 Agreement, HAM7235

8 MR. CHEN: With that, those
9 are my questions for Mr. Moore. Thank you.

10 JUSTICE WILTON-SIEGEL:

11 Mr. Lewis, any re-examination?

12 MR. LEWIS: I do have a few
13 questions that are all around the same issue that
14 Mr. Chen was just covering, just to tie off that
15 front end and the back end largely, and a bit in
16 the middle. It make sense to do that given how it
17 arose today in the context of cross-examination.

18 EXAMINATION BY MR. LEWIS (cont'd):

19 Q. If we could go to
20 overview document 3, image 4, please. This
21 reference here is to an update provided to mayor
22 and city council from Mr. Murray on September 2nd,
23 2002 and it sets out a summary. Are you familiar
24 with this document?

25 A. I don't know -- I don't

1 know that I'm familiar with the document itself
2 but....

3 Q. It's excerpted here and I
4 wanted to point out a couple of things. You had
5 earlier indicated, I think it was when Ms. McIvor
6 was questioning you, you spoke of the original
7 funding in the late '80s, right? I think you
8 mentioned that. I see in the fourth bullet it
9 mentions 1987 the Ontario cabinet approved funding
10 for the project. Is that what you were talking
11 about?

12 A. That's correct.

13 Q. And then the sixth bullet
14 it refers to a -- no, the fifth -- in 1990 the
15 provincial funding was withdrawn for the
16 north-south leg of the project. Again, you were
17 at the region at the time. You recall that event?

18 A. Absolutely.

19 Q. I'm sure it was a big
20 event?

21 A. Yes.

22 Q. Then in the seventh
23 bullet down it refers to 1995 about the
24 reinstatement of the funding for the north-south
25 expressway, and I think you referred to that and

1 then we've seen some agreements about that that
2 you referred to, right?

3 A. That's correct.

4 Q. Including the one in
5 1997. I want to quickly look at that, it's
6 Exhibit 37. This is HAM18501, Registrar. It's
7 the October 27, 1997 agreement between the region
8 and the province.

9 On the second image, image 2,
10 under "Administration" is part of what Mr. Chen
11 took you to, and there's three paragraphs under
12 "Administration" there. In the second bullet it
13 refers, and you spoke about this, about the region
14 submitting contract documents, plans, general
15 specifications, et cetera, cost estimates, et
16 cetera, and so forth. And then it says "for
17 information and file purposes."

18 I just want to be clear. Is
19 it your understanding that that is what -- that
20 the information was being provided for, for
21 information and file purposes, not approval
22 purposes? I think that's what you said in your
23 evidence, that there is no approval function. I
24 just want to be -- for the MTO.

25 A. For their information to

1 be used in regard to the funding. They were -- it
2 was to an upset limit and they were -- and we did
3 have to give them how much by year, but they did
4 review in the context of this is available for
5 funding and this is not available for funding.

6 Q. I understand. But they
7 weren't approving the design or anything else.
8 They might have had to do with the funding and so
9 forth, but they weren't approving the design; is
10 that fair?

11 A. (No response).

12 Q. Or not?

13 A. I mean, when you're
14 saying "the design," I mean, it's everything from
15 the roadway alignment through to the landscaping.
16 So I mean, for funding purposes this is what we're
17 going to build, are you going to pay for it.

18 Q. And that's what the
19 purpose was, you're saying?

20 A. That's what the purpose
21 -- they come back and say no, we're not paying for
22 that, then there's a discussion on whether there's
23 some changes that we can make to the design to
24 accommodate -- to make sure that the funding is
25 included.

1 Q. And then that same
2 language is in the subsequent agreement. I don't
3 think we have to go to that. You indicated in the
4 Exhibit 38 that was the subsequent agreement. It
5 was the same language, and I've reviewed that. Do
6 you agree with that?

7 A. I agree with that.

8 Q. And then if we go to
9 overview document 3, image 25. Paragraph 49
10 indicates:

11 "On March 31st, 2005 the MTO
12 paid the remaining \$50.62
13 million of it's 106.75 million
14 RHVP funding commitment to the
15 City."

16 Do you see that? Does that a
17 --

18 A. I see that. I don't know
19 that I recall that point.

20 Q. You don't disagree with
21 it though?

22 A. Well, I got no reason to
23 disagree with it.

24 Q. Now, just on the timing,
25 because you were asked some questions about

1 Golder's involvement in relation to the funding
2 and I just want to be clear about that. We
3 discussed it.

4 You hired, for the City,
5 Golder in January, 2005 to do the feasibility
6 study for the pavement structure, right?

7 A. Yes.

8 Q. You met with
9 Dr. Uzarowski on January 11, 2005 and then as the
10 year progressed he worked on the feasibility
11 study, right?

12 A. Okay, yes.

13 Q. Ms. McIvor asked you
14 questions about Golder in relation to the
15 provision of information to the province. And you
16 indicated that information was provided to the
17 province in respect of the funding.

18 So would you agree with me
19 that you and the City weren't providing
20 information to the province with respect to the
21 revised pavement structure in 2005 once the
22 funding was finalized and paid by the province?

23 A. I can't say either way.

24 Q. You weren't providing it
25 to the province?

1 A. I don't know that I
2 wasn't. I don't -- I don't have any other
3 evidence to show that I was or wasn't. I don't
4 recall any specific discussions with them in that
5 regard unless I was picking their brain with
6 stuff, but I don't know.

7 Q. Picking whose brain?

8 A. MTO's.

9 Q. If we could go to the
10 document that's footnoted there, it's MT086. This
11 is a Ministry of Transportation information
12 notice. The date of it is July 21st, 2005. It
13 gives sort of a description and summary of the
14 ministry's role in supporting the Red Hill Creek
15 Expressway and in constructing the new interchange
16 to connect with the QEW. It gives an update as to
17 where things are at. Included under a suggested
18 response in answer to the question about what the
19 ministry's role is:

20 "The Red Hill Creek Expressway
21 is a City of Hamilton project.
22 Hamilton is responsible for
23 undertaking the environmental
24 assessment, design and
25 construction of the

1 Expressway."

2 So do you agree with that? I
3 appreciate everything else you said about what was
4 submitted to the province, but do you agree with
5 that, that was Hamilton's responsibility?

6 A. I'm sorry, that what was
7 Hamilton's --

8 Q. Hamilton is responsible
9 for undertaking the environmental assessment,
10 design and construction of the expressway.

11 A. That's correct.

12 Q. And then that the
13 government -- means Ontario -- supported the new
14 expressway with substantial financial contribution
15 of 106.75 million, right?

16 A. That's correct.

17 Q. And then it goes on to
18 talk about the interchange, and the QEW widening.
19 And then in the fax at the bottom there, that box
20 there, you'll see there's a reference to some of
21 the things we just talked about, and then in the
22 bullet second from the bottom the reference to the
23 MTO paying the remaining \$50.62 million of its
24 funding commitment on March 31st, 2005. Do you
25 see that?

1 A. I see that.

2 Q. Again, you don't disagree
3 that that was the ending of the funding by the
4 province?

5 A. Financially, yes. I
6 don't know whether there's any claims beyond that
7 for additional works. There's something in my
8 mind that there was, but I think that had to do
9 with us doing landscaping work in the QEW and
10 other remedial works on their behalf.

11 Q. We're talking about the
12 Red Hill main line here.

13 A. Yes. For the Red Hill
14 main line, yes.

15 Q. And then top of the
16 second page, the next image. Under "Current
17 Status" it says:

18 "The 1998 legal agreement
19 between MTO and Hamilton was
20 terminated on March 31, 2005.
21 However, MTO entered into
22 another agreement indicating
23 that MTO would design and
24 construct the QEW RHCE
25 interchange and associated QEW

1 works at no cost to the City.
2 Current estimate is \$110
3 million."

4 Is that consistent with your
5 recollections?

6 A. I believe that's correct.

7 MR. LEWIS: I don't have any
8 other questions. Thank you.

9 JUSTICE WILTON-SIEGEL: Well,
10 first of all, thank you, Mr. Moore. It's been a
11 long almost two days. I appreciate you appearing
12 before the inquiry.

13 I understand because of some
14 staff who might have COVID, we've had to
15 re-arrange the schedule a little bit and, as a
16 result, we won't be advancing tomorrow's witness
17 till this afternoon. If that remains the case
18 then I think we're adjourned until 9:30 tomorrow
19 morning. Thank you very much.

20 --- Whereupon at 3:16 p.m. the proceedings were
21 adjourned until Wednesday, May 11th, 2022 at
22 9:30 a.m.

23

24

25