RED HILL VALLEY PARKWAY INQUIRY

TRANSCRIPT OF PROCEEDINGS
HEARD BEFORE THE HONOURABLE J. WILTON-SIEGEL
held via Arbitration Place Virtual
on Monday, May 2, 2022 at 9:30 a.m.

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Jennifer Roberts Nivi Ramaswamy Fabiola Bassong	For Golder Associates Inc.

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Arbitration Place Virtual

--- Upon resuming on Monday, May 2, 2022

at 9:30 a.m.

MR. LEWIS: Good morning, Commissioner, counsel. It's Monday, the second week of our hearings, and Mr. Centa read the land acknowledgement on day one of the hearings and it is on the inquiry website, but we do not want this to be a perfunctory one-time acknowledgement and will make it at the beginning of each week of the hearings.

So, I would like to open this week of the hearings by acknowledging that the City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that the land on which Hamilton sits is covered by the Between The Lakes purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation.

Many of the counsel appearing

on this hearing today are in Toronto, which is on the traditional land of the Huron-Wendat, the Seneca and, most recently, the Mississaugas of the Credit River. Today, this meeting place is still the home to many indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land. Thank you.

And, yesterday, just one preliminary matter before we begin with the witnesses this week. We provided participants' counsel with a new release of documents for the inquiry database, which includes documents that weren't in the database which have been made exhibits or otherwise now. That release included two MTO prefix documents that are cited in overview document 4, which is Exhibit 4, and those had previously been redacted and are now being unredacted in the new release.

And since overview document 4 is already an exhibit, we wanted to bring this change to your attention, Commissioner, to confirm that that modification can be made to overview document 4, Exhibit 4.

JUSTICE WILTON-SIEGEL: Thank you.

MR. LEWIS: And the first witness this week is Mr. Andro Delos Reyes, who is here today. If the registrar could affirm or swear Mr. Delos Reyes.

ANDRO DELOS REYES; AFFIRMED

EXAMINATION BY MR. LEWIS:

Q. Good morning, Mr. Delos Reyes. Thank you for coming.

A. Good morning, too.

Q. If we could start off by going to Golder GOL5388. When it comes up, Mr. Delos Reyes, this will be a CV of yours, which I think you will recognize. And just to go through a bit of your background before we get into the rest of your evidence, you have a civil engineering degree obtained in the Philippines. Is that correct?

A. That's correct.

Q. And are you or were you a practicing engineer in Ontario?

A. No.

Q. Is that just a result of the non-transferability of your qualifications from the Philippines?

A. That's correct.

Q. And you are a certified engineering technologist with the Ontario Association of Certified Engineering Technicians and Technologists. Is that right?

A. That's correct.

Q. And how long did you hold that certification for?

A. If I can remember, probably from 1993. I'm not really sure, but --

Q. From the early 1990s, in any event, a long time?

A. Yes.

Q. Okay. And what does that certification qualify you to do?

A. Well, it gives you recognition and because before you could even be a member of the -- be certified as a technologist, you need to take the exam and have to pass that and submit a thesis.

Q. And you became, according to this, a CCIL certified type -- sorry, certified type B -- sorry, type C aggregate technician in 2007. Is that right?

A. That's correct.

Q. And what is a type C

aggregate technician?

A. It's that you can do testing on aggregates.

Q. Specifically on aggregates?

A. Specifically, yes.

Q. I see. And as well, a CSA certified concrete field and laboratory technician in 2007?

A. That's correct.

Q. And what's that specifically?

A. You can actually do field testing on concrete samples, cylinders, and you can also do testing in the laboratory.

Q. Right. And were those obtained prior to the Red Hill Valley Parkway paving working commencing in 2007?

A. That's correct.

Q. Was it for that purpose specifically, because you knew you were going to be doing that kind of work?

A. No.

Q. No, okay.

A. No. That was I think the

standard for Golder, that you have to be certified before even you can handle any of these materials.

Q. Right. Okay. And there's a 2010 date there for the certified type B hot mix asphalt technician. Is that -- did you obtain that in 2010?

A. Yes, that's correct. Yes.

Q. And what's that?

A. That you can actually handle testing on hot mix, hot mixes.

Q. Being asphalt?

A. Yes.

Q. And I understand that you were at Golder from 1996. Is that right?

A. That's correct.

Q. And originally as an asphalt lab supervisor?

A. That's correct.

Q. And then as a senior pavement and materials technologist?

A. That's correct.

Q. Okay. And then you retired from your employment in 2016. Is that right?

A. That's right.
Q. With Golder. And did you nevertheless continue to do some work for Golder after that date?
A. I was recalled, I believe, two years after that, just for on contract. Mostly projects in the Caribbean.
Q. Okay. And do you continue to do that kind of work or have you stopped that entirely?
A. I stopped. I stopped.
Q. Okay. And when was the last time you did work for Golder?
A. That would be '19, I believe.
Q. All right. And then with respect to specifically to the Red Hill Valley Parkway -- you can take that down, Registrar, thank you -- what was your position title on the Red Hill Valley paving project?
A. I was supposed to be the senior inspector in the field and in the lab.
Q. So, the senior site inspector, was that your title?
A. Correct, yeah.

Q. Okay. And were you full time on the Red Hill project?

A. Yes, that's correct.

Q. I guess from when Golder was retained to provide the lab and field testing inspection services in 2006. Is that right?

A. That's correct.

Q. And so, that was your only project from that time forward, until the completion of the paving. Is that right?

A. Yes.

Q. All right. Am I correct you reported to Ludomir Uzarowski?

A. That's correct.

Q. And so, we know that the actual paving of the first layer of the Red Hill Valley Parkway main line started at the end of May 2007, May 29, 2007 specifically, but could you just describe generally your responsibilities prior to the commencement of the actual paving?

A. I believe, if I can recall, once we got the contract, I believe from -- the contract was given to Golder that we can proceed with this project. I was tasked to make sure that the site for the laboratory, which

I think we were given a trainer role, that it is suitable for testing environmentally, and then I had to order the equipment with the help from our senior guys in Whitby and had to set up the laboratory once the equipment arrives.

And after that, then we have to make sure that the laboratory itself should be certified by CCIL to operate.

Q. And so, you were responsible for ensuring that the laboratory was certified by CCIL?

A. Yes.

Q. Okay. And that was done?

A. Yes, that was done.

Q. Okay. And that's the Canadian Council of Independent Laboratories. Right?

A. That's correct, yes.

Q. And what about the hiring of technicians or getting the technicians involved, is that something you were involved with?

A. Yes, I was involved in that. I tried to see where I can get technicians to help me with this project.

Q. And the field laboratory, that was near to the construction site, right, in Hamilton?

A. That's correct. I think it's Raynor Road.

Q. R-A-Y-N-O-R, I think?

A. That's correct.

Q. And once the paving began, what were your responsibilities, generally speaking?

A. Well, my responsibility primarily is on the site, on the paving site, is that I have to ensure that the materials that being placed on the paver conforms with whatever the contract stipulates. And, especially in the field, especially in the field, I had to make sure that there are no defects, right, after the paver, because if there are defects or stress, pavement stresses, I have to call the attention immediately of whoever is the supervisor in the field. And --

Q. Is that by way of a visual that you're talking about at that point?

A. That's the mat, the pavement mat, and that is basically what I do in the field. Number two is that I make sure that I

also document the temperature that the mat, right after the paver, I have to document that. That's why I believe I sent some photos of that before that you could see that it's a certified gauge for temperature. What is the temperature right after the paver, because if it's low or high, I have to call the attention of whoever is the supervisor of the contractor in the field that it's too high.

I believe in practice, in my experience, they actually call their plant immediately that, okay, there is -- you have to adjust this and that. And then --

Q. And just when you refer to the paver, you're actually talking about the paving machine?

A. Yeah, the paver.

Q. You're taking the temperature immediately following that?

A. Right. Yeah, just to document that, okay, we are within what is specified, just to explain some more, because I believe the compaction mixing temperature is around 175 for SMA and the compaction is, I think, 160 degrees Celsius. So, after that, then my other job is also to make sure that, okay, I

document or photograph, make a photo, of whatever I think is not in conformance and also in conformance with the mat, the pavement itself.

And I have also to make sure that the -- we have one technician that was doing the -- what do you call it? -- the density, the nuclear density gauge, and that is way down after the paving when the pavement is already cooled and then you can start doing quality assurance density measurement using the nuclear density gauge.

Q. The nuclear densometer, the nuclear density gauge, that's the same thing?

A. Yes.

Q. And so that's testing the asphalt compaction. Is that correct?

A. That's correct, yeah.

Q. Okay. All right. And what about trial batches and so forth and the asphalt samples from Dufferin?

A. That is being done in our field laboratory and I trained two guys to do that before even this was -- before even the start of the project, I started already training the guys how to do Superpave mixes and testing and using all the brand new equipment that we have.

Q. Okay. So, do I understand you correctly there were three technicians under you at the site? Is that right?

A. Yeah. At the field, one, and two technicians in the laboratory.

Q. Right. Okay. And the one that you referred to who is doing the nuclear density testing in the field. Is that right?

A. That's the guy who he is permanently doing that stuff in the field.

Q. And the other two in the laboratory doing the other two?

A. That's correct, yes.

Q. Okay. And, just to be clear, in the laboratory, what are the tests that are being done there?

A. We do the -- once the sample are delivered to us by the contractor, being Dufferin, then we log it in of course and then we start doing the testing. Testing means we have to heat the sample, reheat the sample, and do the required test parameters on the Superpave and SMA.

Q. And, typically, what's the testing that's being done there?

A. That you're supposed to use the compacter to make the briquette and also do the extraction gradation using the ignition oven.

Q. Right. And we'll get to that issue after, but that's the first way that it was -- the extraction gradation was done, the extraction by using the ignition oven. Is that right?

A. That's correct.

Q. Okay. And the first type of testing you referred to, what are you testing for? Is air voids one of them?

A. Yeah. We are testing the BRD, the bulk relative density, of the briquette.

Q. Sorry. The "what" relative density?

A. Bulk.

Q. BRD?

A. Yeah. In the laboratory, we just call it BRD.

Q. It's all acronyms. I understand, I get that, but sometimes we have to, for us non-technicians and non-engineers, need to clarify what those acronyms actually --

A. I understand.

Q. Okay. And, in terms of attendance on the site once paving started, how often were you -- were you both in the laboratory and at the site of the paving each day?

A. That's correct.

Q. Okay. And were you doing, aside from the temperature, I think you said you were testing the temperature, aside from that, was it the technicians under you that were doing the actual testing or were you involved in the testing itself?

A. In the laboratory, when there is a lull in paving, like maybe the equipment break down or the contractor or rain or for whatever reason there's delay, then I have to rush back to the laboratory and help out the guys.

Q. So, more on an irregular basis if there was a need to assist them, but primarily the other three technicians under you were doing the testing that you described. Is that right?

A. That's correct, yeah.

Q. Okay. And from reviewing the site meeting minutes, it appears that you

didn't attend the site meetings until the actual paving began. Does that accord with your recollections?

A. I believe so, yes. That's correct.

Q. All right. And those three technicians, they reported to you directly. Is that right?

A. Yes.

Q. And did you always review the results of the testing that the three technicians did?

A. Yes, because I have to transfer that to -- because they are all handwritten. They are handwritten. We have a form that does that and then it's transferred to either the Word or Excel sheets, yeah.

Q. Okay. So, the initial test results were handwritten and you yourself would transfer it to the typewritten result in whatever format that was?

A. That's right, yeah.

Q. Okay. And then, how did your reporting with Dr. Uzarowski work, generally speaking?

A. I would e-mail the test results to him.

Q. Okay. As you just described, after you transferred the handwriting into the electronic document, you would e-mail those to Dr. Uzarowski?

A. For his review.

Q. Okay. And what about general communications? I assume you also spoke to him on the phone?

A. Yeah, once in a while, when there is urgency, especially when I'm not really 100 percent sure what is going on, so technically that's it. So, I have to, because Dr. Uzarowski is more experienced and it's a lot of, you know, all this information on asphalt technology.

Q. And how often was Dr. Uzarowski on the site or at the laboratory?

A. He comes in there not regularly, but he comes in there, especially if I need him to check one or two things.

Q. Right, so not daily, but --

A. Not daily, no.

Q. Okay. And so, if there was any issue in your mind that you either didn't understand or required advice on or if there was a problem that you didn't feel that you were able to address yourself or that you ought to address yourself, you would then speak to or e-mail Dr. Uzarowski. Is that right?

A. Definitely, yes.

Q. And prior to this project, did you personally have any experience on a project involving SMA specifically?

A. I probably did. I cannot remember. But not in the field. Probably I was doing a bit of testing of the mortar, we call it mortar for the SMA, like the fibre and the asphalt cement that's being used in --

Q. That holds it together?

A. But not in the field, no. Just because the lab, we have a lot of samples that comes in, so I believe I might have tested one of those things, the SMA mortar, yeah.

Q. So, you may have or you think you did, but not in field work?

A. Not in the field work, no.

Q. Okay. And we know that the SMA and the other mix designs were completed by Dufferin's consultant, Trow Associates. Did you have any involvement in reviewing mix designs for conformance with the contract specifications?

A. Definitely not. That's senior management.

Q. Senior management, okay. And those mix designs were provided prior to the paving taking place. When did your role, then, begin?

A. That's when we got the mix design from Dufferin because, as you probably know now, we cannot do anything without the mix design. Even the contractor also. That is like our Bible. We refer everything to the approved mix design.

Q. And because you're copied on e-mails that pertain to mix design or aggregate approval even though, as you said, you weren't doing the approval of that, why are you being copied on those kind of communications?

A. Most likely for information.

Q. I'm reminded,

Commissioner, I do need to mark Mr. Delos Reyes' CV as Exhibit 28.

JUSTICE WILTON-SIEGEL:

Exhibit 28.

MR. LEWIS: That's Golder 5388.

EXHIBIT NO. 28: CV of Andro Delos Reyes, GOL5388.

BY MR. LEWIS:

Q. Who was your main contact at Dufferin during the paving?

A. As far as I can recollect, it's Mr. Janicas. Janicas?

Q. Janicas?

A. Janicas, yes. I'm sorry. Janicas, yes.

Q. I may not have the pronunciation correct, but it's J-A-N-I-C-A-S?

A. That's correct, yeah.

Q. Paul Janicas. Okay. And what were your dealings generally with him?

A. He was actually, most of the time when I go there he's in the field and he's the only guy that I actually know that I

communicated with verbally, and at the same time also those supervisors in the field of Dufferin, like who's doing quality control for them.

Q. Sorry, that's what he was involved in, Mr. Janicas. Is that what you mean?

A. I believe so, yeah. I believe so.

Q. Right. And did you deal with Dufferin's quality control technicians as well in the field on occasion?

A. Yes.

Q. Okay. And what work were they doing when you were dealing with their --

A. Mostly doing the nuclear density testing.

Q. And when in your experience would Mr. Janicas come to the site, under what sort of circumstances?

A. I have no idea about that. I just always see him there, so, you know --

Q. Right. And would you meet with him in the lab or at the construction site --

A. No, only on the

construction site.

Q. Only the construction, okay. And with respect to the Dufferin technicians doing the nuclear density testing, do you mean you would interact with them when they were actually doing the testing?

A. That's correct.

Q. Okay. And what about the City of Hamilton? Who was, in your experience, supervising the paving process from the city's perspective?

A. I see this guy, Marco.

Q. Marco Oddi?

A. Marco, yeah, yeah.

Q. And did you interact with Mr. Oddi from time to time?

A. From time to time when he's onsite.

Q. Okay. And did he come to the lab or just the construction site?

A. Just the construction site.

Q. And I guess site meetings? Since you're in some of the minutes where he's in those as well.

A. That's correct.

Q. And did you communicate with Mr. Oddi by e-mail typically?

A. I don't remember. No, I don't remember, because the practice usually is I have to make sure that Ludomir is the one that communicates on the senior management, whoever is the senior management, you know, with the City of Hamilton or even the Dufferin engineers.

Q. And so, typically, then, you would communicate with Dr. Uzarowski, who would communicate with Mr. Oddi. Is that fair?

A. That's right, yeah.

Q. Okay.

A. There might be some instance when on the site and they are actually there and then there's something that is troubling me, like, you know, then maybe I could -- I actually directly just speak to them, but I have to inform Ludomir about it.

Q. Right. There you're talking about speaking actually in-person as opposed to e-mail traffic?

A. Right. There might be one or two that I probably did an e-mail directly,

but it's also copied to, as far as my recollection, it's always copied to Ludomir.

Q. I think generally speaking that accords with the documents.

A. Right. Yeah.

Q. You don't typically communicate with them directly. Okay.

And so, then I just want to talk about shortly before the SMA main line paving in July of 2010. And if we could go to OD3, image 49, please, Registrar. And I guess 49 to 50, if we could pull them both up. Thank you.

Mr. Delos Reyes, this is just what we call the overview document, which I think you will have seen, and we'll, on some occasions, rather than go to the document itself go to the summary of it. In paragraph 100, there's an excerpt from the July 10, 2007 site meeting minutes from that day. And under Material Testing, which is at the top of page 50 there, you'll see that it talks about:

> "Golder requested that Dufferin produce a trial batch of SMA for the field labs to work out

testing correlation differences."

And secondly:

"Golder indicated the vibratory roller currently being used by Dufferin is likely too heavy for the SP19 and SMA pavement layers."

So, you're listed on the minutes as attending the meeting. On the first paragraph there, do you recall what the issue was at that time with respect to the SMA trial batch testing correlation differences?

A. The question again, please?

Q. Do you recall what the testing correlation differences were in the SMA --

A. I'm not thoroughly sure what the question is about.

Q. Do you recall what the issue was with correlation?

A. Correlation on the SMA --

Q. Yes.

A. -- samples?

Q. Yes.
A. Samples from where? From like the test strip or --
Q. So, just to place this in time, the test strip is on July 25, so it's 15 days after this, and so here the request is that Dufferin produce a trial batch of SMA?
A. That's correct, yes.
Q. Okay. Is this about the ignition oven issues?
A. Yes, because --
Q. It is, okay. So --
A. I don't know if you -- as I probably could explain, because Dufferin is using a solvent type of structure and Golder here is using the ignition oven system, so that's why we needed a correlation for that.
Q. Okay. And we have heard from Dr. Uzarowski that both the ignition oven and solvent extraction, the intention is to separate or get rid of the asphalt cement, everything except the aggregates?
A. Correct.
Q. So that then testing can be performed on the aggregates and the asphalt

cement component be tested as well. Is that right?

A. That's correct, removal of the asphalt cement by using one type of system called the solvent. We use a chemical called trichloroethylene and then the one we're using at Raynor uses ignition oven, which we burn the asphalt cement itself and what is left is the aggregate.

Q. Right. And then after that, what testing is done with the remaining aggregate?

A. Well, we actually do a sieve analysis.

Q. Sieve analysis?

A. Sieve analysis, yes.

Q. Okay. That's the gradation --

A. Yes.

Q. -- of the aggregates?

A. Yeah.

Q. And that's to confirm that the size of the aggregates, the gradation of the aggregates, conforms to the mix design requirements. Is that right?

A. That's correct.
Q. As well as the asphalt cement content?
A. That's correct, yeah.
Q. Okay. All right. And then the next bullet under Material Testing at the top of image 50 there or the next paragraph states:

> "Golder indicated the vibratory roller currently being used by Dufferin is likely too heavy for SP19 and SMA pavement layers."

Do you recall that issue at that time?
A. Not that I recall. The only thing I recalled was during the test strip.
Q. Okay. We will get to that, but what do you recall about the test strip on that? Are you saying you recall the vibratory roller being an issue during the test strip?
A. I believe so, yeah.
Q. Okay. So, we'll come back to that in turn. Do you recall was this you

that would have indicated that the vibratory roller being used by Dufferin at this time, this was in advance of the test strip, was likely too heavy for the SP19 and SMA pavement layers?

A. Most likely, from my observation. They probably were using vibration.

Q. Right. Is that an issue for SMA?

A. It's an issue, yes.

Q. And what is the issue?

A. The issue that the SMA is more -- principally, it composes around 70 percent coarse aggregate. Coarse aggregate means that one that's retained on 4.75 C. These are the stones, so there's very little fine aggregate that could absorb the impact, so there is a likelihood. It's not 100 percent, but in practice there's a likelihood that if you use vibratory roller, there are vibratory rollers but they are using vibratory because there are vibratory rollers that uses static compaction. But if they use vibration, as I mentioned in my last interview with you, it's just like vibrating a mat on top of a bridge, a concrete bridge, and that is not allowed because it could break the concrete underneath.

Q. Okay. So, just on your last example, you're saying that if you're doing it on a bridge, you would not use --

A. No.

Q. -- vibration on the rollers?

A. That is, I believe, standard practice and specifications.

Q. Okay. So, we're not on a bridge here?

A. Yeah.

Q. But you're using that, as I understand it, as a --

A. Correct.

Q. -- comparison that there's a concern with cracking or breaking the aggregates if you use the vibration function on a roller?

A. It's because of the stone skeleton, you know.

Q. Okay. And then, if we could go to the next paragraph, 101, on the same page, image 50, there's a July 17, 2007 e-mail from Mr. Paul Janicas of Dufferin to Dr. Uzarowski and Marco Oddi, and so this is now a week after

the site meeting that we were just discussing. He's talking about their conversation about the current status of the SMA, and in the second paragraph he states:

> "A concern was expressed over the percent breakdown discovered during the ignition oven testing at 30 percent. Dufferin Construction Company understands that is not what is typically seen. However, it is not a requirement of the contract that these aggregates meet a specific maximum loss during the ignition oven testing."

So, this is the ignition oven we were just talking about?

A. Correct.

Q. Okay. And do you recall what the issue was and what you observed?

A. When we did the ignition

oven on the samples that were taken for the test strip and we went through the ignition oven testing, I just notice that the sieve, the designated sieve of 4.75, the passing is a bit high. That's the coarse aggregate, so my observation was that it's most likely because of the temperature that the aggregate is subjected to.

And I should note the ignition oven goes up from 400 to 500 degrees to burn the asphalt cement, and that could actually affect the aggregate. I mean, I'm not 100 percent sure. I'm not really an expert on this, but from experience it could affect the -- it could degrade the coarse aggregate, but that is in the ignition oven. In the actual paving, you would not experience this kind of temperature.

Q. You're not putting it in an ignition oven?

A. No, you're not. So, that's just my experience.

Q. Okay. And had this been an issue for the prior pavement layers or no on the Red Hill?

A. No.

Q. All right. And it indicates in Mr. Janicas' e-mail that a concern was expressed. Was that your concern that was expressed to Mr. Janicas?

A. Most likely, because I informed Ludomir about it. I have to inform him whatever is my observation and Ludomir is an expert in a lot of these things. He has more experience, so I have to make sure that he actually is informed.

Q. Right. And I'm just, sort of, thinking about the sort of order of operations. As I understand it, you observed the results resulting from the ignition oven?

A. That's correct.

Q. And passed on the concern that you described to Mr. Janicas and/or Dr. Uzarowski?

A. Basically to Mr. Ludomir.

Q. Okay. All right. And the 30 percent number, what's that a percent of? What's that referring to?

A. Probably was referring to -- well, I'm not sure about this, but it was probably referring to the sieve analysis of 4.75

sieve that has higher passing. That's the coarse aggregate.

Q. Right. Is it 30 percent additional or 30 percent of the coarse aggregate is broken down or --

A. I'm not sure what it's saying here, but in my test when we did the sieve analysis, the sieve at 4.75 has a higher passing. Let me just say I believe the JMF is around almost only 30 percent passing, but what we found out was at 4.75, it was higher in the rejectable range.

Q. Right. And you've just referred to the JMF?

A. Correct.

Q. Which is an acronym that appears on the asphalt test results?

A. Correct.

Q. Could you just --

A. Correct. We base everything on the JMF.

Q. What does JMF stand for?

A. Job mix formula. That's the design. Everything is referred there.

Q. Right. So, that's what is expected, that's what the mix requires --

A. That's correct.
Q. -- and you're saying that it was a higher amount passing of the coarse aggregate passing through the 4.75 millimetre sieve?
A. Correct. That's basically everything is referred to the JMF because that's the guide for us.
Q. Right. All right. And what level of concern did you have about this breakdown in the ignition oven? Was it a mild concern, a serious concern, was it alarming? How would you describe it?
A. In my experience, in some projects that I have done, it is also not unusual, you know, of the breakdown of aggregate. It's not unusual --
Q. In the ignition oven?
A. In the ignition oven, yes. But I still have to inform Ludomir, Dr. Uzarowski, about it, you know.
Q. Okay. And then the next day -- sorry, one more question. This breakdown occurred in both the SMA mix and in the SP19 mix. Is that right?

A. Which one are you referring to, please?

Q. Sorry, I'm looking at the -- one moment. Was it just the SMA mix that the breakdown was in or was it also in another -- was it in another asphalt mix?

A. I believe it was in the SMA mix.

Q. Okay. If we could go to paragraph 102 on the next page, image 51. And this is paragraph 102. On July 18, Mr. Janicas sent Dr. Uzarowski the physical property test results for the Demix aggregates which were being used in the SMA mix and Dr. Uzarowski then forwarded that to you and then you replied. And it's actually in 103, if you could expand that. You know what? Maybe don't expand that so that both e-mails, Registrar -- thank you -- so that what they're discussing is also shown.

So, Dr. Uzarowski sends it to you and then you replied:

> "The Micro-Deval test results is way below the max required. I would not be surprised if the

freeze thaw would indicate the same. The pet number is a different story. From these numbers, the material seems acceptable for use, as I mentioned before, only when the aggregate is subjected to high temp, 400 degrees Celsius and up, and that's when the material starts to break down. Will the pavement experience this high temp? I guess not."

If I understand correctly, it's what you just described to us --

A. Right.

Q. -- in the last sentence there that, in practice, is the pavement going to experience that 400 plus degree temperature, and the answer is no. Is that right?

A. It will not experience that.

Q. Okay. And then with

respect to the Micro-Deval test you're referring to, could you just describe that for us?

A. Micro-Deval is a test to test the degradation of the aggregate for loss when it's subjected to -- I think a Micro-Deval is wet testing compared to the Los Angeles test, and these are -- it's an equipment whereby there's water inside it and they put the aggregate in there, the coarse aggregate, and then there are steel bowls that is in there and then it revolves to how many cycles and then after that they weigh it and see if there is a lot of degradation on the coarse aggregate because of the banging of the steel bowls --

Q. So, it's abrading the aggregate. Is that right?

A. Yeah, it's abrasion test.

Q. Right. Both the Micro-Deval and the LA --

A. Correct. It's dry and the Micro-Deval is wet.

Q. Okay. And you indicate the Micro-Deval test is way below the max required?

A. That's correct.

Q. That's a good thing, I take it?

A. Yeah. Oh, a very good thing but I'm not sure the -- in the contract documents, even I think the designer most probably had already tested this, most likely, because at 1.8, that is really very low loss, which is a very good thing.

Q. Okay. So, when you say it's way below the max required, the max is what the specification is for the maximum loss of --

A. Yeah.

Q. -- the aggregate that comes off in the test and it's below that?

A. That's correct. I think 15, 17, I believe is the max. I'm not 100 percent sure about that, but it's way below. I would say that the aggregate is a good quality on this type of abrasion test.

Q. Okay. And then you refer to freeze thaw in the second paragraph, freeze thaw and the pet number. The pet number, is that petrographic?

A. Yes, please. Yeah.

Q. What's that referring to?

A. I think it's -- I'm not familiar with it, but it's one of the requirements. It's most likely there's -- I'm not 100 percent sure. I've not been in the asphalt technology for three years now, so I can't -- and it's probably -- it's a petrograph number. Maybe it's chemical testing and whatever test --

Q. But you're not sure at this time?

A. I'm not sure, yeah.

Q. And what about the freeze thaw?

A. Freeze thaw is for weathering. They usually put it on hot temperature in the oven and then after a cycle and it goes through the freezer just to simulate the weather condition most likely here, in Canada. We have hot and that is the aggregate subjected to that kind of weathering.

Q. Okay. If we could go to image 52. I guess 52 and 53. Okay. And at the bottom of 52, paragraph 105(b), so this is on July 23, 2005. And if you could expand that, please, 105(b). Thank you.

And so, on July 23, this is

now five days after the last e-mail we were discussing, you e-mail Dr. Uzarowski indicating:

> "Just to remind you, trial strip SMA this coming Wednesday."

I guess this is a Monday that you're e-mailing him on the 23rd, since we know it took place on the 25th. And then:

> "Also, if you are going to issue written approval (with reservation) for the SMA mix design, please include the SP19 mix design (we've already given the verbal approval during the regular monthly meetings) just to confirm it in writing."

And so, the first thing you're discussing there with Dr. Uzarowski is the SMA test strip, which we'll get to very shortly. In the second paragraph, there's a couple things I would like to ask you about. The first is you refer to "if Dr. Uzarowski is going to issue written approval (with reservation) for the SMA

mix design." So, what do you use the term "with reservation" about the SMA mix design --

A. Yeah. That's because of what I observed in the ignition oven. He has to be informed because, as I always say, I am not that qualified what happens if, you know, if it's subjected to that kind of -- it's not actually being subjected, but the test results is the test results, so I have to inform him for his information.

Q. Okay. So, the reservation that you refer to is specifically with respect to the ignition oven results that you have described?

A. Correct.

Q. Okay. And nothing else, only that issue?

A. No, that's not the only issue. Yes, that's what I'm referring to.

Q. Okay. But you've already told us, you've described, that the aggregates are not going to experience the 400-degree temperature in practice that caused their background, so why at this point is there a -- you've already described that in your e-mails to Dr. Uzarowski.

Why suggest a reservation at this point?

A. It is for his information.

Q. Okay. Even though you've already described it to him?

A. Correct, yeah. He has to be aware.

Q. And the second thing you refer to in that second paragraph after referring to the written approval with reservation for the SMA mix, you say:

> "Please include the SP19 mix design (which we've already given the verbal approval during the regular monthly meetings) just to confirm it in writing."

So, which mix design are you referring to there?

A. I believe, if I see this e-mail, most likely this is the SMA mix. I'm not 100 percent. I can't recollect this, but could be --

Q. It refers to the SP19,

though.

A. Also probably the same, because there was already -- it says there was already a verbal approval during the monthly meetings, just to confirm it in writing.

Q. Of which one? One or both?

A. Both, I think. Both. This one probably is saying both.

Q. All right. And do you recall there being specifically an oral approval having been given for the SMA mix design?

A. No. Only I've read it in the minutes.

Q. All right. And would it have been you or Dr. Uzarowski that would have given that?

A. Oh, it's always Ludomir. That's why I always tell you this is higher senior management who does the approval of mix designs.

Q. Okay. And we know that, as I said, the SMA test strip was placed by Dufferin on July 25. If we go to image 53, just take that down or we can just leave it up there, I think. No, I guess 53 and 54, please.

So, in paragraph 107, indicating that Dufferin placed the test strip on the 25th of July, and then at paragraph 108 at the top of image 54, you e-mail Dr. Uzarowski the next day, July 26, and you attach some photos of the SMA course from the test strip and you state:

> "Thickness is thinner than required. There seems to be some sort of aggregate breakdown."

I think this is what you were talking about before when we were looking at the meeting minutes on the 10th of July, so if you could describe what you're talking about here?

A. Well, we cored it. The test strip was cored. That's the only time we core because we're not supposed to be coring SMA on the main line, so the test strip is there with us to core. And after coring, we measure the thickness of that. It's not only one but I believe we did five, four or five, cores of that and I found out that it's a bit thinner. From the photos that I've sent Ludomir, there's 32 millimetres.

Q. 32 millimetres on

average?

A. Yeah, and the required is 40. But just to emphasize that these are test strip and that's why they call it test strip, because we need to know, okay, this is the way we're going to do it. But that is not unusual that some of these test strip could even go higher, thicker, and lower.

Q. Right. You're testing out whether or the paving contractor is testing out whether they can replicate the mix designs in practice on an actual placement and whether they can meet the specifications?

A. That's correct, yeah.

Q. And so, is the test strip being thinner than it's supposed to be an unusual issue or is that fairly common?

A. That's common. It happens in all test strips.

Q. Sorry, in all test strips that's the result?

A. In my experience, not in all, but just to -- not in all test strips, but in my experience it happens.

Q. Right. Okay.

A. Yeah.

Q. And then what about the aggregate breakdown issue that you described? There seems to be some sort of aggregate breakdown?

A. It's because I saw it. I did photos of it --

Q. Right. I wonder if we could go to one of the photos. If we go to Golder 1737, I think there's five photos, four or five, which would be consistent with your recollection there were four or five?

A. Yeah.

Q. So, this is the first of the photos attached to your e-mail?

A. Yeah.

Q. A test strip, and I see you've got the ruler out there?

A. Yeah.

Q. When you're measuring it, the thickness?

A. Yeah.

Q. And I see it says the sample is SMA, core one, and then it says site, 25 plus 250, link to Stone Church off-ramp on

July 25, so these are the cores that you were talking about?

A. That's right.

Q. From the test strip? Okay. So, what's the aggregate breakdown issue that you're talking about?

A. Well, if you could see, there's another core. There are five cores in there. Maybe this one is not very -- the clarity is not that good, but maybe the other two, three, four, you could see.

Q. Okay. We can go up. The visual is one issue. We can go to the next one. Hold on. If we could go to Golder 1738, Registrar.

A. Yeah. You can see that down one, the first -- the darker one is the SMA, I believe. And at the bottom there, you could see a bit of cracking on the coarse aggregate.

Q. I see. Like in the middle there there's an aggregate that's --

A. Yeah, yeah. It's not widespread, but I still have to inform Ludomir about it. Yeah.

Q. Okay. Which you do?

A. Yeah.

Q. And what you referred earlier to, the vibratory function. When I say vibratory roller, I understand it's something you can turn and off?

A. Yeah.

Q. The vibratory function, that's something you referred to earlier. Was that something that was used on the test strip?

A. I'm not 100 percent it was being used at that time, but most likely they were using it.

Q. Okay. You don't have a specific recollection, but most likely they were?

A. Yeah.

Q. Okay. And what, in your view, in your experience, was causing this cracking or aggregate breakdown issue, as you described it?

A. They probably used the vibratory this time because, as I explained before, the SMA is stone-to-stone skeleton, so there is always a tendency that there's no fine aggregate that could absorb the impact of the vibratory -- the vibration is huge.

Q. All right. Okay. And then maybe just go to one more photo there. That's 138. Golder 1739, which is another test strip photo. I don't know from your perspective if this one is clearer or less clear.

A. You could still see at the bottom there are the coarse aggregate. The picture at the bottom of the 32 millimetres, there's still a bit of crack in there. But overall you could see too that there isn't much the crack, but as I always tell, as I always mention, that I still have to make comments to Ludomir about it.

Q. Okay. And if we could go to -- take those down, please, and go to image 54. We may be on there. And then in paragraph 109, in the first four lines about it's an e-mail from you to Dr. Uzarowski on July 27, 2007 and you attached the test strip test results and you stated:

> "Air voids is low, DCC got 6.22 on their AC but seems to be higher on AV (3.1) which does not jibe with their test results on trial plant mix."

And, first of all, DCC, that's Dufferin. Right?

A. That's correct.

Q. Okay. And AC is asphalt cement?

A. That's correct.

Q. All right. And AV is air voids. Is that right?

A. That's correct.

Q. Okay. So, deal with the first issue. Air voids is low, and then you compare what DCC got on their ACC. Could you just unpack a little bit what you're talking about here?

A. Well, we did the same test, same sample.

Q. Right.

A. And --

Q. Sorry, you mean Dufferin did the test and we, being Golder, did the test?

A. Yes, at our field laboratory. And what we got is the air voids is lower compared to theirs and I think the AC is also not the same as what they got.

Q. Okay. So, if we could

just open up Golder 1735, please, which is the attachment to Mr. Delos Reyes' e-mail. It says "Superpave Hot Mix Asphalt Concrete Test Report"?

A. Yes.

Q. And we see there under the Volumetric Properties section -- sorry, I should say this is dated July 25, 2007, so it's the test sample on the ramp. And under the top chart there, Volumetric Properties, we see in the third column it says JMF. That's what you were referring to earlier. Right?

A. Yeah.

Q. So, that's what it's supposed to be. And then under Test, the column to the left of that, that's the actual results. Is that right?

A. That's the actual results, yes. That's right, yeah.

Q. Okay. And then to the right of the JMF, it shows the variance from the JMF, the actual test results from the JMF. Right?

A. That's correct, yes.

Q. Okay. And then in the chart below, it's the gradation results, so it's the volumetrics and then gradation results?

A. Just to emphasize here, what we're using is ignition oven and Dufferin was using the solvent, so there's a difference there in testing system.

Q. Were you still at this point? Because you had addressed that earlier in the e-mails that we were talking about. Had you not moved to the solvent extraction method by this point?

A. No. Because what we've been saying here is the testing protocol of Dufferin is different from Golder, so there will be differences, especially on the grading, on the sieve analysis. That's why if I can go ahead and I believe it was decided that our Whitby office, which has a solvent extractor, all the SMA samples should be set there to make sure that it also correlates with -- correlate means the difference would not be that big like what we're using in ignition oven.

Q. Right, but you had already dealt with the ignition oven issue. We looked at your e-mail, the e-mails, from July 17, so more than a week before that you were dealing with this, with the ignition oven issue?

A. Yes.

Q. So, I would have thought and understand that by this point you are using the solvent extraction method and I see it's in the test strip, which is on the 25th, so by that point surely you're using a different method?

A. Here, it says here we were using ignition oven on the test strip sample, but I believe that another sample also was sent to our Whitby office which does the solvent extraction.

Q. Oh, I see where you say. At the bottom, it says asphalt cement by ignition oven?

A. Yes.

Q. Okay. Right. But you're saying, do I understand you correctly, you think you were using the solvent extraction method nonetheless?

A. No. We don't have that kind of equipment in Raynor lab. We don't have. Everything that's being sent to Whitby office because of we cannot send -- just to rephrase before that, we cannot actually put up the same equipment, the solvent equipment, at the Raynor

lab because of environmental requirements, so that's why we were using ignition oven.

Q. No, I understand that. But having found that there was the aggregate breakdown, are you saying that you continued to use the ignition oven?

A. On the test strip only.

Q. On the test strip, okay.

A. Yeah, yeah.

Q. All right. Now, do you recall specifically doing that or is this because it says asphalt cement by ignition oven on this?

A. I think we did. We did the samples. We did the ignition testing for the test strip. But because you could see even from here, it says 80 tonnes, which is very little. That's a test strip, so that's probably grade 2, around maybe 300 to 400 metres only. That's why it's a test strip.

Q. Right.

A. It's a ramp.

Q. And it's prior to the actual main line --

A. Correct. That's correct.

Q. -- being done? Okay. I

just note that you don't indicate, though, that the issues with correlation here in your e-mail to Dr. Uzarowski, you don't suggest that it has to do with the ignition oven, with correlation problems at this point?

A. No. This is probably the test strip that we're testing.

Q. Yeah. I'm just going back to your e-mail where you were comparing what Dufferin got and you don't mention that the cause of any correlation problems are to do with the ignition oven being used as opposed to the solvent extraction method?

A. No, no. This is just for us to test this, the samples that was given to us by Dufferin. But as I believe I can recall, another sample was sent to our Whitby office for solvent extraction.

Q. Okay. Thank you. All right. If we could mark that as an exhibit. It's attached but it's not in the overview document, so if we could mark Golder 1735 as an exhibit. I believe that's 29.

EXHIBIT NO. 29:

Attachment entitled

"Superpave Hot Mix Asphalt Concrete Test Report," GOL1735.

BY MR. LEWIS:

Q. All right. If we go back to the overview document, image 59. No, sorry. That's wrong. Image 54. Thank you.

In the same paragraph, on that day Dr. Uzarowski's notes indicate there was a meeting about the test strip onsite on the same day, and his notes refer to meeting with Marco Oddi, James DCC, Andro and Lu. Do you recall if you were at that meeting?

A. It could be. I can't recall exactly, but if my name is there, then most likely I was there.

Q. You don't have a specific recollection, but if --

A. No, no.

Q. Okay.

A. That's 15 years ago.

Q. It is.

A. Almost 15 years ago.

Q. Okay. And so, you don't have any recollection of the meeting one way or

the other, though?

A. No, I don't think so.

Yeah.

Q. Nonetheless, is it consistent with your understanding at the time and Dr. Uzarowski's notes that the test strip was rejectable and that it had failed because of the gradation on 4.75 millimetres and the low lab voids?

A. Yes.

Q. Low compaction. Does that accord with your general understanding, whether or not you were at the meeting?

A. I believe so. And also probably because of the thickness, you know.

Q. Yeah. And he refers in the last line, then, he says, "and the low compaction."

A. Yes.

Q. That's what that refers to?

A. That's correct.

Q. Actually, that's not the thickness. Low compaction is different than that, but that's an additional issue, is the 32

millimetre average as opposed to 40?

A. Correct. That's correct.

Q. Then if we could pull up 55 as well. And so, at the bottom of 54 and on to 55, on July 31, 2007 you e-mailed Dr. Uzarowski attaching SMA nuclear density compaction test results from the SMA test strip and stated:

"They are proceeding ahead tomorrow on SMA. SP12.5 looks okay (compaction wise and mat texture.)"

So, we know that means Dufferin was going to start paving the main line surface course with SMA asphalt the next day, August 1. Do you recall where you got that information?

A. From one of the supervisors in the field, I believe, of Dufferin.

Q. One of the Dufferin people. Got it. Do you recall specifically who or --

A. No, I couldn't recall who.

Q. All right. And do you

recall if you had any discussions directly with Dufferin people or person about, you know, beyond them telling you that they were going to proceed, that they were doing this even though the test strip failed?

A. No. I don't think I can recall that, no.

Q. Okay. And you attach to your e-mail the Golder 1640, and if we could pull that up. This is attached to your e-mail and this is an "Asphalt Nuclear Density Test Results Summary." And there's just a few things I want to ask about this because this was attached to your July 31 e-mail about the test strip?

A. That's correct.

Q. So, the first thing is near the top there it says, "Type of Mix: SP19.0R15," not SMA. And then it says, "Average Thickness: 32 mm." Can you --

A. That's probably a typo. Clearly the average thickness is 32, which you saw already that that's SMA. SP19 will not be that thin, no.

Q. Okay. And --

A. And you could see it's a

ramp. There's a ramp. That's where the test strip was being done.

Q. Right. So, under Location, which is the third big column that has then four columns underneath it, it says "Station" and then "Direction" and below that it says "Ramp"?

A. Yes, that's correct. Yeah.

Q. And then it says "Lincoln to Stone Church." That's the location. Is that what you recall as being the location of the ramp that you were talking about?

A. Yeah. That's probably it, yeah. The ramp, yeah.

Q. Okay. And then it also has the Date Paving on the far left column and Date Cored. It says July 17, 2007 and then cored on July 18, 2007, whereas we know the test strip was in the 25th?

A. That's probably a typo, too, yeah.

Q. And just when you describe the way that this was -- earlier on you described generally how the test results were

dealt with. Would these results have first have been done by the technicians in handwriting and then you translate it? Does that apply also to the nuclear density test results?

A. That's correct, yeah, I think, but we can make mistakes on these dates. But obviously from the test results that you can see here, it's very obvious that it is from the test ramp, from the ramp, the test strip.

Q. Okay. And then on that issue, there is -- the third column from the right is MRD. What's that refer to?

A. That's the maximum relative density. That is the one that we use to calculate the percent compaction of the mats.

Q. Right. So, just to start with that, every row below maximum relative density has 2,342 kilograms per cubic metre. Is that right?

A. That's right, yeah.

Q. So, that's the maximum density --

A. Of the mat, yeah.

Q. Okay. And then to the left of that, that's the actual, the in situ

density, that's the actual measurement. Is that right?

A. That's correct. That's the density measured by the nuclear density gauge.

Q. Right, so that's the compaction that you're measuring per se?

A. That's correct.

Q. Okay. And so, does the maximum relative density, does that tell you the type of asphalt that you're dealing with?

A. It's not the type, but that is the one that we use to actually measure the compaction, and that is standard for all our -- in asphalt paving. We use the maximum relative density.

Q. Right. But does the number change depending on the asphalt mix?

A. No. I believe this is an average of the whole samples that was taken and that's the one we use every day to refer to -- because you have to refer to something to get a percent compaction and the BRD or the bulk is -- if you see, it's a bit loose, but the maximum relative density is the maximum density of that material --

Q. Does the maximum relative density, does that vary between SMA, HL1, HL3, SP19?

A. Correct, yeah.

Q. Okay. And does the maximum relative density number of 2,342, does that tell you which type of asphalt mix you were dealing with here?

A. I'm not exactly sure about what you're asking, but this is what we got.

Q. Okay. I'm asking if you can tell whether it's SMA or SP19 or some other mix based on the maximum relative density?

A. Yes. You could actually tell if you compare it to the JMF. If it's close to the job mix formula, then it could be, because there's a big, big difference sometimes in if you compare the maximum relative density of, let's say, an SL8 or with SMA, you know.

Q. But you can't tell off the top of your head, though, today, you're not sure?

A. No, no. But it's most likely this is the SMA. It is the SMA, I guess, yeah.

Q. Okay. Then, to summarize, despite the dates and the type of mix listed, you believe that this was the results from the test strip of SMA laid on the 25th of July 2007?

A. That's correct, because you could see that there's a core correction, so --

Q. Yes. And what significance is that?

A. It's because in practice, the right way of doing, of determining, the density of a mat is when we core, but this time, because we're not allowed to do destructive testing, which is coring, on SMA, we actually core it and then compare it to whatever is the nuclear density results that we have, so that is how we do it.

Q. Okay, but how does that assist you in determining that this is SMA from the test strip? Are you saying the mere fact that you have the core correction there?

A. Yes. It's because afterwards, after the test strip, we never use core correction because we never core. The SMA

was never cored. The main line, in the main line, it was never cored, only on the test strip, yes. That's why some of the results you could see there there's a core correction of 000, which meant there was no core, coring.

Q. Okay. But you did take cores here, so why is there --

A. In the test strips, yes.

Q. So, why is there a core correction here?

A. Because of the test strip. We core in the test strip. This is a test strip. It's not the main line that you're doing, so we need to find out actually what is the density of the mat itself because from practice and experience, most of these technicians and engineers know that the nuclear density gauge is not exactly, you know. It's a guide for us most of the time to see if we are within the range, but the coring is very accurate in that to know the density of the mats, because we actually test the actual core in the lab.

Q. Right.

A. In comparison to an equipment, which is a nuclear density gauge, you

know, from practice and experience, even if you use the nuclear density gauge, if you move it right maybe an inch or two, these numbers can change, not significantly but you cannot get exactly like what in the first year, 21.2145. You cannot get that exact number. There will be a difference, yeah --

Q. And then --

A. -- because of the way these machines are set up.

Q. So, the core correction of 7, you add that to 2,145?

A. Yes.

Q. In the top row?

A. Yes.

Q. You can see density 2,145, core correction is 7, you add 7 to 2,145 and that gets you 2,152?

A. That's correct, yeah. Core correction could be negative or positive, yeah.

Q. What you're saying is that assists you here in, if I understand you correctly, identifying that this was from the SMA test strip?

A. That's correct, yeah.
Q. All right. And I think I count in total 13 of 51 of these test results, the compaction test results, being in the rejectable range, so about a quarter of them. Is that consistent with what you recall?
A. Is that test strip you're talking about?
Q. Yes. This is the document in front of us and you said you think it's from the test strip.
A. Yeah, yeah. This is a test strip, yeah.
Q. So, about a quarter of them are in the -- actually, you know what? I apologize. We should pull up the native of this.
A. Yeah, I think --
Q. It doesn't have next to there the rejectable, so --
A. What I remember is that there was a spreadsheet where I highlighted in yellow or red the rejectables on --
Q. We were just going to pull that up. It's just that that was produced as a PDF, so they'll show up below, so we'll pull up

the native Excel which has the rejectable on there. I should have done that in the first instance. There we go.

A. Yeah, that's it.

Q. And, Registrar, if you could just expand the left two -- thank you. So that the dates show up. So, yeah, they're highlighted --

A. Yes.

Q. -- as yellow as well as certain of the stations that are located there?

A. Right, yeah.

Q. If you could scroll down a bit as well to the bottom, all the rejectable ones, and so you highlighted those. Is that right?

A. That's right, yeah.

Q. Okay. And so, would anything under 93 percent is rejectable except at the longitudinal joints where it's under 91 percent. Is that right?

A. That's correct.

Q. Okay. And I appreciate it's a test strip, but is 25 percent, what do you take from that 25 percent rejectable?

A. What do you mean by 25?
Q. This is a test strip and you already described that in a test strip the purpose is to test and see if you can get it right --
A. That's correct.
Q. -- and it's not uncommon that it doesn't get it right?
A. That's correct.
Q. But if it's not a test strip, what would you take from, you know, 25 percent of the compaction results being rejectable?
A. I'm not sure where we're going with that question, but this is a test strip. That's it. I mean, it's not about actual testing of the main line. That's what we have to talk about, but the test strip, test strip. Whatever --
Q. We'll get to the main line, then.
A. Why it's highlighted there about the rejection, I don't know how what percent is that or what, but that is what we -- what I sent to Ludomir for his review to calculate

all this percentages. That's not my job. My job is just to make sure that all this information are passed to Dr. Uzarowski.

Q. Okay. We'll get to the main line shortly, then.

If we could go back to the overview document, image 55, please. And so, this is the same day after you send Dr. Uzarowski your e-mail that we were just talking about with the test strip results. He, Dr. Uzarowski, e-mails Mr. Janicas, Mr. Oddi and Philips, attaching the test results that you had sent to him earlier. And I won't read out the entire e-mail. If you could take a look at that and I'll ask you a few questions.

A. Okay.

Q. So, he lists a number of issues. What amongst these caused you concern?

A. Well, the rejectable areas that the test strip that we tested.

Q. Okay. He refers in there to the air voids, the laboratory air voids?

A. No. This is the test strip, the compaction.

Q. Well, he's referring to a

number of things in here. So, first, he says in the second sentence:

> "As discussed at a meeting with representatives of the City of Hamilton and Dufferin Construction on Friday, July 25, the mix did not meet the specific requirements. The laboratory air voids at end design and the percentage of the material passing the 0.05 millimetre sieve are in the rejectable zones."

A. I corrected him that that's the 4.75, yes.

Q. That's right. You did that shortly after?

A. Yeah.

Q. I understand that, so that's fine. But first he talks about the laboratory air voids at end design?

A. Correct.

Q. So, what about that?
A. That was the one that we did, the samples that we tested for the test strip, that I think it's 1.7 that previously was I think you showed that 1.7, the air void was too low.
Q. Okay. And when the air voids are too low, what does that mean? What problem does that --
A. It does not meet the requirement of 4 percent.
Q. Right. And what can result from that? Is there some -- what's the negative effect of having air voids that are too low?
A. It's too tight. The compaction is too tight. And I'm not supposed to interpret a lot of this, but from experience if you have very low air voids, let me just say there's no more space for more compaction after in-service. Maybe Dr. Uzarowski will correct me with this, but he's more -- he has more experience in a lot of this because he attended a lot of these conferences.
Q. We're just talking about

your experience, though.

A. Yeah, my experience --

Q. So, your experience, so go on. So, it has a compaction effect and what result?

A. The compaction is too tight.

Q. And if the compaction is too tight, what does that cause?

A. It means there's not enough air voids, because for in-service, for long run, you need a certain amount of space in the mix itself when compacted, so that traffic, it will squeeze and squeeze, you know, so the ideal one actually is 4 percent.

Q. Right. I understand that it doesn't then meet the requirements. What is the effect of that on performance of the pavement? Can it cause a problem with durability?

A. It could. It could. It could.

Q. What about flushing of asphalt cement to the top of the pavement?

A. It could.

Q. Okay. And what does that

cause? If there's a flushing of asphalt cement to the top of the pavement, what does that result in?

A. It could because of the -- as I explained before during the first interview, asphalt cement is actually like physical properties like water and an aggregate is much, much heavier, so what happens is when a lot of traffic goes on that, then it squeeze and squeeze and the asphalt cement goes on top and some of -- we call it bleeding, but in SMA I think they call it fat spots.

Q. Fat spots?

A. Yeah. When I did this SMA on Red Hill Valley, I have never seen any of these fat spots ever. I would have taken a photo of that.

Q. Right. You mean on the actual main line paving?

A. I have never seen that.

Q. Okay. I was just asking you what it could cause and you're saying you didn't actually observe that on the main line?

A. No, I have never observed anything. Otherwise I would have taken, because that's my useful practice, if there's any

deficiency on the mat or defects, I would have taken a photo of that and informed Ludomir right away.

Q. Okay. Thank you. And on that point, we know that Dufferin started the paving of the main line on August 1, and I'm going to show you compaction test results from that day. Do you recall if you were onsite for the first day of SMA paving?

A. I believe probably I was.

Q. I mean, I would have thought it's the start of the surface course and you're --

A. Yeah.

Q. -- there for Golder on the QA role, presumably --

A. Most likely. There were a lot of people there.

Q. Okay. And so, if we could pull up Golder 1718.

THE REGISTRAR: Sorry, counsel, would you like the native?

MR. LEWIS: Yes, please. Thank you. Thank you for your attention to that.

BY MR. LEWIS:

Q. Okay. So, this is the same type of test we were looking at before but then for the test strip. This one is dated August 1, 2007 for the date of paving for SMA. Do you see that?

A. Yes.

Q. Okay. And so, this again would fall into what you described. You would receive the results from the technician performing the nuclear density testing and you would put it into the chart. Is that right?

A. That's correct.

Q. And then passed it on to Dr. Uzarowski?

A. That's correct.

Q. All right. And if we scroll down, we'll see at the very bottom it says:

"Stretch vibrated, 1,300 metres, stretch not vibrated, 1,950 metres, total paved, 3,250 metres."

And it gives the start of the vibration at 23 plus 800. Do you see that?

A. That's correct.

Q. All right. And the 23 plus 800, that's what?

A. Well, it's just their start vibration, but I can't recall about this. But it says there start vibration.

Q. Right. And is that typically something that is noted on Golder nuclear density reports, whether vibration is being used or not?

A. Most likely.

Q. Sorry, it is typical, because it's not on any of the other reports?

A. That is not typical, no.

Q. It's not typical?

A. Not typical. It's most likely that the technician just noted this, that our technician in the field just noted this.

Q. If it's not typical, why is your technician in the field noting it on this particular day?

A. We might have some conversation about maybe I would have asked him to, if there's any unusual activity the contractor is doing, you know.

Q. And what would be unusual

about that? Is that because you were not expecting them to use vibration or is it because you were expecting them to use vibration?

A. No, I was not expecting using vibration because of what happened in the test strip.

Q. Okay. And if we could just scroll up a bit, there, you see on the right-hand side it says "vibration started at this location" and there's the notation under column C of 23 plus 800, so that's the same indication as to where the vibration started to be used, is your understanding?

A. That's what this spreadsheet is saying.

Q. Right. And then again, the distances, what's being referred to there? Can you tell from here where along the Red Hill it is?

A. I can't recall. I cannot recall this.

Q. All right. If we go up to the top, so it's based on the station along the --

A. Yeah.

Q. -- structure. Right?
A. This should reflect on the contract documents where this area is. It should be -- yeah.
Q. Right. On the contract drawings?
A. Yeah, on the contract drawings.
Q. All right. And do you recall if you had any discussions with Dr. Uzarowski about using the vibratory roller?
A. No. I just send this to him.
Q. Okay. And, sorry, are you saying that you did not have a discussion or you just don't recall one way or the other?
A. No, I don't think I had. It's when the SMA of paving is already in progress, I just send all the results to him.
Q. All right. Sorry, my screen just disappeared for a moment. And if we go back to the bottom, again, it's the same acceptable borderline and rejectable numbers that we looked at before in the test strip; rejectable of under 93 percent except on the longitudinal

joints where it's under 91 percent?

A. Yes.

Q. Okay. And there, as you can see from this and if you want we can go back over it, there's a lot of rejectable results here. Is that fair?

A. Yeah, from the spreadsheet.

Q. Right. Well, those are the results that were obtained and the results that you transcribed and the results that you sent to Dr. Uzarowski. Right?

A. That's correct.

Q. Okay. And what did you make of those results at the time?

A. None. I just send this for his review.

Q. I understand that that's what you did. Did you form a view about these results at that time?

A. No.

Q. None at all?

A. None at all.

Q. Okay. Are those good results, poor results or indifferent results?

A. Well, these are different. There is centre edge and this is outside edge and whatever is what the spreadsheet says that it is. It is what it is.

Q. It is what it is. I appreciate that. And you have indicated where they are acceptable, borderline or rejectable and there's a lot of rejectable results. Is that something that's usual or unusual in your experience?

A. It happens. In my experience, it happens.

Q. Sorry, it happens or happened?

A. It happens. It happens.

Q. Does it happen frequently?

A. I can't say about frequently, but in my experience it happens.

Q. And do you have a view on these results now if you didn't at the time? Looking at them now, do you have a view about the quality of these results with the number of them being rejectable?

A. Well, this is what it

says here, that they are rejectable, acceptable and outside edge.

Q. Okay.

A. This is a spreadsheet, so some are okay, some are not --

Q. Well, about 53 of 99 are in the rejectable category, as you took it down, so what do you think about that?

A. Could be concern, yeah, but I never, you know, as what you're saying, 53 percent, I never do that. I just send all the results to Ludomir and he has to make an assessment after reviewing what to do with it.

Q. Right. And this placement remained in place, though. Right? It wasn't removed. There was never any part of the SMA main line that was removed after it was placed. Is that correct?

A. I'm not aware of that.

Q. You're not aware --

A. Maybe. Maybe. I can't recall. I can't recall.

Q. Isn't that something that you would remember? I have to tell you we're not aware of that having happened. Do you have any

different information?

A. I'm not sure. I'm not sure SMA was removed from -- I'm not aware of that.

Q. Right. And you were onsite every day?

A. Yeah.

Q. So, you would know. Right?

A. I'm not aware that an SMA stretch was removed. Otherwise, I would probably have make a photo of it if it was being removed.

Q. Okay. And if you didn't, then --

A. Then there's no photo of that, then I don't think it was removed.

Q. Okay. The next one is August 3, if we could pull up Golder 1717. And, sorry, this is also the native, if we could. As always, I appreciate the Registrar training me on these issues. Thank you.

These are the nuclear density compaction results from August 3, so two days later. And do you recall if you were there on the 3rd of August for the paving?

A. Yeah, most likely I was there.

Q. Okay. I appreciate it's a long time ago. You don't have a specific recollection, but you were doing the temperature measurements and so forth, so likely that you were there. Right?

A. Yes.

Q. Sorry, is that a yes?

A. Yes, yes. That's correct, yeah.

Q. And it's the same thing, these are the same type of results and you would have gone through the same process of transcribing and sending to Dr. Uzarowski. Is that right?

A. That's correct.

Q. Okay. And at the bottom you'll see, unlike on the 1st, there's no notation about whether the vibratory roller was used or not. Do you know if it was used on August 3?

A. I'm not aware.

Q. Not one way or the other, you don't know?

A. No. I can't remember. No.

Q. Okay. And from what I understood you to say before, this is the typical way you would reflect the results, is that you wouldn't mention one way or another whether vibratory roller was used or not?

A. No, no, no. In fact, I was even surprised that there was a mention of that, because what I know is that after we did the test strip and vibratory, vibration was used, I believe we were -- I don't know if we were discussing it, but the best way to actually mitigate the breakdown of the coarse aggregate is not to use vibration and just use, you know, more rollers and especially close to the paver when it's still hot because SMA is difficult to compact. So, I believe Dufferin added more rollers in that event.

Q. Right. As the paving progressed, they used more rollers and pushed them up closer to the paver. Is that right?

A. That's correct, yeah, when it is still hot.

Q. Right. Okay. And if we could go to overview document 3, image 58, please. And it's paragraph 119 on image 58 when

Dr. Uzarowski e-mailed Mr. Oddi along with Mr. Phillips and you indicating a concern about low compaction and he indicates:

> "There are quite a few locations where SMA compaction is low. Some are even below 91 percent. We are concerned about these locations. Low compaction is almost a constant issue with the SMA paving. We suggest additional nuke compaction testing at these locations in the presence of contractor's representative and then the representatives decide what to do. The feasible alternative would be to reduce the pavement based upon percent compaction."

And if we could pull up the

native version of Golder 1714, and these are the results from August 7, so it's the day prior to Dr. Uzarowski's e-mail there. And, again, this is the same type of nuclear density test results summary that we were looking at before and that you were involved in transcribing and sending then to Dr. Uzarowski. Is that correct?

A. That's correct.

Q. And we'll see, if we scroll down, Registrar, slowly, that there's fewer rejectable results, more of them are acceptable, but these are the results that Dr. Uzarowski is referring to there. And if you go right to the bottom there, Registrar. Thank you. And, again, we see the percentages referred to about the acceptable, borderline and rejectable. Do you recall if you shared Dr. Uzarowski's concerns at the time about the low compaction being almost a constant issue at that time?

A. At that time, I can't recall, no.

Q. Then is it you were describing how Dufferin ultimately dealt with the issue?

A. I believe so, yes.

Q. Okay. And then just before the morning break, Commissioner, I just want to advise that you recall last week we made RHB927 Exhibit 24 during Dr. Uzarowski's examination, and that is Mr. Delos Reyes' evidence-in-chief respecting the asphalt test results issues referred to in overview document 3, paragraph 27, and that's to do with the results and discussion on the 21st of August 2007 and some confusion over labelling of asphalt test results, and that's dealt with through his evidence in-chief at his affidavit at Exhibit 24.

JUSTICE WILTON-SIEGEL: Mm-hmm.

MR. LEWIS: Dr. Uzarowski's affidavit on the top, being Exhibit 23. I'll be moving to a new topic after the break, being the MTO skid testing arrangements, and so maybe this would be a good time to take the morning break?

JUSTICE WILTON-SIEGEL: Yes.

MR. LEWIS: I was just going to suggest if the Registrar could put counsel into the all counsel room immediately so we can just discuss timing of their questions and subsequent witnesses.

THE REGISTRAR: Okay. Thank you, counsel. I will do.

JUSTICE WILTON-SIEGEL: Good. So, otherwise, we'll stand adjourned until 11:41.

--- Recess taken at 11:26 a.m.

--- Upon resuming at 11:42 a.m.

BY MR. LEWIS:

Q. Mr. Delos Reyes, we know that you were involved in arranging the logistics of the MTO's skid testing on the Red Hill Valley Parkway that ultimately took place on the 16th of October 2007. Is that correct?

A. That's correct.

Q. Okay. And --

A. Just to interrupt a bit, what do you mean by logistics?

Q. Just arrangements.

A. Oh, arrangements. Okay.

Q. Fair question. If we could go now to overview document 4, Registrar, image 59. Sorry, that's the wrong one. My apologies. Hold on. You took us to the right place, but bear with me. It's 53 and 54.

And in paragraph 124(b), (c) and (d), there's references to the arrangements

being made, and so this is on October 2. Dr. Uzarowski e-mails Chris Raymond of the MTO in response to an earlier e-mail and he states:

> "Thank you very much, Chris. We really appreciate it. Andro, as you're on the parkway today, could you please contact Chris and let him know what the best current access is? Please check the parkway for any obstacles like line painting, road work, et cetera, and let Chris know."

And then Mr. Raymond indicates it might be best for you to coordinate access with Frank, who is Frank Marciello, who operates the skid trailer, and then Mr. Marciello e-mails you, if we could go to the next image, 55, giving you the information that they're going to require to do the testing. This is just to situate you in time here on October 2.

So, you recall this sort of

lead-in to the skid testing the MTO performed?

A. Yeah. If I recall, my only -- what do you call it? Hard to say that in English, but my participation in this is just to ensure that the path that this machine is going to take is clear of obstacles. And I have to ask permission also from the stakeholders, like Dufferin, who is the contractor there, and I'm not sure if it's Philips, too, that they are going to do any of this kind of testing.

Q. Right. And so, we go to page 60. I think that's, bear with me for a moment, image 55, please. At paragraph 126 at the bottom, Mr. Marciello e-mails a number of people, including you, that it's going to happen on October 9. We know it didn't occur on that date and it was on the 16th.

And then if we go to the next image, he indicates at the very top:

> "As discussed with Andro Delos Reyes of Golder Associates, I plan to be at the Red Hill Valley Parkway entrance at Martin Street by

10:00 a.m."

And then at paragraph 127, you forward that e-mail to Philips and Dufferin, as you indicated you had to deal with the stakeholders, and you indicated:

"Gentlemen, for your information and permission."

And I take it you have to make sure that there's a clear path that the highway isn't open yet, and so still there's construction materials --

A. That's correct. That's correct, yeah. That's correct.

Q. All right. And we know it occurred on the 16th. Did you meet Mr. Marciello for that eventually? Did you meet him to --

A. I cannot recall if I met him on that. No, I cannot --

Q. You didn't ride with him?

A. I don't believe so, because we have our own vehicle.

Q. Right. I know, but this is the actual skid tester. I'm asking were you

with him while he performed the testing or no?

A. No. I'm not even sure if I was there during the testing. I'm not 100 percent sure if I was there, because the reason I could say that because I'm a bit, not the right word, but diligent. I usually take photographs, photos, of events or -- what do you call that? -- if something is going on which is to document it if it is because, as you were asking me before, I told you I'm not familiar with skid testing since that is not standard in our asphalt paving.

Q. Okay. Well, that's fine and we'll get to that. So, you don't think you were there. You think you probably would have taken some photos if you --

A. Yeah. I went to my archives and there was no photo of that equipment.

Q. Okay. And then if we could go to image 59 and paragraph 136. We know the testing occurred on the 16th, and then on the 17th you e-mailed Mr. Marciello stating:

> "Just a reminder, please e-mail test result as discussed. Dufferin and

Philips Engineering are highly interested."

So, do you recall who you had discussed with at Dufferin and Philips about their interest?

A. I don't know the right person, but what I know maybe I was in the field at the time and one of these people were in the field and I just mentioned most likely that there's going to be skid testing that's going to happen and they said they probably replied to me that they are interested in the test results.

Q. Okay. So, fair to say since you wrote it --

A. Yeah.

Q. -- you likely would have spoken to someone who told you that they were interested, but you don't recall specifically --

A. No, no.

Q. -- who that person or people were?

A. No. Yes. That's correct. That's correct.

Q. Okay. You used the term "highly interested," which suggests a high level

of interest. Is there any further insight you can give us into that?

A. Maybe just the word that I used.

Q. Okay. But you don't recall at this time?

A. No, no, no, no. That's why I'm trying to emphasize that my only role in that skid testing, since I'm not familiar with that kind of test, is that to make sure that the skid testing will be done and without obstruction.

Q. Right. And I get that, that you were only involved in organizing and making sure that the testing occurred and that you weren't familiar with skid testing, but you are familiar with talking to the people and it's your e-mail saying that they were highly interested, so I'm simply asking whether you recall what the reason was for their high level of interest?

A. They probably just talked a bit that they may need the test results, so...

Q. Okay.

A. Yeah.

Q. And you say to Mr. Marciello that it's just a reminder, please

e-mail test results as discussed, Dufferin and Philips Engineering highly interested. When you say "just a reminder," are you saying a reminder to e-mail the test results or a reminder that Dufferin and Philips are highly interested?

A. No. Just a reminder that they need test information.

Q. Sorry, they being who?

A. Whoever was the people I was talking to in the field, which --

Q. At Philips and Dufferin?

A. Yes, yes.

Q. All right. And then at image 62 at the bottom paragraph of 139, on October 18 Mr. Chris Raymond at the MTO e-mailed to you and Dr. Uzarowski the MTO's friction test results that they conducted on October 16. And did you do anything with the test results after you received them?

A. Probably just report information to me and, as I have told you the last meeting we have, that I'm not familiar with this test. To me, it's just a number.

Q. Okay. So, number one, did the test results mean anything to you at all?

A. None.
Q. Did you discuss the results with Dr. Uzarowski after receiving the results?
A. No.
Q. Did you discuss the results with anyone else?
A. No.
Q. Did you send the results to Dufferin or Philips?
A. I'm not sure if I have done that, but most -- I'm not sure. Maybe Ludomir has sent it to them, but --
Q. I'm asking if you did. We don't see it in the e-mails, but did you -- we don't have any e-mails. Do you recall if you sent it to Dufferin or Philips?
A. I cannot recall. I cannot recall.
Q. Okay. Do you recall speaking to Dufferin or Philips about the results?
A. I don't recall that. Since I don't have any expertise in skid testing, so most probably I will not be talking something which I don't really have experience.

Q. All right. And were you aware in any subsequent years of any skid testing the MTO performed on the Red Hill Valley Parkway?

A. None. After --

Q. After October 16, 2007?

A. No. I don't think I have -- I was already assigned in a lot of projects, maybe in the Caribbean, so that was it for me.

Q. You mean once the paving was done and this project was done and the skid testing was done, you were done with the Red Hill Valley Parkway once the lab was wrapped up?

A. Yeah, yeah. That's right. Yeah.

Q. All right. And have you ever been involved in a project before this one where skid testing was performed?

A. No. That's why I said I'm not familiar with this type of test. As I explained to you before that this is not standard testing for most of the -- all the projects that I've been on asphalt paving, skid testing is not a standard test, so that's why when you interviewed me before, this was my first time to really see

this kind of testing.

Q. And, as you said, it was unusual. Did you, at any point, talk to Dr. Uzarowski about why the skid testing was being performed?

A. No.

Q. Or with, say, Frank Marciello, since you spoke to him?

A. No.

Q. No? Okay.

A. No.

Q. Thank you, Mr. Delos Reyes.

Commissioner, I don't have any further questions at this time, so subject to any questions you have.

JUSTICE WILTON-SIEGEL: Yes. Mr. Delos Reyes, I just have a couple of questions. I wanted to understand a little bit more about the process by which the original mix design samples were prepared and provided to you. I assume it was Trow who would have mixed the asphalt. Is that correct?

THE WITNESS: Yeah. I believe Trow was the designer, yeah.

JUSTICE WILTON-SIEGEL: And so, were they responsible generally for the preparation of the asphalt that was to be laid down?

THE WITNESS: No.

JUSTICE WILTON-SIEGEL: Dufferin did it?

THE WITNESS: Yeah, Dufferin did it. In my experience, the designer just, they're given all these materials and then they do the mix and see if it missed the parameters. And if it meets the parameters required in the contract documents, then that would be the mix design.

JUSTICE WILTON-SIEGEL: So, would they be giving you samples at the same time as they were receiving samples from Dufferin?

THE WITNESS: No. The samples already -- I mean, not Trow exactly, but Dufferin will give us a sample based on their mix design, yeah.

JUSTICE WILTON-SIEGEL: Okay. So, when you're talking about the samples that you tested that created the problems of correlation between the two tests, and I guess we're talking

in or about July 10, that would be on the basis of samples that Dufferin had given you. Is that correct?

THE WITNESS: That's correct, yes. It's because of the samples -- because we were -- the problem was because we were doing a different system, which is we were using ignition and Dufferin was using a different kind of system called solvent that made a bit of a problem.

JUSTICE WILTON-SIEGEL: And how large a volume of sample would they have given you?

THE WITNESS: For sampling for what kind of -- for initial testing?

JUSTICE WILTON-SIEGEL: Yes.

THE WITNESS: Well, the usual 20 kilograms. It's most likely three or four of that.

JUSTICE WILTON-SIEGEL: And I was going to ask how many samples, so three or four?

THE WITNESS: Three or four, yeah. I can't recall how many samples they have given us.

JUSTICE WILTON-SIEGEL: Then

you would have taken that and converted them into the briquettes for sampling?

THE WITNESS: That's correct.

JUSTICE WILTON-SIEGEL: Okay. That's all I wanted to know. Thank you.

MR. LEWIS: So, Commissioner, I can advise we consulted with participants' counsel.

JUSTICE WILTON-SIEGEL: Okay.

MR. LEWIS: And they don't anticipate that their questioning will be terribly long and counsellor agreed that counsel for the City, Ms. Jenene Roberts, will go first, followed by Mr. Bourrier for the MTO, Ms. McAleer for Dufferin and then Ms. Jennifer Roberts for Golder.

JUSTICE WILTON-SIEGEL: Okay.

MR. LEWIS: And we expect that this will take us well before the afternoon break and we can address the timing of the next witness at the conclusion of Mr. Delos Reyes' evidence.

JUSTICE WILTON-SIEGEL: Thank you.

EXAMINATION BY MS. JENENE ROBERTS:

Q. Good morning, Mr. Delos Reyes. My name is Jenene Roberts and

I'm counsel for the City of Hamilton. I just have a few questions for you just following up on some of the issues that you discussed this morning.

First, I just want to ask you a little more about the issue of the correlation between the test results between Golder and Dufferin, so the solvent extraction versus the ignition oven testing.

A. Yes.

Q. Am I right that that correlation testing was not because of any sort of concern with the SMA or with the aggregate that was being used?

A. Yes. The correlation because of the different system that we're using, because different equipment that may not have the same test results because of the one is using solvent and the other one is just using high heat. That is the main initial problem when we were doing initially in the early phase of this project.

Q. Okay, great. Then ignition oven testing that you mentioned, you told us more about that, and that occurs at a very high temperature, you told us?

A. That's correct.

Q. And if I'm understanding your evidence correctly, the aggregate breakdown that you saw in that high temperature ignition oven testing, your expectation was that the pavement would never reach those types of temperatures. Correct?

A. That's correct, because in the plant where the contractor is doing it and in my experience, it will never reach that. Most likely usually it's around 180 degrees, the maximum where the aggregate is being heated.

Q. Okay. So, that means that the breakdown that you were seeing in the ignition oven, you wouldn't expect that breakdown to actually happen when the pavement was being laid?

A. Definitely not, no.

Q. Okay. And then another type of testing you spoke of this morning was the Micro-Deval testing, and I think you explained to us that's meant to simulate how aggregate could wear because of abrasion. Is that right?

A. That's correct.

Q. Okay. And the

Micro-Deval testing, that's intended to predict what would actually happen in real life once the pavement is laid. Is that right?

A. That's correct.

Q. Okay. And if we could just look at OD chapter 3, image 51, please. And the e-mail that's on the bottom there in paragraph 103, if we could just call that out. And, Mr. Delos Reyes, I'm just taking you to something that commission counsel did ask you about earlier. I just want to confirm in that third paragraph there, you say:

"From these numbers, the material seems to be acceptable for use."

So, am I correct, then, that based on the Micro-Deval testing you were seeing, you considered the material to be acceptable at that point in time, on July 18, 2007?

A. That's correct.

Q. Okay. We can take that document down. I want to ask you now about some other testing. And if we could call up Golder 1745, please.

THE REGISTRAR: Sorry,

counsel, is that a native document?

MS. JENENE ROBERTS: It should be an e-mail.

THE REGISTRAR: Okay. One second. I apologize.

MS. JENENE ROBERTS: It's probably something that wasn't in the OD. Maybe that's why you're having some difficulties, Registrar.

THE REGISTRAR: Yes. Sorry, I don't have that one. I have 1746.

MS. JENENE ROBERTS: Okay. I did want to go to 1746 afterwards, but 1745 is meant to situate the witness because it's an e-mail from you, Mr. Delos Reyes, to Dr. Uzarowski attaching the results, but perhaps we can just look at 1746, Golder 1746. Okay.

BY MS. JENENE ROBERTS:

Q. And, Mr. Delos Reyes, perhaps you can, without seeing the e-mail, you can confirm for me that these results relate to a test batch of the SMA. Is that correct?

A. That's right.

Q. Okay. And am I right that this includes the air voids, the asphalt

cement content and the gradation results for the SMA test batch?

A. That's correct.

Q. And you understood at the time that all of these results were acceptable and met the specification. Correct?

A. Yes, that's right. And just to -- this was done in our Whitby office because at the bottom there it says that's a Rotarex, not using solvent.

Q. Okay. Great. Thank you for clarifying that. If we can please mark this as the next exhibit. I believe we're at Exhibit 30 now.

EXHIBIT NO. 30: Document entitled "Superpave Hot Mix Asphalt Concrete Test Report," GOL1746.

BY MS. JENENE ROBERTS:

Q. Could we take a look next at Golder 1636, please. And, Mr. Delos Reyes, I just wanted to ask you about the top e-mail here. And you're responding to Dr. Uzarowski here. The second line of your e-mail, you say, "SP12.5 looks good." What's the SP12.5 there?

A. As far as I can recollect, this was probably being used in the ramps.

Q. Okay. So, am I right, then, that SP12.5, that's SP12.5 FC2?

A. FC2, yes.

Q. Okay, great. And if we're looking at, this is July 31, your view at the time was that the SP12.5 FC2 was looking good?

A. That's right.

Q. Okay, so you considered the results for the SP12.5 FC2 to be acceptable as of July 31, 2007?

A. That's correct.

Q. Great. And I think those are all my questions. Thank you, Mr. Delos Reyes.

A. Thank you.

MR. LEWIS: So, I believe next, Commissioner, would be Mr. Bourrier for the MTO.

JUSTICE WILTON-SIEGEL: Okay.

MR. BOURRIER: Good afternoon, Commissioner.

EXAMINATION BY MR. BOURRIER:

Q. Good morning,

Mr. Delos Reyes. I'm counsel for the Ministry of Transportation. I have a couple questions for you regarding the October 16, 2007 friction testing on the Red Hill Valley Parkway. Mr. Lewis asked you about that this morning.

Mr. Registrar, can you please call up Golder 2619. And while this is being called up, this is the e-mail from Chris Raymond providing the October 16, 2007 friction testing results to Dr. Uzarowski as well as copying you and Frank Marciello from the Ministry of Transportation.

You'll see that at the end of the e-mail, Chris Raymond says:

> "Should you have any questions regarding the results, please do not hesitate to contact us."

Am I correct that you never contacted Mr. Raymond at the Ministry of Transportation after receiving these skid testing from him?

A. I cannot recall, but the previous interview that I had, what I can recall clearly was that my involvement in the skid

testing was just to ensure that there's a clear path for this machine to go through. That was my role in that. And I believe I don't think, because as I was emphasizing, I'm not familiar with this kind of test and equipment, too. I'm not familiar with that.

Q. Yes. I understand that. So, you don't recall either sending this or contacting Mr. Raymond by telephone?

A. I don't recall, yes. No. Most of these things are most likely Ludomir who would contact them.

Q. Right. And then I take it as well, then, that you never contacted anyone else at the Ministry of Transportation to specifically discuss these results?

A. I doubt, because I'm not familiar with it. I will never discuss something which I'm not comfortable with. Those are just numbers for me, so...

Q. Okay. Thank you very much. Those are my two questions, Commissioner.

JUSTICE WILTON-SIEGEL: Thank you.

MR. LEWIS: Thank you.

Commissioner, I believe Ms. McAleer is up next for Dufferin.

MS. MCALEER: Good morning, Commissioner.

EXAMINATION BY MS. MCALEER:

Q. Good morning, Mr. Delos Reyes.

A. Good morning.

Q. My name is Jennifer McAleer. I'll one of the lawyers representing Dufferin on this public inquiry. I only have two areas of questions for you this morning. The first is with respect to the vibratory rollers. You'll recall that Mr. Lewis asked you this morning a number of questions about vibratory rollers and I understood you to say that it is standard practice not to use vibratory rollers on bridges. Do you remember giving that evidence?

A. Yeah, yeah.

Q. Okay. And, at the time that the Red Hill Valley Parkway was constructed, I take it you were familiar with the Ontario Provincial Standard Specifications?

A. Not 100 percent. But just remember I retired 2016, so I probably will

not be able to recall a lot of this specifications.

Q. Don't worry, sir. I have no intention of testing your memory as to the contents of those documents. But I did want to see if we could get a bit more clarification about that point by pulling up the OPSS 310.

And, Mr. Registrar, that is a document that I believe my colleague Ms. Laurion e-mailed to you this morning. It's HAM3104 and I believe it has been uploaded. So, it's HAM3104. Thank you, Mr. Registrar.

So, Mr. Delos Reyes, if you look at this document, this is the OPSS 310 and if we look at the bottom of the page, you'll see that this was one that would have been applicable at the time because this is the 2004 version. Do you see that?

A. That's correct, yes.

Q. All right. Now, is this a document you would have been familiar with back in 2007?

A. Most likely.

Q. All right.

Mr. Registrar, if we could go to image 11 of that

PDF. And about two-thirds of the way down the page, Mr. Delos Reyes, you'll see the heading Vibratory Rolling?

A. That's correct.

Q. Do you see that?

A. Yes.

Q. And it says:

"For all HMA being compacted on bridge decks, vibratory rollers shall be operated in static mode."

Do you see where I'm reading?

A. That's correct.

Q. Okay. And when we say HMA, that's hot mix asphalt. Is that correct?

A. That's correct.

Q. And that would include SMA?

A. I assume, yes.

Q. And my understanding, Mr. Delos Reyes, is that with the exception of bridges, there is no other prohibition in the OPSS standards with respect to the use of vibratory rollers with hot mix asphalt. Is that your

understanding as well?

A. Well, in my experience, in most, not all, maybe, I can't remember, but in the jobs that I have undertaken, the contractor never actually vibrates a hot mix asphalt on top of -- because there's still a thin layer that's being laid on a bridge. They never vibrate. They never use vibration. They always use -- compact it in static mode.

Q. Right. I understand that. My question is a little bit different. So, my question is that from my review of the OPSS standards, this section that deals with bridges is the only place in the OPSS standards that actually has a prohibition with respect to vibratory rolling. They specifically say you can't do it on bridges?

A. That's right, you cannot. Yeah.

Q. Right. But nowhere else in the OPSS does it say anything about when you can use vibratory rolling with HMA. Is that correct?

A. That's my understanding, but I'm only talking about from the experience I

have, that I've never seen a contractor use a roller with vibration. It's always in static mode whenever they -- that is my experience whenever they try to compact a thin layer of hot mix asphalt, SMA, laid on top of a bridge.

Q. Okay. That's fine. Thank you. Mr. Registrar, you can take down that document.

So, my only other question for you, and it's really a clarification with respect to some of the evidence you gave this morning, you'll recall that Mr. Lewis took you to some photographs that you had taken of the core samples from the test strip that was done on July 25. And, Mr. Registrar, those photos, if we could bring both of them up, please, at the same time. It's Golder 1738 and Golder 1739. Thank you.

And I just want to make sure I understood your evidence this morning. You were asked some questions about the aggregate breakdown and it was a little unclear to me, sir, but were you saying that the aggregate breakdown that you see in these photos is not in the SMA layer but is in the layer below the SMA layer?

A. It's the SMA I'm talking

about.

Q. You are talking about the SMA?

A. SMA, yes.

Q. All right. Thank you for clarifying that.

I'm being reminded, Mr. Commissioner, that I did not mark the OPSS standard that I just referred to as an exhibit.

JUSTICE WILTON-SIEGEL: Okay. Thank you.

MS. MCALEER: If that document, OPSS 310, which is the Hamilton document 3104, if that could be marked as the next exhibit, please. I think it's Exhibit 31, Mr. Registrar.

THE REGISTRAR: Yes, counsel, I'm just confirming it's 31.

EXHIBIT NO. 31: OPSS 310, HAM3104.

MS. MCALEER: Thank you. If we could take down the image of the two samples, please.

BY MS. MCALEER:

Q. Thank you,

Mr. Delos Reyes. Those are all of my questions. Thank you, Mr. Commissioner.

MR. LEWIS: And then last counsel up is counsel for Golder, Jennifer Roberts.

MS. JENNIFER ROBERTS: Good afternoon, Commissioner.

EXAMINATION BY MS. JENNIFER ROBERTS:

Q. Mr. Delos Reyes, I just want to go back to the issue of compaction, Mr. Delos Reyes. So, Registrar, may I please ask you to pull up Golder 1685 and 1684. Can you please put them in native format as well. I think maybe let's look first at 1685. There we go. Thank you.

So, Mr. Delos Reyes, this is another of the compaction testing and am I reading it correctly that this is testing done on August 11?

A. That's what it says there.

Q. Okay. And if we can scroll down the lines, so you gave evidence earlier this morning that Dufferin changed its compaction technique. Do you remember saying

that?

A. I believe so, yes.

Q. Okay. And when you look at these results, does this reflect Dufferin's changed technique and a more successful outcome for compaction?

A. I believe so, yes. That's correct.

Q. Thank you. Can we please turn up 1684. Thank you. And, again, I think this reflects testing on August 13. Is that how you read it?

A. Yes.

Q. Okay. And again, if we scroll down, I think we've got universal acceptable levels of compaction. Is that how you read it?

A. Yes.

Q. Okay. And, sorry, Registrar, can you go back up a little bit and maybe make it a tiny bit smaller so we can see the whole thing. Is that possible?

Mr. Delos Reyes, can you see all of that?

A. I'm trying to.

Q. All right. So, my question is: Do you gain a sense when you read in column C, the Stations, how much paving that reflects?

A. If you go on the top and then you deduct the one at the bottom, that's 22 plus 700. And then at the bottom there, it would be -- what's the bottom station?

Q. Can we go to the bottom line, please?

A. That's 28. That's almost, what, 6 kilometres?

Q. Right.

A. Multiplied by 5 point something, 5.8, I guess.

Q. I think your math is exactly accurate, sir. So, do you remember how long the Red Hill Valley Parkway SMA paving was?

A. Around 7.5, if I'm correct. I'm not very sure, but that's what I know from the contract document, if I'm right.

Q. That's about it. And then am I right in understanding this compaction that this reflects compaction for a significant majority of the Red Hill Valley Parkway?

A. That's what it says in the spreadsheet.

Q. Thank you. Registrar, you can pull that down. Thank you very much.

JUSTICE WILTON-SIEGEL: Can I just ask before you do that, this one is for the southbound lanes. Is that correct?

THE WITNESS: Yes.

JUSTICE WILTON-SIEGEL: So, it's a significant portion for the southbound lane?

MS. JENNIFER ROBERTS: Right.

JUSTICE WILTON-SIEGEL: Is that the way we should read this evidence?

MS. JENNIFER ROBERTS: Registrar, do you want to go back up? I think that's right, but let's go up to the top.

JUSTICE WILTON-SIEGEL: There's a little bit of northbound lane in there as well.

MS. JENNIFER ROBERTS: Right. So, let's just go to Golder 1685 and see if we can match that.

JUSTICE WILTON-SIEGEL: Just before we do that, is it continued? The

northbound lanes in the middle, if we drop that, we go from 24 plus 200 southbound lane to 25 plus 200 southbound lane? I'm not quite understanding. It doesn't look like it's continuous.

MS. JENNIFER ROBERTS: We've got the station 22, 700 southbound lane, and then you're right, there's some instances of northbound lane there and then we pick up again southbound lane, 25, so it's not continuous. I think if we go to the testing that was done on the 11th, that might fill in the gap.

JUSTICE WILTON-SIEGEL: Why don't we look at the 11th?

MS. JENNIFER ROBERTS: So, Registrar, that would be 1685, please. So, is this all southbound? Can you scroll down, Registrar, please. Right. So, you would have to match them together to get a complete -- to, sort of, fill in whatever the gaps are in the testing that was done on the 13th.

JUSTICE WILTON-SIEGEL: Right. And this is all southbound lanes still?

BY MS. JENNIFER ROBERTS:

Q. Mr. Delos Reyes?

A. Yes.

Q. That's how I read it. Is that how you read it?

A. That's right. That's right.

JUSTICE WILTON-SIEGEL: So, is it worth going back to the other two to see if they're northbound lanes?

MS. JENNIFER ROBERTS: I don't know that we have complete records of the testing.

JUSTICE WILTON-SIEGEL: We don't have complete records of the testing.

MS. JENNIFER ROBERTS: And that's, you know, we're going back to work that was done in 2007. There are gaps in the evidence. Okay.

JUSTICE WILTON-SIEGEL: Okay.

MS. JENNIFER ROBERTS: Thank you, Registrar. Commissioner, any other questions on that?

JUSTICE WILTON-SIEGEL: No, I don't have any more questions on that.

MS. JENNIFER ROBERTS: Okay.

BY MS. JENNIFER ROBERTS:

Q. Then just two points that I wanted to raise. Mr. Delos Reyes, we've talked

a lot about the SMA asphalt on the main line?

A. That's right.

Q. Was the same asphalt mix also put on the ramps?

A. No. This is the -- the ramp, I believe, was the FC2 12.5. That's what I remember that being used in the ramp.

Q. Okay. Thank you. And then last question, sir. You mentioned this earlier, but at the completion of the paving, did you observe any fat spots or flushing on the Red Hill Valley Parkway?

A. None at all. None. As I previously said already before, never. Otherwise, I would have taken a photo of that and sent it to Ludomir, because that is a defect. So, I have not seen that on the SMA.

Q. Thank you. And, just for clarity and explanation, can you describe for us what a fat spot or flushing is?

A. That's when the air voids sometimes is very low, so there's no more space for the liquid asphalt, so the tendency is for it to, you know, push up and create that -- on a strip, they call it bleeding, but on this case,

they call it fat spots, yeah. Mm-hmm. Yeah.

Q. Okay.

A. And it's very obvious. You will see it right away if there's any defect on that.

Q. Okay. And can I just ask you in your experience what did you observe of the quality of the asphalt mat for the SMA asphalt on the Red Hill Valley Parkway?

A. It is actually even the photos that I have taken, you could see that even I made a photo close-up of the texture of the mat and at the same time where I took the photo of the close-up, I took it longitudinally. But you could see that the mat is -- I mean, it really looks good. I don't see anything, you know. There's no -- I've not seen any defect on that, in the segregation, which actually, in my experience, that's the first thing we have to see as an inspector because that's the first thing that you have to know after the paver. You have to make sure that, you know, the supervisors know about -- because the segregation is a big problem in paving, especially like the bigger stones. But on the SMA, I've never seen that. I've never seen

segregation at SMA.

Q. Thank you, Mr. Delos Reyes. Those are my questions.

MR. LEWIS: I wonder if I could just ask one follow-up question on the August 13 compaction results. So, Registrar, this is Golder 1684, and I guess the native. Thank you.

FURTHER EXAMINATION BY MR. LEWIS:

Q. And we were looking at the southbound and northbound lanes, the direction being southbound and northbound. To the right, the next column of that is the lane and here it shows lane 3 all the way down. I see that all of the compaction reports show the lanes. Does this mean that it's for that one lane along that whole distance?

A. I believe so, yes.

Q. Okay. All right. We know there's a climbing lane. I don't know if it's the reason why we have the distinction between when it changes from southbound to northbound. I'm not sure if that's the reason. Do you have any idea about that?

A. No. That's what the test

result is saying.

Q. It would indicate, though, if it has the same lane number all the way down, that means it's one lane that's being paved?

A. Yes.

Q. Okay. That's my only question. Thank you very much. You can take that down, Registrar. Thank you. Thank you, Mr. Delos Reyes. We appreciate your time and preparation.

Commissioner, we are at just a bit after 12:30. We have conferred with counsel and Ms. McAleer for Dufferin, we alerted them on the weekend that we may be finished with Mr. Delos Reyes before the end of the day and to have Mr. Gamble available for after the afternoon break, which he will be available, but he's on the way into the city, I understand, and so obviously he has to get set up, and so we would ask that we just take an early lunch and then resume at the normal time --

JUSTICE WILTON-SIEGEL: 2:15.

MR. LEWIS: -- for Mr. Gamble. We can at least get started on him today and get a good ways through his evidence.

JUSTICE WILTON-SIEGEL: Okay. Well, then let's stand adjourned until 2:15.

--- Luncheon recess taken at 12:33 p.m.

--- Upon resuming at 2:15 p.m.

MR. LEWIS: Good afternoon, Commissioner and counsel. Our next witness is Mr. Peter Gamble. If the court reporter could affirm him, please.

PETER GAMBLE; AFFIRMED

EXAMINATION BY MR. LEWIS:

Q. Good afternoon, Mr. Gamble. Thank you for coming. I would just like to go through a bit of your background and history at Dufferin. I understand that you're a long-timer with Dufferin and that you worked with or at Dufferin from 1975 until August 2020. Is that right?

A. That's correct.

Q. Okay. And you retired in 2020?

A. August of 2020.

Q. And I understand that you worked your way up through the company, up and through the company, in a variety of positions from being on the tools, so to speak, hauling

asphalt to management positions as the years passed. Is that right?

A. That's correct.

Q. Could you just give us -- it's a long career, I know.

A. Yeah, sure I could.

Q. Sorry?

A. Sorry. Go ahead.

Q. I was wondering if you could give us just a brief description of that long career and your trajectory through Dufferin?

A. Sure. In 1975, I had a trucking company that worked exclusively for Dufferin and it was mainly hauling asphalt, so I had a real interest in asphalt, especially in the placement of it. And, in 1989, I believe, 1989, 1990, I actually sold the business and became a full-time employee of Dufferin, starting as an asphalt foreman. The roles that I hired through my career was starting as an asphalt foreman, went to a general foreman, then went to an asphalt specialty superintendant, and then a manager of plants and equipment, which is the role that I had when this paving occurred on the Red Hill, and the last ten years from 2010 to 2020 as a general

manager.

Q. All right. And I understand that Dufferin was the paving contractor for the Lincoln Alexander Parkway in 1997. Were you also involved in that project in some capacity?

A. I was a specialty superintendant at that time, so I was not in tools, but I was the specialty superintendant.

Q. So, you're managing the crews who were placing the asphalt. Is that right?

A. That's correct.

Q. Okay. There's a bit of an echo. You're speaking clearly, but if I ask you to repeat something, that's probably the reason. I don't know if others are experiencing that, but just hopefully it won't be too --

A. My apologies.

Q. And I understand it was from February 27, 2007 to March 31, 2010 that you were the manager of plants, equipment and technology. Is that right?

A. That's correct.

Q. And, as you indicated,

that's when the Red Hill paving took place. Can you describe your general duties in that position?

A. As the manager of plants and equipment, I was responsible for all the pavement crews, both concrete and asphalt, all the asphalt plants and concrete plants. I was responsible for the quality control of laboratories. I had reporting to me two QC managers, one for asphalt, one for concrete. I believe I had three specialty supers and then there was numerous crews that all fell under the people that reported to me. Sorry, and I also had four equipment shops that had superintendents that reported to me also.

Q. The position that you occupied right before you were the manager of plants, equipment and technology, what was that?

A. That was the specialty asphalt superintendant.

Q. Okay. And what does that position entail?

A. That position entailed scheduling and just moving crews to the different projects across the province. That was company wide.

Q. For asphalt?
A. For asphalt, correct.
Q. Okay. And when you were the manager of the plants, equipment and technology, I think you said that the quality control department was under you?
A. That's correct. All the labs and we had two managers, one concrete and one asphalt.
Q. And the asphalt supervisor, that became Paul Janicas at some point. Is that right?
A. That's correct, at the time of this project. We were transitioning from Wade, who moved from asphalt to concrete, and we moved Paul up.
Q. Sorry, that was Wade Leary?
A. O'Leary, Wade O'Leary.
Q. Right. And now, Dave Hainer was a project superintendant during the Red Hill paving, but I understand he didn't report directly to you in any event. Is that right?
A. That's correct. He reported to the district manager of the region.

Q. That was Jake Sudak [ph]?
A. That's correct.
Q. All right. And as the project superintendant, what were his responsibilities? The daily operations?
A. The daily operations and contractual part of the contract and meeting with the owner.
Q. All right. And in your capacity as the manager of plants, equipment and technology during the Red Hill paving, were you also responsible for the selection and purchase of the raw materials used in the paving?
A. Yes, I was.
Q. Okay. And for asphalt, we can put aside the concrete for a moment, that includes, what, the asphalt cement?
A. That's correct.
Q. The components of the aggregates used in the mix?
A. That's correct.
Q. Anything else that's used in the mix?
A. Anything that's got to do with asphalt, I would purchase it.

Q. Okay. And what else does that include for asphalt that you purchased?

A. It's really just the aggregates and asphalt cement and some fuel and some natural gas.

Q. Right, in order to run the equipment?

A. To heat the asphalt.

Q. The actual heating of it, okay. And was that the same prior to you becoming the manager when you were the -- in your immediately prior position, were you also purchasing materials for asphalt?

A. I was, yes.

Q. Okay. So, at least as far as asphalt goes, it was the same thing?

A. It was me.

Q. Okay. And you are, of course, familiar with the Ontario Hot Mix Producers Association, otherwise known as OHMPA?

A. Yes, I am.

Q. And OHMPA had representatives on its board from industry from -- representatives of the various asphalt producers. Is that right?

A. That's correct.
Q. Including Dufferin?
A. Including Dufferin.
Q. And you were on the board for a period of time as Dufferin's representative. Is that right?
A. Yes, I was.
Q. And for how long? From when to when approximately?
A. I would say for ten years, but definitely during the term that this project had taken place in 2007.
Q. Okay. Both before and after this project, you were still on --
A. Correct.
Q. Okay. And we'll get into some specifics, but generally speaking, can you tell us what your role was during the Red Hill Valley Parkway construction?
A. Well, the role of manager of plants and equipment was simply that all the people reported to me were a support mechanism for the field, so whether it be structures or concrete or asphalt or manufacturing plans or testing, they were all in support of the field so that we had

three districts at the time, and so this whole department was a support mechanism for people that were doing the work.

Q. Okay. And so, your role was what? Managing all those people under you?

A. Supporting those projects with the right people to complete the work.

Q. All right. And so, typically, were you involved in -- I don't mean hands-on in the tools sort of way, but in a day-to-day role on the project or were those the people that were under you?

A. Under me, yeah.

Q. Okay, so not in a day-to-day role yourself?

A. Not at all.

Q. And did you attend any of the site meetings for the --

A. Not that I recall, no.

Q. And is it fair to say that not exclusively, but for the most part in terms of e-mail traffic on the project, that you're receiving them in a for-your-information copy sort of way as opposed to being directly involved? Is that fair generally speaking?

A. Absolutely, that's fair. It's everybody keeping me in the loop.

Q. And were you also involved in the grading part of the project, which obviously preceded the paving?

A. Not at all.

Q. Because you were, at the time, in the asphalt position?

A. Correct. That's a contractual part of the job with the district.

Q. Right. And how often, if ever, did you attend the Red Hill construction site?

A. I'm going to say I was there for the test strip and I'm going to say I probably had -- I know I met with the staff on site for some shoulder -- I'm going to say maybe a half a dozen times max and two or three of those were drive-throughs, not really to meet anybody but I was just driving through because I lived in that area just to take a look at the progress.

Q. Right. Okay. So, by that, literally a drive-through, see how things are looking, what's going on without meeting with people. And then one specific memory you have is

the test strip, which we'll get to, but that was on July 25, 2007. That's the event you're talking about?

A. I was present. Correct.

Q. Okay. And aside from just being copied on matters, typically what sort of matters would you get involved in? Would you be brought into issues on the Red Hill?

A. Normally the only time I ever got involved was if there were issues and generally it wasn't an e-mail, it would be a phone call. Most e-mails are always FYI. If there was an issue there, then I got a phone call.

Q. Okay. And do you recall what sort of things you could get brought into?

A. Mainly employees, difficult employees, equipment breaking down, plants breaking down, just those kind of things.

Q. Okay. Now, we know that Demix aggregates from the Varennes Quarry in Quebec were used for the SMA and Superpave 12.5 FC2 surface courses for the Red Hill, and whose decision was it to use those aggregates?

A. That was my decision.

Q. Right. In your capacity,

as you said, the purchasing capacity of your positions?

A. Correct.

Q. And do you recall why you made that particular decision?

A. Actually, there was a few reasons, actually. Number one, the contract allowed for it, number one. Number two, we were a vertically integrated company, so any chance that we got a chance to use our own material, we would. Number three, we knew we had a very good product in Quebec, highly regarded by the MTQ and it was available. And number three, it made economic sense to go that route, so that's why we proposed to do that.

Q. Okay. Or that river, I guess. Is the idea that you would bring it down, ultimately, the Saint Lawrence River through Lake Ontario to the site? Is that right?

A. Well, any premag [ph] had to come by boat. Every premag, whether it be Lafarge or OTR, everything comes in by boat, so we probably had our own material.

Q. And so, you mentioned a number of things. The first one was that it was

not a requirement of the contract. If I understand your shorthand, and correct me if I'm wrong, you mean that it wasn't, unlike the MTO, wasn't a requirement that it be an aggregate, specific aggregate, listed on the designated source materials list. Is that correct?

A. That's correct. The project didn't restrict us to the DSM.

Q. Right. And was that a usual or unusual thing on a municipal project, that there not be a restriction on the type of aggregate that was used?

A. This was a unique job where it was perpetual pavement and we had never done SMA for the region before or any municipality for that matter, so this was the first time we ran into it. Like I said, it wasn't restricted to the DSM, so that's why we went the route we went.

Q. Okay. And so, a few things there. The MTO uses or requires DSM-listed aggregates, in summary, for, you know, high volume surface courses, where surface courses can be used on high-volume roads. Right? It's not just SMA? It's not just SMA that they require that for?

A. But it's the same stone.

Q. Right. I understand. Right. It's not just SMA. It's anything that's required that it be on the DSM for.

So, the second thing is you said that the first use of SMA. Did you mean first use for Dufferin placing SMA at all or did you mean something different there?

A. First time that we ever did a municipal job with SMA.

Q. Okay. Had you at that point done a non-municipal job with SMA?

A. I believe we had done one prior to this once.

Q. Okay. For the MTO?

A. For the MTO.

Q. Do you recall where that was?

A. I believe it was QEW. It was right on the QEW.

Q. Okay. So, then putting aside SMA for a moment, was this an unusual thing for a municipal project or was it usual, that specific aggregates not be specified?

A. Municipal always used 103, SP103, so this was not unusual, no.

Q. Sorry --
A. This is -- SP, the SP103.
Q. 103 or 1003?
A. 1003, sorry, yeah.
Q. Okay.
A. Yeah, but that was standard of practice for municipalities. All municipalities use that standard or that spec, so this was not out of the norm for them to do this.
Q. Okay. And had you in your own experience or Dufferin more generally used Demix aggregates for a project in Ontario at that time?
A. Not in Ontario, not at that time.
Q. Okay, so this was the first time in Ontario, but it had been used in Quebec, as you, I think, already described?
A. Yes.
Q. And do you recall when the decision was made to use the Demix aggregates for the Red Hill project? We know that it was in late March and we'll get to that, but it was actually proposed to or presented to Golder and the contract administrator and the City, but do

you recall when the decision was made?

A. We talked about it over the winter and what we had to do was we had to figure out the logistics on it to see if it was even a possibility. We knew they had availability in Montreal as far as providing the stone, but we had to bring it in with boats, so we used our cement division -- we use boats all the time -- to see if they could coordinate some shipping for us and they were able to do that and that's when we decided that we would move forward and do everything to try to get it approved.

Q. Okay. And so, by the winter, so it might have been in late 2006 into early 2007 or it could have been in early 2007?

A. It would be early 2007.

Q. Okay, so January-February time period perhaps or early March, that sort of thing?

A. I don't remember. Sorry.

Q. All right. And the Demix Varennes Quarry, it's located not too far from Montreal. Is that right?

A. That's correct.

Q. And it's a type of trap

rock, is the kind of aggregate. Is that right?

A. That's correct.

Q. And if we could go to overview document 3, image 33 and 34. From time to time, just while they're pulling this up, we have the overview document which summarizes documents and so forth which we may go to the actual document underlying it, but that's just what we're calling up here.

And this is what I alluded to before. In 66(b) at the bottom of the image 33, Vincent Gangaram, who is the lab supervisor at Dufferin, wrote to Mr. Maranzan, who was the Philips contract administrator rep, about seeking approval, Dufferin seeking approval, to use the Demix Varennes aggregate for the Superpave 12.5 FC2 and SMA mixes, so this is the first request to use it, just to place that in time, and that's what I'm referring to. Obviously sometime before that in the winter is when the decision was made to use it. Right?

A. Correct.

Q. Okay. Now, it's mentioned in this letter specifically that it's not on the MTO's DSM and refers to it being used

as a reference aggregate by the Quebec Ministry of Transportation. At that time, were you aware of the MTO, generally speaking anyway, requirements for aggregates being listed on the DSM?

A. Yes, I was. I was familiar with the DSM, if that's what you're asking.

Q. Well, you were familiar with the DSM, but were you aware, at least generally speaking, of the requirements for being listed on the DSM?

A. No, I wasn't. No.

Q. Okay. So, you knew that it was about pre-qualifying them to be of a sufficiently high quality for use. That's sort of the general purpose. Right?

A. Yeah. I knew what the process was to get on the DSM, if that's what you're asking, but it was very clear that we -- well, Varennes was not on.

Q. Right. You had to go through a process to get there?

A. Right.

Q. Were you aware that there was a friction testing requirement that the MTO

had put the aggregates through?

A. No, I wasn't.

Q. Okay. Or about using polished stone value testing, anything like that?

A. That came under my lab guys. That's technical and they had the training to deal with that. That was beyond me to --

Q. You knew there was a requirement and you knew that the Demix Varennes weren't on it, but you didn't know what the specifics were to get on it?

A. That's correct. That's correct.

Q. And if we could go to image 39 and paragraph 74 at the top there, on April 23, 2007 -- I'm just going to blow that up a bit -- Paul Janicas, who you talked about who moved into the quality control supervisor role, had e-mailed Dr. Ludomir Uzarowski at Golder with test results for the Demix aggregates done by Trow. And, again, I'm just sort of placing this in time. You're not copied on this, but you'll see at the bottom there in the e-mail from Mr. Janicas it says:

"Dufferin also requests

that the fine aggregate used in both the SMA and 12.5 FC2 be different from the coarse aggregates."

And then, if you just hold that, at that time there was a request that the fines and the coarse be from different sources, is the first thing.

And then if we could go to paragraph 77, if we could bring up image 40 as well, paragraph 77 is an April 30, 2007 e-mail from Mr. Janicas to Dr. Uzarowski. And it doesn't say it there, but you were copied on this one and it's about Dufferin's plan for physical testing of the Demix aggregates. It sets out a number of items there.

And then on page 40 on the right-hand image, in that last bullet with the 1, 2, 3, 4 listed below it, he's again requesting that, for SMA and 12.5 FC2, that the coarse and the fines come from different sources, so the coarse and secondary coming from Demix and the fines and screenings coming from the Aecon Marmora Quarry. Do you see that?

A. Yeah, I see that.

Q. Okay. And then just to finish it off and I'll ask you a couple questions about it, at page 40 there on the bottom, number 78, Mr. Janicas says, it's on May 2:

"Dufferin would like to retract our request to blend premium sources for the SMA and the 12.5 FC2 and that they'll be both from the same source, from Demix Varennes."

And do you recall why it started off at both Demix and then not and then back to Demix? Do you have any recollection about this issue and what was driving it?

A. I didn't even know that this happened until I read all these documents that were sent to me. I was not aware this was happening. The intention was that you wanted to represent Varennes.

Q. Okay. So, you were copied on the second one, as I indicated?

A. Yeah.

Q. But you're saying at the

time you didn't have any appreciation really of what was being asked. Is that your point?

A. Yeah. Prior to this, I probably scanned over it, but I just assumed that my guys were taking care of it.

Q. Okay. So, number 1, this wasn't something that you directed. Is that right?

A. That's absolutely correct.

Q. But you were in charge of the purchasing, as you described, so is that not something that you would have had to have been involved in in order to --

A. Eventually if that usage needed to be done, then yes, then I would have had to go and purchase those materials. The only assumption I can make is that when Trow was doing the mix designs, that they wanted to use another material, or the logistics, the fine portion of these mix designs was very, very small and maybe it was a logistics issue of trying to get it in by boat with such a small quantity. Maybe that wasn't possible. Again, you have to ask Paul and the fellow who did the mix design why they wanted

to switch. I can't speak to it.

Q. Okay. You just don't have any recollection at this time. Right?

A. Well --

Q. And actually you say that you just weren't involved in that to your recollection?

A. Yeah. I would never get deep into the mix design itself. This would be getting deep into the mix design where they thought that they needed raw materials and then it looks like they retracted, so maybe they figured out the logistics of getting the material in. I'm not sure.

Q. All right. And it was Trow that was doing the mix designs. Right?

A. That's correct.

Q. Which you're, of course, as I understand it, it was done after the selection and purchasing decisions are made that the actual mix designs are done. Is that right?

A. That's correct.

Q. Okay. And I take it from what you said that you weren't involved in the mix designs at all, other than hiring Trow to do it?

A. That's correct.

Q. Okay. And then if we could go to image 48, paragraph 97, this is just to place the timing. On June 22, 2007, Mr. Janicas e-mailed Dr. Uzarowski at Golder the SMA mix design for the main line surface course. And many people are copied on that, but you're not copied on this particular one. So, it's the timing just that I'm interested in.

We know that the SMA paving did start on August 1, so this is 40 days before, almost six weeks, not quite. Is that within the normal time range before paving commences to submit a mix design to the QA consultant and the client? Is that within the normal range?

A. At that time of year, yes. As it gets later in the year and you're busier, it's usually less than that. It's usually a month.

Q. Okay.

A. So, we were trying to be proactive and try and get all our ducks in order here to submit it.

Q. Okay. And is it unusual or is it normal course to have some back and forth

with the quality assurance consultant about mix designs and compliance with mix designs?

A. It depends. Some of them are straightforward and some -- this is a complicated mix, so it's not surprising that it would go back and forth.

Q. Okay. So, not unusual in that context --

A. No.

Q. -- of it being a complex mix design? Okay.

A. At the end of the day, it needs to be approved, so if the owner wants something different or something adjusted that's outside the spec, then we would comply.

Q. Okay.

A. But again, it would be done through the third party that was designing the mix design.

Q. If you have to go alter the mix design?

A. Correct.

Q. Right. I mean, because in that respect, there wasn't anything back and forth with Trow. It was between Dufferin and

Golder, the City and the contract administrator at that point, and we'll see a bit of that in a moment.

If we go to -- well, we have image 49 up. Actually, 49 and 50, please. And this is just a reference in a site meeting, which I appreciate you did not go to. You weren't at this one. But there's a reference at the top of page 50 there under Material Testing, the second paragraph, that Golder indicated that vibratory roller currently being used by Dufferin is likely too heavy for SP19 and SMA pavement layers. So, this is on July 10. This is before the test strip and it's obviously before the placement of SMA. And so, the past tense description is about the lower lifts that are being referred to.

And can you comment on the issue of damage to aggregates resulting from the roller being too heavy and vibration. Is that an issue that you're familiar with?

A. If you vibrate too much the SMA mix, it will fracture the stone absolutely. Compaction is achieved mainly by hitting it hot. And when I was there for the test strip, we started out static and I believe the

test strip did not -- we did not get the compaction that was required. So, again, but I wasn't there every day, so I'm not sure if they went to vibratory or not, but, you know, we had a process control person on the nuke who would work with Golder to achieve what we needed to achieve, and that was the adjustment after the test strip.

Q. Right. So, there's a number of things there and we'll get to the actual paving in a second. I'll actually ask a couple things.

Is it standard procedure for Dufferin to use, you know in the normal course, to use vibration with its rolling?

A. Always.

Q. Always?

A. Not with SMA, but on any other mix, standard to use vibration.

Q. Okay. And with SMA you're saying it's not the standard practice?

A. Again, we had only done it once before, so we were cognizant of the fact that we were over compacting. Again, SMA, without getting -- I'll keep it real layman terms here. It's roughly 85 percent stone where the other

mixes are 50/50 for the round numbers. So, 85 percent stone, if you over compact, you will crush the aggregates.

Q. Right. And if I understood you correctly, on the test strip on the 25th, I think what you said was that you, you meaning Dufferin, started off using the vibratory -- sorry, not using the vibration on the rollers, but then there was difficulties with the compaction and so then vibration was used. Is that what you said?

A. I only know that after the fact, though. At that time that we made this test strip, we had some nuclear density machines out there, but at that time we actually laid the test strip, we weren't aware of the compaction results at that time.

Q. Okay.

A. I know we started out static. I'm not sure if we actually switched to vibratory on that test strip.

Q. Okay. So, you didn't have the test results available while it was going on on the test strip, but I take it you think that that may have been the case? We have heard some

evidence from Andro Delos Reyes and Dr. Uzarowski that vibration was used on the test strip, but are you saying -- is it fair to say that you think it may have been, but you're not positive?

A. I don't know. I have no idea. I know we started out static. That's all I am saying.

Q. Started out static, okay.

A. Yeah.

Q. On the test strip, okay. We'll come to the test strip in a minute. I know you were there. And then I'm going to take you to a couple of e-mails, the first of which you weren't copied on, the second of which you were, but I want to place it. And this is on the 23rd of July, so now we're a couple of days before the test strip placement and this is at image 52. I think it should be 52 and 53. Pull them up, please. And the first one is in paragraph 105(a) on image 52 there where Mr. Hainer, Dave Hainer, e-mailed Philips and Mr. Oddi regarding concerns expressed about Demix aggregates in the SMA and FC2 surface courses and also about the upcoming test strip. And if you could just have a look at that, tell me when you're done reading it.

A. Okay.

Q. And I'll go to that document in a minute, but while we're still here, in paragraph (c) on the next page there there's another e-mail that day from Mr. Janicas to Philips and Mr. Oddi about prior use of Demix aggregates by the Quebec Ministry of Transportation and this is one that you are copied on and he's giving past examples, which I take it is the sort of thing that you were talking about previously, that Dufferin had done work using Demix in Quebec. Do you recall receiving this e-mail or being involved?

A. No, I don't.

Q. Okay. And in this, he refers to the information, in addition to the information submitted this morning, which appears to be the stuff that we were looking at in the prior e-mail.

And, if we could go to the actual first e-mail, which is Dufferin DUF1965.1, I guess. And so, you'll see at the top this is Mr. Hainer sending it to Philips, CC Mr. Oddi and then also James Wharrie and Rick Triemstra at Dufferin. That's the e-mail we referred to

before. And then at the bottom, it's Paul Janicas and that e-mail is to Mr. Hainer, copied to you, then that gets forwarded on by Mr. Hainer to Philips and Mr. Oddi.

And in the e-mail at the bottom, which is on the 20th of July, so a few days before, I think it's a Friday and then Monday is the 23rd, he writes:

> "Dave, attached is the package discussing the Demix aggregates issue. Please review it."

And it appears we've already seen this and, Commissioner, you'll be familiar. This is the Dufferin and the City have been unable to locate the attachments, but you'll see there's four PDF attachments located there and there's images of one, which is a skid resistance report, the second says mix design examples, the third is Red Hill Valley aggregate physicals comments, Trow, 20th July 2007, and then the last one is a Dufferin cover letter about Demix aggregates of July 20.

Did you recall at all what any of these attachments were, other than what their

titles indicate that you can see?

A. I don't know. Not at all.

Q. Okay.

A. Without seeing them.

Q. Pardon me?

A. I said without seeing them, I'm sorry, I can't. I don't know.

Q. Okay. And in the e-mail at the top from Mr. Hainer, he mentions that the correspondence which is attached below is regarding the concerns of the aggregate which are to be used in the FC2 and SMA surface course mixes. And then he trusts that, in the second paragraph:

> "Trust the documents below will satisfy the concerns verbally identified."

And the last paragraph, he says:

> "Should there still be concerns, please call me at your earliest convenience."

Do you have any recollection as to what the concerns were that are mentioned in Mr. Hainer's e-mail?

A. No. Again, I wasn't copied on any kind of concerns, but I would think, again I'm speculating, that these PDFs, they are rebuttals, requests for some information.

Q. Right. So, you assume if this information is being provided, it must be answering a request of some sort?

A. That's correct.

Q. But you're not aware of what that was?

A. No. Sorry.

Q. And it does seem to me from the way that you have described your job, if concerns are being expressed about materials which you were responsible for the selection and purchase of, that that would be the kind of thing that you would be involved in. Is that a fair assessment?

A. Yes, yes. But again, it would not have been through e-mail. They would have called me up and said this is what's happening, this is the concerns and then what are

we going to do about it? At this point here, it looks like they're just looking for some history from Quebec. I don't know what's in those PDFs. It looks like it's physical testing which the owner needs to approve for the stone and then some history on it.

Q. Right. And what one of them is, and we don't have the attachment, but the title there for the image in the attachment is "Skid Resistance Report." Do you recall any concern being expressed about the skid resistance of the Demix aggregates?

A. Not at all, no.

Q. Can you say one way or the other or is it just that you can't recall?

A. I don't recall ever being questioned about anything about friction or skid resistance on the Varennes material.

Q. Okay. And following that up, are you saying it did not happen or that at this time you can't recall any questions being raised, because those can be two different things: I don't remember or no, it didn't happen?

A. I just don't recall. I do not recall ever being asked anything about

friction qualities of that stone.

Q. Thank you. And we've heard that this e-mail did not go to Golder, which was of course the City's quality assurance consultant. It did not go to Dr. Uzarowski which, generally speaking, that was the normal flow of information with respect to the aggregates and mix design approvals and these sorts of things.

Do you have any knowledge of why this e-mail and the subsequent e-mail the same day were not sent to Golder?

A. No, sorry, I don't. You would have to ask the sender.

Q. That's what, sorry?

A. You would have to ask the sender. I have no idea why it didn't follow the process.

Q. Okay. Is it not something you had any discussion about?

A. Not at all. This is day-to-day activities. That's what this is. I would not be part of that.

Q. Well, I appreciate that as a general proposition, but you are, as I say, copied into Mr. Janicas' first e-mail with the

materials, so you are being -- you're copied on it, you're being involved and you're copied on a number of things and you're copied on the next one and it involves questions apparently specifically about the materials that you purchase. So, again, it does seem a little less than the usual day-to-day of who is laying what asphalt in what quantities on the project. Would you agree with that?

A. I believe that this is an FYI, just like most of the other e-mails. This is keeping me in the loop of what's going on back and forth before this mix actually gets approved.

Q. And at this point, on July 23, we're a couple of days before the test strip and ultimately nine days before Dufferin actually starts placing the SMA. And if at this point the aggregates that form part of the mix design for the SMA are, for some reason, found to be unsuitable or rejected, what sort of a delay would you be looking at for commencing the paving? Do you have any sense of that?

A. My sense would be, at minimum, one month.

Q. Of one month?

A. One month as a minimum.
Q. Okay. And why is that? I'm not asking you for a day-to-day, but just overall, what's your sense of why --
A. You would follow the process again of purchasing, so you need to go find suitable aggregates, you would have to purchase them, make sure they're available, make sure you get the logistics figured out, and then you would have to do the mix design. A new mix design is a minimum of two to three weeks, so that's why I'm saying 30 days.
Q. Okay. And then I guess as well, and maybe it's included in that, whatever the testing is done, the quality control and quality assurance testing is being done, has to be completed as well before the placement can actually occur. Is that right?
A. That correlation is everything, you're correct. But 30 days is a pretty good number, I would say, unless the material is not available --
Q. Right. Assuming you can get it from somewhere else?
A. Exactly.

Q. Okay. So, we've talked a couple of times about the test strip on the 25th and that you were present, and that's the one time that does stick in your mind about being specifically onsite for the Red Hill project. And why in particular were you there for the test strip?

A. I wanted to see how the material was going down, the actual placement of it.

Q. And why was that?

A. Well, I wanted to check to make sure that we did not have segregation of the mix. Sometimes you have to adjust pavers and our shuttle buggies to make sure that you have no segregation and I wanted to visually inspect the mix.

Q. Could you explain what you mean by segregation in that context?

A. Well, an example would be the SMA. Too much touching of the rake would cause segregation, so we wanted to make sure when we did the asphalt on joints, that there was no manual touching, that kind of thing, so we did not have any kind of segregation. And then we were

looking at the rolling of roller patterns, what's the process control behind it. It was a short piece on a ramp, I remember, but visually it looked very, very good, to my recollection.

Q. Sorry, there's just that bit of an echo. So, on the segregation point, and I apologize, I didn't quite catch it clearly what you meant. You referred to segregation and then you referred to the joints, so I didn't quite get that.

A. If you touched SMA with a rake, you handled it with a rake, you can segregate it, so I wanted to make sure the placement crews were placing it properly. That's why I was there. And then I wanted to see visually after it was rolled what the product looked like.

Q. Okay. As you said, that visually it seemed to be fine and that the process itself went fine?

A. It looked very, very good.

Q. Okay. And then to just make sure we're talking about the same thing, you were paying attention to the rollers and as a

result you're aware that it was not -- you were not using the vibratory function. You were in static mode, as you referred to it, at the start. You don't recall whether it went to vibration mode, but you were definitely in static mode at the beginning. Is that right?

A. That's correct.

Q. When you were in that position and, I guess, in your prior position when you were in charge of asphalt only, did you typically attend for test strips for the surface course or was this unusual?

A. Except for airports, test strips are not done very frequently and this is the only one I can remember going except for at the Toronto airport, so this is not typical of, you know, me showing up for a test strip.

Q. Okay. Because test strips themselves, in your experience, aren't that common. Is that right?

A. That's correct.

Q. Okay. If we could go to OD3, pages 54 and 55, images 54 and 55. So, there's two events I want to bring your attention to and then ask questions. The first is in

paragraph 109 there's a meeting. The last sentence below at the bottom of the paragraph before this is the excerpt from the notes:

"There was a meeting onsite between Dufferin and City of Hamilton."

It references representatives with Golder to inspect the test strip. And Dr. Uzarowski's notes indicate a number of people that were there, but not you, and so just to confirm, am I correct you were not at that meeting?

A. I was not there.

Q. Okay. And at that meeting, Dr. Uzarowski advised that the test strip had failed, that it was rejectable and he gives the reasons. Do you recall specifically with respect to that meeting whether you were advised of what the Dufferin folks were told? I guess it was James Wharrie, is who he indicates was there, but do you recall being advised at that time?

A. No. No, I don't.

Q. And then on July 31, if we go to the next page, Dr. Uzarowski e-mails Mr. Oddi from the City, Philips, Mr. Janicas and

Mr. Hainer. The overview document doesn't mention Mr. Hainer, but he was also copied on that document. And you can read that e-mail and just let me know when you're done. He's advising that the test strip failed and indicates that -- I'll wait until you read it. Let me know when you're done.

A. Are you talking about 111?

Q. Yes. Maybe he can expand that for you to take it easy on your eyes. Is that better?

A. Perfect.

Q. Thank you, Registrar.

A. Okay.

Q. All right. And he indicates the shortcomings in Golder's view of the test strip and the results and states at the bottom:

> "We understand that Dufferin Construction intends to place the SMA mix on the main line tomorrow. Dufferin Construction should be

aware that the test strip has not been approved and that paving will be at their entire risk."

Do you recall being advised of this e-mail?

A. I remember hearing that the test strip failed and the reasons that are identified there as far as the issues we have on voids and compaction, but I did not know about that paragraph.

Q. About proceeding at Dufferin's risk?

A. Yeah. I do not remember that.

Q. So, actually you recall being advised of the specific technical issues, if I can call them that, but then not the warning. Is that right?

A. Yeah. Because that would be under contract, so that would be under the district manager and superintendant.

Q. So, meaning that is not something that you would expect to be advised about?

A. Sometimes, sometimes not. But they do not need my approval to move forward if they wanted to take that risk. District manager would make that decision.

Q. Okay. And in this case, the district manager is Jake Sudak?

A. That's correct.

Q. And in consultation with Mr. Hainer?

A. That's correct.

Q. Okay. And so, did you have anything, any involvement, in the decision to proceed?

A. No, not at all. Our focus was on adjusting, you know, a test strip. A test strip is simply a test strip and needed to make some adjustments to make sure that when we did start, whenever we started, that we had satisfied these concerns.

Q. Now, I think you indicated that it was uncommon, except I think on airports, for test strips to be done, in your experience in any event. What typically do you do if a test strip fails in your experience, or is that not something you would run into?

A. Again, we have done very little of them. Like I said, test strips are never perfect. You know, it's up to the owner whether they want them in or out. I can't speak to the fact that we've ever taken one out if we did do one. Test strips, mind you, are much different than doing trial batches. Trial batches, we do all the time, but this is an actual test strip, so very few. We've done very, very few.

Q. Explain maybe what you mean by trial batches in this context?

A. So, trial batches is where we actually make a sample at the plant for testing before you actually do -- before you actually lay the asphalt, so --

Q. And those would -- sorry, go ahead.

A. Sorry. They're used to, number one, formulate the two labs together to try to find a happy medium and then, you know, you're making a trial batch with a 400-tonne-an-hour plant, trial batches is very small compared to the amount of asphalt that you would have to make to actually do it, so a 400 tonne plant, we would

have to run 30, 40 tonne just to get a representative sample to actually test. So, trial batches are very common but test strips are not.

Q. Right. And there were trial batches done in this instance, in this project, as well of course?

A. I believe so. We would -- even if it wasn't a requirement, Dufferin does trial batches to see where the settings need to be.

Q. And given that this was, you indicated, Dufferin's second SMA project and there was a requirement of a test strip, you know, if you were told about it failing, it does seem to me that, you know, it might be something that you want to make sure you get right or just before you start the main line paving. Am I wrong?

A. Again -- yeah. Again, you know what? It depends on what's off. Test strips are all about adjusting to get it right. You know, I don't know exactly how far this was off. It tells me that -- the fact that it was not removed tells me it just needed a tweak to put it into compliance. So, again, you would have to ask or look at the results of it for that stretch of

the ramp, but the fact that it's stated tells me it was out of compliance but it wasn't real bad or it would have been removed. Again, it's all about -- that's what you do with all test strips so you can make those adjustments on everything.

Q. And this was on a ramp, which is not, of course, the main line where SMA was going to be laid over, placed overall, it was on a ramp where the Superpave product was otherwise going to be placed. Is that right?

A. That's correct.

Q. Okay. Now, I'm going to tell you -- actually, this might be a good -- it's 3:15, so this is our typical afternoon break, and so I think this would be a good time, Commissioner, to break.

JUSTICE WILTON-SIEGEL: Fine. Should we take ten minutes?

MR. LEWIS: I think --

JUSTICE WILTON-SIEGEL: 15 minutes?

MR. LEWIS: I think 15. I would like to have a brief chat again with counsel about their thoughts on --

JUSTICE WILTON-SIEGEL: Okay.

That's fine. We'll be back at 3:30.

--- Recess taken at 3:16 p.m.

--- Upon resuming at 3:31 p.m.

MR. LEWIS: Good afternoon, Commissioner. May I proceed?

JUSTICE WILTON-SIEGEL: Please do.

MR. LEWIS: Thank you.

BY MR. LEWIS:

Q. Mr. Gamble, just coming back to one thing from before the break, you said that you thought that there was one prior SMA placement that Dufferin had done before the Red Hill and I think you said that it was on the QEW somewhere. Is that right?

A. I think it was QEW and Trafalgar.

Q. And Trafalgar, okay. We'll look into that. We certainly know there were a number of placements that -- first of all, this is an MTO project, of course, because it's the QEW. Right?

A. That's correct.

Q. Okay. And QEW and Trafalgar road in Oakville. Is that right?

A. Correct.

Q. And there were a number of MTO SMA projects, so I just wanted to nail that down as to the one that you were talking about that may be in overview document 4. We'll look into that. Thank you.

Are you quite sure it preceded the Red Hill?

A. Am I positive? No. I believe the timing, it's 2007, I believe, so...

Q. All right. Because we know that Dufferin was the subcontractor for the QEW interchange with the Red Hill Valley Parkway and that SMA was -- and that was after and that was intended to use --

A. That was after.

Q. Okay. Exactly. Okay. We'll look into that. Thank you very much.

Now, there's a few things that I anticipate Marco Oddi from the City may testify about and I'm going to ask you -- I'm going to tell you what I anticipate he may testify to on three things and then I'm going to ask you about those things. I'll mention all three at once and then I'll ask you individually.

So, I anticipate he may testify to the following things, and the first is that Dufferin and specifically you were very excited about starting the SMA paving and were quite confident in getting it right. And the second thing is that Dufferin wanted to win Paver of the Year, some sort of award in that respect. And the third is that he recalls in a conversation with you're around July 31, 2007 or perhaps in the week following that he said words to you to the effect of, and referring to the SMA placement, that if a doesn't meet spec, you're going to have to mill and replace it.

And so, if we could start with the first thing, were you and Dufferin excited about starting the SMA paving and confident that you would get it right?

A. Absolutely. I told all my people we could go out there and give the owner exactly what he required.

Q. Okay. And did you tell Mr. Oddi that Dufferin wanted to win Paver of the Year?

A. Yeah. You know what? I remember having a conversation with him, but it

wasn't for this project. This project would not have qualified for that. That's an MTO award, so I think that was a generic conversation we were having about because at that time it was every contractor's goal to win that award, but it wasn't for this project because this project wouldn't have qualified for it.

Q. Because it was an MTO --

A. So, he might have -- yeah, it's an MTO award.

Q. Okay. And then the last point, that around or about July 31 or perhaps in the week following, him saying words to the effect of: If it doesn't meet spec, you're going to have to mill and replace it. Do you recall him saying that to you?

A. I don't recall him saying that, but that's the world that we live in. If you don't give the owner the requirement, then that's what it results in. So, I don't remember the conversation, but would I have said it? Probably.

Q. It wouldn't surprise you if he said it?

A. Pardon me?

Q. It wouldn't surprise you if he said that to you?

A. Well, no. He's doing his job. You know what? He meets the client what he's asked for, and so that wasn't unreasonable for him to say that to me.

Q. Okay. And early on when we were talking about your work history and so forth and we briefly mentioned the Ontario Hot Mix Producers Association and your being on the OHMPA board for around ten years, which spanned the time of this project and, you know, we're aware and we'll hear from some MTO people about this that there were OHMPA members or representatives of some OHMPA members who were on an MTO industry joint SMA task group that was convened in 2006 to deal with concerns that had arisen regarding early low age friction in SMA pavements.

And at the time of the Red Hill project and the SMA paving commencing, were you aware of there being an issue about early age SMA low friction?

A. Not at all. I was not aware there was even a task force.

Q. Okay. At that time, you

weren't aware there was a task force either?

A. (Non-verbal response).

Q. And do you recall when you learned of the issue and/or the task force's existence?

A. I don't remember the task force, but like I said, through the industry I had heard about the pause on the OTR product and that's when -- obviously I asked why and it was about friction concerns, so that was the first I heard about any kind of friction issues in SMA.

Q. Okay. And so, OTR, that's the company and quarry Ontario Trap Rock?

A. That's correct.

Q. And you heard about a restriction on Ontario Trap Rock, but specifically the pause on SMA and we know that the pause was instituted in November 2007. Does that accord generally with when you would have heard about it?

A. You know what? We had done the -- so we finished, what, August? What was the completion of Red Hill? August 16, I believe.

Q. The paving was done on the 13th of August and it --

A. The surface?
Q. Pardon me?
A. The surface was completed on the 13th?
Q. The main line was. There was further paving that had to be done and that's when the main line was completed, in August, and then it opened it November, so --
A. So, we were completed the surface for sure when I found out and I believe it was all because we were asked to price the Aecon job at the bottom of the hill and because Varennes wasn't on the DSM, I had to find something else to use, and so when I called, that's when I found out, through the salesman at OTR.
Q. Okay. Again, to unpack that a little bit, at the bottom of the hill, do you mean at the interchange?
A. The interchange between Highway 20 there.
Q. Sorry, the interchange?
A. Between Highway 20, to the bottom of the Red Hill up north.
Q. Sorry, and Highway 20?
A. The project went to

Highway 20 for the Red Hill going east to Highway 20. It was on the QEW, the paving.

Q. Right, on the QEW, yes, that particular project where Dufferin was the subcontractor to Aecon. Is that right?

A. That's correct.

Q. Okay. And I think we have some documents that are at a later date than this, so thank you very much.

Sorry, just give me one moment. So, the QEW, there is a project for the MTO between the Third Line to Trafalgar, which is, if we could go, Registrar, to OD4, images 90 and 91. So, at the bottom of the page 90 in paragraph 214, you'll see that it refers to Dufferin requesting the MTO's permission to use aggregate from Hutcheson sand and gravel in SMA on the QEW from Third Line to Trafalgar. And I would just bring you to that because you mentioned your recollection about a prior project being at Trafalgar Road and the QEW.

Is this what you're referring to or do you still --

A. That's the project I told you, but obviously I've got the wrong project.

Q. Okay. So, you still think -- that's fine. So, that's the project you were thinking of?

A. That's the project, but obviously I've got the wrong project in mind.

Q. Okay. Do you think that there was another SMA project that preceded the Red Hill?

A. Yes, I do. Yes, I do. There's one project, I believe.

Q. Okay. If we're unable to get to the bottom of it today, we'll follow up on that with Dufferin's counsel.

Okay. You can go back to OD3, Registrar, image 57. While he's -- we've got it. Good. We know that it started, the SMA paving, on August 1, 2007 and Golder conducted compaction testing on August 1st and 3rd. I think you indicated earlier that Dufferin's normal practice, except on SMA, is it to use the vibration setting on its rollers, but am I correct you weren't onsite on the 1st or the 3rd? You weren't supervising the paving in any respect. Is that right?

A. That's correct.

Q. And from the review of documents, and I don't know that it will be necessary to take you to them, but it certainly shows that from the compaction test reports on August 1 that vibration, the vibration setting, was used for a portion of the SMA paving. Do you have any knowledge of that occurring?

A. No, I don't. All I know is that at that time our people were working with Golder to establish rolling patterns to make sure that we hit the spec. If that entailed using vibration, then that's what they would have done.

Q. Okay. But you don't have any personal knowledge of whether they used it or not and, if they did, to what extent. Is that right?

A. That's correct.

Q. Now, if I could take you to -- actually I will ask one question. Would it make sense to you, though, that if vibration was used, that that would directionally, taking into account the concerns you raised about potentially cracking aggregates, that better compaction results can be obtained by using the vibration mode?

A. Again, as long as it was hit hot, as long as they hit the mat at the temperature that it needed to be. Once it gets too cold, regardless of what you do, vibratory or not, you wouldn't get the compactions.

Q. And that's the issue with SMA, that it really needs to be rolled when it's hot, so you need the rollers to be close to the pavers. Is that right?

A. That's correct. And I believe after we did the test strip, we added more rollers so they were really tight to the paver, but I'm not sure if they did vibratory or not. That, I wouldn't know.

Q. Okay. If we could go to page 58 of OD3. And in paragraph 120, if you could expand that, please, Registrar, so Mr. Oddi, on August 9 of 2007, e-mailed Dave Hainer, you and James Wharrie, all of Dufferin, and the e-mail is quoted there:

> "This correspondence confirms that the Varennes mix aggregates have been approved for use in the SMA and

Superpave 12.5 FC2 surface course asphalt mixes on the Red Hill Valley Parkway main line paving project. The trial batches for both mix designs met the specified requirements. If you have any questions, please call me."

You did receive a copy of this e-mail. Do you recall receiving it?

A. Not specifically, until I read all the documents and I see that I forward it on.

Q. Right.

A. I just assumed this was an FYI again.

Q. Right. You sent it on to, if you could pull that down, it's actually not in there. We would have to go to the document itself. I think you forwarded it to --

A. Vincent Gangaram.

Q. Yes, it's to

Mr. Gangaram, who is the lab person. Right?

A. Yeah. I forwarded it to him for his records.

Q. Right. And so, was it typical for Mr. Oddi to communicate with you directly?

A. Not at all. Not typical at all.

Q. And who was he typically communicating with?

A. At the job site with Mr. Hainer.

Q. Okay. And would it be fair to say that typically these communications, communications about mix design and aggregates and approval or issues arising, that those typically, from the City side, came from Golder, Dr. Uzarowski?

A. Or Philips, one or the other. Again, I wasn't part of the process, so I'm not sure what the trail was.

Q. Okay. And do you have any recollection of the circumstances surrounding this e-mail?

A. Again, I just assumed it

was an FYI, that this was the official approval.

Q. Did you request that this e-mail be sent?

A. No.

Q. Do you recall any discussion on the Dufferin side of things about requesting such an e-mail?

A. No.

Q. Is there any light that you can shed on why this e-mail was sent by Mr. Oddi at this time rather than by Dr. Uzarowski?

A. No. I'm sorry. You would have to ask Marco. I just don't know.

Q. Okay. And would it be fair to say to that it's unusual for such a communication, whoever it's coming from, to be coming eight days after the paving commences?

A. Again, you know what? I wasn't part of the job site, but it sounds like a lot of verbal approvals were done at these site meetings that I've read, so this could just be catching up on the paperwork. Again, you would have to ask the author here, but there's a lot of things done at site meetings verbally to get the

job to stay on schedule so, but again, you would have to ask the author.

Q. Okay. OD3, image 60, please. These are the site meeting minutes for the site meeting on August 21, following the completion of the SMA paving. You weren't in attendance, but there is an entry referring to Golder providing written confirmation indicating the SMA mix design is satisfactory. You don't need to expand it, but it's the fifth bullet there.

Do you have any knowledge of when that was provided or who provided it?

A. No, not at all. Because, again, these approvals go directly to the job site and then to my people in the QA/C lab.

Q. Right. And that is the typical thing but it's not what happened on August 9. That's the distinction. Right?

A. Correct.

Q. Okay. Now, I would like to move on to the topic of the MTO friction testing and then the application that was then submitted by Dufferin and Demix for DSM approval, is the next topic I want to talk about.

So, if we could go to OD4 now, Registrar, image 55. Just to place it in time for your benefit, the actual testing, skid testing, by the MTO took place on the Red Hill on October 16, 2007 and then there were arrangements being made, of course, in the lead-up to that testing taking place. And in paragraph 166, there you'll see in early October, October 4, there's some e-mails about making arrangements to conduct the testing on October 9 but then it doesn't end up happening until the 16th.

And if you could go then to paragraph 127, the next page, next image. That's good. You can keep them both up. And then Mr. Delos Reyes at Golder forwards the October 4 e-mail from Mr. Marciello at the MTO to Philips and to Dufferin at James Wharrie's e-mail address stating:

> "Gentlemen, for your information and permission."

And if we could go to an actual document, Dufferin DUF2709.1, and you'll see at the bottom it's Mr. Delos Reyes' e-mail on October 4 where he writes to James Wharrie, the

e-mail I just read to you before:

"Gentlemen, for your information and permission."

He sends it to Mr. Wharrie and to Dr. Uzarowski and Mr. Delos Reyes and Mr. Oddi. And then Mr. Wharrie at the top there on the same day forwards that to Mr. Hainer, to you and I guess that's Brian Dodds at Dufferin. Is that right?

A. Brandon.

Q. Brandon, thank you. I see the "Br" there. He indicates:

"FYI, please find attached from Andro regarding skid resistance testing to take place at 10:00 a.m. Tuesday October 9, 2007."

Okay. If we could pull that down and then go to OD4, image 59, and paragraph 136, so maybe 59 and 60 so the entire paragraph is up. Thank you. So, in paragraph 136, you're not copied on this but this is Mr. Delos Reyes to Mr. Marciello at the MTO on

October 17, the day after the testing is conducted, and he states:

> "Just a reminder, please e-mail test result as discussed. Dufferin and Philips Engineering are highly interested."

So, with all of that just to set the stage for you, you received that earlier e-mail that Mr. Wharrie forwarded to you on October 4 about the testing that was going to take place. Do you recall if you were highly interested in the testing?

A. That was the first time that I realized that the testing was actually going to happen, because again, the contract itself, that was not a criteria for acceptance, so that was the first time that I knew there was actual testing being done. And then through all my readings, the job site showed an interest in the results. I did not. I was focused on fulfilling the contract, the specifications in the contract.

Q. Okay. Do you know who expressed that interest to Mr. Delos Reyes? Do

you have any knowledge of that?

A. Well, it's coming from the job site, so it's Mr. Wharrie worked for Mr. Hainer, so it's coming directly from the job site.

Q. Okay. Someone at the job site?

A. Someone at the job site.

Q. Okay. Do you know why they would have been interested in it?

A. No.

Q. Because, as you said, it wasn't a contractual requirement, so what do they care?

A. I'm not sure.

Q. And if we could mark Dufferin 2709.01 as the next exhibit, please, Commissioner. I believe that's Exhibit 32.

EXHIBIT NO. 32: E-mail from James Wharrie to David Hainer dated October 4, 2007, Skid Resistance Testing - Red Hill Valley, DUF2709.01.

BY MR. LEWIS:

Q. I will say, is friction testing something that you had any, other than knowing that perhaps friction testing existed or skid testing existed, is that something that you had any knowledge of or understood how it worked and what it did, anything like that?

A. Anything technical like that, I left for the people that worked for me. I didn't have the training or the education to even understand it. I hired experts to take care of that for me.

Q. So, that's the explanation. I take that as a no and that's the reason why no. Is that right?

A. That's correct. That's correct.

Q. Okay. So, I appreciate you weren't interested in the friction during the paving because it wasn't a contractual requirement. What about regarding the submission to the MTO for inclusion of Demix aggregates on the DSM? Is that something that crossed Dufferin's radar screen at the time that the application was being made?

A. Yeah, I believe what had

happened there, and again that was probably at my direction, is after we completed the Red Hill, we're very proud of the Red Hill, and then the product that we had placed, we believed to be a very, very good material, and so we made the application to or I gave Paul the direction to try to get it on the DSM list, but you had to satisfy a bunch of conditions with the Ministry and there were some visits and things, but I believe I directed to get the ball rolling to get on the DSM.

Q. And Paul, that's Paul Janicas that you're talking about?

A. Yes. Sorry.

Q. That's okay. That's why I'm here.

If we could go to OD4, image 57, just back a little bit. So, paragraph 131, a day prior to the actual skid testing being done by the MTO on October 15, Mr. Janicas sends this letter to Jim Theodore, who is the contract administrator at Morrison Hershfield on a MTO contract, contract 2007-2031. Under the reference line, "Trial Section - SP12.5 FC2 using aggregates from the Varennes Quarry - Demix." And attached

to Mr. Janicas' letter was the Red Hill Valley Parkway mix design package prepared by Trow for the SP12.5 FC2 layer, so the Superpave asphalt mix, with everything that's attendant in the mix design package.

And then in his e-mail -- sorry, his letter to Mr. Theodore is outlined there referring to requesting a trial section for the SP12.5 FC2 surface course of approximately 500 tonnes to evaluate potential alternative source of premium aggregates for use in hot mix on Ministry projects. And then it goes on to talk about the aggregate having been used in SMA and the Superpave on the Red Hill Valley Parkway and attaching it and then indicating that the design was completed by Trow Associates and does not have third-party verification as it was not a requirement of the above-mentioned project.

And then he asks at the end:

> "Should the Ministry be interested in this trial section but require a verification, please advise DCC as soon as possible."

So, was this a Dufferin paving contract with the MTO?

A. I believe it was, yes.

Q. Okay. And so, as I understand it, and you tell me if I'm wrong, it's seeking for Dufferin to place a trial section, a trial strip, using Demix aggregates in that mix on the contract which another mix is being used, using an already-approved DSM aggregate. Is that right?

A. Yes.

Q. And as you indicated, you think this would have been submitted at your direction by Mr. Janicas?

A. This would have all been a part of the process of trying to get the Demix material on the DSM. That's what's required to get on the DSM, is a trial strip.

Q. Right. And the trial strip being used, that's what you're asking for, and then next to it a continuous section of road which can also be using an already-approved aggregate. Is that right?

A. Yeah. You know, I could speculate. You would have to ask Paul his

intentions here, but I would speculate that at the time we did not know if the Ministry would allow the Red Hill to be the actual trial strip, so we wanted to get the product on an actual MTO job. I believe that's what the intention would have been, but again, that's me speculating.

Q. Okay. So, to back it up, would it by fair to say that likely you said to Mr. Janicas let's make an application, you know, to get this on the DSM, you figure out how to do it?

A. It's a matter of just following the process that the Ministry requires to get on the DSM list, which required a test strip.

Q. Right. But I think you had said before, that's right, that you weren't familiar with the ins and outs of what was required. You just knew you had to be on the DSM if you wanted to do an MTO project, so that's why I'm asking what level of detail you got into with respect to the application?

A. Satisfy the Ministry to get on the DSM list. That's --

Q. All right. And do you

know when you made the decision to apply? When did that start to be on your radar screen about applying to the Ministry for DSM status for the Demix aggregates?

A. We talked about it before the completion of the Red Hill, but after we completed the SMA and saw how satisfied we were with the placement of it, that's when we made the decision to actually move forward.

Q. Okay. So, how far back would you have been talking about it? Would this have been a topic of discussion at the time or before the time that you made the decision to use the Demix aggregates on the Red Hill Valley Parkway?

A. No, because at the time we didn't know how it was going to react, so we wanted to use it and see how friendly it was as far as placement goes before we decide to do it and we were very happy with the -- sorry.

Q. No, I understand that about the decision to actually submit the application. What I'm wondering is when it first came to your mind and was discussed about even contemplating doing that, even contemplating the

application. I appreciate what you said about you weren't going to do something until you saw how it was placed and that it went well. I get that. But I'm wondering going back how far back that this was in contemplation to even consider making an application.

A. It was always in my mind to do it. There's a very short supply of premium aggregates in Ontario. Us getting that mix or, sorry, that aggregate on the DSM is good for the government, for the owner, for the MTO and for the industry to have another source to be able to use, so. But again, no decision was made to move forward until we saw the end result on Red Hill.

Q. Okay. So, am I correct, then, that prior to making the decision to use the Demix aggregates in the SMA and SP12.5 FC2 mixes, that it was in your contemplation that there may be an application to the DSM, assuming that the Red Hill project went well?

A. Yeah. Not initially because we didn't even know if it was going to be approved by the City, but once it was approved, then we talked about it.

Q. Okay. So, I'll keep

backing up. So, once you knew that it was approved, then it was moving forward and closer to the decision to actually make application. Are you saying that --

A. Correct.

Q. Because you also said that, I think, and I don't want to mischaracterize your words, I thought you said it was always in your mind, so I'm wondering how far back that goes. I appreciate that your certainty as to whether an application was going to be made would have been increased over time. I'm wondering if at least it was in your contemplation that there would in the future, assuming the Red Hill, assuming it was approved, assuming that it went well, that an application could be made and if that was in your contemplation prior to deciding to ask the City if you could use the Demix aggregates on the --

A. Not prior. Not prior.

Q. Okay. Sometime after? At some point after that?

A. Correct.

Q. And we've seen with the letter early on in our discussion today was the

letter from Mr. Gangaram to Philips was on the 27th of March of 2007, so not prior to that date or was it prior to that date?

A. So, the 27th, we made the application to the City. Correct?

Q. Yes.

A. Yes.

Q. 27th of March.

A. 27th of March. So, it would be after that date.

Q. Okay. And then at some point along the way -- and if you can't pinpoint it any further than you have, then that's fine -- before the SMA paving actually took place, you were more solidified, assuming that the paving went well, that the DSM application would be made. Is that correct?

A. That's fair, yes.

Q. And can you place it any better along the time between March 27 and August 1?

A. I would be guessing. Sorry. I would be guessing.

Q. That's fair. Thank you. And I want to then come back to Mr. Oddi's

August 9, 2007 e-mail, which, as you indicated, was at least atypical in terms of the lines of communication on this project, and this is the e-mail where he sets out the approval of the Demix aggregates. And so, I just want to ask you is it possible that Mr. Oddi was sending that at Dufferin's request so that there was a record of approval for potential submission to the MTO for the DSM application?

A. No, not at all. No, not at all.

Q. Okay. How can you be so sure about it that? It's after the paving commenced.

A. Again, I wasn't at the site meetings, but I'm assuming a verbal was given to start and this was catching up with the paperwork to make sure that all approvals are done in writing.

Q. Okay. But you're quite certain it wasn't for the purpose that I just suggested?

A. No, not at all. Not at all.

Q. Okay. Thank you. The

last thing I want to ask you about is if we go to OD3, image 70, and in paragraph 147(a) there's a reference to a paper that was presented at the 2008 annual conference of the Transportation Association of Canada. And in paragraph (a), there's one that's called "Innovative, Comprehensive Design and Construction of Perpetual Pavement on the Red Hill Valley Parkway in Hamilton," and authors are listed as Dr. Uzarowski, Gary Moore of the City of Hamilton and you.

Did you have any role in writing the paper or in providing any inputs or edits?

A. Nothing at all. Nothing at all.

Q. Okay. Did Dr. Uzarowski ask you, though, if you would agree to be listed as an author?

A. He phoned me asking for permission to put my name on the paper.

Q. Okay. And you gave him that --

A. I gave him permission, yes.

Q. Okay. And do you recall if you read the paper before it was completed?

A. I still haven't read the paper.

Q. Okay. And do you recall if it was sent to you? Dr. Uzarowski testified that he believed it was and we do have an e-mail where he instructs his assistant to send it to you. I appreciate that you never read it. Do you recall if you received a copy?

A. I don't. I don't. I can't say for sure, but if I did receive it, it was not read.

Q. Okay. All right. I don't have any further questions, Commissioner. Thank you, Mr. Gamble. The participants' counsel will, I believe, have some questions for you.

Commissioner, I can advise that -- and maybe if we just take five minutes for counsel to confer about the time, I do expect that if we sit a little bit past 4:30, I expect we will be able to finish with Mr. Gamble and get him on his way rather than calling him back tomorrow, so maybe if we could just have five minutes to discuss with --

JUSTICE WILTON-SIEGEL: That's fine. Mr. Gamble, I'm assuming that that's your preference, to --

THE WITNESS: Yes.

JUSTICE WILTON-SIEGEL: -- sit a little bit later today and finish up today?

THE WITNESS: Indeed.

JUSTICE WILTON-SIEGEL: That's fine. Then let's take five minutes and counsel can discuss the timing in counsel's breakout room.

--- Recess taken at 4:12 p.m.

--- Upon resuming at 4:17 p.m.

MR. LEWIS: We are back, Commissioner. I can advise that there aren't very many questions and I think likely we'll be done around and about 4:30 in any event. And counsel for the MTO has advised that they don't have any questions. Mr. Chen for the City will go first. He has a few questions. Then Ms. Roberts for Golder. And, unless there's something that needs to be addressed, Ms. Laurion has indicated she's unlikely to have any questions, but she does reserve the right if something else arises.

JUSTICE WILTON-SIEGEL: Okay.

EXAMINATION BY MR. CHEN:

Q. Good afternoon, Mr. Commissioner. Good afternoon, Mr. Gamble. My name is Jonathan Chen and I'm one of the lawyers for the City of Hamilton. I just have a small number of questions for you.

So, I want to go back to the decision to use the Demix aggregates for the SMA surface layer and I believe you testified that one of your responsibilities was to decide which aggregate to use for the SMA surface layer. Is that correct?

A. That's correct.

Q. And we know the decision was to use the Demix aggregates for the SMA layer. Correct?

A. That's correct.

Q. And one reason for choosing the Demix aggregates is that this was not an MTO contract, so there was no requirement to use a DSM-listed aggregate. Is that fair?

A. That's fair.

Q. So, an aggregate not on the DSM was permitted for this project, provided that it met certain specifications?

A. Correct.

Q. And given that there was no requirement to use a DSM-listed aggregate, I take it Dufferin never proposed to the City to use a DSM-listed aggregate?

A. That's correct.

Q. And, again, I get that there was no requirement under the contract, but fair to say that Dufferin could have proposed using a DSM-listed aggregate if Dufferin wanted to?

A. If we wanted to, we could have.

Q. And just back to the Demix aggregates, I take it we can agree that just because an aggregate is not on the DSM list, it doesn't mean the aggregate is low quality?

A. That's correct.

Q. The aggregate just hasn't been pre-qualified for use by the MTO, as I think you discussed with Mr. Lewis. Correct?

A. That's true, yes.

Q. And fair to say that you believe the Demix aggregates to be a premium aggregate?

A. Yeah, as deemed by Quebec

and as deemed by the professionals that were doing our mix design.

Q. Perfect. Those are my questions, Mr. Commissioner. Thank you, Mr. Gamble.

MR. LEWIS: So, I believe Ms. Roberts is next.

EXAMINATION BY MS. JENNIFER ROBERTS:

Q. Hello, Commissioner, Mr. Gamble. Mr. Gamble, I'm counsel for Golder and I have a very short series of questions just on process.

Registrar, if I can take us back, please, to overview document 3, image 47, paragraph 97. There we go. Okay. I just want to take you back, Mr. Gamble, to the submission of the mix design, and that's set out in paragraph 97. June 22, this is Mr. Janicas, he submits the mix design.

And I would like to go actually to the mix design, and that, I believe, is Golder 1631. There we go. Okay. Can we please turn up image 3. First of all, I take it that this is the mix design that was prepared for Dufferin by its consultant, Trow?

A. Looks like it, yes.

Q. Okay. And just for clarity of understanding, this is Trow's mix design and I'm not going to go through the whole package because that would -- I don't think it warrants that detail, but am I understanding this correctly that this is, sort of, the overview of what's in the mix that you're going to actually produce?

A. Yes. Those are the proportions of each individual constituent in the mix.

Q. You're anticipating my question. So, maybe if you can take us briefly through that, because I think you gave evidence about proportionality earlier this afternoon.

A. Can you blow it up? I can't see anything now.

Q. Thank you. There you go.

A. Okay. So, that first box is the key ingredients, so you've got 12.5 coarse aggregate, 72 percent of the mixes is coarse aggregates. Screenings, there's 15 percent screenings. Then you have a filler of 6.58 and then you have AC content, which is 6 percent.

That constitutes your mix proportions.

Q. Okay. And the PG 70-28, that's the kind of asphalt cement that's been specified. Right?

A. That's correct.

Q. Okay. And we looked at various points today at different issues and one of the specifications required is the air void of 4 percent. Do you see that there?

A. Yes.

Q. Okay. And this, then, as I understand it, becomes the template against which all of the aggregate that's produced by Dufferin gets measured?

A. That's correct, in the mix. Correct.

Q. Okay. And so, just as we go forward in the chronology, as Dufferin's plants are producing asphalt for the Red Hill, I understand that two samples are taken at supply: One that Dufferin tests pursuant to its QC. Is that correct?

A. I'm not sure the process they use on this. That's a day-to-day thing --

Q. Okay.

A. Sorry, I can't answer that.

Q. Okay. But am I correct in understanding that all of the QC/QA review is done in comparison with this mix that's prepared by Trow?

A. Yes, yes. I think you were asking are the samples taken side by side so that you have a good correlation. If that was your question, that's true.

Q. Yes.

A. But the frequency and everything, I couldn't tell you about that.

Q. Right. Sorry, I didn't mean to get into frequency. The point is that they're duplicate samples that are taken. One of those --

A. Yes. Yes.

Q. Okay. Commissioner, this morning you were asking about the process and I'm hoping this would be responsive to that series of questions.

JUSTICE WILTON-SIEGEL: Yes. So, one sample, I take it, goes to Trow and one sample goes to Golder. Is that right?

THE WITNESS: To Trow? I believe on this project we were doing the testing ourselves. Trow only did the mix design, I believe.

JUSTICE WILTON-SIEGEL: I see. Okay.

BY MS. JENNIFER ROBERTS:

Q. I can go to an example of that, actually. Why don't we do that. Let's just pull up Dufferin 2419. Is this an example of a hot mix asphalt test report done by Dufferin?

A. Yes. So, if that's from this project, that's us doing the testing and we compared that to Golder's sample.

Q. Commissioner, we can go through this, but I think for my purposes I was trying to illustrate the process of the review.

JUSTICE WILTON-SIEGEL: That's fine. Thank you.

BY MS. JENNIFER ROBERTS:

Q. Thank you. Those are my questions. Thank you very much for your patience, Mr. Gamble.

MR. LEWIS: Ms. Laurion, do you have any questions?

MS. LAURION: No questions. Thank you, Mr. Lewis.

MR. LEWIS: Thank you. Commissioner, there is one thing that I neglected to ask right at the end and I do, under our rules, have the ability to ask follow-on questions, but it's just one very, very short point.

FURTHER EXAMINATION BY MR. LEWIS:

Q. Mr. Gamble, just with respect to the actual skid testing results from the MTO, did you ever receive a copy of the results?

A. Never.

Q. Do you know if anyone else at Dufferin received the skid testing results by the MTO?

A. I don't know for a fact that they did, but I know that they were eager to see them, so you would have to ask them.

Q. Okay, but you're not aware of whether they did or not?

A. They didn't share them with me if they did.

Q. Okay. That's it. Thank you.

JUSTICE WILTON-SIEGEL: Okay. So, I take it, Mr. Lewis, that ends the session for today?

MR. LEWIS: Yes, it does.

JUSTICE WILTON-SIEGEL: And Mr. Gamble was scheduled for tomorrow, but we've now finished with Mr. Gamble today, which means that, if I understand correctly, Mr. Oddi is not available until Thursday. Is that correct?

MR. LEWIS: Wednesday.

JUSTICE WILTON-SIEGEL: Wednesday.

MR. LEWIS: He was originally scheduled for Wednesday, but we've been advised that he's not able to make himself available tomorrow.

JUSTICE WILTON-SIEGEL: Right. And neither Mr. Janicas, who is scheduled for Thursday, nor Mr. Murray, who is scheduled for Friday, is available to slot in tomorrow?

MR. LEWIS: That is correct. Mr. Janicas just had the one day really available and Mr. Murray is not in town.

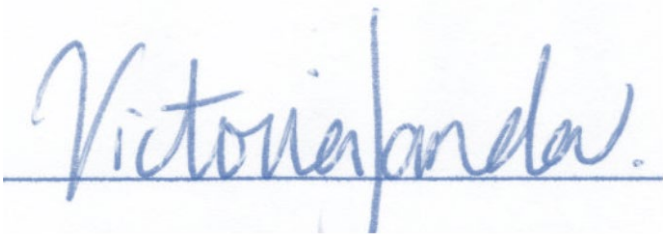
JUSTICE WILTON-SIEGEL: So, two things: In the short-term, that means that we

will be adjourning until Wednesday morning at 9:30, there being no witness for tomorrow. The second, and I appreciate that this is a bit of a trial and error kind of experience for all of us, but I would strongly ask a request of counsel that with respect to subsequent weeks, that they do their best to ensure that their witnesses are available to be called the day before in case we have a similar experience to that which we've had this week where we can get through witnesses a little quicker than the schedule contemplates.

So, with that, Mr. Lewis, if there's nothing further that we have to address today, the inquiry -- first of all, I should say thank you to Mr. Gamble for appearing today and we'll stand adjourned until 9:30 on Wednesday morning. Thank you, all.

--- Whereupon at 4:30 p.m. the proceedings were adjourned until Wednesday, May 4, 2022 at 9:30 a.m.

I HEREBY CERTIFY THAT I have, to the best of my skill and ability, accurately recorded by shorthand, and transcribed therefrom, the foregoing proceeding using real-time computer-aided transcription.



Victoria Janda, CSR