TRANSCRIPT OF PROCEEDINGS HEARD BEFORE THE HONOURABLE J. WILTON-SIEGEL held via Arbitration Place Virtual on Wednesday, February 22, 2023 at 9:30 a.m.

VOLUME 85

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February 22, 2023

1 Arbitration Place Virtual 2 --- Upon resuming on Wednesday, February 22, 2023 3 at 9:35 a.m. 4 MS. LAWRENCE: Good morning, 5 Commissioner. 6 JUSTICE WILTON-SIEGEL: Good 7 morning. MS. LAWRENCE: Maybe you can 8 9 just give me a second to ensure that my tech 10 issues are resolved. Seems good. I think we can get started. I 11 12 don't know if we're live or not. 13 JUSTICE WILTON-SIEGEL: I 14 believe we're live. 15 MS. LAWRENCE: Great. We have 16 one witness today. It's Janice Baker, who is our 17 next witness, and I understand that she is in the 18 waiting room. I would ask the Registrar to let 19 her in, please. Good morning, Ms. Baker. 20 THE WITNESS: Good morning. 21 MS. LAWRENCE: Commissioner, 22 Ms. Baker has not yet been sworn and I ask that 23 the court reporter do that at this time. 24 AFFIRMED: JANICE BAKER; EXAMINATION BY MS. LAWRENCE: 25

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1 MS. LAWRENCE: Good morning. 2 Commissioner, may I proceed? 3 JUSTICE WILTON-SIEGEL: Yes, 4 please do. 5 BY MS. LAWRENCE: 6 Welcome, Ms. Baker. Ο. You 7 prepared an expert opinion report for the inquiry in November of 2022; is that right? 8 9 A. Yes, it is. 10 Registrar, could you Q. 11 bring up document EXP193, please. Ms. Baker, can 12 you see that document on your screen? 13 A. Yes, I can. 14 Q. Great. If you have any 15 issue with any of the documents that we put up on the screen in terms of size or scrolling up and 16 17 down just let us know and the Registrar can 18 adjust. A. Okay. 19 20 Ο. This is a fairly lengthy 21 document. It contains your covering letter and 22 then your report. It also contains your CV, and some assumed facts that commission counsel 23 24 provided to you, and I would ask that this made the next exhibit, please. 25

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1	THE REGISTRAR: Noted.
2	JUSTICE WILTON-SIEGEL: What
3	number is that, Mr. Registrar?
4	THE REGISTRAR: Exhibit 229
5	(sic).
б	JUSTICE WILTON-SIEGEL: Thank
7	you.
8	EXHIBIT NO. 230: Document
9	dated November 17, 2022; 42
10	pages
11	BY MS. LAWRENCE:
12	Q. Ms. Baker, before we get
13	into the details of your opinion I'm going to take
14	you to your CV. Registrar, can you go to image 24
15	of this document, please. And this is your CV?
16	A. Yes, it is.
17	Q. We redacted your personal
18	contact information at the top, but this is the
19	document you provided to commission counsel?
20	A. Yes, it is.
21	Q. So just even on this
22	first page, it's clear that you have worked in
23	municipal government for decades; is that right?
24	A. Yes, 35 years.
25	Q. Before I get into your

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1	lengthy career I'm going to go to your education.
2	And that's at the bottom of image 26 please,
3	Registrar. Can you call out the bottom part of
4	this document under education. There we go. Just
5	so it's a little bit bigger for you, Ms. Baker.
6	And we can do that any time you need a little
7	assistance with the size of the font.
8	I see that you have a bachelor
9	of commerce degree with a major in accounting and
10	finance; is that right?
11	A. That's correct.
12	Q. And a chartered
13	professional accountant since 1982?
14	A. That is correct.
15	Q. And more recently, in
16	2019 you did a directors education program at the
17	Rotman School of Business?
18	A. Yes, correct.
19	Q. Registrar, you can close
20	this, and if you can go back to image 24, please.
21	So right at the top of your CV it indicates that
22	you are currently the chief administrative officer
23	in the Region of Peel; is that right?
24	A. Yes, it is.
25	Q. And you've held that role

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1 since 2020? 2 Α. Correct. 3 At a high level what does 0. 4 your role as chief administrative officer for the 5 Region of Peel entail? 6 Α. Thank you. The CAO is 7 the single employee of the council of the Region of Peel, and as such, you're responsible for the 8 9 oversight of the organization, establishment of 10 strategy for the municipality, setting of policy for a wide range of areas whether it's human 11 resources, finance, broad strategic objectives 12 13 around the services that the region provides. 14 You are, along with your 15 leadership team and the professional staff in the 16 organization, the advisors to council on issues 17 that come before them that they are responsible 18 for making decisions with respect to services and 19 other priorities for the municipality. We manage 20 the infrastructure that the municipality owns and 21 operates, provide frontline services in a broad range of areas. So in the case of the region, 22 23 it's primarily housing, health, public works, and 24 we run a number of provincial programs such as 25 ambulance and emergency response.

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1	So in broad terms, you lead
2	the organization, you certainly support the
3	organization in terms of delivering on its
4	objectives. And you are an advisor to council on
5	the issues where they are looking to the
6	administration to help them do their job, which is
7	make decisions on behalf of the citizens of the
8	Region of Peel.
9	Q. Thank you. Prior to this
10	role in the Region of Peel you worked for the City
11	of Mississauga your CV indicates?
12	A. Yes.
13	Q. And I see you held
14	successive roles in the City of Mississauga
15	starting in May 1999; is that right?
16	A. Correct.
17	Q. So you were first
18	commissioner of corporate services and treasurer
19	for about five years, then the acting City manager
20	and CAO for a brief period of time, and then the
21	City manager at CAO from January 2005 to May 2020?
22	A. That's correct.
23	Q. Recognizing that was a
24	city role versus your role in the Region of Peel,
25	was the City manager and CAO role in Mississauga

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1 similar in terms of your overall responsibilities 2 to the role that you currently hold in peel? 3 Yes, it would have been Α. 4 very similar. The basket of service that the two 5 municipalities delivers is somewhat different, but б nonetheless, the role would have been virtually 7 the same in terms of its responsibilities and 8 accountabilities. 9 Ο. Thank you. Registrar, 10 could you go to the next image, please. Your CV also indicates that you've worked for two other 11 municipalities, the City of St. Johns in the 80s 12 13 into the 90s, and then the City of Oshawa in 14 the -- from 1995 to 1999; is that right? 15 Α. Correct. 16 0. And you held successive 17 leadership roles at the -- looks like they are 18 commissioners but as the director role; is that 19 right? 20 Α. In St. Johns, yes, my 21 ultimate role was director of finance and city treasurer as you see there, and then in Oshawa I 22 held a number of commissioner roles. 23 24 And that included for a Q. brief period of time the acting commissioner of 25

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1 public works? 2 Α. That's correct. There was a reorganization underway and the City manager 3 4 at the time asked me to step into that role while 5 we were looking to make some structural changes. 6 0. And thereafter you had the commissioner of operational services role 7 8 which had responsibility for roads and parks 9 maintenance, recreation programs and facilities, and solid waste collection; is that right? 10 11 Α. Yes, so that was post the 12 reorganization and I took over that consolidated 13 set of services for the City for a brief time. 14 Q. Looking at the bottom of 15 this page, you've listed a number of awards that 16 you've received, most recently the Vanier medal from the Institute of Public Administration of 17 18 Canada, and that you indicate was the first time 19 the award was given to municipal official. At a 20 very high level, the Institute of Public 21 Administration of Canada, what is the nature of 22 that organization? The Institute of Public 23 Α. 24 Administration of Canada is an organization that focuses on career development, training, skills 25

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1 development, setting codes of conduct, really 2 looking at supporting senior public officials at all levels of government, federal, provincial, and 3 4 municipal. You know, learn about current best 5 practices, and they do training for public б officials, they hold an annual conference, they 7 create networking opportunities, all with a view to building the skills and expertise of those in 8 9 public service to be able to perform at their 10 best. And the Vanier medal, as you've noted, is 11 their highest award that they give on an annual 12 basis. 13 Q. Registrar, can you go to 14 the next image, please. Thank you. Just stopping 15 there, a matter of housekeeping. I understand 16 that this report should actually be Exhibit 230. 17 I think there was a numbering error earlier. 18 Registrar, can you just confirm that? 19 THE REGISTRAR: I confirm, 20 Ms. Lawrence, it's 230 instead of 229. 21 BY MS. LAWRENCE: 22 Thank you. Turning to Ο. 23 your board and community service, we're not going 24 to go through all of them. They are many. In my review of these it appears that you've served on a 25

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1 number of different boards, some of which arise 2 out of the various roles that you have held; is 3 that right? 4 Yes, that's correct. Α. 5 Ο. And others appear to be education and development associations for б municipal administrators. Is that also correct? 7 8 Α. Yes, including the 9 National Association in Canada for Municipal Administrators, the Canadian association, I was on 10 their board and president -- served as president 11 12 in 2017 I believe it was. 13 Ο. Thank you. In those --14 that latter group of organizations including the Canadian municipal administrators, in those roles 15 16 you were able to discuss and interact with other 17 municipal senior officials; is that right? 18 Α. Yes. In fact, it's one 19 of the prime benefits of being a member of an 20 association is the ability to connect and network 21 with your peers right across Canada. 22 Thank you. And did that Ο. 23 include the sharing and brainstorming of best 24 practices within municipal governance? 25 Absolutely. In fact, one Α.

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1 of the programs that we had at the Canadian 2 Association of Municipal Administrators was an annual awards program that across a number areas 3 4 had municipalities submit annually initiatives and 5 programs that they had developed for purposes of б showing innovation or best practices, and then 7 those who received the awards, their material would be available on the website for any and all 8 9 members to access. 10 Q. Thank you. So given your education and your very lengthy career in 11 12 municipal government and your interactions with 13 many other officials in other municipal 14 governments, do you feel well positioned to today 15 to give Commissioner evidence about municipal 16 corporate governance? 17 Α. I believe so. I've been, 18 as you've noted in the field, for a very, very 19 long time with senior roles in large organizations 20 and I can hopefully share the benefit of my 21 experience with the commission. 22 Ο. Thank you. In giving 23 your testimony today can you commit to providing 24 evidence that's fair, objective and non-partisan and relating only to matters that are within your 25

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1 expertise? 2 A. Yes, I certainly can. 3 Ο. And you understand that 4 this duty prevails over any other obligation that 5 you might owe to commission counsel who have б retained you and that your role today is really to 7 assist the Commissioner in his work of addressing 8 terms of reference; is that right? 9 A. Yes, correct. 10 So you were given some Ο. facts to assume in Exhibit 230. Those start at 11 12 Exhibit 28. Registrar, could you take us to 13 Exhibit 28, please. Pardon me. Image 28 is what 14 I meant to say. 15 So you'll see this is the 16 beginning of the commission counsel's letter to 17 you that encloses your questions, themes, and some assumed facts. Registrar, can you go to the next 18 19 image, please. Thank you. 20 I'm not going to take you 21 through each of these pages, but just for a bit of 22 overview, you were asked to assume some facts and 23 you were given some references to the commission's 24 overview document. I don't know if there's any on this particular page, but you recall throughout 25

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1 the assumed fact there's some references? 2 Α. Yes, I do. 3 0. And you reviewed those 4 pinpoint references in the overview document in 5 order to assess your opinion today? 6 Α. Yes, I did. 7 Ο. More recently you were 8 provided with some City policies and some 9 consultant reports that are all relevant to this 10 inquiry and its work? 11 A. Yes, I was. 12 Ο. So other than the 13 documents and the assumed facts that we've 14 provided to you, you haven't reviewed the totality 15 of the overview documents in preparation for 16 today; is that right? 17 Α. That's correct. I looked 18 at the material that was provided to me only. 19 Ο. And you haven't listened 20 to the evidence in the public hearings or reviewed 21 the transcripts from that evidence? 22 Α. I have not. 23 Ο. And you understand that 24 your role really is to assist the Commissioner, who is actually the person who is going to make 25

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1	findings of fact?
2	A. Correct.
3	Q. Great. So I'm going to
4	turn now to your opinion. Registrar, could you go
5	to image 2 of this document, please. So this is
6	really where your opinion starts. And commission
7	counsel asked you a number of questions. I'm not
8	going to go through each of the questions point by
9	point, but I just wanted to give you a sense of
10	where we'll go. We're going to start with best
11	practices around setting the roles and
12	responsibility of staff.
13	So first I have some general
14	questions about role clarity and role
15	responsibility within large municipalities. In
16	your report Registrar, can you bring up the
17	next page as well. Thank you.
18	In your report at the bottom
19	of image 2 you say large municipalities by their
20	nature can be complex and untidy, which is a
21	helpful way to put it I think. And the next page
22	you say culture is very important for
23	organizational effectiveness. You talk about
24	culture of cooperation and transparency throughout
25	your report.

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1 Can you speak more about why 2 it is important to develop a culture of cooperation and transparency within large, untidy 3 4 municipalities. 5 Yes, thank you. Α. My reference to I think the untidiness of б 7 municipalities is that municipalities deliver a wide range of services, many of whom don't have on 8 9 a daily basis the need to interact. So if you're 10 in the fire department you may never speak to the 11 person who is providing recreation programs and 12 teaching kids to swim. 13 So there is really a need for 14 the organization to develop a strategy and plans 15 to bring the organization together from a cultural 16 perspective. And what I mean by that is you want 17 the organization to be aligned on strategy, what 18 is important to us in building this community. 19 You want the organization to be aligned on its 20 values and you want the organization to be aligned 21 on the behaviours that you would expect from 22 senior leaders, staff. 23 So talking about the values of 24 the organization, how you want the staff to work together regardless of whether they do that on a 25

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1 day-to-day basis or whether they do it on a more 2 in frequent basis. The values of teamwork, of collaboration, of really behaving -- I always use 3 4 the expression we are one team. And in order to 5 do that within a municipal structure, which again б does not necessarily bring people together on a 7 regular basis, you -- first of all, you need to 8 articulate what those expectations are. And you 9 can do that in a variety of ways, certainly in 10 performance documents that the staff use to manage and measure both their deliverables but also their 11 12 competencies and behaviours. You can do it 13 through learning and development opportunities. 14 You can do it through team meetings. 15 There are a wide range of 16 tools that organizations can use to bring it 17 together, but ultimately what you really want is to have clear expectations and a clear 18 19 understanding of the organizational culture and 20 the behaviours you that expect from those who work 21 for the municipality. 22 Turning to individuals or Ο. 23 departments that do work more closely together 24 than say the firefighter and the swim instructor, but divisions that are not -- that have their own 25

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1 role and responsibility but may have some overlap 2 or at least some similarity in terms of what they 3 are doing, how can department leaders ensure that 4 it is clear who is going to do what so that 5 nothing gets -- there is not confusion or gaps or 6 overlap?

7 Α. I think again there are probably a variety of things that need to be in 8 9 place. It would be the responsibility of the departmental leader to look at those who report to 10 that position and really have articulated clearly 11 12 the roles and responsibilities of each of their 13 direct reports and then in turn the staff who 14 report to a director level position and front 15 line.

16 And typically that would be 17 done either within the leadership team or with the 18 assistance of an outside advisor or human 19 resources to really look at the structure and understand all of the roles and responsibilities 20 21 that are within the scope of the department and then spell out clearly who is responsible for 22 23 discharging those. That can be done in a variety 24 of ways. I think if you look at municipalities and in particular the role of public works, every 25

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1 municipality has responsibility generally for
2 various public works whether it's roads, water,
3 wastewater, so there certainly is a lot of
4 evidence and information out there around how
5 others have organized and set about aligning those
6 roles and responsibilities.
7 But it needs to be clear,

everything has to be covered. There needs also to 8 9 be -- or there needs to be conversations about, 10 you know, how you're going to resolve those areas where there is overlap because it's almost 11 12 inevitable that the person who is responsible for 13 the capital maintenance of assets and those who 14 are responsible for the daily operations need to 15 consult with each other occasionally and maybe 16 even often to talk about their respective roles, but make sure that information and knowledge is 17 18 being shared back and forth.

But ultimately it's the departmental leader who has the primary role in assessing and documenting and then sharing that understand with everyone. The performance documents of staff would reflect the roles and responsibilities that have been assigned to them, work plans would in a similar fashion be laid out

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1 in a way that would make it clear who is the 2 person most responsible for delivering on a 3 particular work item. 4 Ο. Thank you, Ms. Baker. 5 I'm going to ask you to slow down just a little. б The Commissioner is taking handwritten notes so to 7 save his hand from cramping if you can slow down 8 just a little. 9 Α. It's my Newfoundland heritage. I talk fast. 10 11 Q. You mentioned work plans at the end of your last answer. How are work 12 13 plans a useful way to keep municipalities and in 14 particular public works departments within 15 municipalities on track in terms of goals and 16 agenda items? 17 Α. So a work plan is 18 essentially a document that captures immediate and 19 possibly even short and medium term projects, work 20 items, operational maintenance, responsibilities 21 for a team of people. So those plans would be 22 really the way of operationalizing the 23 responsibilities that have been assigned to 24 respective staff in an organization and in a 25 department.

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1 The work plans also can be 2 used to provide status updates on progress. They can be used to identify challenges, you know, we 3 4 have a target finishing project X but we're 5 running into problems, we need to have a 6 discussion or we need to bring that to the 7 attention of our supervisors or leaders in the 8 department. So they really are a tool that gives 9 you a view of all of the various projects, issues, 10 work items that are under way at a point in time 11 or potentially are planned for later in the year or subsequent years, and then you manage to those. 12 13 They really are a tool that can allow you to keep 14 a finger on the pulse of what's happening, 15 identify problems and issues that may arise, and 16 understand the progress that you're making, are we 17 hitting targets, are we ahead, behind. They really can be very, very useful both from a 18 19 management perspective but also from a 20 communications perspective. 21 Ο. Thank you. You mentioned 22 that work plans are one way to keep track of 23 projects. When there are projects that overlap 24 with different departments or divisions within

25 departments, what's the best practice to ensure

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1 that a project is well managed? 2 Α. In my experience when you 3 have a project that crosses departmental or 4 division alliance you can establish a steering 5 committee or at least an oversight committee that has representatives, the appropriate б 7 representatives on the team from the different divisions or departments that are involved and 8 9 have shared responsibility for that project. 10 And through tools like a project charter or a document that, you know, 11 12 speaks to the scope of the project, sets out the 13 roles and responsibilities, you can establish how 14 that team will work together, how frequently would 15 they meet, what would be the items that would be 16 on their agenda. It wouldn't likely be the intent 17 of a steering committee to deal with the 18 day-to-day operational issues of the project, that 19 should be the role of the project manager, but 20 certainly to receive updates, to resolve 21 disagreements, or provide priority if it is 22 unclear around how something should be resolved, 23 or what is more important, is it more important 24 that we do A or that we do B, what's the sequencing of these things, et cetera. 25

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1 I mean, I think it's important 2 based on everything that I've said to now, you 3 know, these are living, breathing projects. They 4 require ongoing communication typically, ongoing 5 management, and sometimes, you know, an intervention or a decision would have to be made б 7 by someone senior in a role because there's a 8 disagreement that can't be resolved at the 9 operational level. So it is a dynamic process, but nonetheless one that still can be structured 10 to -- keep the project and the team on track. 11 Thank you. So you 12 Ο. 13 mentioned both charters and steering committees 14 and I'm just going to delve a little deeper into 15 both of those. 16 Registrar, could you bring up 17 a document that was provided to you. It's called 18 City of Hamilton Public Works Project Management 19 Manual. Thank you. You can actually pull up the 20 next image as well, please. 21 So this document does not yet 22 have a doc ID and it has not been introduced, 23 Commissioner, through a City staff member, but 24 commission counsel does anticipate it will be and we have provided on that anticipation to 25

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1 Ms. Baker. 2 Ms. Baker, you had a chance to 3 look at this public works project management 4 manual in your preparation for today; is that 5 right? 6 A. Yes, I did. 7 Ο. And you'll see just looking at the table of contents this manual 8 9 really deals with project management. And you'll 10 see project integration management, the fourth 11 line down, is developing a project charter, and 12 then it goes through a number of aspects of 13 project management that should be considered, and 14 then it in ends closing the project. 15 So just if we can go down, 16 Registrar, if you can pull up the page 6, please -- or image 6, please. 17 18 So here in this -- this is 19 project work specific for the City of Hamilton, so reference to what is a project. And it has some 20 21 criteria to decide whether a project requires a project chart and actually is a project, and the 22 23 criteria here are that it is the creation of 24 unique product, service or result, that knowledge is broadly shared including across divisions, that 25

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1 there are some time criteria that is relevant, 2 there is resource criteria including choosing between different resources that may be limited or 3 4 funded by capital or operating budget, or the 5 outcomes are uncertain including having some б political sensitivity or being public facing. 7 And so in those circumstances, 8 this manual suggests having a project charter 9 because, as you say, projects are -- here it says 10 projects are human events, which I think corresponds to say what you said about projects 11 12 being living and breathing. 13 In your view what is the 14 benefit of having a project charter when you have 15 a circumstance where knowledge is broadly shared 16 in order to create clarity around who is going to 17 be doing what in the context of the project? 18 Α. I mean, first of all, the 19 benefit of a project charter is you write everything down, and to the extent that you've 20 21 documented the goals and objectives of the project, the tools and resources that will be used 22 23 to deliver that project, you know, the people who 24 touch the project, so what are their roles and responsibilities, those can be anything from 25

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someone who is directly involved in leading or
 delivering an element of the project to those who
 simply need to be kept informed.

4 But it becomes a reference 5 document for those within the project, but quite б frankly, through transparency, even those who are 7 not directly associated with the project to be able to understand the scope of the project, how 8 9 it's going to be delivered, who is going to 10 deliver it and what the desired outcomes will be, and as I said, the resources and tools that you 11 12 would need in order to successfully deliver the 13 project.

14 So it really becomes your -- a key document in keeping track. You know, as I 15 16 keep -- I think I've said this earlier, one of the 17 things that you really need to be able to do in a 18 complex organization is be able to keep track and 19 be able to check in on progress of initiatives or 20 projects, so the project charter says out how that 21 will be done and becomes a key communication tool. 22 Thank you. Registrar, Ο. 23 can you go to image 17, please. So this is an 24 appendix in the same document. It has a project roles and responsibilities and it lists -- this is 25

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1 really one of I think two -- a page and a half of 2 the different roles and responsibilities of people 3 involved. 4 Registrar, can you bring up 5 the next image just so it's clear. б Ms. Baker, you said earlier 7 that the day-to-day responsibility of a project 8 may fall with a project manager but that having a 9 steering committee may be helpful where there are higher level decisions that need to be made. I'm 10 paraphrasing your evidence but I hope I've 11 12 captured it. 13 In this roles and 14 responsibilities they list a member called a 15 project champion is often the general manager, 16 director or manager, and they are the ones that deal with funding, approvals, approving 17 18 deliverables, approving changes to the project 19 charter, and basically it appears being an 20 advocate for the project outside the project team. 21 Is that a fair summary of the project champion? 22 Α. Yes, as I see it they are 23 correct. 24 Do you always need a Q. steering committee to be -- to provide oversight 25

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1	to a project that is subject to a project charter,
2	or are there circumstances where a project
3	champion sitting with one individual is an
4	appropriate organizational structure?
5	A. I think for every
6	project and it depends on scale and scope. So
7	clearly the larger a project the more likely it is
8	that you would need a steering committee. In my
9	experience, steering committee can consist of
10	someone who would be a project champion, but if
11	there are significant financial implications you
12	might need your CFO or if there are significant
13	legal implications you might bring in your
14	solicitor or a representative.
15	So I think it can be project
16	specific and but certainly I think it is a best
17	practice where you have a significant or complex
18	project, I think to have those a steering
19	committee of senior people who can make decisions
20	quickly, who can come together and discuss and
21	then align around a decision or a solution, it
22	certainly facilitates communication. And, you
23	know, steering committees can meet on a regular
24	basis if they need to, or they can be ad hoc. It
25	doesn't mean that you have to feed that structure

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1 daily, weekly or monthly, you know, they can 2 certainly come together as needed. 3 So I think it does depend on 4 the nature of the project, but the bigger the 5 project, the more complex the project, the more I б think a steering committee can be helpful. Thank you. Just before 7 Ο. 8 we leave this document, in terms of having a 9 project charter that guides a project, has that 10 been good practice in municipal government for a 11 number of years before now or is this a relatively 12 new organizational approach? 13 Α. In my experience, 14 municipalities have been pursuing good project 15 management practices certainly for the last 10 to 16 15 years. I think there are organizations like 17 the project management institute or -- sorry if 18 they've name incorrect, but there is a body of 19 knowledge, expertise and experience that I think municipalities look to, because municipalities 20 21 tend to do a lot of projects, not just in public works, but across all of the spectrum of the 22 23 services that they deliver, and so having the 24 access to an inventory of best practices is something that I think has become the norm within 25

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1	municipalities and certainly for the last decade
2	in particular. As I look at this document I think
3	this has likely benefitted from having access to
4	some of that material that is made available
5	through that group.
6	MS. LAWRENCE: Thank you.
7	Registrar, can we mark this the next exhibit,
8	please.
9	THE REGISTRAR: 231. Noted.
10	EXHIBIT NO. 231: City of
11	Hamilton Public Works Project
12	Management Manual, December
13	2022
14	BY MS. LAWRENCE:
15	Q. Returning now to the
16	concept of a steering committee. Registrar, could
17	you close this and can you go to another document
18	that's been provided to you but does not have a
19	doc ID. It's City of Hamilton Parkway and
20	Management Committee Terms of Reference. If you
21	can pull up the next image as well too.
22	So the inquiry has seen
23	various versions of this document, but this one is
24	dated April 2022, and you'll see that it is a
25	parkway management committee that provides

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1 leadership on the safe and efficient operation and 2 maintenance of the LINC and the Red Hill. That's right at the top of the mandate. And that the PMC 3 4 shall provide input and guidance to staff and 5 council on policies, projects, programs relating б to the operation and maintenance of those 7 roadways. 8 And then on the second page 9 you'll see the staff representation includes the general manager's office, the chief road 10 official's office, engineering services, 11 12 transportation operation and maintenance, 13 environmental services including forestry, and the 14 water division. 15 Is this an example in your 16 opinion of a steering committee for a project, 17 being the efficient and safe operation of the LINC 18 and the Red Hill? 19 Α. It does. Based on my 20 reading of it that's what I would typically expect 21 to see in a steering committee structure and 22 mandate. 23 Ο. Thank you. Registrar, 24 can you close this down and go back to Ms. Baker's opinion which is -- report, pardon me, which is 25

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1	EXP193. I left that document too quickly.
2	Could you make that document
3	the next exhibit, the parkway I want to make
4	sure I have the name right Parkway Management
5	Committee Terms of Reference April 2022.
6	THE REGISTRAR: 232.
7	EXHIBIT NO. 232: Parkway
8	Management Committee Terms of
9	Reference, April 2022.
10	BY MS. LAWRENCE:
11	Q. Registrar, could you go
12	to image 4 and 5 of this document, please. So
13	you'll see at the bottom this is your report,
14	Ms. Baker. At the bottom of your report on
15	image 4 you say it appears from the assumed facts
16	that the Red Hill became a high profile issue over
17	time. There was political interest, concerns
18	expressed about the parkway (audio skipped)
19	committees, by members of the public and by the
20	media. High profile issues such as the Red Hill
21	issue receive attention at all levels of
22	leadership up to City manager.
23	So I'm just going to stop
24	there and ask a question that's not related to
25	steering committees, although that's what we're

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1 talking about right now. Generally in your
2 opinion does the City manager have a direct and
3 specific responsibility for public safety within
4 the municipality?

5 Α. I think an overarching б responsibility to ensure that matters of public 7 safety are being addressed in a timely manner I 8 would say would be a discussion that would happen 9 regularly between the City manager and the 10 department head responsible. I can think of one example during my time in Mississauga, I won't get 11 12 into the details of it, but, you know, an area 13 where we were experiencing significant and 14 frequent flooding in a neighbourhood. In that 15 case I did seek regular updates from the public 16 works commissioner on the progress we were making 17 on that issue, and I think that, as CAO, you know 18 councillors will approach you as the leader of an organization to ask what are we doing about this. 19 You know, often, I mean, 20 21 there's some political urgency because in all 22 likelihood they are getting complaints from the 23 residents who are affected or they are hearing in 24 this case from the general public about concerns

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And they want to understand that those concerns

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1 are being addressed, given some level of urgency 2 if it is a public safety issue, and that the CAO 3 is keeping an eye on the progress that's being 4 made. 5 So that is something that I б would expect in the normal course of dealing with an issue that has received some political 7 attention for sure. 8 9 Q. On the next image you 10 say: "The creation of a steering 11 committee of directors to 12 13 manage the Red Hill issues 14 would, in my opinion, have 15 helped to resolve some of the 16 challenges that staff had 17 getting information, 18 understanding what was 19 happening and determining who 20 was responsible for what. 21 This could have been in place 22 as early as 2013 when 23 councillors raised issues with 24 the Red Hill by motion." 25 So just stopping there. Are

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-	
1	steering committees useful for issues that don't
2	have a time-based project with a particular
3	outcome but, rather, more the sort of political
4	sensitivity or public scrutiny that you are
5	referencing in that first paragraph on image 5?
б	A. I think so. And whether
7	you call it a steering committee or whether it's
8	just a collaboration of leaders that comes
9	together on a regular basis, because, you know,
10	you have different groups that are touching an
11	issue in different ways and again to share
12	information to resolve differences or
13	disagreements that may be happening, those could
14	be brought to the attention of that group.
15	I mean, it is really all about
16	the values of collaboration, team work,
17	transparency, communication, that's really what
18	you are trying to develop and foster. And in my
19	opinion, any time you do that and you have a group
20	that comes together that has a shared interest in
21	resolving a problem, it is best practice that
22	these are this group communicates, shares work
23	plans, resolves conflict or disagreement and
24	really aligns to get to a solution to the problem
25	in an effective and coordinated fashion.

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1	Q. Thank you. And whether
2	there's a steering committee or not, does the
3	ultimate responsibility for projects fall to the
4	general manager of public works?
5	A. I mean, the department
6	head is ultimately responsible for the broader
7	delivery of results across the entire spectrum of
8	responsibilities that they have been given to
9	ensure operations are running effectively,
10	services are delivered, and issues and problems
11	are resolved or projects are completed on time and
12	have achieved the desired result.
13	Q. Recognizing that
14	assessments of public safety or remediation of
15	public safety issues will be at a technical level
16	with technical staff, what's the role of the
17	general manager within a public works department
18	to have oversight over public safety generally?
19	A. I would think that
20	again scale and scope matters, you know, fixing
21	potholes is one thing. If you have a major asset
22	that has drawn some attention and there's some
23	concern that there may be significant safety
24	issues, I think that rises to the level where it
25	would become an issue that any general manager

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1 would wish to be updated on regularly. 2 My practice as a CAO I had 3 biweekly update meetings with my direct reports, the commissioners, and encouraged them to do the 4 5 same with their direct reports. So there should б be regular and ongoing conversations about how are 7 we doing, and in particular issues that are current, topical and of concern should be on those 8 9 agendas so that the general manager can understand what's being done. Those conversations can be 10 about do we have the right resources, whether it's 11 12 expertise or capacity, to be able to get the 13 information or do the technical analysis that's 14 required to reach a solution. 15 So these are all discussions 16 that I would expect in a scenario such as this 17 would be happening on a fairly regular basis. 18 Ο. Thank you. I'm going to 19 move now to information sharing between City staff 20 or amongst City staff. At a very, very high 21 level, municipalities have legislative 22 responsibilities to maintain records created by 23 the municipality; is that right? 24 Α. Yes. 25 And as a result there Q.

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1	needs to be document retention and document
2	control processes and policies in place to be able
3	to meet those requirements?
4	A. That's correct.
5	Q. And would you expect that
6	recordkeeping would be required in the same
7	legislative framework for staff reports or
8	consultant reports, you know, things that are
9	prepared by either staff or consultants as part of
10	the work municipality?
11	A. Yes, municipalities as a
12	level of government are subject to legislation
13	that speak to the need for recordkeeping and
14	record retention, and quite frankly that's very
15	broad. That can range to everything from e-mails
16	and correspondence through to technical or staff
17	reports, really any document that is comes into
18	the possession of the municipality that pertains
19	to the services it delivers and the work that it
20	does is generally considered to be a record that
21	then has to be properly stored, managed, and
22	available should, for example, a request be made
23	through municipalities are subject to the
24	municipal Freedom of Information and Protection of
25	Privacy Act. You can get requests for documents

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1 under that legislation.

2 So ensuring that documents are 3 properly managed, stored and then available should 4 a request be received is something that 5 municipalities have really as a core part of their б document management systems. 7 Ο. When it comes to storing 8 and then sharing information as between divisions 9 within the City, and we can I think talk 10 specifically about the public works department, 11 regarding a specific project or a specific matter, 12 what's the best practice to have a repository 13 information all in one place, or is that a best 14 practice or if not, what is the best practice? 15 Yeah, it is, and of Α. 16 course in today's world and for the last number of 17 years those practices have been facilitated 18 through document sharing tools such as SharePoint, 19 a place where electronic documents, because quite 20 frankly these days pretty much everything is 21 electronic -- electronic documents are stored, they can be managed. Multiple staff, if you're 22 23 looking at a team coming together to work on a 24 particular report or needing to access a particular document, they can see it, in some 25

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1 cases they can edit it if they have been given 2 permission to do so. 3 So it really -- collaboration 4 tools are certainly now a best practice and I 5 would suggest becoming a norm for municipalities 6 in how to manage documents and how to have those 7 documents accessible to various stakeholders and staff that need to see them or work with them. 8 9 Ο. The City of Hamilton has put in place a policy that deals with tracking and 10 retaining consultant reports, that is, from third 11 12 party consultants. 13 Registrar, could you call up 14 City of Hamilton consultant report tracking and 15 retention divisional procedure, please. 16 Ms. Baker, you've had a chance 17 to review this in preparation for your evidence 18 today? 19 Α. Yes. 20 Q. So I don't forget, can 21 you make this the next exhibit, please, Registrar. 22 MS. LAWRENCE: Exhibit 233. 23 EXHIBIT NO. 233: Consultant 24 Reports Tracking and Retention, May 2021 25

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1	BY MS. LAWRENCE:
2	Q. Thank you.
3	So I'm going to summarize this
4	policy rather than go through it, but you'll see
5	just the purpose is to establish a process for
6	tracking and retaining consultant reports. And
7	throughout the procedure, and perhaps we'll
8	actually go to image 3, please, various levels of
9	team member have responsibility from director to
10	manager, and then we're now on the sort of next
11	level down, superintendent or senior project
12	manager and project manager. Registrar, can you
13	bring up the next image at the same time, please.
14	So you'll see the project
15	manager reviews a final consultant report. This
16	is under 4.4. The project manager will advise if
17	the consultant report contains an imminent risk to
18	human health or safety and follow up with the
19	consultant to understand the risks and seek
20	recommendations if that's the case, and bring it
21	to the senior project manager superintendent and
22	to the continuous improvement manager if that
23	circumstance exists.
24	And as well for all reports
25	they will prepare a report summary form that

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1 contains the recommendations and then track the 2 recommendations that exist and that are 3 implemented within this form. 4 And the senior project manager 5 continuous improvement actually has the repository 6 of the summary forms that contain the tracking of 7 consultant reports. That is my very broad summary 8 of this procedure. 9 But turning sort of more to the substance rather than the words in the 10 procedure, is it common in your experience to have 11 12 a particular policy that deals with tracking of 13 consultant reports? 14 Α. It is not common in my experience, no. I mean, generally municipalities 15 16 have bylaws and policies that relate to the management of all documents. Project charters 17 18 will in themselves, if a consultant's report or 19 consultant's engagement is part of the project, you know, will talk about where those documents 20 21 are going to be housed and who has access to them. 22 In looking through this, it 23 was certainly quite detailed and seemed to be very 24 targeted because the imminent risk to human health or safety was kind a criteria that said if it's 25

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1 this you take these steps, if it isn't you stop is 2 what I saw -- I think there was a chart that was 3 included at some point somewhere. 4 So I wouldn't say this is 5 normal or, you know, something that I've seen. I б mean municipalities will often in response to 7 something that may have gone wrong overreact or 8 take steps to decide that can't happen again. 9 This feels a little bit like that to me. But I 10 suppose there's no inherent harm in it. It feels very procedurally heavy, but if it works it works. 11 I wouldn't necessarily classify it as a best 12 13 practice. 14 Q. In terms of having a 15 repository where all of the consultant reports and 16 the recommendations that are contained in those 17 reports are noted, and where the -- to the extent 18 that there is some imminent risk to human health 19 and safety is also noted within that repository, 20 but really just focusing on having a repository 21 that has all consultant reports, is that -- can

22 you see the benefit of that for municipality even 23 if it's not a best practice?

A. I can see the benefit it.I mean, consultant reports, again depending on the

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1	nature of the engagement and public interest in
2	it you know, I say in my opinion. I mean are a
3	number of reasons why a municipality can hire a
4	consultant and some of it may strictly have to do
5	with internal practices. How do you design
6	offices effectively. You know, we're looking at
7	human resource policies. But those that have a
8	public interest are typically more transparent.
9	Often municipalities will have them on their
10	website, for example, as part of reports to
11	council if in fact the report goes forward in
12	that as appended to a staff report, for
13	example.
14	So in my experience the use of
15	consultants is common in municipalities and having
16	the reports that they generate be readily
17	available and accessible is common and I would
18	suggest a fairly standard practice.
19	Q. You spoke earlier about
20	work plans. How would you see this kind of
21	tracking of specifically of consultant reports
22	that have been received and the recommendations
23	contained therein as it relates to the work plan
24	tracking of the work of the municipality that you
25	talked about earlier?

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1	A. I would see if there are
2	recommendations coming out of the consultant's
3	report for specific actions to be taken,
4	specifically in respect of human health and
5	safety. And I mean, in this case if we're talking
б	about imminent, we would be talking about
7	something that would rise to the level of urgency,
8	then that would had been integrated into a work
9	plan of the division responsible for delivering on
10	that safety measure and but subject to the same
11	kind of oversight and tracking and, you know,
12	communication standards that I spoke about
13	earlier.
14	I don't believe segregating
14 15	I don't believe segregating the recommendation the source of the
15	the recommendation the source of the
15 16	the recommendation the source of the recommendations in respect of work plans really
15 16 17	the recommendation the source of the recommendations in respect of work plans really shouldn't matter a great deal. If the
15 16 17 18	the recommendation the source of the recommendations in respect of work plans really shouldn't matter a great deal. If the recommendation has of a consultant been
15 16 17 18 19	the recommendation the source of the recommendations in respect of work plans really shouldn't matter a great deal. If the recommendation has of a consultant been accepted or if it's the recommendation of an
15 16 17 18 19 20	the recommendation the source of the recommendations in respect of work plans really shouldn't matter a great deal. If the recommendation has of a consultant been accepted or if it's the recommendation of an internal expert, those should be integrated into a
15 16 17 18 19 20 21	the recommendation the source of the recommendations in respect of work plans really shouldn't matter a great deal. If the recommendation has of a consultant been accepted or if it's the recommendation of an internal expert, those should be integrated into a consolidated work plan and managed in that way.
15 16 17 18 19 20 21 22	the recommendation the source of the recommendations in respect of work plans really shouldn't matter a great deal. If the recommendation has of a consultant been accepted or if it's the recommendation of an internal expert, those should be integrated into a consolidated work plan and managed in that way. Q. You mentioned earlier the

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1 process may make that accessibility easier? 2 Α. Yes. I think again to --3 you know, there's certainly nothing inherently 4 wrong with keeping track of where the source of a 5 work plan item came from and then being able to б refer back to that source document if that becomes 7 important. So, you know, there are ways of doing 8 that, but again in my view in an integrated 9 fashion. 10 Q. Absent having policy that specifically speaks to the tracking of all 11 12 consultant reports and the tracking specifically 13 of consultant reports that contain imminent risk 14 to human health or safety, so absent formal policy 15 that have that, would you expect that there would 16 be a culture of developing repositories of this 17 kind of information to be shared amongst staff? 18 Α. Absolutely. It's -- you 19 know, again that goes -- circles right back to the earlier conversation about culture. It would feed 20 21 into the conversation about steering committees or ad hoc committees coming together, transparency, 22 23 accountability, follow up, teamwork, 24 collaboration, I mean, these are principles that should apply to everything that the team is doing 25

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1 and that the municipality is working on. 2 So the use of a consultant --3 I mean, in my opinion, you know, consultants are a 4 tool. They can be hired if you don't have 5 expertise internally to do certain work, or if the б capacity is not there; staff could do it if they 7 had the time or the tools. And so you bring in a 8 consultant to backstop a gap that you see in your 9 resourcing or your expertise, but then that really 10 just gets integrated into the -- the work of the consultant and the recommendations that they 11 12 deliver really come into a more integrated 13 team-based approach to solving a problem. 14 I think the comment I made 15 earlier, the source of the recommendations is less 16 important than having those recommendations fed 17 into a work plan system, an accountability system, 18 you know, that they are communicated within and 19 among the people who have a role to play in 20 delivering on that recommendation or just need to 21 be aware that work is under way and being done. 22 They may not have a role in discharging the 23 responsibility, but it would be helpful for them 24 to understand the status of what's happening if they have a different role in respect of an asset 25

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1 or a service. 2 Q. Where there is not an 3 existing culture or where there is going to be 4 communication up to those -- the people you were 5 just talking about who may not have a role but 6 have sort of a need to be kept in the loop, or 7 where there are other gaps in the existing culture about transparency and collaboration, are 8 9 procedures like this one that expressly provide 10 some requirements for staff useful to help develop that culture? 11 12 Yeah, it's a tool. Α. It 13 certainly makes the expectations clear, and I 14 think you can evolve ultimately from, okay, 15 remember this policy that dealt with this very 16 specific issue, we now want to grow that so that 17 we're working through all issues in the same way. 18 So I think again it's you do 19 what you feel is necessary at the time but it 20 should be in service of a broader objective, I 21 believe, if again you want to evolve to a best practice organization. 22 23 Ο. Thank you. Absent a 24 policy like this, in your opinion do City staff have an obligation to escalate reports that 25

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1 contain imminent risk to human health or safety? 2 Α. In my view yes, 3 absolutely. You know, the responsibility for 4 public safety and ensuring that no harm comes to a 5 member of the public that can be prevented is б really one of the first principles that a 7 municipal government operates under. Whether 8 you're looking at a budget or whether you're looking at the services that are delivered or 9 10 you're looking at an assessment of infrastructure, in any case where a risk has been identified that 11 12 may pose a threat to public health and safety, 13 that is job one. And those should be brought --14 there should be systems to escalate those and --15 but in the absence of that, you know, staff should 16 talk to their supervisor and ensure that that 17 information is passed on and ultimately hopefully 18 acted on. 19 Ο. Thank you. Registrar, 20 can you pull up City of Hamilton Sharing of 21 Consultant Reports With Identified Imminent Risk to Human Health or Safety. That is not the one 22 23 I'm looking for. It is a document that is titled

25 time. That is it. Thank you, Registrar, for

that but it was more -- not provided at the same

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24

1	identifying two similarly named documents.
2	So this, Ms. Baker, is a
3	document from January 2022 you see at the top in
4	the issue date. It is a process for communicating
5	risks and it sets out the responsibilities.
6	Registrar, can we mark this as
7	the next exhibit, please.
8	THE REGISTRAR: Exhibit 234
9	noted.
10	EXHIBIT NO. 234: Sharing of
11	Consultant Reports with
12	Identified Imminent Risks to
13	Health or Human Safety,
14	January 2022
15	BY MS. LAWRENCE:
16	Q. Thank you. And if you
17	can go to image 3, please.
18	Ms. Baker Registrar, can
19	you actually make the chart on this page a little
20	bit bigger by calling out the gray box. Exactly.
21	Thank you.
22	Ms. Baker, you said there
23	should be processes to escalate where there's
24	issues with where a report advises of imminent
25	risk to human health or safety. Leaving aside how

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1	you would define imminent risk to human health or
2	safety, is this the kind of approach that you
3	would expect in terms of escalation?
4	A. Yes, I mean, it speaks to
5	who should tell whom and then, you know, a
6	succession of reports. I mean, the one comment I
7	would make is I don't think it matters whether an
8	imminent risk interesting word but imminent
9	risk comes from a consultant report or something
10	that staff may discover in their daily inspection
11	routines, for example, I think the steps would be
12	the same but this speaks specifically to
13	consultant reports. So as a general rule, I think
14	if you are concerned about a particular issue that
15	it may create a risk to public safety I think this
16	would be the kind of communication channels that
17	you would pursue.
18	Q. Thank you. Looking at
19	the last box before end:
20	"City manager and general
21	manager to communicate the
22	risk to council
23	appropriately," and there's a
24	star, "and promptly."
25	And then it says the star:

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1	"Communication modes include
2	but are not limited to
3	e-mails, press releases or
4	information updates."
5	And I won't take you to it in
6	your report, but do you mention in your report
7	that you don't need to wait for a staff report,
8	there are various ways that the City manager and
9	general manager may contact council to advise them
10	based on the imminence or the urgency; is that
11	fair?
12	A. That is fair. I think if
13	it is something that must be disclosed and acted
14	on immediately then you would want to share that
15	information. You can follow-up later a formal
16	report to council, but I often use e-mails as a
17	way of sharing information with council that I
18	believe is needs to be shared in a timely manner,
19	and, you know, not necessarily wait for the
20	formality of producing a report for a council or
21	committee meeting.
22	Q. Thank you. Registrar,
23	you can close that.
24	So as we spoke at the
25	beginning of your testimony, you have not reviewed

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1 or been watching all of the evidence of this 2 inquiry. We've provided you with some assumed faces. So turning to some of the assumed facts 3 4 that speak to some questions that you dealt in 5 your report, the Tradewind report is a report that б we provided to you, and in 2019 the director of 7 roads and traffic reached out to two of his 8 subordinates, the manager in traffic operations 9 and the superintendent in traffic operations, to confirm whether his staff had seen a copy of 10 Tradewind report. And Mr. Ferguson, who was the 11 12 superintendent, and Mr. Martin, who was the 13 manager, responded to Mr. Soldo, who is the 14 director of roads and traffic. 15 Mr. Soldo replied that he had 16 not seen the report, that he asked Mr. Moore for 17 it previously and never received a response. 18 Mr. White also confirmed he had never seen the 19 report despite asking for it several times. Mr. White also testified that there was a 20 21 continuing theme of people asking for the results of the friction testing and having no results. 22 So again these are just 23 24 assumed facts for you, but assuming those facts

25 and assuming that Mr. Moore had received a copy of

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the Tradewind report, which was a friction testing report in January 2014, so five years before, would it be appropriate for a member of City staff to refuse to provide or to redact before providing information that's requested from one of their colleagues?

A. I think as I said in my opinion, I can really only think of a couple of circumstances for redacting information. You know, the obligations that municipalities have under IMFIPA not to disclose private information, which now having seen the Tradewind report, I don't believe applies here.

14 Secondly, there may -- a matter may have been in camera before council 15 16 which clearly heightens its confidentiality, and 17 in that case it isn't necessarily that staff can't 18 see it, they just need to be made aware of the 19 heightened requirements for confidentiality. 20 Municipal staff generally sign a confidentiality 21 pledge or agreement when they come to work with a municipality saying I withhold all the information 22 23 that I receive in confidence as necessary. 24 And I think in the third case

25 it would be if it related to legal advice.

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1 So I really can't think of a 2 circumstance beyond those where staff would be denied a copy of a consultants report or something 3 4 that they felt was important to their role. 5 Now, you know, people are 6 curious. So curiosity isn't a justification for 7 requesting a report, but assuming that the 8 individuals requesting the report had a reason to 9 see the report and understand the recommendations 10 within it, it should have been provided in my 11 opinion. 12 What about in 0. 13 circumstances where the City staff member holding 14 the report has concerns about its reliability or 15 its usefulness? 16 Α. Yeah. So those should be taken up with the consultant. But ultimately at 17 the end of the day when you engage a consultant, 18 19 especially in a field where you are asking them to 20 bring their technical expertise to the table, 21 that's the reason that you've engaged them, you 22 know, a -- if the consultant stands behind the 23 information that they have provided, the analysis 24 that they have done and the recommendations that they have made, then the report really stands on 25

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1 its own.

2 So, you know, the way to deal with that would be I'm sharing this report with 3 4 you but I just want to make you aware, you know, I 5 have some questions about the recommendations that 6 have been made in this area, so I'm concerned or 7 I'm not convinced or, you know, so I would ask you -- you can read it but I would ask you not to 8 9 act on it, or just use it for information. Ι 10 mean, that's part and parcel of the collaboration between colleagues that shares not just the 11 12 material but the context and any concerns that 13 might arise as a result of the work. 14 Ο. In what circumstances, if 15 any, should City staff escalate concerns if they 16 have an ability to obtain information from a 17 colleague? 18 Α. I think if they feel that 19 the information is important to them and that not 20 it or not being -- having that knowledge is 21 impacting their ability to be able to perform in their role, then I think they should escalate that 22 23 to their supervisor formally, either in an update 24 meeting or through an e-mail, you know, articulating the steps that they have taken. And 25

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1 certainly they should take steps to try and 2 resolve the disagreement with the individual but -- or assuming that that has been unsuccessful 3 4 they can outline the steps that they have taken 5 and, you know, why they need -- they feel that б having that material is important and then 7 explicitly ask their supervisor to intervene their 8 behalf. 9 0. Thank you. As a general principle are City staff required to provide 10 accurate and comprehensive information to council? 11 12 Absolutely, that is a Α. 13 core principle and requirement for every public 14 servant. You know, the principle of fearless 15 advice and diligent implementation is -- speaks to 16 you are a trusted advisor for council. They 17 expect that you will bring your best advice based 18 on your professional credentials and the work and 19 due diligence that you've done to the table and 20 then they can rely on that advice. Council can 21 disagree. Council has the right to make its own 22 decisions, but they certainly expect their public 23 administration to be thoughtful, honest, speak 24 truth to power and complete and thorough in the advice that are provided to them. 25

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Q. If City staff become aware that staff have concealed -- other staff have concealed or withheld information or there's information that council simply didn't receive over time, what obligations if any flow from that awareness?

7 Α. I think again escalation. 8 And I will tell you, I mean, this has been -- this 9 is an issue that does arise, you know, where --10 aren't we taught when we're young not to snitch on people. So escalation is something that has to be 11 12 built as part of the cultural conversation that we 13 had earlier, the principles that it's safe to come 14 forward and raise a concern if you have one even 15 if raising that concern may reflect badly on a 16 colleague, that there won't be reprisals for 17 raising concern. So not providing fulsome 18 information to council, or worse, providing 19 inaccurate information to council, honest mistakes happen, but a resistance to do that is certainly a 20 21 challenge from my perspective. I would think that any staff who become aware of that would raise it 22 23 again with their direct supervisor and push it up 24 the hierarchy.

Q. And would you expect that

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1 the senior staff to whom these kind of issues are 2 reported would -- in order to encourage that culture of transparency, would take certain steps 3 4 to reinforce the benefits of escalation? 5 Α. Absolutely. I think б again it is something that you need to talk about 7 in your staff meetings with your team leaders 8 through training and development materials. You 9 really need to set the table that look, we're all 10 in this together and, you know, mistakes can happen, and if you become aware of something, you 11 12 know, you need to address it. You can't just turn 13 away from it, especially if it's important, or, 14 you know, if elected officials are acting on 15 information that may have been provided to them 16 that was incorrect, as soon as senior leadership 17 becomes aware of that they need to take steps to 18 correct the record. And again, that could be a 19 circumstance where an e-mail, you know, my 20 apologies, it has come to my attention you were 21 told this, it isn't correct, we will provide 22 council with a follow up report to tell you what 23 happened and what the corrected information is. 24 But I think that's really important. It's part of the trust that you have 25

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1 to build between elected officials, the public 2 administration, and then within the public administration that, you know, we understand that 3 4 mistakes or problems -- mistakes can happen or 5 problems can arise, but as a mature organization 6 we need to deal with those once we become aware of 7 them. Your comment on this 8 Ο. 9 point, do they extend to circumstances where a 10 staff member becomes aware that there's been some misrepresentation or miscommunication with members 11

12 of the public or the media?

13 Α. I think any time that a 14 staff member is aware that a member of the public council -- I mean, again the reputation of the 15 16 municipality will be harmed if that misinformation 17 is not corrected in a timely manner and in a 18 proactive manner. You know, we've all seen 19 examples in the public service or the public realm where information may have been withheld or 20 21 somebody knew that this wasn't right but didn't do anything about it. It just -- it just amplifies 22 23 the issue and it sets an unfortunate tone that the 24 administration can't be trusted to disclose errors or mistakes, or worst case scenario, you know, a 25

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1 deliberate attempt to misrepresent information. 2 So it is in my opinion critically important that once the organization at any level is aware that 3 4 there's a problem, that needs to be escalated and 5 addressed. MS. LAWRENCE: Thank you. 6 7 Commissioner, I see we're just 8 a few minutes past 11:00 o'clock, and I believe 9 for this week our plan is to take our morning 10 break at 11:00 o'clock so I propose we do that and come back at 11:15. 11 12 JUSTICE WILTON-SIEGEL: Okay. 13 Let's stand adjourned until 11:15. 14 MS. LAWRENCE: Thank you. --- Recess taken at 11:04 a.m. 15 16 --- Upon resuming at 11:16 a.m. 17 MS. LAWRENCE: Commissioner, 18 we're back on. May I proceed? 19 JUSTICE WILTON-SIEGEL: Yes, 20 please proceed. 21 BY MS. LAWRENCE: 22 Ms. Baker, I'm now going Ο. 23 to turn to some of the more specific details 24 relevant to the inquiry and the facts that have come out in the public hearings. 25

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1	First in terms of consultants
2	and their retainer and the scope of their
3	retainer. So there's a number of reports that the
4	inquiry has received prepared by consultants
5	retained by the City between 2013 and 2019,
6	including the 2013 CIMA report, the 2014 Golder
7	report which appended the Tradewind report, and
8	the 2015 CIMA report. There are others but those
9	are a few which we provided to you.
10	Generally and not specific to
11	those reports, how should the scope of a
12	consultant be established?
13	A. I think generally the
14	subject matter experts or the vision or work group
15	that are requiring the services of the consultant,
16	plus municipal procurement staff, in some cases
17	depending on the complexity staff from legal may
18	be involved, but I think primarily the first two
19	would come together to develop a request for
20	proposals and a scope of work for the consultant,
21	would spell out the requirements that the
22	municipality has, what are we seeking, what are
23	the deliverables, if there are any timelines or
24	urgency with respect to the engagement which may
25	be the case when you're looking at issues of

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1 public safety, for example.

2 And then a scope -- a request 3 for proposals would be issued to which various 4 parties would respond. Those proposals would be 5 reviewed, assessed, and a consultant selected from б among the proponents that would be both, you know, 7 the one that the assessment panel feels has the best -- brings the best skills and expertise and 8 9 qualifications to the table and can meet the 10 requirements, then a contract would be executed 11 between the municipality and the consultant for 12 the work. 13 There is a process, and I'm 14 not sure if I mentioned it in my opinion, I mean, you can sole source to a consultant if they have 15 16 maybe experience with the City or particular 17 expertise. Typically those would have to go to council for approval. It's unusual for staff to 18 19 be delegated the authority to sole source. So that's a slightly different process. 20 21 Ο. Thank you. Registrar, 22 could you bring up Ms. Baker's report which is 23 EXP193, please. If you go to page 34 -- pardon 24 me, image 34. Can you bring up the next image as well, please. 25

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1 So, Ms. Baker, you will see at 2 the bottom of the image on the left-hand side in the assumed facts that commission counsel provided 3 4 to you there's a reference to the 2013 CIMA 5 report, and in particular there was a motion from б public works committee that led to CIMA being 7 retained, which specifically directed staff to 8 investigate lighting on the Red Hill in the 9 vicinity of the Mud/Stone Church interchanges. 10 And CIMA's proposal included an assessment of lighting on the mainline in that study area, and 11 12 it appears during the course of the retainer and 13 after, CIMA had assessed whether illumination was 14 warranted on the mainline. CIMA received information from Mr. Moore, who was not part of 15 16 the team assigned to this project, there was no 17 project charter, and CIMA understood that the --18 an environmental assessment prohibited lighting on the mainline based on information received from 19 20 Mr. Moore and possibly other staff. 21 And just jumping down, the EA 22 did not prohibit lighting on the mainline, 23 although it's probable that a new EA would be 24 required to install full illumination. Despite the scope set out in CIMA's proposal and the work 25

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1 CIMA had done, CIMA excluded consideration of the 2 mainline -- illumination on the mainline in its report as out of scope and CIMA and the City did 3 4 not document this fact, the fact of the change in 5 scope, or its rationale. б So just stopping there and 7 recognizing we're in a circumstance where there 8 was no project charter, how and when, if at all, 9 should a consultant's report be modified during 10 the course of a project. 11 Α. Typically a consultant 12 will be given a designated project lead or again 13 person most responsible that they would interact 14 with, and they may interact with other staff in 15 the organization as well for purposes of gathering 16 information or understanding background, history, or picking staffs' brains, if you will, but 17 18 generally they would have somebody designated as 19 the engagement manager and that is the person that 20 the consultant would look to for guidance, you 21 know, resolve differences. 22 But again, you know, and in 23 this instance in particular because you have a 24 consultant that is retained for specific expertise 25 in an area, conversations can happen throughout

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1 the engagement about the scope of the work being 2 done, but generally the consultant should only 3 take direction from the engagement manager. 4 So I find it unusual that the 5 consultant would take direction from a member of б staff who didn't appear to be part of the 7 engagement or part of the engagement team or 8 certainly the head of the engagement or the 9 project. And yes, you can have discussions 10 between and among staff and the consultants about, you know, whether or not this piece of work is in 11 12 scope, out of scope. There can be minor 13 adjustments along the way. But in general, the 14 consultant should deliver on the scope of work that was given to them, assuming one was. But a 15 16 scope of work would be given to them in the 17 beginning. They should work to that and identify to staff if they have received new information 18 19 that has in some way changed or amended their 20 understanding of the scope or the work that they 21 have done, that should all be disclosed. There 22 should be conversations about that, and then an 23 agreement between the consultant and the 24 engagement manager on whether or not this work should be included in the report or not included 25

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in the report, again based on the agreed on scope
 that was created at the beginning of the
 engagement.

4 So, you know, disclosure, 5 transparency, conversations back and forth. I б think, depending on the nature of a consulting 7 engagement, you know, you would see more of that 8 back and forth on a I'm going to say a strategic 9 issue, you know, can you give me a culture plan or 10 help me build a culture plan, as compared to something that was very tactical and very specific 11 12 such as can you evaluate lighting on a piece of 13 roadway. So it's certainly something that, you 14 know, would need to be documented and clarified in 15 terms of what is to be included in the final 16 report. You know, to have the consultant simply 17 bring something on the basis of information they 18 received from one of the parties as opposed to the 19 engagement manager is unusual in my opinion. 20 Ο. Thank you. In what 21 circumstances would it be appropriate to update council about limitations to completing work that 22 23 they have directed in the course of a consultant

24 engagement?

25 A. Yeah, and there certainly

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1 is some sensitivity to a consultant engagement 2 that has come about as a direct result of a request from council, and I think at that point to 3 4 some degree council becomes the client and staff 5 are really delivering on council's behalf. 6 So if there was a broad 7 understanding based on the discussions at council 8 about the scope and then subsequently staff 9 through discussions with the consultant determined 10 that there were limitations to delivering that scope or the scope was -- needed to change in some 11 12 material fashion as a result of advancing the 13 work, I think as soon as staff become aware of 14 those circumstances they would have an obligation 15 to report back to council and clarify, you know, 16 council, you asked for this, we are going to 17 deliver most of that, however there's a piece that we can't deliver to you, here's why, and explain 18 any amendments or changes, particularly reductions 19 20 to scope. I think reductions to scope are 21 actually much more sensitive than, you know, if you broaden the scope and then went back to 22 23 council and said oh, by the way, while we were 24 doing this we also did this. So I think that may be less sensitive, but reducing scope, they need 25

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to be informed and have an opportunity to have a
 discussion about that.

Q. Moving to the preparation of consultant reports, at what stage in the drafting of a consultant report would it be appropriate for City staff to provide edits or of comments?

8 Α. I think consultants can 9 work with staff to ensure that the report that they have written is clear. I would tell you not 10 every consultant is a great writer and so 11 12 sometimes they need help making the report, the 13 background, the recommendations clear. Staff can 14 certainly, you know, help them with context. And, 15 you know, if a report is overly technical they 16 might request, for example, that the consultant 17 put together an executive summary or something 18 that would help people of non-technical individuals understand and be able to use the 19 20 report itself. 21 So I think that these are 22 normal interactions that you would see between

23 staff and a consultant as a report is being

24 finalized.

25 The question was asked earlier

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1 about I'm not sure about -- you know, as a staff 2 person maybe not being sure about a recommendation, you know, if there are any 3 4 disagreements those should be aired; however, at 5 the end of the day the consultant's report in my б opinion is the consultant's report. It stands on 7 its own. It should not -- the substance should 8 not be edited unless the consultant completely 9 concurs. If staff have made an observation or a 10 criticism of a report and the consultant looks at it and says you know what, you're right, I'm going 11 12 change that, that's fine. However, the 13 consultants themselves need to stand behind the 14 report so they shouldn't be simply removing things or editing things if -- you know, they need to be 15 16 able to defend the product that they have produced 17 at the end of the day. 18 Ο. If there is a 19 disagreement about a recommendation and if it's 20 aired, as you say, but that disagreement remains, 21 should the staff report identify that disagreement 22 as between staff and the consultant? 23 Α. I think -- I don't think 24 if you -- if staff had got some technical expertise and some experience and grounding in the 25

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1	issues that are subject to disagreement I see
2	nothing wrong with staff advising council that,
3	you know, we're not sure about this or we have
4	concerns or we have experience that would suggest
5	that maybe something this shouldn't be done
б	or I mean, these are all things that are
7	appropriate. However, there's no you don't mix
8	the two. The consultants' report stands on its
9	own and then staff can make their own give
10	their own advice and guidance to council if they
11	have that concern.
12	Q. Do consultants' reports
13	have to be provided to committee or to council
14	along with staff reports or is it acceptable to
15	summarize
16	A. I think it's I think
17	it is acceptable to summarize. I mean, I've seen
18	technical reports that run hundreds of pages and,
19	you know, those are very difficult to provide to
20	lay people in most cases. So there's nothing
21	inherently wrong with summarizing the results of a
22	consultant's work and the recommendations arising
23	from that. I think a best practice would to be
24	ask the consultant to do that, to have them
25	prepare a shorter, less technical document that

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1 could be appended to a staff report. 2 Having said that, I've also seen, you know, requests from members of council 3 4 for the full report even though it was staffs' 5 judgment that it didn't need to be provided. And б if council wants it, they can have it, but very 7 often I think council is quite happy to rely on a summarized version and then staff's view and 8 9 recommend takings on rising out of the consultant 10 engagement. 11 Q. Are there any 12 circumstances in which it's appropriate to not 13 address a consultant recommendation in a staff 14 report because it had not received -- the 15 recommendation had not received buy-in or approval from an individual staff member or from a 16 division? 17 18 Α. No, in my view the 19 consultant's report stands on its own. If the consultant is making that recommendation in its 20 21 final report then that is the technical expertise 22 and advice that you have engaged them for and that you've paid for. 23 24 So then those -- any 25 disagreements or concerns about the

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1	recommendation you know, recommendations might
2	require significant budgetary investment or there
3	might be other reasons why it's not a
4	recommendation that could be implemented easily.
5	All of that context or those concerns and
6	background should be itemized in the staff report,
7	and if staff is going to be recommend that one of
8	the consultant's recommendations not be
9	implemented they can make their case for that and
10	recommend that to council. Ultimately council
11	will make that decision.
12	Q. Thank you. Registrar,
13	can you call up the consultant's report tracking
14	and retention divisional procedure again, please.
15	Thank you. If you can go to image 6, please.
16	So this is in turquoise, or
17	some of it, because changes were made to the
18	previous released version of this document. So
19	this is the document I took you to earlier.
20	There's a reference in this document to validating
21	external reports, and you'll see it says:
22	"Where staff received a
23	consultant report from a group
24	external to the teon division
25	where the health and safety

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1	risks are identified, they
2	will review the information to
3	assess the risk and forward
4	them to be appropriate
5	individuals responsible for
6	the scope of work identified."
7	(As read)
8	So this is when you had
9	different divisions who had responsibility and a
10	consultant report has identified something that
11	really falls within the scope of work and
12	responsibility of another individual or division.
13	And this is very specific you'll see to where
14	there's a health and safety risk identified. It
15	goes on to say:
16	"If the risk has been
17	confirmed as valid then the
18	staff member responsible for
19	the scope of work will follow
20	the consultant report
21	procedure."
22	So you bring in that other
23	group.
24	"And if the risk is brought
25	forward from an external group

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1 and deemed not applicable," 2 that is the risk is not 3 applicable, "the staff should 4 present and confirm their 5 findings to the next senior 6 staff members including the 7 manager at division level." So if the other division says 8 9 that is not an applicable risk, then the staff who 10 has received the consultant report tells their manager or director. 11 12 So you were not speaking in 13 your last bit of evidence about this particular 14 issue around risk or around escalation, but is 15 this one way, albeit perhaps a bit of a 16 complicated way, but one way to ensure that there 17 is discussion about any disputes or disagreements 18 as between divisions when dealing with consultant 19 report? 20 Α. It is a way. My sense is 21 you can avoid getting to this issue of presenting 22 what sounds like a finalized consultant report to 23 an external group, I presume external to mean 24 another part of the City's organization. You know, coming back to the best practices of if you 25

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1 have an engagement terms of reference or a project 2 charter for the consulting engagement, if there are other themes or other parts of the 3 4 organization that have an interest in the project, 5 you know, they could have a representative that б would be either consulted as needed or sit on the 7 project team, because ultimately you would want to 8 have -- I mean, I spoke earlier about within a 9 municipality speaking with one voice. Well, part 10 of creating that one voice is having these -- the 11 stakeholders, the parties at the table as the work is unfolding and being done, and then as such, 12 13 when the consultant report is finalized, these 14 perspectives should have been and would have been 15 taken into consideration during the development of 16 the report itself. 17 So it is a way, but I would 18 suggest a better way might to be ensure that 19 collaboration and representation happens as the 20 project is being completed so that these kinds of 21 issues and challenges can be uncovered earlier and 22 then hopefully resolved as part of the process.

Q. Thank you. And just for clarity, there's nothing about the approach that you just set out that is something that is sort of

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1 a new approach within project management. This is 2 something that would have been applicable back to 3 2013? 4 Α. I believe so. I mean, in 5 my view collaboration across the organization and 6 effectiveness in project management are all 7 principles that municipalities have had and 8 certainly should have at the core of the work that 9 they have been doing for years and years, so I don't think it's new or would have been 10 unavailable or unknown at the time. 11 12 Thank you. Registrar, Ο. 13 you can take this down. If you can go to 14 HAM41871. 15 THE REGISTRAR: Repeat the 16 number, please. 17 MS. LAWRENCE: Of course. 18 HAM41871. This is the 2013 CIMA report. 19 BY MS. LAWRENCE: 20 And, Ms. Baker, you've Ο. 21 had a chance to receive and review this document 22 in preparation for today? 23 A. I did. 24 Q. Thank you. Registrar, can you go to images 3 and 4, please. So this is 25

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1	the executive summary from this work, and I'm
2	drawing your attention to it because I'm going to
3	have questions about prioritization and time
4	frames for consultant recommendations.
5	Registrar, could you call out
б	the bottom half of image 4, please. Sorry, I
7	misspoke. I think that's image 3. The other
8	side, the right-hand side, so where it says each
9	of the tables have a recommendation for timing.
10	Perfect. Thank you.
11	So you'll see in 2013 CIMA
12	provided in its executive summary a reference to
13	tables that follow through the report which have
14	short term, medium term and long term timing
15	recommendations. So short term is zero to five
16	years, medium term is five to 10 years, and long
17	term is 10 plus years. And then this goes on, and
18	we're going to come back to that later point
19	shortly.
20	There's also a reference in
21	the executive summary to what the City has
22	indicated it would do in terms of the sequencing
23	of the recommendations. So signage first,
24	pavement markings as wells and then illumination
25	recommendations after the implementation of other

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1 countermeasures. 2 So in fact -- actually maybe I'll take that second part first just so we can 3 4 deal with it. In your opinion is it appropriate 5 for a consultant report to reference how the City б intends to sequence the recommendations contained 7 within the consultant report? 8 Α. My expectation is that 9 would be in the staff report. I find it unusual 10 for a consultant's report to talk about implementation of recommendations or sequencing. 11 12 That really is within the purview and 13 responsibility of the City. So the section, in my 14 view, would more appropriately belong in a 15 covering report from staff that would talk about 16 the consultant's recommendation. Thank you. So turning 17 Ο. 18 now the first part of this callout, which is the short term, medium term, and long term. In your 19 experience how useful is the prioritization of 20 21 short term being zero to five years within 22 municipal planning? 23 Α. Certainly in my 24 experience short term is more typically within one to two years. Short term is -- suggests these are 25

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1	things that need to be done quickly. It might be
2	because there is low-hanging fruit, you know,
3	things that are relatively inexpensive or easy to
4	do but could have an impact. And then you kind of
5	build from there. You've got the real easy, you
б	know, things that are maybe a bit more
7	challenging, need a little bit more time, but
8	still are have a high impact and therefore it
9	would be important to do them more quickly.
10	So when I looked at this, zero
11	to five years from a planning horizon in a
12	municipality, we have annual budgets, often
13	forecasts that take you out most municipalities
14	don't forecast beyond three years. So if I'm
15	looking at a zero to five-year timeframe as short
16	term it could actually it could actually sit
17	outside the typical what I would consider to be
18	the short term planning horizon for a
19	municipality. So I would more typically think
20	short term would be zero to two, maybe zero to
21	three, but I would be more likely to say zero to
22	two.
23	Sorry, just building on that,
24	medium three to five, and longer term, you know,

25 five years plus. If you're dealing with in this

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1 case a piece of infrastructure, there is ongoing 2 work and maintenance and other improvements that may be part of the regular maintenance cycle that 3 4 are happening every year, you could integrate some 5 of these improvements into that work plan, for б example. 7 But it is helpful to have at least a prioritization to say do these first, 8 9 these you can wait a little longer, and these, you 10 know, maybe the next time you do a major capital upgrade you can consider doing the remainder. 11 12 That's how I would interpret these types of 13 recommendations. 14 Ten years in an infrastructure 15 planning cycle is relatively useless. Most 16 municipalities have a ten-year capital plan; 17 however, the reality is anything beyond two to 18 three years is a forecast as opposed to a detailed 19 planning document. 0. Registrar, you can close 20 21 that down, thank you. You can close it back, take 22 this document down as well. 23 In the CIMA 2015 report there was that same identification of short term, medium 24 and long term in terms of time horizon. 25

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1	Registrar, could you bring up
2	HAM702, please. If you can go to image I think
3	it's page 50, I think it's image 66. Image 59.
4	Apologies. It's definitely not this one. Let me
5	find it. This is the ongoing struggle between
6	page numbers and image numbers. I think it's 57.
7	Apologies.
8	So this is a summary table in
9	the 2015 CIMA report which you were also provided
10	with and reviewed in advance of today. You're
11	nodding. Just for the court reporter.
12	A. Yes.
13	Q. So this is a summary
14	table that sets out the countermeasures and the
15	estimated cost of those countermeasures and then
16	the timeline. So again you don't have that same
17	reference to what short term or long term here
18	means in this report, but you'll see that CIMA
19	included a number of short term options, some of
20	which are quite relatively inexpensive, you know,
21	under \$10,000, and some are quite expensive, 120
22	and 270 pardon me 47.
23	In this document friction
24	testing, which is three up from the short term
25	total, is listed as a short term option, and in

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1 the staff information, the staff report that 2 followed, the staff listed this as a medium term option but medium term being to two to five years. 3 4 Registrar, perhaps we can just have up that, so if 5 you can leave this up and that if you can bring б up -- thank you. HAM24702. Thank you. 7 So, Ms. Baker, this is really just to orient you to some of the reports that 8 9 those involved in the inquiry have seen many, many 10 times. So in this, this is the appendix B and a staff report, and I can certainly advise you that 11 12 there was an appendix A that has short-term 13 options, zero to two years, and those include a 14 number of the short-term options that are on the summary table on the left. But one of them is 15 16 conducting pavement friction testing, and that's 17 as a medium-term option, two to five years. 18 So recognizing the CIMA 2015 19 report doesn't actually specify what short-term means, if it means zero to five as it did in the 20 21 2013 report, the medium term here, staff has done what I think you would view as the medium term, as 22 23 you just said, the two to five years. 24 Α. Hm-hmm. 25 Q. So here are my questions.

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1	Mr. Ferguson as he was preparing this staff report
2	asked CIMA to change CIMA's I'm using the word
3	that Mr. Ferguson used layout to reflect this
4	separation of short term, medium term and long
5	term in which medium term included friction
6	testing. And CIMA declined to do that. In the
7	final version of their report, conduct pavement
8	friction testing was listed as short-term.
9	So my first question is, there
10	seems to have been no discussion except for the
11	e-mails back and forth requesting a change and
12	then CIMA providing the final report that did not
13	include that requested change. What's the best
14	practices as between staff and consultants to
15	clarify the timeframes that consultants may be
16	referring to and to clarify the request for any
17	changes to those timelines?
18	A. I think for the benefit
19	of the reader of the report, for example, which
20	might be council or other staff, you know, to the
21	degree that you can provide greater precision. So
22	if we look back to the 2013 report which talked
23	about short-term as being zero to five, at least
24	that's a bit more specific, you know, may have
25	issues with whether that defines short-term, but

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these are all things that it's important to
 clarify because, you know, you start to create
 some confusion.

I think most people, you know, most reasonable people would think of short term as within the next year or two, and I think that's, you know, generally the way short term would be viewed in a municipality.

9 And the medium term, as I've 10 noted, yeah, two to five years, I think that's -you know, probably a generally accepted standard 11 12 for medium term. Again, this is one of these 13 areas where if you have a disagreement between or 14 a difference of opinion, I guess -- you know, I 15 think CIMA's report could have been improved by 16 defining short term, long term, but nonetheless, 17 if there was an understanding of that being sooner 18 than the two to five years, then I think it would 19 have been incumbent on staff when this report or 20 the results of this engagement went forward to 21 council to once again point out, you know, we are -- we're recommending something that is 22 23 slightly different from a timing perspective than 24 the consultant and here's why. 25 I mean, consultant reports are

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1 by their very nature advisory. You know, a 2 consultant is not a decision-making authority, they are an advisory tool, and so there is nothing 3 4 inherently wrong with staff suggesting to council 5 some slight differences. You know, material б differences may be -- you know, can be a bit more 7 challenging, but timing is something that is really within to some degree the purview of staff 8 9 to manage. 10 If the consultant feels there's urgency to a recommendation, they 11 12 certainly should convey that. You know, this gets 13 back to the earlier conversation about imminent 14 risk to health and safety. That's -- the 15 consultant really needs to highlight something 16 that they feel is, you know, a response to an imminent risk. 17 18 Conducting testing, you know, 19 there probably is some rationale for flexibility 20 and when you choose to do that. If the consultant 21 felt that that was urgent, then they certainly had an obligation to point out that they believe that 22 23 that was something that needed to be done sooner. 24 Thank you. Registrar, Q. you can close these. 25

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I would like to turn now to the Tradewind report, which is a report appended to the Golder report which Tradewind prepared, provided to Golder, and Golder along with its report provided to Mr. Gary Moore of the City in January of 2014.

7 You were asked to assume for 8 the purposes of your opinion that the Tradewind 9 report contained findings of friction value on the Red Hill that were below or well below the 10 investigatory standard from the United Kingdom in 11 12 contrast to the LINC, which was above the same 13 investigatory standard. And that the draft 2014 14 Golder report recommended rutting and 15 microsurfacing to remedy the friction values on 16 the Red Hill and other surface cracking on the Red Hill that Golder had identified. 17 18 Neither Mr. Moore nor any 19 other staff, City staff -- pardon me, member of 20 City staff sought a final report, a final draft of 21 the Tradewind report or the Golder report which

had a draft stamp on it. No staff member advancedthe Tradewind report or the Golder report to a

23 the Tradewind report or the Golder report to a

24 committee or to council until February 2019.

25 At a high level, when is it

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1 necessary to disclose consultant findings or 2 recommendations to council? 3 Α. You know, I think a 4 general principle would be, and we are talking 5 here about matters of health and safety, if 6 something is brought to the attention of staff 7 that would suggest or indicate that there is a 8 problem with a particular piece of infrastructure 9 or something that has an element of risk to public safety, I think that rises to the level of 10 something that council needs to be made aware of. 11 12 Because it may require budget adjustments. It may 13 require capital investment. It may require short 14 term funding outside of the budget which only council can typically approve. So all of these 15 16 reasons would be reasons to bring it forward, but 17 also from the perspective of transparency. 18 We've learned something 19 that's important and we need to consider how we act on that information, and so we're making 20 21 council aware and we will bring you 22 recommendations as to how we intend to follow up. 23 Ο. You have said in the 24 course of your evidence that municipalities retain consultants for lots of different things and have 25

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1	lots of different consultants' reports that are
2	received, and I hear from your evidence that not
3	all consultant findings or recommendation need to
4	go to council or through committee; is that right?
5	A. That's correct. And
6	again, I come back to, you know, you might retain
7	a consultant to look at an organizational process,
8	you know, how do we improve our recruiting
9	process, it's taking too long to hire people,
10	or these are all administrative processes and
11	work that really is under the purview of the CAO
12	and department heads. You would not typically
13	bring that to council. You might refer to it in a
14	budget request to say, you know, we're asking for
15	resources because. But generally these are things
16	that fall under the responsibility of the City
17	manager.
18	I think when you get into
19	asset management, infrastructure, and again health
20	and safety, that elevates the recommendations, and
21	in my view any matters pertaining to the health
22	and safety of the public that are material need to

23 be escalated to council so that they can become

25 assurance that these issues are being managed and

aware of them, but also so that they have the

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24

1 resolved in, you know, an appropriate timeframe. 2 Q. Absent any specific 3 governance or corporate policy, who is responsible 4 for determining whether a consultant's findings or 5 recommendations or their reports containing those 6 recommendations should be presented to council? 7 I think it would Α. typically be staff. Again, a recommendation of 8 9 the nature that suggests a risk to health and 10 safety, I think that a director or general manager position would make the determination is this 11 12 material. Because if it's not material, then, you 13 know, staff can just deal with it, but to the 14 degree that they determine that this is a material 15 issue or, you know, we have findings or 16 recommendations here that would suggest that we 17 need to follow up on those, then I think it would 18 be staff that would decide to bring that forward. 19 Ο. So when you say "staff," 20 you mean --21 Α. The director or general manager, yeah. I mean, typically it's the general 22 23 manager that signs off on council reports, 24 sometimes the CAO does, but in general it would be the general manager, and so it would be through 25

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1 that channel that a report would go forward to council. So it would need to be escalated to the 2 3 senior officials in the department. 4 0. I think your evidence 5 assumes that the report would have been received 6 from some project manager level and then escalated 7 up to the director for decision-making; is that 8 right? 9 Α. Yes. In best practice, 10 this consulting engagement would have been managed in the way that we spoke of earlier. You would 11 12 have a team. You would have an engagement 13 manager. They would be working with the 14 consultant to complete the work. The report would 15 then be distributed to the various parties who had 16 an interest in viewing it. So having it sit with just one individual, you know, certainly is not in 17 18 keeping with best practice as I understand it. 19 Ο. Where staff have any 20 concerns or questions about the validity or the 21 usefulness of the findings or the recommendations in a consultant report, how quickly would you 22 23 expect staff to determine what next steps would 24 occur? 25 Α. I mean, presumably there

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1 was -- you know, there was a work plan that 2 anticipated that an engagement would be completed by a certain -- in a certain window. You would be 3 4 doing your best to meet that target. And so these 5 are typically things that are happening in real б time as an engagement is reaching the stage of 7 final report or final draft report. 8 So I would expect, you know, 9 these kinds of follow-ups to be done in a timely 10 manner, having regard for the project timeline or the schedule that's been established for 11 completion of the work. And there may be minor 12 13 delays, but I think in general it would be to meet 14 the schedule that was originally laid out when the 15 consultant engagement was launched. 16 0. Can you tell me a little 17 bit about the best practices for closing out a 18 consultant retainer? Yep. I mean, you may go 19 Α. 20 through a number of drafts of a report, again 21 depending on the nature of the engagement. However, you will reach a point of agreement 22 23 between the City and the consultant that this is 24 the final report. You know, we've provided you with our input. You've responded to them either 25

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1 by accepting the suggestions we've made or saying 2 no, my report stands on its own. And then the consultant would issue a final report. That would 3 4 typically be delivered to the person who is the 5 engagement manager and then circulated to, you б know, the various parties who would need to see 7 that report. Earlier drafts may also have been 8 circulated to -- you know, in the process of 9 finalizing and getting to a final product. 10 But there is typically a one document that is issued -- in fact, the consultant 11 12 signs off to say this is -- you know, I've 13 completed the engagement. The City would attest 14 to the fact that the work has been completed, the 15 report would be issued, and then the consultant 16 would receive final payment. 17 Ο. Once that final report is 18 in the hands of the City -- the appropriate City staff, would it be stored and archived in the 19 20 manner that we spoke about before, in an 21 accessible way and in a way that reflects the 22 legislative requirements of record management? 23 Α. It should be, yes. 24 Where there is a report Q. that doesn't have a strict timeline or a work plan 25

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1 which deadlines around it, how promptly would it 2 be a best practice for staff to consider the recommendations in consultant reports and decide 3 4 whether or how to implement those recommendations? 5 You know, I think Α. б obviously the fact of engaging the consultant and 7 having the work done would suggest that there's an 8 element of priority to the work. Consultants are 9 not inexpensive and you've invested in acquiring 10 their time and expertise, and presumably you would first look for guidance from the consultant's 11 12 report itself in terms of urgency, timing, because 13 again I'm coming at this from the context that 14 we're dealing with an issue that appears to have 15 elements of public safety. I think that elevates 16 the obligations that staff would have to consider 17 and act on the recommendations that have been 18 provided to them, and certainly to address any 19 issues that are presented by the consultant as 20 urgent.

You would consider, as I mentioned earlier, low-hanging fruit, are there things that we could do quickly and maybe not terribly expensive within our operating budget even that would have an impact, and then are there

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1 recommendations that we either need to integrate 2 into our next budget cycle, or, you know, there's some more significant consideration that has to be 3 4 taken in order to move forward. Is there a 5 capital project or work that's happening that, you 6 know, would facilitate bringing these actions 7 forward. I mean, there's a lot of moving parts in managing major infrastructure, and I think the 8 9 more significant and costly the recommendation, the more time staff would require to consider how 10 and when to bring it forward for implementation. 11 12 Thank you. The inquiry Ο. 13 has received evidence and heard from staff that on 14 at least two occasions staff from traffic 15 operations and engineering updated public works 16 committee -- the public works committee and therefore council that the recommendation from 17 18 CIMA to do friction testing had been completed, 19 and so there's -- staff, pardon me -- an 20 information update and a staff report, both of 21 which list friction testing as completed. 22 The inquiry has heard from 23 staff in traffic operations and engineering who 24 offered those reports that they relied on Mr. Moore's statements that testing had been 25

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1 completed. What steps should be taken to ensure 2 the accuracy of a staff report that's being 3 submitted to council or a committee? 4 Α. I mean, responsibility 5 for accuracy rests with the drafter. It is not б unusual for a staff member who might be drafting a 7 report to rely on the assertions particularly of a 8 senior manager, director in an organization, to, 9 you know, write into the report the information that's been provided to them, and then I think it 10 would be kind of -- I say trust, but verified, you 11 know, do you have any reason to think that there's 12 13 something that's not right here or doesn't feel 14 right, or, gee, I want to do additional follow-up. 15 I think in general if a director-level position is 16 telling the drafter of a report that something has been done, you know, I think it would be unusual 17 18 for that to be challenged. 19 So staff, you know, would 20 trust that the information that they're being 21 given is accurate and that they can rely on it. I mean, this comes back to the principle of culture, 22 23 we're all on the same team and we're all working 24 together to do -- to give our best advice and recommendations to council, and, you know, you 25

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would not necessarily take it any further than
 that.

Q. Thank you. So the trust and verify approach. If there was -- if a staff member did have concerns that something seemed to not be adding up or that there was some concerns about gaps or the information that they were receiving, what would be the steps to try to address those concerns?

10 Yeah, you could go back Α. to the individual who provided you with the 11 information and say, you know, can you tell me 12 13 more. I have some questions, here they are. And 14 see what comes back. If you're still not 15 comfortable, then I think you're back to the 16 conversations that we've had about escalating, 17 pushing it up the hierarchy. You may want to talk to your own director and say, look, can you just, 18 19 you know, check into this for me because here are 20 some reasons why I'm not feeling as comfortable as 21 I need to be in order to sign off on the report. Because remembering that most staff reports for 22 23 council are signed by a department head, but they 24 are most often drafted by someone, you know, at a manager or below level in the organization that 25

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1 has the knowledge and capability to draft the 2 report, but it is the director or general manager at the end of the day who has the responsibility 3 4 to sign off, and if there are concerns, those 5 certainly should be brought to their attention б before they do sign the report. 7 Registrar, could you Ο. 8 bring up EXP193 and go to image 36, please. Thank 9 you. Can you call out the final paragraph on this 10 page, please. This is from the assumed 11 12 facts, Ms. Baker. In 2016, Mr. Ferguson, who again is in traffic operations and engineering, he 13 14 is a superintendent. So not at a manager level. 15 He sent an e-mail to a local community group, 16 copying the public works committee and the mayor, 17 which stated that friction testing recommended in 18 the 2015 report would be completed by engineering services in 2016. 19 20 And just as a matter of a 21 little bit more background for you on this, the local community group reviewed the 2015 CIMA 22 23 report that listed friction testing as a short 24 term measure and the staff report which listed

25 friction testing as a medium-term measure, asked

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1	public works committee and the mayor actually
2	asked council to reassess that timing, and in
3	response, about two months later, Mr. Ferguson
4	sent this e-mail that said the friction testing
5	recommended in the 2015 CIMA report would be
6	completed by engineering services in 2016.
7	Mr. Moore was copied on the e-mail, and he replied
8	to Mr. Ferguson, "perfect."
9	There is no evidence that
10	friction testing was contemplated or performed on
11	the Red Hill in 2016 after that e-mail was sent.
12	And Mr. Ferguson did not advise the local
13	community group, the public works committee, or
14	mayor that this friction testing hadn't been
15	completed in 2016, although it's Mr. Ferguson's
16	own state of knowledge about whether it had been
17	completed or not may have not he may have not
18	known either way.
19	So I provided you with a
20	little additional information than what is in the
21	assumed facts, just to make clear that this
22	commitment to do friction testing by engineering
23	services was not part of an outstanding business
24	list item or part of a staff report. It was in
25	response to a community group that was reviewing

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1 the staff report about the 2015 CIMA report. 2 My first question is, is there 3 a best practice on how this type of commitment 4 flowing outside of a staff report or flowing 5 outside of an outstanding business list item б should be documented as a staff commitment? 7 Yeah. I think it may Α. have been a better approach to have engineering 8 9 services, who apparently were responsible for completing the work, be the ones to make the 10 commitment. I mean, I always caution staff making 11 12 commitments on behalf of others in the 13 organization when they -- while they are making 14 the commitment, they, it would appear in this case 15 in particular, don't have control of the outcome. 16 And you know informal or e-mails to local 17 community groups, I mean, are an important piece 18 of communication, so I think as opposed to sending it out and then -- and, you know, to have 19 Mr. Moore respond, maybe a draft of this would 20 21 have been circulated to Mr. Moore or the engineering services division so that they could 22 23 have eyes on it and put in the appropriate words. 24 I mean. The lack of follow-on on the commitment I think is a different problem. 25

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1 But certainly the communication, you know, it 2 is -- I think it's one thing -- you always want to 3 be cautious when you're making commitments to the 4 public that everyone who needs to see and 5 understand that commitment is involved in the б crafting of the message. It just comes back to 7 everybody needing to be on the same page, some due 8 diligence being applied to, you know, the crafting 9 and delivery of that message to ensure that all 10 the parties who were mentioned in it had an opportunity to review it before it went out. 11 12 Staff who make 0. 13 commitments on their own behalf of things they can 14 control, is it your opinion that they then have a 15 commitment to follow through on the commitment 16 that they have made? 17 Α. Sorry, could you just ask 18 that question again. 19 Ο. Sure. Of course I can. 20 So taking it out of the circumstance here where 21 Mr. Ferguson has made a commitment on behalf of engineering services, in a circumstance where a 22 23 staff makes a commitment to do something over 24 which they actually have control about the outcome, is it your opinion that they then have a 25

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commitment to actually follow through on the 1 2 commitment that they have made? 3 Clearly, yes. You know, Α. 4 when you are communicating with the public and 5 particularly a public group that has -- a group б that has taken an interest in a particular issue, 7 I think, you know, a commitment that's made in a 8 piece of correspondence like this would have the 9 same weight as a commitment that was made in a 10 council report or through any other documentation that's created and provided. 11 12 So I would think at that point 13 there would be an obligation then to either 14 complete the work or to come back at some point, if there were circumstances that did not allow 15 16 that work to be completed, to follow up and say, 17 you know, I told you we were doing this, 18 unfortunately for these reasons it's been delayed 19 or deferred or we can no longer do it. You know, 20 you've established a relationship and a commitment 21 with this group that you need to manage going 22 forward. 23 0. Registrar, you can close 24 this callout. Turning to a different topic, and that's information sharing with councillors. 25

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1 In your opinion is it 2 appropriate for staff to share or disclose draft 3 or in-progress consultant reports to individual 4 council members. 5 Α. No. You know, managing 6 the council-staff relationship is something that 7 is vitally, critically important in maintaining the trust of council. You know, sharing draft 8 9 reports with individual members of council -- and I think at this point I would state that, you 10 know, the authority and the responsibility for 11 12 decision-making and acting on behalf of the 13 municipality rests with council, not individual 14 councillors. So you want to avoid at all costs 15 the perception that staff reports have been vetted 16 politically or that, you know, staff's 17 recommendations are somehow influenced by a political agenda. 18 19 So in my view those staff 20 reports should be insulated from any political 21 interference and/or the perception of political interference, and staff reports and 22 23 recommendations should be provided to all of 24 council at the same time to ensure that there can be no question of there being some influence 25

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1 brought to bear by a member of council ahead of 2 the full of council seeing the report. 3 Ο. Thank you. I think your 4 answer was directed primarily at draft staff 5 reports; is that right? 6 Α. Yes. 7 Ο. That was going to be my 8 next question, but the question that I had asked 9 was actually --10 A. I'm sorry. Q. No, it's fine. It was 11 about draft consultant reports. Is your answer 12 13 the same for draft consultant reports? 14 Α. I think, you know, as 15 long as the principles of no interference are 16 followed. I mean, again, draft consultant reports 17 are subject to change. In my view, council should 18 only see final reports. You know, when a consultant is still contemplating the final 19 20 recommendations or advice that they are giving, 21 then in my view there should not be any 22 involvement. 23 You know, the one exception or 24 area -- and again, I referenced an issue that I dealt with in my career that was somewhere similar 25

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1 to this one in terms of flooding -- if you have 2 something that's quite localized. 3 So in that particular example, 4 it was a neighbourhood within a ward. The ward 5 councillor was very concerned, so in that case the б consultant was brought out to public meetings 7 prior to the report being issued. I think that's a different standard. 8 9 If you're looking at a -- in 10 this case a piece of infrastructure and issues 11 that have city-wide, community-wide, council-wide 12 interest, then involving or having individual 13 councillors see material or be part of discussions 14 prior to the whole of council receiving the report in my view is a problem and should avoided. 15 16 Ο. Is that the case even if 17 it is the councillors who actually brought motions that lead to the work of the consultant or staff? 18 19 There's nothing different or enhanced about 20 dealing with councillors who bring the initial 21 issue to staff? 22 If it's been brought Α. 23 through a committee, which I believe is the case, 24 I think the best practice is that the report should go back to all of committee or council so 25

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that all members of council can see them and get the information at the same time. You know, council might at that stage be prepared to allow a subset of council or a committee to interact with staff and seek additional information or meetings, but at least it's done with the knowledge of the full council.

I mean, I have always in my 8 9 time as CAO really very, very -- been very guarded 10 about having information go to individual members of council before all of council sees it, and I 11 think there are just some -- it's a practice to be 12 13 avoided and only exercised in very exceptional 14 circumstances for issues that are clearly local 15 and clearly of concern to one member of council 16 because it's only in their ward that the issue 17 exists.

18 I think then there's some 19 latitude for some meetings and discussions ahead 20 of time. Staff still should be presenting their 21 recommendations and their advice free from political interference, and if they are making 22 23 recommendations, they need to be able to defend 24 those. You cannot stand in front a council meeting and say, the councillor asked me to do 25

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1 this. If you can't defend it, then it shouldn't 2 be in the report. 3 Ο. Thank you. Registrar, 4 could you bring up the document entitled "City of 5 Hamilton Council-Staff Relationship." Could you 6 bring up the next image as well, please. 7 So this is the council-staff relationship policy, which you'll see was last --8 at the top, last reviewed April 2021. And, 9 Registrar, I would like you to make this -- if we 10 can make this the next exhibit. Exhibit 235, 11 12 please. 13 MS. LAWRENCE: Noted. 14 EXHIBIT NO. 235: Document 15 entitled "City of Hamilton 16 Council-Staff Relationship" 17 April 2021 18 BY MS. LAWRENCE: 19 Ο. This is a policy from the office of City manager that deals with staff and 20 21 members of council, and you'll see -- Registrar, 22 you can pull this out -- number 2 on the 23 right-hand side. If you can pull up where it says 24 number 2. Yes. Perfect. Thank you. 25 "Council and staff are

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1	committed to accountability
2	and transparency among council
3	and staff." And the
4	commentary says:
5	"Staff will ensure that all
6	council members are provided
7	with the same information on
8	matters of general concern or
9	matters that will be discussed
10	at a meeting of council or
11	committee of council, and
12	council and staff will
13	maintain transparency in
14	decision-making and ensure
15	proper consideration of
16	confidential matters."
17	And I take it that that
18	reflects the practices that you have put in place
19	where you have the municipalities where you
20	have worked with your own staff in dealing with
21	council; is that right?
22	A. Yes, I think you would
23	find that that's a principle that would be common
24	across most, if not all, municipalities.
25	Q. And is this an obligation

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on staff and on council but on staff that existed 1 2 before 2021? I'm using 2021 because that's when 3 this policy was last reviewed. 4 Α. In my opinion this has 5 always been a best practice because this is at the б very core of the independence of the professional 7 public service, and that, you know, the public service needs to deliver its advice and 8 9 recommendations independent of political 10 interference or political influence, and, you know, then you serve council, not individual 11 12 members of council. 13 So those reports should go to 14 the body through the clerk's office, and at that 15 point they become public and subject to discussion 16 and debate at a council meeting and council will 17 make a decision if it's a report that requires 18 that. 19 So in my view this is a 20 principle that has been around since the dawn of 21 government, to be honest, and I think we talked 22 about the Institute of Public Administration of 23 Canada earlier. You know, these would be the

25 espoused by those kinds of organizations through

kinds of principles and values that you would see

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their own codes of conduct and best practices 1 2 advice. 3 Q. Thank you very much, Ms. 4 Baker. 5 MS. LAWRENCE: Commissioner, I 6 see the time is 12:30, just past 12:30. I expect 7 I'm going to wrap up, and I'm wondering if you 8 would prefer me to take a very brief break just to 9 look at my notes and ensure I'm done, or if it may 10 make sense to take a bit of an early lunch. I can confer with other counsel. The City of Hamilton 11 is the only participant who intends to examine 12 13 Ms. Baker, and we can set our schedule for when we 14 come back from a slightly earlier lunch. 15 JUSTICE WILTON-SIEGEL: I 16 think perhaps the latter course of action makes 17 more sense. Why don't we take lunch now, it's 18 12:30, we'll return at quarter to 2, and in the 19 meantime, Ms. Lawrence, you can set the schedule 20 for this afternoon for us. 21 MS. LAWRENCE: Thank you, that sounds great, thanks very much. 22 23 --- Recess taken at 12:33 p.m. --- Upon resuming at 1:46 p.m. 24 25 MS. LAWRENCE: Commissioner, I

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1	was able to speak to counsel over the lunch break,
2	and I can advise for the schedule for this
3	afternoon, we will finish up with Ms. Baker,
4	Mr. Chen expects to be about half an hour, and
5	then we'll move to our next witness, we'll
6	probably take a brief break in between, somewhere
7	around 2:15 to 2:30, and I expect we'll be
8	finishing before 4:30 today.
9	JUSTICE WILTON-SIEGEL: Thank
10	you.
11	MS. LAWRENCE: Thank you.
12	Ms. Baker, I don't have any further questions for
13	you. Thank you very much for your time and
14	attention today.
15	THE WITNESS: Thank you.
16	JUSTICE WILTON-SIEGEL: So,
17	Ms. Lawrence, I understand that Mr. Chen has
18	questions for Ms. Baker.
19	MS. LAWRENCE: That's right.
20	JUSTICE WILTON-SIEGEL: Over
21	you to you, Mr. Chen.
22	CROSS-EXAMINATION BY MR. CHEN:
23	Q. Thank you,
24	Mr. Commissioner.
25	Good afternoon, Ms. Baker. I

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1	am one of the lawyers for the City of Hamilton and
2	I just have a couple of questions for you.
3	So earlier today you provided
4	some very insightful commentary and as well as in
5	your report on safety and risk to human health,
6	and specifically you also talked about
7	responsibility for public safety, and I think you
8	had mentioned no harm to the public as kind of a,
9	if I can call it, guiding principle.
10	So just putting that together
11	on identifying a safety issue, is it fair to say
12	that a safety issue can be a circumstance where
13	some issue will likely impact human health? Is
14	that a fair summary?
15	A. Yes. I think that's a
16	fair summary, yes.
17	Q. I'm of course referring
18	to impacting human health in a negative way. And
19	you're shrugging meaning yes, I take it?
20	A. Yes, sorry. I forget
21	that I need to respond. Yeah, I think we're
22	talking about risks to health, although of course,
23	you know, municipalities also have a role in
24	promoting good health, but I think in this case
25	we're talking about risks to public health and

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1 safety, yes. 2 Q. When staff are assessing 3 whether something is a safety issue on the 4 definition we just discussed, the staff assessment 5 would include what likelihood an issue will б negatively impact human health? 7 Yes. I think they would Α. 8 look at a range of factors to make that 9 assessment, so the likelihood, you know, the 10 nature of the risk, et cetera. 11 Q. In doing that assessment, 12 I take it it could be quite obvious in some cases 13 as to whether an issue will likely impact human 14 health? 15 Α. Yeah, I mean, some 16 things, you know, clearly. You know, a 17 physical -- you know, physical damage that -- you 18 know, a light pole that could fall on a car. I mean, there are things that are obvious on their 19 20 face, and then there are others where, you know, a 21 deeper assessment or expert opinion or other work 22 may need to be done to both understand the 23 likelihood and the nature of the risks. So there 24 is certainly a wide range of risks that staff can 25 assess.

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1 Certainly. And you're Ο. 2 getting ahead of me, but that is the direction that I intend on going. And just to bring it back 3 4 to situations when it's quite obvious. In those 5 cases, I take it you would agree that staff should б act promptly and devote the necessary resources to 7 address that issue, correct? 8 Α. Of course. You know, 9 imminence, and certainly that word has come up in 10 the context of today, you know, something that is imminent and obvious, yeah, you would not expect 11 12 staff to do anything other than act. Assuming they have the resources and the capacity to do so. 13 14 So, you know, if it's something that needs to be 15 repaired immediately and they have the means to do 16 so, they should proceed to do that. There may be 17 a need for some communication that something is 18 happening, but in general you would expect them to 19 act expeditiously to make the necessary repairs. 20 Ο. I think you may have used 21 the word spectrum, or that's how I see it. 22 Operating, I think I Α. 23 said, yes, yeah. 24 So on that spectrum, Q. there would also be situations where it's not 25

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1 likely that an issue will negatively impact human 2 health, or an easier decision, I put it? 3 I mean, risk assessment Α. 4 by its nature says you look at a risk and you determine if the likelihood of that risk or the 5 б consequences are low, medium or high. I mean, 7 that is a typical practice that would be used in 8 risk assessment, and in general those of us who 9 work in this space, you know, you focus most of 10 your attention on your medium to high risks. You 11 focus less attention typically on low risk. Ιt doesn't mean you ignore them, but certainly you 12 13 want to deal with and put your resources, time and 14 energy into your medium to high risk first. 15 And so I think what Ο. 16 you're describing is kind of what my next question 17 is getting at. Staff are engaging in a balancing exercise of the low, immediate or high risk, 18 what's the resources available and whatever other 19 20 priorities there may be? 21 Well, I think the two are Α. separate. I mean, your risk assessment isn't 22 23 necessarily coloured by do I have the resources or, you know, the means at my disposal to deal 24 with the risk. I think identifying the risk, 25

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1	assessing it, and then coming to a conclusion if
2	it's a medium or a high risk or low risk is one
3	step. Then it is a risk that I need to mitigate,
4	and if it is, do I have the necessary tools,
5	resources, budget, whatever, to do so, or do I
б	need to make a budget request, do I need to hire
7	expertise. I mean, these are all things that are
8	looked at in the mitigation stage, not necessarily
9	the identification stage or the assessment stage.
10	Q. But that's kind of the
11	process, though, you have the identification
12	stage, and then I think you call it the mitigation
13	stage?
14	A. Yes.
15	Q. In your response you
16	talked about I think hiring third parties or
17	seeking assistance or consultation from
18	consultants; is that right?
19	A. Yes, yeah, I did.
20	Q. I take it that's normal
21	when staff don't have the necessary expertise in
22	making assessments related to safety, for example?
23	
	A. Yes, I mean, everybody is
24	A. Yes, I mean, everybody is aware that there are sometimes there's

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1 I think the two examples I gave would be you don't 2 have the expertise or you don't have the capacity, and in those cases it is typical to backstop those 3 4 kinds of gaps with consulting resources or 5 temporary resources. б 0. One of the I'll call it 7 principles you've talked about today or terms you've used is clarity. I take it you would 8 9 expect clarity from your consultant in terms of a 10 what they're recommending? Yes, I think you need 11 Α. 12 them to both, you know, do the work and the 13 diligence required to make the recommendations, 14 and then the report needs to be clear and 15 understandable to the user. And not necessarily 16 the expert user, depending on the nature of the 17 engagement. You know, if the report is being 18 released publicly, it should be understandable to 19 council and to a lay person as well. 20 0. So when you're engaged with the consultant, and just taking it back to 21 22 the start, you would expect them to clearly 23 identify the issues that the consultant believes 24 would likely impact human health? 25 I think when you are Α.

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1	engaging a consultant to for their expertise in
2	looking at risks to public safety, you know, as it
3	pertains to a piece of infrastructure, for
4	example, yes, I think the more clear that the
5	consultant can be on the technical reasons for
б	their recommendation but also the urgency or, you
7	know, timing of when they believe certain actions
8	should be taken in order to mitigate the risk that
9	has been identified, I think that is
10	extraordinarily helpful to both staff and to the
11	council and the public.
12	Q. And would it assist if
13	the consultant also identified what would happen
14	if the recommendations were not implemented or
15	moved forward on?
16	A. I think that's part of
17	the you know, the overall value of the report.
18	I mean urgency or, you know, being adamant, I
19	guess, if I can use that word, that something must
20	be done as opposed to a recommendation that would
21	improve the situation, but, you know, you may have
22	some flexibility in timing. I think that's
23	important, but if a consultant who is an expert in
24	an area believes that if something isn't done, you
25	know, it could lead to more harm or more frequent

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1 harm or harm that could be avoided, then I think 2 they do have, in my opinion, a professional obligation to point that out. 3 4 That would certainly help 0. 5 with the City's understanding of the seriousness of the issue? 6 7 Α. I think it would help. I 8 also think that in the course of completing the 9 work, you know, these are typically conversations 10 that might happen between staff and a consultant because it's also incumbent on staff to make the 11 12 inquiry if the information isn't provided, you 13 know, how urgent is this. These are the kinds of 14 questions I think -- questions of clarity can also 15 come from staff if the consultant hasn't provided that in their draft materials or -- well, yes, in 16 their draft materials. 17 18 Ο. I've looked back at the 19 transcript and I couldn't find it, but I recall 20 that you had mentioned that you've invested 21 resources and time into the -- into working with the consultant, engaging the consultant. Was that 22 23 a point that you made or am I misstating? I'm not clear. I mean, 24 Α. in my view, you know, there is dialogue that would 25

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1 be happening in the course of a consulting 2 assignment between the consultant and staff. I 3 believe I mentioned that earlier. That's what I 4 recall. 5 Ο. But is it fair to say б that City staff can rely on the consultants to 7 identify those issues that would likely impact human health? You're obviously getting the report 8 9 for a reason. 10 Α. Yeah, I mean, I think when I talked about engaging a consultant, you 11 12 know, there is a terms of reference or a request 13 for proposals that would go out that would specify 14 the nature of the engagement but also the expertise that the City is looking for, and in the 15 16 course of the responses, you know, those -- that 17 expertise would be assessed, and presumably the 18 City would have confidence then that the 19 consultant that they have engaged has that expertise, and as a result of that advice and 20 21 recommendations that are made, would have value 22 and certainly could be relied on by the staff as 23 advice that they should move forward, utilize, and 24 presumably implement.

Q. Thank you. Just as an

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25

1 example, if a consultant recommends that the City 2 could consider implementing a countermeasure or to take some action, I take it staff can rely on that 3 4 conclusion, the way it's phrased? 5 Well, you used the word Α. 6 "could." So could implies discretion, you know, 7 and that's where I think it is -- it's important, 8 because, you know, the nature of consulting engagements is -- varies, but in a circumstance 9 10 where you're relying or looking to expertise, and 11 again I think the stakes are higher when you're 12 talking about an issue that might impact public 13 safety, I think it's incumbent on the consultant 14 to identify those things that they believe are 15 important for mitigation versus things that might 16 be a good idea, but, you know, they are not 17 necessarily recommending. I mean, there are lots 18 of things that you can do. 19 I go back to I believe in one 20 of the reports, and I apologize, I think it was 21 the 2015 report, there was a cost-benefit analysis that was done on some of the recommendations. 22 23 That's extremely helpful to be able to assess how 24 important or how urgent, you know, it is to move forward because if you've got something that's low 25

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1	cost/high benefit, that I calling it the
2	low-hanging fruit, but so I think again
3	clarity, but conversations also will happen
4	between staff and the consultant, and I think
5	that's where clarity can come with respect to how
6	critical is it we do something versus, you know,
7	something that's a good idea, but, you know,
8	you're not necessarily recommending it as a
9	measure that must be taken.
10	Q. Right. And so you used
11	the word must, and I don't think we need to go to
12	your report, but one of the things you say is:
13	"Helping staff and council
14	understand what the consultant
15	feels the City must do versus
16	things that are helpful but
17	discretionary is always useful
18	to ensure a municipality's
19	time, effort, and resources
20	are assigned to the right
21	priorities."
22	A. Yes.
23	Q. That summarizes, in
24	effect, I think our conversation.
25	A. It does, I believe, yes.

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1 MR. CHEN: Mr. Commissioner, 2 if I can just have five minutes to consult with my 3 colleagues? 4 JUSTICE WILTON-SIEGEL: Yes, 5 by all means. Do you want stay on the line or do 6 you want to just -- we'll adjourn for five 7 minutes? MR. CHEN: If we can adjourn 8 9 for -- if I can impose and adjourn for 10? 10 JUSTICE WILTON-SIEGEL: We're now in a negotiation, Mr. Chen? 11 12 MR. CHEN: We are not in a 13 negotiation. I'm leaving it to you. 14 JUSTICE WILTON-SIEGEL: Let's take a 10-minute break. We'll return -- I'll give 15 16 you an extra couple on top of that. We'll say 17 2:15 as an even quarter. 18 MR. CHEN: This is a good day. 19 Thank you, Mr. Commissioner. 20 --- Recess taken at 2:04 p.m. 21 --- Upon resuming at 2:16 p.m. 22 MR. CHEN: No further 23 questions, Mr. Commissioner. 24 JUSTICE WILTON-SIEGEL: Thank you very much, Mr. Chen. 25

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1	Well, then, first of all, I
2	don't think, Ms. Lawrence, you have any further
3	questions, would that be right?
4	MS. LAWRENCE: I don't.
5	JUSTICE WILTON-SIEGEL: Ms.
6	Baker, thank you very much. We appreciate the
7	time that you put in both in preparing your report
8	and in preparing for and attending today to give
9	your testimony. It's been very helpful to the
10	inquiry.
11	THE WITNESS: Thank you, Your
12	Honour.
13	JUSTICE WILTON-SIEGEL: And
14	you're excused, if you want to sign off now.
15	Enjoy the rest of the day.
16	The rest of us, I believe
17	perhaps a few minutes is required in order to set
18	up Mr. Baaj; is that correct?
19	MS. JENNIFER ROBERTS: Yes,
20	Commissioner, if I might your indulgence just for
21	five minutes so I can connect. I understand that
22	Dr. Baaj is in the waiting room. I think we're
23	ready to go, but I just want to have an
24	opportunity to connect with him, make sure he's
25	comfortable.

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1	JUSTICE WILTON-SIEGEL: Well,
2	I gave Mr. Chen 10 minutes, so I'll give you the
3	same if you like. We'll return at 2:30.
4	MS. JENNIFER ROBERTS:
5	Perfect. Thank you, Commissioner.
б	Recess taken at 2:18 p.m.
7	Upon resuming at 2:31 p.m.
8	MR. LEWIS: Commissioner, we
9	have Dr. Hassan Baaj here today, who of course you
10	granted leave for him to be examined, to file a
11	report and be examined, and Ms. Roberts is going
12	to lead his evidence in-chief.
13	JUSTICE WILTON-SIEGEL:
14	Perhaps he should first be sworn in, Mr. Lewis.
15	MR. LEWIS: Yes, he should.
16	HASSAN BAAJ; affirmed;
17	EXAMINATION BY MS. JENNIFER ROBERTS:
18	MS. JENNIFER ROBERTS:
19	Commissioner, may I begin?
20	JUSTICE WILTON-SIEGEL: Yes,
21	please do.
22	MS. JENNIFER ROBERTS: Thank
23	you. With your indulgence, I would like to begin
24	with a housekeeping matter.
25	I have two corrections to make

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1	to this report that Dr. Baaj can confirm. The
2	first one is in the report, page 12, which I think
3	will be image 13, there's a reference to footnote
4	3 on that page and that should be corrected to
5	footnote 5. The Registrar is putting it up.
6	So, Registrar, if you go to
7	page 12, I think that's image 13. Yes,
8	petrographic number. You'll see two-thirds of the
9	way down there's a sentence that begins "according
10	to H and et al., the PN typically ranges from 100
11	to 1,000." There is a footnote which should be
12	footnote 5.
13	JUSTICE WILTON-SIEGEL:
14	Hm-hmm.
14 15	Hm-hmm. MS. JENNIFER ROBERTS: Thank
15	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that
15 16	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that
15 16 17	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that should be image 23, I think. This one may be more
15 16 17 18	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that should be image 23, I think. This one may be more obvious. In the paragraph section 3.2,
15 16 17 18 19	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that should be image 23, I think. This one may be more obvious. In the paragraph section 3.2, "comparison with 1992 data," the last sentence in
15 16 17 18 19 20	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that should be image 23, I think. This one may be more obvious. In the paragraph section 3.2, "comparison with 1992 data," the last sentence in that paragraph which begins "this explains the
15 16 17 18 19 20 21	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that should be image 23, I think. This one may be more obvious. In the paragraph section 3.2, "comparison with 1992 data," the last sentence in that paragraph which begins "this explains the difference between PSV," small numbers, "1992 and
15 16 17 18 19 20 21 22	MS. JENNIFER ROBERTS: Thank you. Similarly, on page 22. Registrar, that should be image 23, I think. This one may be more obvious. In the paragraph section 3.2, "comparison with 1992 data," the last sentence in that paragraph which begins "this explains the difference between PSV," small numbers, "1992 and PSV 2007," that reference should be 2008.

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1 Absolutely. Yeah, I do Α. 2 confirm that. 3 Ο. Thank you. Registrar, 4 you can take that callout down, please. Take the 5 whole report off. I see that we're being asked to б put Dr. Baaj's full name on the screen. Dr. Baaj, 7 are you able to do that? 8 Α. I may be able to do that. 9 Rename, yeah. 10 Q. If you could just do a dash and say expert for Golder. I think that 11 12 might be helpful as well. Thank you. I hadn't 13 noticed that before. 14 Dr. Baaj, I just want to begin 15 with an acknowledgement of your duty expert as an 16 witness. You understand that your duty to this 17 inquiry is to provide your evidence that is fair, 18 objective, and non-partisan. You understand that? 19 Α. Yes, I do understand 20 that. 21 And you understand that Ο. 22 that duty to the inquiry prevails over any other 23 obligations that you may have? 24 Α. Yes. 25 Q. Thank you. I'm going to

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1	go to your CV first. Registrar, that is Golder
2	7519. I think it's been marked as Exhibit 225.
3	Can you please go to the third image, Registrar.
4	Dr. Baaj, you're a professor
5	at the University of Waterloo?
б	A. Yes.
7	Q. And you are the chair in
8	sustainable pavement and engineering, civil and
9	environmental engineering?
10	A. Yes, I am.
11	Q. And the director of the
12	Centre for Pavement and Transportation Technology,
13	University of Waterloo?
14	A. Yes.
15	Q. I don't intend to go
16	through your CV in a great deal of detail because
17	that would take a long time, but what I want to do
18	is focus on a number of areas, particularly your
19	experience in relation to aggregates and asphalt
20	mixes. So I want to focus, I think, on your
21	experience in industry.
22	Can you tell us about your
23	experience in relation to the selection, testing,
24	and qualification of aggregates for use in asphalt
25	mixes?

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1 Α. Yes. So, yeah, I 2 completed my PhD in 2002, and even during my PhD I 3 was involved -- well, my PhD focused on the 4 behaviour of asphalt mixes, so that -- and my masters as well. And then I worked for National 5 б Research Council for one year, as both Dr. Hiddle 7 and Dr. Dante joined Sintra, which is a division 8 of Colas Canada, as a research engineer, and then 9 I got requisitions, and at this capacity I was 10 involved with technical services of the company, including working with different regions of the 11 12 company on mix designs and selecting materials, 13 and that includes, for sure, aggregates. 14 And that was for about five years, and -- like, I 15 also worked temporarily at a school in Montreal 16 called École de Technologie Supérieure where we worked on asphalt mixes, and specifically that was 17 18 about 21 years ago. 19 After that -- well, during this period I gained a lot of experience with 20 21 asphalt mix design and materials used in asphalt mixes. After that, I moved back to France where I 22 23 did my PhD. I worked for Lafarge at the Lafarge 24 Research Centre, which is the corporate research facility for Lafarge. Lafarge at that time was 25

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1 the first cement producer in the world, but also 2 the second aggregates producer in the world. Ι was leading their R&D research projects on roads, 3 4 road applications. So I would say more than half 5 of my work was working with aggregates because we б were trying to find solutions to improve the 7 quality of aggregates for asphalt mixes but also come up with, like, an innovative solution for 8 9 asphalt materials.

10 And then I became R&D department manager, and my department was 11 12 particulate solids, where aggregates was a big 13 part of what we used to do in that group. So I 14 was involved with geologists and people who work 15 in quarries, et cetera, working on aggregates and 16 aggregates quality, aggregate characterization. 17 And after that I was in charge of infrastructure 18 solution program, still at Lafarge research 19 centre, where I also continued to work on these 20 aspects.

I joined the University of Waterloo in 2014, and throughout my last eight years with the university, I worked with different industry partners and also on funded projects by -- for the provincial governments on

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1 aggregates, so including projects on, like, 2 selecting aggregates, the study of impact of aggregates on asphalt mixes. 3 4 So yeah, this is in summary 5 the experience I had on aggregates throughout the б last -- my 25 years I think, almost, of 7 involvement with asphalt mixes and materials 8 engineering. 9 Ο. Just one question, you 10 mentioned, you reference Sintra. It's in your CV. 11 Α. Yes. 12 Ο. It's on -- Registrar, can 13 you go to the next page, page 3, the next image. 14 Back to the beginning. Its reference associate director RD, technical division, scientific 15 coordinator. What is Sintra? 16 17 Α. Sintra is an asphalt 18 materials producer and paving company located in 19 the province of Quebec. They have different -- at 20 that time they used to have around 55 asphalt 21 plants throughout the province, and I'm not sure 22 now, but it was at the time the biggest asphalt 23 company in the province. And Sintra is part of 24 Colas, which is one of the world leaders in road construction, so it's a French company. Yep. 25

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1 Thank you. I think you Ο. 2 said that when you were with Lafarge in France that you were involved in the development of 3 4 mechanisms to improve aggregate for use in 5 asphalt. Did you have any involvement in б reviewing the geology of guarries? 7 My team, my team had. So Α. 8 in the previous page, in the image number 2, I 9 mentioned -- it mentions my role as group leader, 10 research group leader of the particulates group, and in that group we work on everything related 11 12 to, like, particulates, including for sure 13 aggregates but from smaller, fine aggregates and 14 cement particles to the rocks and geology. 15 So we had several research 16 projects, and my involvement in the geological --17 the ones focusing on the geology was as a group 18 leader but not as a project manager, because it 19 takes a geologist to do this work. But I was 20 involved as a group leader in these projects, and 21 I'm very well aware of these projects, yes. 22 You mentioned it, but Ο. 23 that included also a review of the different 24 methodologies for producing aggregate. Can you just briefly address that and the importance of 25

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1 different methodologies being used to produce 2 aggregate?

3 Sure. Well, guarry Α. 4 materials are produced from aggregates, and if we 5 focus on the ones that are obtained by breaking б down, simplify the rocks to smaller size, so the 7 way how we break down the aggregates, the way how 8 we -- the processes and different type of 9 equipment, like jaw crushers for example, 10 (indiscernible) pressures, et cetera, the sequence 11 and the type of equipment we use will influence 12 the quality of the aggregates that we get at the 13 end. 14 My team was working with 15 different quarries within the company in different 16 countries on finding solutions and investigating 17 ways to improving the quality of the aggregates, 18 including for sure the skid resistance -- or not 19 skid resistance. I would say the microtexture of 20 the aggregates as a way to improve the skid resistance and improve the polishing resistance of 21 22 these aggregates for the time. And we've not asked you 23 0. 24 to provide an opinion in relation to friction, but

25 as part of your research, and I think this is

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1 where you're going, you were involved in studies 2 of the role of aggregates to provide good skid 3 resistance in asphalt mixes? 4 Α. Absolutely, absolutely. 5 So I worked on different projects where we б investigated -- so there are two aspects here. 7 One is working on the aggregates and examining the 8 microtexture and finding better ways for 9 quantification of the potential skid resistance or 10 polishing resistance. So we used different type of equipment, like laser scanners, we used 11 12 microscopes to study the roughness of aggregates, 13 but we also used PSV, which is one of the tests 14 that -- like, we're talking about here in the 15 report, but comparing PSV on asphalt bind -- like, 16 to what we get from in asphalt mixes and using different methods. 17 18 In particular, my focus was 19 how to improve or incorporate recycled materials 20 with virgin aggregates without impacting the skid 21 resistance or the final pavements. 22 Thank you. You've Ο. 23 alluded to it, but among those testing procedures, 24 and I'll come back to this, but that included PSV. Did it also include CPP? 25

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1 No, I don't have -- I Α. 2 never used CPP because CPP is only used in Quebec, and the only equipment is at MTQ. So we didn't 3 4 have this equipment. 5 You've alluded to it in Ο. 6 your experience in working with asphalt mixes. 7 Did that include working with stone mastic asphalt mixes? 8 9 Α. Oh, absolutely, yes. 10 Well, stone asphalt -- it's a mini-stone mix asphalt or -- it's stone mastic asphalt of Germany 11 12 is a very old mix actually, and there are 13 different mixes even that don't have this name, 14 but they are very similar in terms of mix design. 15 So even during my PhD and after, I worked with 16 different French mixes that are very similar to 17 cement. But my first work on SMA was in 2002, so 21 years ago. That was with MTQ in Quebec, 18 19 Ministry of Transportation in Quebec, and we 20 studied SMA -- one of the SMAs used on Highway 20 in Quebec, and my role was working on the mix to 21 22 evaluate its performance, like fatigue and 23 rotting. And I have a few publications from that 24 time. Like, the first was one in 2003. 25 And then I used SMA in

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1 different projects, including projects that 2 incorporate recycled materials, recycled shingles actually, and that was also with MTQ at the time 3 4 that I was with Sintra. And even with Lafarge 5 later, I worked on SMA, one of my projects 6 included SMA. 7 So I used it a lot in research 8 and at least three times in real-life projects. 9 Ο. Perhaps it's obvious, but 10 in 2007 would you have described SMA asphalt as experimental? 11 12 No. In 2007 -- well, as Α. 13 I said earlier, this stone mastic asphalt was 14 created back in the 60s in Germany, and there's a 15 lot of experience with this mix in Europe and worldwide. It arrived to North America I think 16 sometimes in the 80s, and MTO started using it I 17 18 think in 1990, and this mix is very well known. 19 It's not an experimental mix. When it becomes 20 experimental is when we added something new to it, 21 or I don't know -- a recycled material or a 22 different fibre, et cetera, but the one that was 23 used in 2007 and the one that is standardized in 24 Ontario is not an experimental mix. Or wasn't in 2007, yes. 25

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1 Thank you. Do you have a Ο. 2 view as to the appropriateness of using SMA on a 3 road such as the Red Hill Valley Parkway? 4 Α. Like, I think that the 5 SMA is by far one of the best asphalt mixes that I б work with, and it's a mix that is very liquid for 7 use on, like, highly trafficked highways, like in 8 all layers, surface and the other layers, and I 9 believe that it's not only a liquid, I think it 10 was by choice for this highway. 11 Q. Dr. Baaj, I want to go to 12 your report. Registrar, if you can take down this 13 document and go to Golder 7517. I think that 14 that's Exhibit 224. Thank you. 15 So, Dr. Baaj, much of your 16 report addresses the testing of the aggregate 17 supplied by Dufferin in 2007, and you reviewed the 18 various tests that were provided by Dufferin so 19 the aggregate met the specifications required for 20 the project. And Dr. Flintsch in his examination 21 earlier has agreed with you that the aggregate met 22 the requirements. So I don't propose to go 23 through all of the evaluation that you've done 24 here, but I do want to touch on some of it. 25 First let me address the

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1	point, the aggregate proposed by Dufferin for use
2	in the Red Hill was an aggregate from the
3	Demix-Varennes quarry. It was not a designated
4	source materials in 2007, although it was so
5	designated by the MTO in 2009. Would the fact
6	that the Varennes-Demix aggregate was not on the
7	DSM list be a reason to refuse to accept it for
8	use on the Red Hill paving project?
9	A. From a technical point of
10	view or from, like, a standardization point of
11	view? Because
12	Q. Both ways.
13	A. Yeah, exactly. My answer
14	would be no both ways, actually. Like, it's not a
15	reason to reject them. The first is that from a
16	technical point of view, like as an engineer if I
17	have a new material and I need to evaluate if the
18	material meets the requirements and that I think
19	was done properly, from the standards of point of
20	view, the standards in 2007 did not require that
21	the material used in SMA or any of other mixes,
22	applications to be part of the DSM.
23	Q. Would it have caused you
24	doubt about the suitability of the aggregate? And
25	maybe you've answered that, but let me just ask it

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1 directly.

2	A. No, that's a good
3	question. I think my answer would be no because
4	this is a material that comes from a different
5	province, so there is no reason to include it in
6	that list if it wasn't used before in Ontario. So
7	it's very normal when you have a new material I
8	think the MTO does all the time when they have a
9	new material that is like a manmade material
10	that's produced elsewhere that we start producing
11	in Ontario, or an actual material like aggregates
12	that is transported from another province to be
13	used in a project, I think the right thing is to
14	evaluate it before saying yes or no. So for me,
15	it's like no, I don't think that was a problem at
16	all.
17	MS. JENNIFER ROBERTS: Thank
18	you. I see commission counsel has come up.
19	MR. LEWIS: Yeah, maybe I
20	missed it in Dr. Baaj's report what he was just
21	talking about, and if I did, I apologize, but if
22	it's not in his report Commissioner, if you
23	find it helpful, then that's fine, but I do think
24	we should
25	MS. JENNIFER ROBERTS: Just

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1 for clarity, it is in the report. 2 MR. LEWIS: Then I missed it. 3 Thank you. 4 BY MS. JENNIFER ROBERTS: 5 Thank you. Is there a Ο. б consequence -- you can put this a number of 7 different ways. Is there a consequence to the 8 fact that the aggregate was not on the DSM list in 9 2007? Like, what has to happen when you get a new 10 aggregate? 11 A. So, like, again from a 12 technical point of view, I won't talk about for 13 MTO, but from a technical point of view, I would 14 evaluate the aggregates and see if they meet the 15 requirements, and then if they are acceptable for 16 the project, because in that specific case I think 17 there are specifications that are required. If the aggregate meets the requirements, so it should 18 19 be used. 20 Ο. So that is then you would 21 like to -- my language might be accurate, but then Dufferin has to qualify the aggregate as 22 23 appropriate and meeting the specification and that 24 has to be reviewed. Do I have that right? 25 I don't work for MTO, for Α.

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1 the municipalities --2 Q. No, no, I'm talking -- go 3 ahead. 4 -- but yes, that's what Α. 5 was done actually, so I believe that this is the б right thing to do. Like, again, from a technical 7 point of view, for me the DSM is just a list that includes the material that are approved. If a 8 9 material that is not on the DSM meets the 10 requirements, and at that time there was nothing 11 that prevented using the aggregates in that 12 situation. 13 Q. Let's go forward. I want 14 to address the testing of the aggregate which 15 assesses its qualities to resist polishing. You 16 said that in 2007 a test like a PSV testing wasn't 17 required for the provincial standards, but 18 nonetheless, amongst the data sheet that Dufferin 19 provided there was a testing for resistance to 20 polishing. Perhaps we can go to it. 21 Registrar, can you please go 22 to appendix 1 of this report on page 28, which I 23 think is image 29. Oh, dear. Registrar, can you 24 make this a bit larger? Dr. Baaj, can you just identify what this is. 25

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1 So this is the data sheet Α. 2 that was provided by Demix in 2007 for the coarse 3 aggregates used in the Red Hill Valley project, 4 SMA. 5 Way down at the bottom Ο. б there's -- second last line item is "polishing by 7 protection coefficient"? 8 Α. Yes. 9 0. What is that? 10 So this is the test used Α. in Quebec in lieu of the PSV that we use in 11 12 Ontario and some other jurisdictions. So the 13 polishing by projection is a test that is used to 14 evaluate the potential of the aggregate to resist 15 polishing over time. 16 Ο. Can you briefly explain 17 what that testing is? 18 Α. Yeah, for sure. So the 19 original test -- and this test actually I think 20 was inspired from a test used in France that is 21 also called -- has a similar name, an equipment 22 called Grab (ph) in French, and these tests, we 23 subject the aggregates to artificial polishing or 24 accelerated polishing in the lab by projecting a powder or an emery or like aluminium side powder 25

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1	and water on the aggregates for about 45 minutes,
2	is good, 20 some cycles, and this way the
3	aggregates get polished in the lab, and after that
4	these aggregates would be tested using the average
5	pendulum that is the same one used with the for
б	the PSV to determine their, like, potential skid
7	resistance.
8	And it's always compared to a
9	reference aggregate, so a reference number
10	actually from perfect aggregates, and that gives a
11	value and this value is in this case 0.49 percent.
12	Typically it's 0.3, 0.55 would be the limestone,
13	and it can go up higher than that. So this number
14	here is the number reported here is 0.49, which
15	is the test result.
16	Q. Can you tell me whether
17	that is good or bad or acceptable or not, .49?
18	A. Well, it is acceptable,
19	and the minimum used in the standards, the norms
20	in Quebec is 0.45. That is used for high
21	traffic high traffic highways in most of the
22	province.
23	Q. Thank you. Registrar,
24	you can take down that callout, please.
25	Now we've heard in the course

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1 of the last -- we've heard a lot about polished 2 stone value testing. And as I understand it, that is the test used by the MTO to address aggregates 3 4 and their ability to resist polishing. 5 Hm-hmm, yes. Α. 6 Registrar, so you can Ο. 7 take down this appendix and actually go to the one 8 prior on page 20 -- sorry, further on, page 29. 9 Thank you. I'll go to this in a second, Dr. Baaj. 10 Can you explain briefly the PSV testing, what that is. 11 12 Α. The PSV testing is 13 similar to the CPP in the sense that when we 14 have -- when the aggregate is a candidate to be 15 used in the surface mix, we place these aggregates 16 in trays and these trays are placed on a wheel, on the outer side of the wheel, and then using two 17 18 types of powders or emery that is injected, this 19 wheel will be -- will start rotating, and there is 20 another rubber wheel that will start polishing the aggregates with the emery being inserted at that 21 time, and we simulate again several years of in 22 service use of the aggregates. 23 24 So the target is to polish the 25 aggregate to an advanced stage similar to the

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1 projection that I explained earlier, and then 2 these aggregates are tested using the pitch pendulum compared to a standard aggregate, and 3 4 then it gives us a number. 5 In this case the number is б reported here in this table, it's 52. And --7 veah. So I don't know if I need to -- if it's not 8 clear, I can elaborate. 9 Ο. Thank you. So let me 10 just ask the question. So both tests, the CPP and the PSV, are there to evaluate an aggregate's 11 resistance to polishing. Is it possible to 12 13 correlate the PSV and the CPP test? 14 Α. So I was unable to find 15 any correlation between the CPP used in Quebec and 16 the PSV, probably MTQ did that, but I haven't seen 17 any published data. However, in my reports I 18 talked about the original CPP test, if you wish, 19 which is slightly different but similar used in 20 France and in figure -- trying to find this. 21 Figure 6. Registrar, Ο. let's go to it. It's figure 6 of your report, 22 23 page 15, image 60. 24 Yes exactly. Thank you. Α. I think this is the 25 Q.

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1	figure.
2	A. Yes.
3	Q. Figure 5?
4	A. It's not this one, it's
5	next page. Exactly. So this one shows a
б	correlation from very good actually, but the
7	reference is here, by CBC, which is the main
8	research lab on pavements and bridges in France.
9	So in this research they compare PSV to RPA, and
10	RPA is the value obtained from the projection test
11	used in France, which is similar to the CPP, and
12	here we see that we have an excellent correlation
13	between these PSV and RPA value.
14	So I would expect that the
15	CPP because the concept of the RPA and CPP is
16	very similar, I would expect to have also a good
17	relationship between the two. I mean PSV and RPA,
18	and for sure RPA and CPP.
19	Q. You had physical
20	mechanical test results of the testing conducted
21	by the MTO, and we were just there.
22	Registrar, I'm going to ask
23	you to go back to appendix 2, page 29, image 30.
24	Next one. Appendix 2. Thank you.
25	Let me ask, what is this?

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1 So this are the test Α. 2 results obtained by MTO on aggregate sample -- two aggregate samples, one fine and one course, sent 3 4 by Demix Aggregates which -- from the Varennes 5 Quarry in 2008. So that was part of the process б of evaluating that appropriateness of these aggregates to be added to the DSM in Ontario. 7 8 Ο. And I think maybe the 9 easiest place to look at this is where you've 10 summarized the MTO testing, which is in your 11 report at page 16. 12 Registrar, can we please go to 13 page 16, image 17. So you've got table 1, which 14 is the summary of this testing for the -- I think 15 it was the testing provided by Dufferin in 16 reference to the Quebec standards, and table 2 is 17 the testing provided -- testing provided of the 18 aggregate by the MTO in 2008. 19 You've got a note here, it's a star at the bottom of table 2, requirements for 20 21 the highest traffic category, category E. What 22 does that mean? 23 Α. Yeah. Category E is 30 24 million ESOLS, just -- I don't remember the -- so it's part of the OPSS, like Ontario standards 25

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1 1003. It's a category, traffic -- the highest 2 traffic category in Ontario for asphalt and aggregate material selection and design, and it's 3 4 when the traffic is higher than 30 million 5 equivalent single axel loads over 20 years. And б that is a category that response to freeways, 7 major arterial roads with heavy truck traffic and special applications such as truck and bus 8 9 climbing lanes or stopping areas. 10 So it means that an Q. aggregate that meets these requirements would be 11 12 appropriate for use for their highest traffic, 13 high speed highways? 14 Α. Yes. 15 I want to stay focused on Ο. 16 the PSV testing. Dr. Flinsch in his testimony 17 described the PSV testing showing the terminal 18 polished state. I understand what he means by 19 that the state at which an aggregate will not 20 polish any further. 21 In your view, does PSV show 22 the terminal state of an aggregate? 23 Α. Not necessarily. So the 24 test -- like it's intended to simulate polishing on the aggregate, so within the PSV or the CPP, 25

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1 both, they would try to polish the aggregates as 2 much as possible in the lab. We cannot do that 3 forever so we should stop at this at one point. 4 So if the aggregates that I 5 have are like excellent to start with, the б polishing in the lab would probably lead to 50, 7 60 percent of the polishing that would happen in 8 real life. If we're starting with limestone, for 9 example, maybe after ten minutes of polishing we will reach the terminal state and we will polish 10 everything. So I wouldn't necessarily say that 11 12 it's always terminal state of polishing. 13 Q. That depends in part on at least the aggregate. Is that what your --14 15 Α. Yeah, exactly. 16 Ο. Staying with the table, and you already referenced it. The table shows 17 18 polished stone value. It's the last entry on 19 table 2, PSV. And the results in 2008, and I 20 think you reference them, that's 52? 21 Α. Yes. 22 What does that test Q. 23 indicate to you? 24 Α. So 52 is higher than the minimum required in Ontario and higher than the 25

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1 minimum required in many other places actually,
2 and it indicates to me that the quality of the
3 aggregates is good for use when a skid resistance
4 is required or needed.

5 Now, we focused on CPP Ο. б and PSV testing. Are there any other tests that 7 you've evaluated which would give an indication of the aggregate's ability to resist polishing? 8 9 Α. Yeah. So there are some, 10 as I said, test using research, as I said earlier, microscope to evaluate the microstructure, laser 11 12 scanners, also some advanced tests that can be 13 used on asphalt mixes as well on aggregates. But 14 if I look at the test that we have here in the 15 table I would say that we have other numbers here 16 or other values that would help me understand 17 whether this -- the quality of the aggregates 18 would be good for this type of application. 19 For example, the petrographic number, PN, which is I think the fifth value in 20 21 table 2. It's 100 here for this type of aggregates. These value reflects the quality of 22 23 the aggregates, it's a test that is done by 24 geologists and they try to evaluate different 25 things like how clean the aggregates are, how good

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the aggregates are, the minerology used in the
 aggregates, scratching. Different things are
 included in this number.

4 So this number indicates that 5 the quality of the aggregates is high, and 100 is 6 almost about the lowest that we can reach with 7 natural aggregates. Like, according to the 8 literature they have seen 90, but 100 is sort of 9 reported to be like at the -- one of the best 10 numbers.

There is also -- the very 11 12 first number, which is a Micro-Deval abrasion --13 again this is a standard test used in Ontario and 14 Quebec and almost everywhere now -- and it's 15 called abrasion but it's actually attrition. So 16 the concept of the test is that we have a small 17 drum in which we put steel spheres, smaller steel spheres than other test, like the (indiscernible), 18 19 and the drum starts rotating and then the 20 aggregates hit each other and they get hit by the 21 steel spheres and then the surface of the aggregates gets -- with the impact we lose this 22 23 micro roughness will be certain impacted, and how 24 much we lose at the end of the test reflects whether the aggregates are good or not to resist 25

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1 attrition and abrasion. And in this case we have 2 2.7 percent and the minimum required is 10 percent. So it reflects that -- the aggregates -3 4 the aggregate here has good resistance to 5 attrition as well. 6 0. Forgive me for asking 7 what might be a rudimentary question, but is attrition related to microtexture? 8 9 Α. So -- somehow, because at 10 the end of the day what will happen during when we open the road to traffic and the vehicle starts 11 12 damaging the asphalt and aggregate, there will be 13 some attrition that -- and this is what leads 14 polishing. It's somehow similar because if the 15 aggregate is strong and this micro roughness is 16 strong enough to resist the attrition it will be 17 most likely also resist the impacts caused by the 18 traffic better than another aggregates that has -doesn't good have resistance or attrition. 19 So if it's resistant --20 Ο. 21 if it's resistant to attrition it's more likely to 22 retain its microtexture? Do I have that right? 23 Α. Yes. 24 Thank you. So we have Q. here the CPP testing and the PSV testing as well 25

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1 as the other laboratory results that you consider. 2 And we have your evidence with which Dr. Flintsch agrees that show the aggregate was suitable for 3 4 the application and could've been expected to find 5 good skid resistance. 6 Is there anything in any of 7 this testing that would suggest to you that this aggregate might be susceptible to undue polishing? 8 9 Α. No. 10 Obviously in 2007 0. Dr. Uzarowski wouldn't have had the MTO testing 11 12 that was done in 2008 but he had the data sheet 13 provided by Dufferin that you summarized in table 14 1 here. Were you provided these test results in 15 2007 would you have accepted the aggregate as 16 suitable and appropriate for the application 17 within the SMA mix? 18 Yeah, yeah, absolutely. Α. 19 Ο. You addressed this. 20 Dr. Flintsch in his report, in section 2.1, 2.5 21 addresses the 2017 PSV testing conducted by 22 Golder. This was testing of the aggregate that 23 had been in service on the Red Hill for 10 years 24 and was extracted from the asphalt. In your experience is it usual to test aggregate that's 25

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1 been in service? 2 A. No, not in this way. Not 3 with PSV for sure. 4 And here it was done by 0. 5 Golder for a particular purpose? Yeah. So if we are 6 Α. 7 trying to evaluate the future use of the 8 aggregates, so we can conduct this type of test 9 which was done here, because we are projecting the 10 future. So the PSV doesn't tell me anything about 11 the aggregates now. It takes the aggregates and polishes the aggregates to a certain level like --12 13 we talked about that earlier, not necessarily 14 terminal but like in service, long term situation. 15 So by taking the aggregates 16 from the asphalt mix, modifying them through the 17 process of extraction, recovery, et cetera, and 18 taking them to the PSV test and running the PSV test on them, what this would tell me is if I have 19 20 to reuse these aggregates how would they perform 21 later. That may be acceptable but not to tell me if the aggregates have polished in the past. 22 23 That's another story. 24 Q. And indeed Golder was using it to evaluate whether the aggregate could 25

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1 be used in hot in-place recycling? 2 Α. Yes. 3 Ο. And Dr. Flintsch notes 4 that the PSV of the in-service aggregate -- and 5 they suggest a connection with what the virgin б state of the aggregate might have been. Do you 7 agree that the 2017 testing of the recovered 8 aggregate would have given you any indication of 9 what the virgin state might have been? 10 Α. No, not at all. Dr. Flintsch then notes 11 Q. 12 that the friction on the Red Hill declined by 13 approximately 20 percent between 2008 and 2014. 14 He seems to draw a connection between the PSV testing in 2017 and the decline in friction. 15 In 16 your opinion, would the PSV testing of the 17 in-service aggregate tell you anything about 18 whether the aggregate had in fact polished? 19 Α. No, not -- as I mentioned 20 before, the result and even the specifications in 21 the test standards says clearly that testing recycled aggregates, or aggregates taken from 22 23 asphalt mixes, would lead to misleading 24 information. So the PSV obtained in 2017 would be a misleading number. So I cannot use this one to 25

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1 say hey, the aggregate polished or not. 2 And I repeat that again. The 3 PSV won't tell me what's the situation now. wi11 4 tell me what the situation if I put this aggregate 5 again for another 10 years. So I cannot use it to б say what's happened in the past and connect it to 7 the virgin aggregates in any way. 8 Ο. Just to cover off the 9 point. That doesn't tell you, it doesn't conclude 10 that the aggregate hasn't polished, but only that this test doesn't tell you whether it did or not. 11 12 Α. Any aggregate -- any 13 natural aggregate would polish for sure, that's a 14 fact. But when I take the aggregates and run the 15 PSV on them it doesn't tell me anything about the 16 past. So I cannot connect it to what happened 17 during -- I cannot connect it to the virgin 18 aggregates and I cannot use it to conclude whether 19 this aggregate polished over the last 10 years too 20 much or very little. Like, there's no connection. 21 Thank you. Ο. 22 JUSTICE WILTON-SIEGEL: Can I 23 just interject for a second. 24 I think you're making a simple 25 statement, and that is that the only use that can

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1 be made of this would be as a projection of what 2 this aggregate tested in 2017 might be like 3 10 years from now. 4 THE WITNESS: Yes, that's 5 correct. 6 MS. JENNIFER ROBERTS: 7 Commissioner, subject to any further questions that you might have and obviously 8 9 cross-examination from counsel, I have no further 10 questions. 11 JUSTICE WILTON-SIEGEL: I have 12 no further questions. 13 Mr. Lewis? Do either of the 14 other counsel have questions for Dr. Baaj? 15 MR. LEWIS: When I last 16 checked other counsel did not, but I should confirm that. 17 18 JUSTICE WILTON-SIEGEL: I'm 19 hearing silence. Mr. Chen? 20 MR. CHEN: No questions. 21 MR. BOURRIER: No questions 22 from us, Commissioner. 23 JUSTICE WILTON-SIEGEL: 24 Mr. Buck was on earlier, is he on? 25 MS. LAURION: No questions on

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1 behalf of Dufferin. 2 JUSTICE WILTON-SIEGEL: 3 Mr. Lewis, do you have any questions? 4 MR. LEWIS: I just had a few 5 questions, not very many. Just one moment. б CROSS-EXAMINATION BY MR. LEWIS: 7 Q. Just a few questions, Dr. Baaj. The issues that you were disagreeing 8 9 with Dr. Flintsch on, and he testified on these as well. But it was about the validity of using the 10 2017 PSV testing as you just described right now. 11 12 That was your first. And the other was about the 13 1992 PSV testing, which we don't need to deal 14 with, but we read your report and Dr. Flintsch 15 addressed that and that's fine. 16 Other than that, when you're 17 talking about the testing you have referred to 18 Dr. Flintsch having covered most aspects of skid 19 resistance and a comprehensive analysis of the 20 field testing. You don't take any issue with that stuff, right? 21 22 I wouldn't say that. My Α. 23 mandate was to comment on the testing, so in 24 general I think Dr. Flintsch did, like, great job addressing different points. I would probably 25

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1 disagree on certain things but I'm here to discuss 2 them. Yeah. 3 And then as you said, Ο. 4 it's reasonable to expect some polishing during an 5 aggregate service life, right? They all do -б they all polish, right? 7 Α. They all polish to a 8 certain point, yes. 9 0. So at least 10 directionally, although you say you don't opine on 11 friction, but directionally you are saying at 12 least some cause in this instance of any reduction 13 in friction, whatever that is, it would've been 14 the effect of polishing. Not an inordinate 15 polishing, because as you said it's not -- the 16 aggregate itself isn't particularly susceptible or 17 unusually susceptible to it, but that's part of 18 it, is it not, or do you not opine on that at all? 19 Α. So during the in-service 20 life of the pavement there are many factors that 21 would lead to a decrease of the -- or drop in the skid resistance, and aggregate polishing is one of 22 23 them. So losing this microtexture over the time, 24 that would lead to a decrease in the skid resistance and that is a normal process, but also 25

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1 the macrotexture of the pavement itself, like --2 and the traffic, this macrotexture would be impacted and the higher the number of vehicles and 3 4 vehicles that we have, the road, the speed in 5 urban settings for sure, that would also lead to a 6 loss of that macrotexture and would also impact --7 we can never quantify it as percentages because 8 it's different from a case to another. But it's 9 also a very important factor that we need to take 10 into account, the time of the testing and other factors, and if we're analyzing a specific 11 12 situation there are so many other factors that 13 make (indiscernible). 14 Q. Right. But the 15 macrotexture results were -- you're not taking in 16 issue with that, or at least you weren't asked to 17 look at, fair? 18 Α. I wasn't asked to comment 19 on the macrotexture and, yeah, it has been tested 20 here and there but we don't have a lot of data, I 21 don't think. 22 You referred to -- and Ο. 23 this is why I'm asking the question about 24 friction. You stated in your report that -- and I won't take you to it but it's image 26, page 25. 25

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You indicated that: 1 2 "Dr. Flintsch considered the 3 drop in friction at 20 percent 4 over a six year period as 5 significant. I've examined 6 the literature on point and 7 found that this drop is within the norm for paving projects, 8 9 with similar materials and service labs." 10 I took Dr. Flintsch to that 11 12 reference in your report in his testimony on 13 Thursday on this exact question and the use of the 14 word "significant." And that's just a characterization perhaps but -- and he said: 15 16 "It depends what you start 17 with. If you start with a 18 very high friction value then 19 if you drop 20 percent you still have high friction, but 20 21 we have a friction like we had 22 that started with about 40 23 something, that being around 24 30, then being around 30, then 25 it's more critical than in

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1 other cases. And again what 2 I'm saying it's relative, but 3 I do feel it is significant." 4 So the point being a 5 20 percent drop is more significant if you're б starting from a lower value, FN value, than a 7 higher one. Do you agree with that proposition? Well, I think it's -- it 8 Α. 9 would be significant if we start with higher value 10 because the drop would be bigger, 20 percent from a high value is bigger than 20 percent -- but I'm 11 12 not going to discuss that. 13 Ο. I appreciate the math, 14 but there is a qualitative less of a difference in 15 the drop of say 60 to 50 than there is in a drop 16 from 40 to 30, correct? 17 Α. Yes. 18 0. You agree with that? 19 Α. So like my comment there 20 is that to start with actually I found that in my 21 -- the reason why I contested this conclusion or summation from Dr. Flintsch, actually, quite 22 23 respectfully is that it was just subjective to me. 24 Like, I didn't -- I didn't find anything to support whether it's high or low. Like where is 25

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1 the data, how we reached this conclusion. 2 So this is why I try to look 3 at the literature and find projects where we 4 studied the pavement friction over several years 5 and I actually found a few, very little, one using 6 that I mentioned, where it's clearly obviously we 7 found that a drop of more than 20 percent. But 8 the most important one that I found was actually 9 done by MTO over around, like 10 years on Highway 401 close to Milton. So like geographically it's 10 11 very close. The type of the aggregates that was 12 used is traprock that is very close to the one 13 used in there. They used SMA using the standard 14 mix designs that we have here. 15 So these projects for me I 16 found it very, like, comparable to the Red Hill 17 Valley Parkway, and this is why I looked at this 18 and I found that over nine years, like similar 19 period, the friction dropped by 26 percent and it 20 dropped from 46, I think, like -- I don't have the 21 exact numbers, I use the figure, from around 36 to So we have similar numbers and we have 22 34. 23 similar materials, similar -- traffic not very 24 different, like it's high traffic but four lanes, higher speed, three lanes, sorry, in each 25

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1 direction, versus two here.

2	So similarities very big and
3	MTO concluded that these numbers are within the
4	norm and they are within the acceptable range for
5	these type of aggregates, materials and highways.
6	So this is why I concluded that for Ontario
7	conditions a drop of 20 percent is within the
8	acceptable norm like here.
9	Q. You're talking about the
10	SMA project that was done in the mid-nineties and
11	there was a 10-year I believe that paper was
12	authored by, among others, Becca Lane at the MTO
13	is that the one you're
тJ	is that the one you re
14	A. Becca Lane and other
14	A. Becca Lane and other
14 15	A. Becca Lane and other authors and Chris Raymond and others, I think. It
14 15 16	A. Becca Lane and other authors and Chris Raymond and others, I think. It was published at the CTAA, Canadian Technical
14 15 16 17	A. Becca Lane and other authors and Chris Raymond and others, I think. It was published at the CTAA, Canadian Technical Asphalt Association Conference, yes.
14 15 16 17 18	A. Becca Lane and other authors and Chris Raymond and others, I think. It was published at the CTAA, Canadian Technical Asphalt Association Conference, yes. Q. That's in evidence. We
14 15 16 17 18 19	A. Becca Lane and other authors and Chris Raymond and others, I think. It was published at the CTAA, Canadian Technical Asphalt Association Conference, yes. Q. That's in evidence. We have that.
14 15 16 17 18 19 20	A. Becca Lane and other authors and Chris Raymond and others, I think. It was published at the CTAA, Canadian Technical Asphalt Association Conference, yes. Q. That's in evidence. We have that. Last point is you just on
14 15 16 17 18 19 20 21	 A. Becca Lane and other authors and Chris Raymond and others, I think. It was published at the CTAA, Canadian Technical Asphalt Association Conference, yes. Q. That's in evidence. We have that. Last point is you just on the reasons why you speak of the PSV from an
14 15 16 17 18 19 20 21 22	A. Becca Lane and other authors and Chris Raymond and others, I think. It was published at the CTAA, Canadian Technical Asphalt Association Conference, yes. Q. That's in evidence. We have that. Last point is you just on the reasons why you speak of the PSV from an in-service aggregate test being inaccurate.

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1 affect the results. That's one of the things you 2 talked about in your report. 3 Indeed. And we do a lot Α. 4 of extraction and recovery in our labs and I see 5 these aggregates -- construction and we always б have some fines that come out from that process. 7 So -- and we use very strong solvents. So the 8 aggregates that we get at the end I cannot just go 9 and use them as aggregates or test them to tell me 10 how was the aggregates before. Q. So would they not also --11 if that's the case, would they not also be 12 13 inaccurate, the test results, for the purpose that 14 Golder was using it for, which was to evaluate for 15 hot in-place recycling or no? 16 Α. So in my opinion that 17 would -- like the process would affect the 18 aggregates negatively so -- the way they did it, 19 they extracted the aggregates and tested them and 20 the number that the test would give would be lower 21 than the real PSV, expected PSV. So it's more in a conservative way would lead -- it wouldn't lead 22 23 to an optimistic value that would lead to problems 24 later. It's the opposite actually in my opinion. 25 MR. LEWIS: I have no further

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1 questions, Commissioner.

2	JUSTICE WILTON-SIEGEL: Then I
3	think we're finished. Dr. Baaj, thank you for
4	your report and for your time today appearing to
5	answer to give your testimony. You're excused.
б	We appreciate your testimony. It's very helpful
7	to the inquiry. You're excused for the rest of
8	the day.
9	THE WITNESS: Thank you very
10	much.
11	JUSTICE WILTON-SIEGEL: For
12	the rest of us, I think, Mr. Lewis, we stand
13	adjourned until 9:30 tomorrow morning; is that
14	correct?
15	MR. LEWIS: That's right.
16	Mr. Dewan Karim will be testifying tomorrow.
17	JUSTICE WILTON-SIEGEL: Then
18	have a good evening everyone.
19	Whereupon at 3:35 p.m. the proceedings were
20	adjourned until Thursday, February 23, 2023
21	at 9:30 a.m.
22	
23	
24	
25	

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