Ottawa Light Rail Commission

Remo Bucci on Tuesday, May 17, 2022



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4	OTTAWA LIGHT RAIL COMMISSION
5	DELOITTE - REMO BUCCI
6	May 17, 2022
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13	Held via Zoom Videoconferencing, with all
14	participants attending remotely, on the 17th day of
15	May, 2022, 9:00 a.m. to 12:05 p.m.
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    COMMISSION COUNSEL:
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    Kate McGrann, Co-Lead Counsel Member
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    Liz McLellan, Commission Counsel Member
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    PARTICIPANTS:
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    Remo Bucci - Deloitte
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    Jamie Yoon, Esq. & Malina Simmalavong, Deloitte
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    ALSO PRESENT:
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    Carissa Stabbler, Stenographer/Transcriptionist
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    Chandani Joshi, Virtual Technician
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1 -- Upon commencing at 9:00 a.m. --2 REMO BUCCI: AFFIRMED. 3 Good morning, Mr. Bucci. KATE MCGRANN: 4 My name is Kate McGrann. I'm one of the co-lead 5 counsel for the Ottawa Light Rail Transit public 6 inquiry. I'm joined this morning by my colleague 7 Liz McLellan, who's a member of the Commission 8 Counsel team. 9 The purpose of today's interview is to 10 obtain your evidence under oath or solemn declaration for use at the Commission's public 11 12 hearings. 13 This will be a collaborative interview 14 such that my co-counsel, Ms. McLellan, may 15 intervene to ask certain questions. If time 16 permits, your counsel may also ask follow-up 17 questions at the end of the interview. 18 This interview is being transcribed, 19 and the Commission intends to enter this transcript 20 into evidence at the Commission's public hearings, 21 either at the hearings or by way of procedural 22 order before the hearings commence. 23 The transcript will be posted to the 24 Commission's public website, along with any 25 corrections made to it after it is entered into

evidence. The transcript, along with any corrections later made to it, will be shared with the Commission's participants and their counsel on a confidential basis before being entered into evidence.

You'll be given the opportunity to review your transcript and correct any typos or other errors before the transcript is shared with the participants or entered into evidence. Any non-typographical corrections made will be appended to the transcript.

12 Pursuant to Section 33(6) of the Public 13 Inquiries Act, 2009, a witness at an inquiry shall 14 be deemed to have objected to answer any question 15 asked him or her upon the ground that his or her 16 answer may tend to incriminate the witness or may 17 tend to establish his or her liability to civil 18 proceedings at the instance of the Crown or of any 19 person, and no answer given by a witness at an 20 inquiry shall be used or be receivable in evidence 21 against him or her in any trial or other 22 proceedings against him or her thereafter taking 23 place, other than a prosecution for perjury in 24 giving such evidence.

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As required by Section 33(7) of that

1	act, you're hereby advised that you have the right
2	to object to answer any question under Section 5 of
3	the Canada Evidence Act.
4	We will take a break at around 10:30,
5	but if at any point in this interview you need to
6	take a break, just say so and we will pause.
7	To begin, would you just provide us
8	with a brief description of your professional
9	background as it relates to the work that you did
10	on Stage 1 of Ottawa's light rail transit system?
11	REMO BUCCI: My academic credentials,
12	I'm a civil engineer. I graduated in 1989. I've
13	been at Deloitte since 2000 working in
14	infrastructure advisory services providing similar
15	services that we mostly what I work in is
16	providing services to government and large
17	infrastructure projects.
18	Prior to that and previous to Deloitte,
19	I worked at the Ministry of Transportation for four
20	years. I was part of the group at the Ministry of
21	Transportation that worked on the privatization of
22	the 407 in 1999, so that was my and we were also
23	doing things like alternative service delivery
24	design-build pilots, et cetera as the ministry was
25	moving to, you know, do less in-house and more

1 outside -- using outside advisors. 2 So while at Deloitte, my primary client 3 base is transportation, building on that 4 background, but I also -- my other service line of 5 work is not relevant to this project is power and utility projects, but mostly transportation, 6 7 highways. 8 And since 2008ish, which is when we 9 started working on the UP Express, the Air-Rail 10 Link for Infrastructure Ontario, it's probably been 11 70 percent transportation -- transit, and some 12 vears 2014, '15, '16 probably to '18 nothing but 13 transit. 14 Clients include the City of Ottawa, 15 Region of Waterloo on their Ion light rail, City of 16 Mississauga on the Hurontario light rail system, 17 Infrastructure Ontario for Finch light rail and 18 Eqlinton. 19 Metrolinx we're doing a number of 20 projects, advising on a number of projects in the 21 subway program and GO expansion, principally the 22 encore expansion which just got closed recently. 23 City of Edmonton on the Valley Line 24 light rail project, and I might be missing one or 25 Those are the key ones. two.

1 KATE MCGRANN: When did you first 2 become involved in the Ottawa LRT project? 3 The City issued an RFP for REMO BUCCI: 4 advisory services, financial and transaction 5 advisory services. I can't think of the exact 6 time, but that was the scope of services they were 7 looking for. 8 At the end of 2009, right around the 9 time they had gone to council for approval of the 10 road and the environmental assessment, we were 11 successful. I don't remember if we did the 12 interview in late 2009 or 2010. We started working 13 on the project in the spring -- early winter of 14 2010. 15 And that mandate completed -- commenced 16 with financial close which was January, February 17 2013. It -- then we had a bit of a hiatus, and the 18 City brought us back just to do a lessons learned 19 2014 I think it was. That took about a piece. 20 year to get done. 21 And then we were engaged again through 22 an RFP process for advisory work on the Stage 2 or 23 their Stage 1 or 2 program work. It broadened out 24 and continued to provide service to the City with 25 respect to that.

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1	So other than, let's say, two years
2	one or two years from 2013 onwards, it pretty much
3	continuously engaged by the City on either Stage 1
4	or Stage 2.
5	KATE MCGRANN: Just with respect to
6	timing, you said that you became involved in the
7	early winter of 2010. Would that be, like,
8	January, February 2010?
9	REMO BUCCI: Yeah, that's we did a
10	lot of work in the spring of that year on the on
11	the on the early-stage work of the procurement
12	options analysis report. That was primarily what
13	we were doing at that time and some of the early
14	modelling as well.
15	KATE MCGRANN: In terms of the work
16	that you specifically were doing, what was your
17	we'll talk about your roles and responsibilities
18	first with respect to the first tranche of work
19	that you were discussing, working up until
20	financial close of the project agreement for
21	Stage 1.
22	REMO BUCCI: I was responsible for all
23	the work that Deloitte was doing, so I was the
24	lead, the project lead. You know, bear in mind
25	that behind the scenes, you know, we have a

1 governance structure that oversees projects, and we 2 have quality assurance who review processes, 3 et cetera. 4 But I made the proposal, the pitch to 5 the City during the interview. I was put forward б in our interview as the lead, and I was always the 7 lead throughout the project in the sense of I was 8 responsible for helping the City, you know, 9 identify what scopes of services we needed to do to 10 staffing it up on our side, to putting the 11 deliverables together, to make sure the 12 deliverables met their needs. 13 And I was present at all of the key 14 meetings that -- you know, that Deloitte was 15 requested to attend. I was -- I was the throat to 16 choke. I don't know if that's a good saying, but 17 that was me. 18 KATE MCGRANN: It is a saying that I 19 have heard before. 20 Right. No, you have to be REMO BUCCI: 21 careful using these old sayings. But, yeah, I was 22 responsible for the project from that respect, from 23 the delivery with the client. 24 Okay. And in terms of KATE MCGRANN: 25 the City, who are you interacting with primarily at

1 the City through this work? 2 REMO BUCCI: At that time would be --3 so on a project administration management, you 4 know, making sure we got task orders and our 5 monthly reporting on what we're doing, et cetera, 6 that would have been Dan Farrell. 7 And then with respect to key 8 deliverables, particularly, let's say, if we were 9 going to Executive Steering Committee, et cetera, 10 that would have been John Jensen. So between John 11 and Dan, they were our -- they were my primary 12 contact points. 13 Okay. And in terms of KATE MCGRANN: 14 who you would go to if Deloitte needed to seek 15 instructions or directions on the work that it was 16 doing or the next steps, who would you be 17 interacting --18 REMO BUCCI: Mostly Dan. Mostly Dan 19 from that perspective. If it was strategic, it was 20 John, but mostly Dan. 21 KATE MCGRANN: And who were you 22 reporting to at the City, updates on work? 23 REMO BUCCI: Dan -- we sent our 24 invoices to Dan, and he approved them, if you think 25 of it that way, right. And then if we had a major

1 deliverable, let's say, go to the City manager, 2 John would take a look. 3 Dan would still manage it for us and 4 say, I think we need this and this and this, and 5 then we got to that, you know, penultimate draft 90 6 percent, if John had some concerns, he would call 7 me directly, and we'd go from there. 8 Could you give me a KATE MCGRANN: 9 sense of what the major deliverables were like 10 during that first phase of the project? 11 The first -- so let's set REMO BUCCI: 12 the stage of 2010. I think it's important to do 13 that, right. So the City had, in the early 2000s, 14 done a procurement. They called it the 15 north-south, which is basically the Trillium Line 16 now. 17 And it had been awarded -- it was 18 somewhat controversial within the city. They 19 cancelled it. I shouldn't say they cancelled it. 20 That's not the right word. It was awarded to 21 Siemens and PCL. There was a change in government 22 and change in mayor, and the City bought that 23 project out. They say, that's the wrong one. We 24 should be going east to west. We shouldn't be 25 going down to the airport.

1 So the City team had worked on that, 2 had worked on that procurement, John, Dan, and 3 others, and it was a design, build, operate, 4 maintain, so this would have predate -- I don't 5 know if it predated Infrastructure Ontario, but 6 certainly the early days. 7 And then in 2010, the Canada Line had just come onboard in Vancouver. Very successful 8 9 execution of that project. Design, build, finance, 10 operate, maintain. 11 It was fairly analogous. I mean, it 12 didn't go to the airport, but it was a 13 fully-automated train control system with a tunnel 14 and quideways. 15 So the City was interested in what the 16 mode of delivery needed to be, number one, and if 17 we think about that, it's like what's the mix, 18 design, build, operate, maintain. What's the 19 City's internal capability? How do you bring all 20 the pieces of light rail together recognizing that 21 it was going to be, like, a fully computer-based 22 train control system, so it's going to be complex 23 from that end. 24 You know, having -- you know, those are

²⁵ different suppliers, and the vehicle -- well, not

1	always, but you've got train control system
2	suppliers, you've got vehicle suppliers, you've got
3	civil works you got to do, you've got a significant
4	tunnel. So you have all this coordination of
5	large of large complex pieces. How are you
6	going to bring that together?
7	The other thing the City was really
8	fixate on was making sure that the right design
9	the design solution that was selected took the
10	long-term into mind. Like, what's your
11	preventative maintenance program? How are you
12	going to deal with, you know, your prescheduled
13	periodic large life cycle payments, refurbishment
14	to make sure it lasts 30 years, and then how do you
15	tie that together contractually?
16	So that was the first thing. And if
17	you look at our procurement report, you'll see this
18	wide range. I don't know, we did 10 or 12. I
19	didn't count that up but, you know, there's and
20	they just what they wanted what John wanted
21	to do is say, Don't discount everything. Start
22	let's put everything on the table, because they
23	anticipated having just gone to council for
24	here's the route, here's sort of the broad scope of
25	the undertaking to come back and say, well, here's
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1 how we're going to deliver it, realizing they had 2 just gone through this previous exercise on this 3 other project. 4 So making sure that if anyone asked a 5 question to say, well, why wouldn't ridership be part of what -- you know, why don't we have our 6 7 ridership sharing regime here or what do we do 8 about operations? 9 What's the right mode of -- what is 10 operations by the way? Is that driving the train? Is that dispatching? Is that train control? 11 And 12 then also what about the financial construct, and 13 this is where the funding comes in. 14 What would be the view of Canada and 15 We're going to, you know, provide --Ontario? 16 well, not quite a third but at least 600 million 17 each to the project costs. 18 And so two audiences in mind. If you 19 think of -- we always ask, well, who is the 20 audience of this report? The audience was going to 21 be the public to demonstrate the thought process 22 and the methodology that the City used to take this 23 long list and come to a conclusion of delivery. And secondly, in the event and the 24 25 anticipation on our advice was when you get into

1 due diligence with the funding partners -- and that 2 was thought to be later, because in 2010, you've 3 qot an election coming in -- a municipal election 4 in the fall. 5 So, you know, we always try and lay 6 backwards and we say, okay, when are you going to 7 get a major decision done? We'll talk about that 8 maybe in a moment because that affected the 9 schedule. 10 But generally our program was do the 11 front-end work, heavy lifting on options, develop a 12 multivariant analysis to be able to screen them 13 out, document the thought process and the 14 methodology used with the City team, make sure you 15 have the right people at the table. 16 We did a number of workshops, and, you 17 know, as advisors our job is to make sure that --18 you know, we don't make decisions, right, but our 19 job is to build a framework so that our client --20 we believe our client, when they get to the end of 21 that journey, has made an informed decision. 22 And then -- so there was a lot of that, 23 I would call it, sort of consultation, framework, 24 workshops and then building up the financial 25 model in anticipation -- and the financial model

1 for the delivery of the product. 2 So if you take design, build, operate, 3 maintain, how does it get financed either publicly 4 or privately and how does that affect, you know, 5 the initial budget that had been published in 2009 б and what are the challenges potentially that the 7 City would encounter with respect to that regarding 8 its internal funding program which notionally we 9 refer to it as the affordability. It's not an 10 affordability issue; it's how much budget -- what's 11 the budget you've allocated. 12 And then looking ahead to say, okay, 13 once we've got that all lined up, what's the plan 14 to engage Ontario and Canada for a funding 15 agreement. How does that tie up with the 16 procurement, the commencement of the procurement? 17 Do you need to have a fully executed funding 18 agreement? Like, what does that look like? 19 What is -- what does the procurement 20 look like? When do the bids come in? What's the 21 commitment, and when do you pull everything 22 together to close the project? 23 So that was sort of the early days, but 24 the main -- the main deliverables, if you're 25 thinking about the scope -- like, the product we

1	delivered would have been the procurement, the
2	drafts of the procurement options report.
3	It was not released until the following
4	year mostly to build through that new council and
5	mayor that had come in and the financial modelling
6	that we had done, which then morphed into
7	value-for-money assessments once we got engaged
8	more fully with Canada and Ontario.
9	So there was a lot there. I should
10	have slowed down. I notice you were writing. Do
11	you want to go back through that?
12	KATE MCGRANN: I do have a couple of
13	questions about that. In terms of where the City's
14	priorities were and how the affected the
15	multivariant analysis that you went through with
16	them, what was your understanding of what the
17	City's key priorities were? And then maybe we can
18	talk after that about how they affected the
19	selection of the model.
20	REMO BUCCI: Yeah, they were really
21	concerned about what John called the rail I'll
22	always trip over this. Rail-wheel interface
23	meaning that the decisions you make on design and
24	construction need to take into account how you're
25	going to maintain the track and the ballast and how

1 the train is going to run on that track and ballast 2 and the train is going to be dispatched and 3 communicated to get to the stations on time. 4 And any time that we were making -- and 5 any time there was an option, let's say, that 6 you're looking at, you were potentially breaking 7 that. 8 Let's say -- this didn't happen, but 9 I'll give you an example. Well, we'll have someone 10 do the design-build and the operations and 11 maintain, but the City is going to choose the train 12 control system. And this is an anecdotal example. 13 It didn't happen. 14 Probably what the City would have said, 15 Well, hold on a sec. So this train control system 16 is going to tell the trains where to go. Will that 17 interfere with the rail-wheel interface. We would 18 have said, yeah, of course it would have. 19 Okay, then why is that -- why should 20 that sit on this side of the responsibility --21 let's say that's the City's side versus on the 22 notional, you know, projectco, or do you split the 23 contracts up into a couple different combinations, 24 right. 25 So this was, I would say, the primary

1	focus to make sure that because it's a complex
2	undertaking with all of those, you know, and it's
3	not it is moving parts that if you're associated
4	with, recognizing that the bulk of the costs is
5	still the civil works because you got to dig a lot
6	of soil and tunnel and pour concrete, but what the
7	customer is going to feel is that rail-wheel
8	interface in terms of the quality of service that's
9	delivered.
10	So that, I would say, was at the top,
11	and then close to that was the City because the
12	funding model had a fixed bucket of had a fixed
13	envelope of funding, the known amounts coming in
14	from Canada and Ontario, 600 million each, were
15	set, but recognizing this is early days.
16	When you're going to council in 2009,
17	environmental assessment report, you're probably
18	talking about a design that's, at best, 5 percent.
19	Someone may tell you 10.
20	But it's, like, really high level. You
21	know, how much property do we need? What's the
22	alignment? So your costs are set. You're not
23	getting anymore, and every dollar over and above
24	that, because of the issue that as you get into the
25	reference concept design you're doing, 20, 30

1	percent comes up, or you're looking at a financial
2	construct that's different or that hadn't been
3	it's not taken into account that funding, because
4	that funding doesn't the financing is all on the
5	City's dime, right. That's not on the federal
6	and provincial government only fund basically works
7	in the ground.
8	So I think the other element would have
9	been, well, what's the impact to the City's
10	fiscal the budget envelope.
11	So and I should say as part of that
12	stream, finance was then City finance was
13	engaged over that period of time I was talking
14	about earlier, whereas we were doing let's say
15	the options report, we were dealing with John
16	primarily and Dan.
17	We were building up the financial model
18	for the project. At the same time, the City was
19	building a broader program model, which they called
20	a Transportation Affordability Master Plan Model
21	for not just Stage 1. Stage 1, Stage 2, Stage 3
22	and their broader transit portfolio.
23	And PwC, PricewaterhouseCoopers, had
24	been engaged to put that together, so they were
25	working directly with finance. And our job was to

1	provide, if you will, the stream of payments that
2	are associated with the Stage 1 Confederation Line
3	project.
4	Then the City finance and PwC would
5	pull that into the affordability model, and that
6	would that's basically how the City identified
7	the budget envelope. So they'd look at the 600
8	plus 600 coming from Canada on the capital side,
9	how the City you know, if there was any private
10	financing, how did that affect the timing of the
11	payments and the costs, the City's share of that
12	capital amount through debentures.
13	And then you got ridership assumptions.
14	You've got development charges. Then mostly
15	importantly, the allocation that the City had made
16	from the property tax base that had been allocated
17	to the project.
18	You add that all up, and it's not just
19	one number, because you got to do it by year, then
20	that's how the project fit, and that's how, for
21	example, the City treasurer would be able to go to
22	council and say, yes, the project is affordable and
23	here are the sources and uses of funds.
24	So I should have I just back up to
25	say that, you know, the financial element was

1	important from that end, and we were working with
2	City finance, but the City finance had set up their
3	own process to do that.
4	I wouldn't say they were independent
5	because it was all integrated, but like I said,
6	Pricewaterhouse was doing the broader program
7	model, and our job was to provide the stream. So
8	we worked quite closely with them as well.
9	KATE MCGRANN: In terms of just
10	understanding how the budget or the affordability
11	cap and you can let me know which term is
12	appropriate.
13	REMO BUCCI: They're interchangeable,
14	and I can provide maybe sorry, I cut you off
15	there, but we can talk later about how the
16	affordability cap was defined because there's
17	different ways you can do it for sure.
18	KATE MCGRANN: I'm just my
19	understanding is that at the environment assessment
20	stage, there's an early budget set of, I want to
21	say, \$1.8 billion. Does that sound familiar to
22	you?
23	REMO BUCCI: Correct.
24	KATE MCGRANN: And then after the
25	reference concept design is done and there's some

1 value engineering that's done in there I think, the 2 budget is brought to just over to \$2.1 billion. 3 Does that sound right to you? 4 REMO BUCCI: Yeah, and -- and that's 5 And, you know, there's also -- I think the right. б 2.1 might not have had the City's program 7 management costs of about 300 million, or was that 8 imbedded in there because I think it's 2.1 plus 9 about another 300 million being the property 10 takings, the advisory costs, you know, like, legal, 11 the owners engineer, Infrastructure Ontario, 12 Deloittes, all the folks that they had to pay, BLG, 13 et cetera, et cetera, the office costs, staffing 14 costs related to that. 15 There was an another 300 million that 16 was, you know, behind -- I'll call it behind the 17 scenes, not as part of a contract. The contract --18 yeah, I think you're right. I think it was 1.8 19 plus 300. I should -- I should have looked that 20 up. My apologies. I think you're right. 21 KATE MCGRANN: And then I think there's 22 a \$100 million contingency that also --23 REMO BUCCI: Correct. Correct. 24 Correct. That's right. 25 KATE MCGRANN: So this may be an overly

1	simplistic question, but in terms of the the
2	budget that's set for the project, the 2.1 billion
3	plus the other costs versus the affordability
4	model, is it did one come first?
5	So, you know, we start with 1.8. Is it
6	that like, the preliminary engineering work gets
7	to the 2.1 model, and then that's fed into the
8	City's overall transportation model, and the answer
9	comes back, yes, that's workable, or was it more of
10	a back-and-forth kind of process?
11	REMO BUCCI: I think it's back and
12	forth, and it needs to be iterative, if I'll use
13	that term, because there are different components
14	for sure.
15	You've got the hard, you know, design,
16	build, operate, maintain elements, and even with
17	operations in or out, it's still a cost the City
18	has to bear, right.
19	So, you know, there's an example where
20	we might have had a mode where it's finance
21	design, build, finance, operate, maintain. Here's
22	the stream of payments that the project company is
23	going to be undertaking. All right. The
24	affordability model needs to say, okay, so the
25	drivers are over there. They're not over here.
	1

1 Good. Adjustment, affordability. 2 Now if you give them an option, say, 3 design, build, finance, maintain, and the City's 4 qot the operators, they need to make sure that on 5 the OC Transpo side, they're covering those costs, 6 right. 7 So that's -- that's your iterations. 8 You need to make sure that -- because you don't 9 want double counting, number one, nor do you want 10 to miss something, which is just as important, 11 right. You've got inflation indexations. Always a 12 challenge on these projects, right. 13 And then the third element is 14 notwithstanding the accuracy of the cost estimates, 15 these are extremely difficult to put together, and 16 it's not about the labour, the materials, the 17 goods. That -- the cost consultants, the quantity 18 surveyors do a pretty good job of it. It's the 19 commercial construct. 20 What's the cost to engage someone in a 21 design-build contract that they're taking certain 22 risk, or now you add maintenance, and you have a 23 different pay regime. 24 So that's, you know, the -- if you put 25 that in a bucket of the contingencies, it's very

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1much a moving target and as much of an art as it is2a science. Frankly, all you can do is rely have3projects you can go to existing projects that4are on the market. That's all we could do. It's5not a matter of guessing.6You can just say, well, here's a7really here's an analogous project. We think,8you know, the risk allocation, the commercial9construct was X. We're going to apply that here,10and we think it's analogous.11So there's that. The second and12this is more unique to municipal projects I think,13you know, having, you know, worked and by the14way, we work for the Federal government too, like,15projects like Gordie Howe Bridge, et cetera, and16municipalities across Canada.17And they're all the same, right, in the18sense of the challenges. You go to council, say,19in 2009, we had the same experience in other20projects, and you tell them, okay, this is an21environmental assessment. We have a lot of work to22do, but just so you know, it's like buying the23house, I think I want to spend this, but I'm just24going to start looking in neighbourhoods. We think25it's \$1.8 billion in today's dollars. I haven't		
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²⁵ it's \$1.8 billion in today's dollars. I haven't	24	going to start looking in neighbourhoods. We think
	25	it's \$1.8 billion in today's dollars. I haven't

1	taken inflation into account. I haven't I'm
2	just telling you what the general scope of the
3	project is, and you put those caveats down.
4	The moment that number gets out, it
5	never gets taken away, right. That's the number.
6	That's the project number, right. And frankly, I
7	mean, we try to do this on every municipal project,
8	never have any luck, right, because that's just the
9	way it is.
10	If you go in with, well, you know what,
11	we think there's this risk of delivery and this
12	risk of delivery, and we need to take this into
13	we want to be safe. It's not 1.8. It's 2.8
14	billion.
15	Well, you don't want to do that either
16	because someone is going to say, well, isn't a
17	little bit too early to look at those
18	contingencies? So just tell me what your best
19	estimate for the cost of the project is right now
20	and come and report back.
21	Once you do your additional analysis,
22	et cetera and tell us how's it changed and then
23	what's the budget now to deliver it for me to give
24	you the appropriation, right, and that would have
25	been the report that went in the summer of 2010.

1 So that -- I just want to say that 2 dynamic that I'm talking about there, that's not 3 unique to the City of Ottawa. That's any 4 municipality. That's different than the province 5 and the federal government who would go through the 6 same steps, but behind the scenes, you're dealing 7 with the Treasury Board. You're not dealing with 8 the fishbowl of municipal council, right. 9 And that -- the dynamic of how you can 10 rationalize where are we at a point in time and how 11 is the project changing to the market conditions, 12 you have a little bit more -- the ability to, okay, 13 I understand. All right. Let's build appropriate 14 contingencies, et cetera so that we've got the 15 right -- the right governance on the project and 16 the right budget. 17 Now move forward and -- like, for 18 example, that's the way Infrastructure Ontario 19 works. They get authority and they move ahead and 20 as long as we're in the budget, but all that heavy 21 lifting is done without the challenge of having to 22 do it in a public format. 23

I don't mean that critically. I'm just saying that's a challenge because the moment you put those numbers out, and they're complex and they

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1 change, and then, well, why did it change, you 2 know, and then you have to explain, well, this is 3 this, and you get into math, and it's hard. 4 KATE MCGRANN: Well, particularly with 5 the fact that the early number doesn't include 6 inflation --7 REMO BUCCI: Correct. Correct, or 8 financing, right, because that's just the undertaking, right. That's the point of that 9 10 exercise. 11 KATE MCGRANN: And that is -- the 12 provincial and federal funding is set based on the 13 EA budget for --14 REMO BUCCI: Correct. And we -- sorry. 15 That was one of the things we pointed out in our 16 lessons learned report. I'm not sure much of it 17 was applied on Stage 2, but I won't go there. It's 18 just the way it is. 19 You get engaged with the federal and 20 provincial government on direct funding agreements. 21 Like, it's different, for example, when you have 22 programatic LRT funding like in the Greater Toronto 23 Area. Like the projects like Finch or Hurontario 24 or Eqlinton, they are similar to Ottawa, but they 25 are funded 100 percent by the province.

1 There's no direct agreements with 2 Canada and Ontario. They're behind the scenes 3 because they're programatic, so you don't have to 4 sign a funding agreement like you do in Ottawa. 5 And the moment you do that and it gets 6 crystallized and frankly, even the federal and 7 provincial government will say, well, give us an 8 indicative cost schedule. We just want to 9 understand where the project is at, you know, by 10 quarter. 11 We're always like, okay, the moment we 12 give that, we're -- that's the setting. Like, two 13 years from now, you'll be dealing with someone 14 different from the policy perspective, and they'll 15 say, well, why is this changed? Actually we 16 brought this forward, and that's the number now. 17 Sorry, you can't change it. 18 KATE MCGRANN: So that was my question 19 on that just while we're talking about it is, you 20 know, to the extent that you can explain it or your 21 understanding of it, why is the other two levels of 22 government funding set at the EA stage? 23 REMO BUCCI: I -- it's a policy issue. 24 And recognize, Ontario doesn't do -- I'm sure 25 Ontario had a funding agreement for that project.

1 Canada did more of it. 2 It -- that's -- this project predated 3 P3 Canada and now Canadian infrastructure, but P3 4 Canada had a very different kind of funding regime, 5 and they funded 25 percent of all of capital. So I think -- I think the policy side 6 7 is that -- like, we just deal with the reality. We 8 come in, and we have -- we have a good 9 understanding of where the federal government is at 10 because of the services we provide there and our 11 contacts in Ontario, and we come to the City of 12 Ottawa and we say, you know what, we think this is 13 the reality. This is what you're dealing with. We 14 could try and change it, but it's not a decision 15 of -- it's not a decision of the policy makers. 16 It's probably above that. 17 So now, the question is in 2009-2010, 18 you've got a mayor I don't think is running again, 19 so who is your project champion? This is very 20 important in any large infrastructure project. 21 And when we say "project champion," 22 there's two levels. There's the person on the 23 staff side and how senior are they to kind of, you know, get everybody organized and drag the project 24 25 through, and then politically where, okay, I'm

1	going to get on the phone and and Ottawa tried
2	this in a couple of different ways.
3	For example, the issues it came up
4	with, the Ontario funding and how costs were
5	accounted for from an accounting perspective,
6	et cetera and would say, okay, well, we have an
7	issue here. Can you guys help us out?
8	And it's very, very difficult to get
9	those types of arrangements changed because
10	typically there's a policy, a regulation, or a
11	legislation behind the scenes, and either at the
12	federal, provincial level, somebody there that has
13	to take it up and say, all right, now, we have to
14	change this policy because it applies to this, you
15	know, direct funding agreement as compared to
16	programatic funding where you don't have a direct
17	agreement. You have a lot more flexibility because
18	the money flows from treasury to MTO, to Metrolinx
19	or Infrastructure Ontario. You know, it's
20	different from that. And I'm using Ontario there
21	because it was in Ontario.
22	Federally it's not much different.
23	Again, you know, I have experience for example on
24	Gordie Howe Bridge. We can tell you I can tell
25	you it's roughly the same way.

Т

1	So that's the issue. So the moment you
2	get into a direct funding agreement on and this
3	would have been Ministry of Transportation on
4	Ontario's side. They would've said, okay, now it
5	has to fit within all the rules that describe these
б	payments, including how we account for it.
7	And Canada was a little bit more
8	advanced because they have more funding agreements,
9	but they didn't take the none of them take P3s
10	into account. This I shouldn't use the word P3.
11	Anything that has private financing and bundling
12	operations and/or maintenance with, let's call it,
13	deferred payments that are on performance. Now you
14	get into situations where neither of these funding
15	agreements took that into account.
16	And I would just say, like, if you're
17	the federal government like, Edmonton Valley
18	Line, for example, was P3 Canada was the funding
19	partner for the federal government. That was 25
20	percent of all design and build costs including
21	financing.
22	If you look at the funding agreement
0.0	

²³ with the City, it was 33 percent of just the ²⁴ eligible construction costs without financing. So ²⁵ you think, well, that's a better deal than Ottawa

1	got. I would say, no, they got less than probably
2	what Edmonton got because the denominator was
3	bigger when you're taking 25 percent of all
4	financing costs.
5	So it's just the nature, I think, where
6	Canada was at that point in time, both Ontario and
7	Canada, their knowledge of project delivery
8	options, and the agreements were basically bagged
9	as it always is on previous projects, and Ontario
10	had none.
11	KATE MCGRANN: So were there analogous
12	projects that you referenced outside of Ontario?
13	REMO BUCCI: Yeah, the key one would
14	have been the Canada Line at that time, right,
15	which was a design, build, finance, operate,
16	maintain funded by and we had done a detailed
17	I know we had provided it somewhere in the files we
18	had given to you.
19	I mean, we had done a detailed set
20	of as part of that early procurement options
21	report, I wouldn't call it market soundings, but as
22	part of our benchmarking, we had some very good
23	calls, meetings with the with both on the
24	private and public side up to delivery of that
25	project to understand how it was put together from

1 a funding perspective and a financing perspective. 2 So that was the first and the most 3 analogous because Canada had funded that one, and 4 we wanted to understand, okay, well, would Canada 5 want to apply that funding to this project. That 6 was -- that was the primary one, and it's Canadian. 7 As we got closer to procurement, the 8 Denver Eagle project in Denver, which was another 9 design, build, finance, operate, and maintain light 10 rail project, again light rail so not heavy 11 intercity rail like VIA Rail or things like that. 12 These are the projects we were looking at. 13 Was also an analogous project, but that 14 was more as we got closer and closer to the form of 15 the delivery option, less about the financing. 16 To go to your question, the primary one 17 would have been Canada Line, and Canada Line was 18 different because it had monthly progress payments. 19 The private dollars were last in to reduce the 20 costs of the project. 21 The federal dollars were layered in 22 with the provincial dollars and the local share 23 That was a different model that was used upfront. 24 that was allowed for Ottawa principally because of 25 the AFP structure.

1 KATE MCGRANN: I was going to ask you. 2 Would it have been an option with respect to the 3 timing of the input of the different financing to 4 follow that model in Ottawa? 5 REMO BUCCI: So where you capture that 6 is payments during construction. And so now let's 7 also set the stage of where Infrastructure Ontario 8 is at. 9 So in 2010, there's no discussions yet 10 with -- no hard discussions yet with the province. 11 I think IO had been engaged. They had done an 12 initial value-for-money assessment. I think the 13 City maybe hired some consultants to do some kind 14 of independent work. 15 So in 2010, Infrastructure Ontario was 16 doing social projects primarily and Herb Gray 17 expressway. So that would have been -- that's the 18 highway through Windsor that goes to the Gordie 19 Howe Bridge. It was called the Windsor-Essex 20 Parkway at the time, right. I don't think 407 east 21 Phase 1 would -- that was 2012, I think. 22 So not yet doing civil projects, and if 23 you step back on the social side of things, the 24 general payment structure was -- this is pre-2008 25 Infrastructure Ontario, we're not going to pay you

1	anything until substantial completion because the
2	concept of AFP is you pay at performance. You only
3	pay when you delivered something to me, and I
4	can I can diligence it, and I can measure it
5	against a set of standards, output specifications
6	we call them, and I'll give you that payment.
7	So up to 2008, that's 100 percent.
8	Credit crisis comes. All the European banks were
9	present in Canada at the time that funded those
10	private provided that private financing are
11	gone. You need to now change the market.
12	It goes more to institutional investors
13	in Canada because our banks don't lend long-term,
14	so life insurance companies, your commercial
15	your sort of variance of pension funds that are
16	become, you know, what we call the institutional
17	investment stream.
18	And that also means you're not going to
19	pay you're not going to have the project company
20	finance 100 percent of the project or construction
21	anymore, okay, because there's no capacity to do
22	that given the number of projects that are done,
23	and the costs are now the costs are becoming
24	quite prohibitive versus the private financing.
25	So the concept of, well, we need to pay

1 more during construction comes into account, and 2 the concept of, well, I don't want to pay on a 3 monthly progress basis. I want milestones. 4 So let's pick an event in the schedule 5 and, like, I'm going to use the analogy of a б building because it's the best one. Like, you pour 7 the foundation because you have to pour the 8 foundation before you can put the first floor down. 9 That's a milestone. 10 And then you put the rough work up and 11 you pour to second floor foundation. That's 12 another milestone because you can't do the first 13 floor until the basement is done. 14 In a linear project, you can develop a 15 project and say, well, I'm going to work on this 16 segment. I'm going to do this piece of work first 17 and set an event, whilst design-build, things may 18 change. 19 You may run -- you may hit some surface 20 conditions that you didn't know about or 21 subcontractor is not available or you want to 22 redeploy and work on another end, right. 23 Well, now you can't because you picked 24 this event in your schedule that you're going to 25 work towards, so we call it chase the milestone

1 because you got to get that milestone to get the 2 payment. 3 So the major -- let's say the first 4 challenge that had to be -- and I'm going to jump 5 ahead. Once Infrastructure Ontario got involved б was do you do monthly progress payments like they 7 had done on the Canada Line, or you do no payments 8 up to substantial completion. 9 Well, we knew that wasn't possible 10 anymore because affordability. The City was going 11 to have to pay for all that, and there wasn't 12 market capacity. 13 So now you have to have some form of 14 construction period payments, and the compromise 15 was to come up with 12 event-based milestones, or 16 we came up with scheduled event-based milestones 17 and let the project -- the three bid teams pick 18 them. 19 But that was -- and if you look and you 20 say, okay, well, that's -- Ottawa had milestones. 21 Eqlinton didn't have milestones. They were 22 monthly-based. Waterloo, which is the next two 23 that came on, didn't. 24 So there's an example of moving from 25 event-based to progress-based, but Ottawa -- and,

1	again, and it's not to be critical of everyone,
2	you're just you're dealing with a program and
3	where it is in a maturity cycle and having to deal
4	with building up versus building out.
5	And the lesson there, and I think we
6	cover it in our lessons learned report, was on
7	linear projects your schedule is absolutely 100
8	percent going to change. You shouldn't assume that
9	what you the schedule that was at a 20 or 30
10	percent design, it's the nature of design-build, so
11	don't set a payment regime that forces. You want
12	the other side to have the means and methods to
13	adjust and redeploy their means and methods to do
14	what's right for the schedule, not to hit a
15	milestone that you thought was appropriate three
16	years prior. And that affects financing too,
17	right.
18	KATE MCGRANN: Couple of questions, and
19	then I'm going to drag you back to where we were
20	before.
21	REMO BUCCI: Okay. All right. Sure.
22	KATE MCGRANN: Am I right in
23	understanding that the Canada Line is monthly
24	progress payments?
25	REMO BUCCI: Yeah.

1	KATE MCGRANN: And then the projects
2	that follow Ottawa are also monthly progress
3	payments?
4	REMO BUCCI: In a different way. But,
5	like, for example and you should probably talk
6	to Infrastructure Ontario about this, but it's
7	more they become subtle differences.
8	Like, for example, on I'll just call
9	it some of the AFP LRT projects, that's
10	specifically what they are. The because
11	remember you've got a share now of private money
12	coming in short-term because you've got a
13	substantial completion payment that wipes away that
14	short-term private financing and leaves a certain
15	amount over the over the over the operating
16	period.
17	But during construction, it kind of all
18	looks the same. And you're going to wipe away a
19	certain amount of that private financing by
20	substantial completion payments. So you say, well,
21	how much is that? And that's the payments I'm
22	making during construction, the public and private
23	amounts.

So the -- very simplistically it would
 be if that formula up to substantial completion,

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1 and I'm just using an example, is 50-50, then my 2 50 percent share from the public sector will trail 3 the private sector once the lenders have verified 4 that that payment can flow from their credit 5 facility because they would have to have due 6 diligence that the work was done in the ground. 7 The moment that that decision is made, I'll fund my 8 money. Okay. 9 That doesn't work when you have 10 provincial and federal funding because they have a 11 requirement for work-in-the-ground requirement to 12 verify that the work has been done. 13 So there's an example where if you're 14 doing programmatic, you have flexibility there, 15 whereas with the government of Canada, they would 16 have said, no, no, no, we're not going to fund you 17 when the private lender or their payment certifier, 18 technical advisor says it's okay. We're only going 19 to do it if the City can verify that the work has 20 been done. 21 Okay, so the -- so the payment regime 22 is you kind of got it right, then the question of 23 mechanics of what's the preconditions to payment

²⁴ become more complex because you've got a credit
 ²⁵ facility, construction credit facility, you got a

lender's technical advisor that sits on top of 1 2 that, and then you got an independent certifier 3 that kind of sits on top of that. 4 And then if you've got funding 5 agreements, then you want to make sure you're not б introducing a process that will get into the way of 7 that flow. 8 So that's the difference between Ottawa 9 and, say, the GTA LRTs. Waterloo was different 10 because the moment we -- I left Ottawa and went to 11 Waterloo, I said we're not doing milestones. We're 12 going to do -- we're going to find a way to get 13 progress payments done here. 14 KATE MCGRANN: Just quickly, the -- on 15 Ottawa, it sounds like you looked at -- or 16 milestones payments were looked at, monthly 17 progress payments were looked at. What was your 18 understanding as to why the milestone approach was 19 selected? 20 This was -- I don't know REMO BUCCI: 21 if compromise is the right word. It was -- it 22 was -- because if you -- at that point in time, 23 Infrastructure Ontario had only done -- like, I 24 think the way Windsor-Essex -- I can tell you 407 25 Phase 1, we worked on that project, as an example

1	was and I'll draw it on the screen.
2	It's a project that goes like this. So
3	it's a segment, a north-south segment and a segment
4	that goes to the east. Do this, you finish that
5	one, you get a payment. Finish that one, you get a
6	payment. Finish that one, you get a payment.
7	KATE MCGRANN: Just for the sake of the
8	transcript, you basically scripted out a capital T.
9	When you say half of the top of the T, you get a
10	payment. When you do the base of the T, you get a
11	payment. When you do the other half, you
12	REMO BUCCI: Right, correct, because
13	you can chop it up that way into thirds, right.
14	And you say, well, you do it whatever order you
15	want, I don't care how you bid it, but when you go
16	to deliver it, when you get those Ts done, I'll pay
17	you on that segment.
18	Now, you do a light rail project, you
19	go, well, how are you going to do that? There's no
20	logic. You can say, well like, here's an
21	example: The commencement of tunnelling as a
22	milestone, okay, and this is a real example. What
23	does the start of tunnel mean? That you've ordered
24	the tunnel boring machine? That the tunnel boring
25	machine has arrived? That you've done 5 metres?
L	

1	That it's done three turns?
2	So this is now where it comes
3	difficult, and this is not a criticism of anyone.
4	It's really easy to say when a project meets
5	substantial completion, right. It's safe to
6	occupy. You've got good construction precedent on
7	what that is.
8	The moment you start breaking down
9	and if you look at the 407, like the T that you
10	just described, that fits that definition,
11	substantial completion. I can drive on the
12	highway. It's safe, right. I'll make my payment.
13	But if anything less than that, now you
14	have to start saying, okay, so commencement of
15	tunnelling, what does that mean? We have to now
16	describe it because, you know, when you get into
17	the administration mode, the other side is going to
18	try to say, well, we met it. See, we met it.
19	That's our interpretation of a milestone.
20	So the milestones were middle ground
21	between the City wanting to ensure that the
22	financial construct and construction period
23	payments because they had to pay for every
24	single penny of incremental financing that goes
25	with that, fit within its budget envelope.
I	

1 So when you see all the machinations of 2 options we had looked at -- you know, we use the 3 nomenclature -- the small F was construction 4 financing, the big F was -- not the right word but 5 long-term financing was to look at those differences because going back to that б 7 affordability model, how did it affect the budget 8 envelope that the City had, and Infrastructure 9 Ontario saying we want -- we want to meet our 10 payment on performance milestone but recognizing 11 that we need to have a lot of them or more of them 12 than we would normally have because the City is 13 absorbing the incremental cost.

14 So a working group was put together. 15 The concept was let's define a range of fixed 16 events that we think that can work. In order to 17 give flexibility to the bidders, we will give 18 them -- here's 20 -- I forget the exact number. 19 Here's 20 of the acceptable -- sorry if you hear 20 dogs barking -- milestones, but you're going to 21 have to put 12 and no more than 3 or 4 in a year. 22 Like, we set some rules in the RFP, and 23 we modelled that out, and that got us to a point

where financially we thought, okay, that can fit
within the City's budget envelope, and it met where

1	Infrastructure Ontario was at the time, fixed
2	event-based payments, right.
3	KATE MCGRANN: Okay. So let me just
4	say this back to you to make sure I understood it
5	properly. There's sort of two components to the
6	milestone piece. First of all, the use of
7	milestones at all as opposed to monthly progress
8	payments, and I understand the driving factor there
9	is Infrastructure Ontario's preferred approach to
10	have payment upon a visible thing that has been
11	built
12	REMO BUCCI: Correct.
13	KATE MCGRANN: as opposed to a
14	percentage towards the final project?
15	REMO BUCCI: Correct.
16	KATE MCGRANN: And then the other piece
17	is the number of milestones, and that's driven by
18	the City's finances and the realities of having
19	to the cost of having to have outstanding
20	REMO BUCCI: Correct, correct, that's
21	exactly right. Now, to complicate things even
22	more, the one thing about the other dimension
23	with the federal and provincial money is when does
24	the money come in? Now, they're paying a third,
25	but that doesn't mean they have to pay a third of
1	

1	every single monthly payment or every payment
2	that's made.
3	So the one compromise that the federal
4	government and Ontario agreed to is accelerated
5	payments, meaning they would pay their one-third,
6	but they would pay it faster, right.
7	So I think it was 50 percent of the
8	initial project cost up until you hit that
9	one-third threshold. Basically what it enabled the
10	City to do is put their money in last.
11	Okay, so this is the iterative part
12	that you talked about. You know, at the beginning
13	part of the journey, we didn't get there. We
14	didn't get to all of this until frankly probably
15	when we were structuring the RFP, like, later in
16	the fall.
17	And I say "we," you know, the
18	collective "we" in 2012, but these are the dynamics
19	of here's the funding agreement. He's the delivery
20	model. It's got to work within a contract. It's
21	got to work within the affordability structure.
22	It's got to be financeable. How does it impact all
23	of the pieces?
24	And that's what made, you know, this
25	project complex because you've got the two funding

1	agreements. You've got the City's expectation on
2	the size of the project and its budget allotment,
3	and then you've got Ontario through Infrastructure
4	Ontario who are just at the beginning of the
5	journey of doing transit projects trying you
6	know, working with the City to find something that
7	can you know, that can work within and the
8	AFP program has evolved since then obviously.
9	KATE MCGRANN: Any discussions with the
10	groups working on the Canada Line about the
11	progress payments versus
12	REMO BUCCI: Yeah, we did. We did
13	with sorry. We did. We did that yes, we
14	did. We did we did interviews with multiple
15	people on that.
16	This would have been as part of the
17	initial procurement options report that we had done
18	and prior at Infrastructure Ontario as part of
19	the because part of that procurement options
20	report is the benchmarking. Like, what are the
21	relevant projects that you're using to take lessons
22	learned from?
23	So, yes, we had we had that done. I
24	don't think we had provided the if you look
25	at the procurement options report and you go, well,
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1	they were a little light on there in the financial
2	structure, weren't they? Like, they didn't really
3	disclose a lot of numbers, and that was frankly on
4	purpose because the procurement options report was
5	going to be followed by the procurement itself.
6	So we wanted to be careful not to
7	again, take in the lesson of, well, it's 1.8
8	billion. That was one point. Then you issue your
9	procurement options report. If you put another
10	and this is for communication purposes, not what
11	you're sharing with the funding partners behind the
12	scenes. It's to manage what's the project cost
13	going to be.
14	Well, it will be at financial close.
15	That's the main event. So let's just make sure as
16	we're going down the journey of at least the public
17	part of the report and this is not just unique
18	to the City of Ottawa. Like, every municipal
19	project we've done, we try and set that balance of
20	here's the delivery, here's the budget, here's how
21	it's going to work, but you also want to make sure
22	you don't provide too much information that's going
23	to hurt your procurement down the road because you
24	have a competition that you and you want to
25	provide comfort to the bidders that you've got a

1 funded program. 2 So if you're -- I shouldn't -- you 3 didn't ask the question, but if you look at the 4 procurement options report, you'll see that it 5 talks high level about cost, but the detailed financial stuff was being shared with the two 6 7 funding partners, and the City primarily was doing 8 that affordability assessment to say, Do we think 9 we have a big enough budget envelope here? 10 KATE MCGRANN: Okay. And that approach is to sort of strike a balance between transparency 11 12 and maintain the environment in which competition 13 can drive the price to --14 REMO BUCCI: Correct. 15 KATE MCGRANN: -- where it should go? 16 REMO BUCCI: Correct. And 17 municipalities have annual budget cycles. So part 18 of financing's job is to say, What's it going to 19 cost this year, but let's make sure that we've --20 and those ones down the road, the levers are going 21 to change, so we just need to make sure we can 22 control those levers. 23 Ultimately, if you're wrong and your 24 municipality is -- the only one you can do is raise 25 your property taxes, right, and that's the

1 worst-case scenario beyond what you forecasted, 2 right, beyond what you forecasted or allotted to 3 the project. 4 KATE MCGRANN: Specifically with 5 respect to the use of milestones, what was the 6 advice coming from the precedent projects? So 7 Canada Line. In Denver you spoke to --8 Denver Eagle we did. REMO BUCCI: 9 Canada Line was they thought it worked well because 10 they had multiple milestones. And, Kate, like, I'm 11 going to tell you they're monthly, but someone may 12 call them event-based as well. 13 You can have -- you can have -- you can 14 have some milestones, like, you know, you drill 15 certain boreholes, and I'll pay you those. You can 16 have a mix. 17 You can appreciate when you've got a project schedule that's, let's say, 100 pages, six 18 19 levels deep, you can be really creative how you 20 define events on a monthly or sub basis, but 21 Ontario line was hundreds of payments. Ontario 22 line. 23 KATE MCGRANN: Wasn't Canada Line 24 monthly progress payments? 25 REMO BUCCI: Yeah, yes, it was, but

1	what I'm saying is it might have also been and
2	I'm going by memory here, a combination of sub
3	events within the month as well. So they were
4	frequent payments that were, at the least, monthly.
5	Maybe I'll describe it that way.
6	KATE MCGRANN: And so was it it
7	sounds to me like Ottawa is departing from the
8	model that Canada Line used.
9	REMO BUCCI: Correct, correct, correct.
10	KATE MCGRANN: Did you run did you
11	speak to Canada Line about
12	REMO BUCCI: Yes.
13	KATE MCGRANN: What was their view
14	or what was
15	REMO BUCCI: They thought it worked
16	well because it gave them flexibility in particular
17	to so what Canada Line did is said, I'm only
18	going to pay you this amount per month, okay, but
19	what you do during that month I'm going to allow
20	you to change during the construction period to
21	allow for the flexibility of your schedule.
22	So as long as you if I if you
23	were going to if I was going to pay you for \$100
24	of value and you thought you were going to put
25	yellow pipe down for that and you had to do green

1 pipe somewhere else, I'll pay your for \$100 a green 2 pipe. I'm okay with that because I'm getting value 3 for it. 4 And you're doing it because you thought 5 during the -- when you put your bid together, that 6 you were going to put the yellow pipe over here, 7 but now you have to put the green pipe over here. 8 You can do that shift, but I'm only paying you 9 \$100. 10 KATE MCGRANN: So what discussions were 11 there, if any, before the procurement model and 12 milestone payment approach was set about what may 13 flow from the lack of flexibility that comes from 14 milestones payments as opposed to monthly progress 15 payments? 16 REMO BUCCI: It's primarily that. The 17 City's concern was from an administration 18 perspective. The other complexity is when you set 19 those milestone payments and they're -- effectively 20 you think about it, it's the short-term 21 construction financier, lender that's being paid, 22 and they're institutional investors. If you want 23 to change that milestone event, you got to go get 24 lender consent. 25 So how is the risk of KATE MCGRANN:

1	that lack of flexibility accounted for? Like, what
2	was done to account for the fact that your let
3	me put it to you this way: What discussions did
4	you have about the fact that flexibility is going
5	to be limited as a result of this?
6	REMO BUCCI: The compromise was
7	let's pick let's set a set of rules that give us
8	maybe not monthly but enough during the year that
9	you don't have an accumulation of financing, and at
10	the same time, we're not going to tell the and
11	we also sorry, again, collectively "we" said to
12	the proponents, Here's the list of milestones we
13	think are appropriate. If you think there's better
14	ones, tell us and we'll consider them.
15	And then a set of rules was created,
16	and they got to pick that you know, from that
17	long list of milestones which ones were the most
18	appropriate for their project and when they were
19	going to occur. That was the mitigation note that
20	was that was chosen.
21	Recognizing the constraints were
22	it's going to be very difficult to change that
23	milestone payment once it's set because it's
24	event-based, and if you want to change it, you need
25	to have lender consent.

1	Those were realities that we knew at
2	the time, but, again, it was trying to come to this
3	infrastructure I don't want to speak on behalf
4	of Infrastructure Ontario, but my what my
5	understanding from them is they didn't want to use
6	the Canada Line model. That did not fit with AFP.
7	Couldn't go with the hard, like your T
8	example, the 407 example. Everyone recognized
9	that. So the milestone regime that was used for
10	Ottawa and never used since was what the what we
11	collectively thought at the time met the
12	requirements of both all the parties including
13	the federal, provincial funding authorities, the
14	City of Ottawa, and Infrastructure Ontario because
15	they signed off on it.
16	KATE MCGRANN: You mentioned the
17	concept of chasing milestones earlier, and I take
18	it that's the idea that instead of making decisions
19	that would advance the project overall
20	REMO BUCCI: Correct.
21	KATE MCGRANN: as fast as possible,
22	you were making decisions to advance the project
23	towards a milestone so you can achieve that
24	payment; is that fair?
25	REMO BUCCI: Correct. I'll give you an

example, right, like --1 2 KATE MCGRANN: Actually just let me ask 3 the next question before you do that. Did you see 4 that chasing-milestone behaviour on the Ottawa 5 project? б REMO BUCCI: Well, there you go. I was 7 going to give you that, so thanks for that. So the 8 best example of that was -- I think in 2016, there 9 was a fairly major tunnel collapse, right, and if 10 you think about this, what -- so what RTG did is 11 they had to react really rapidly to deal with that 12 tunnel collapse because they were, like, literally 13 this far away from completing the tunnel, right. 14 Bad luck for them. And they had to complete the 15 tunnel because there was a milestone payment that 16 was due, right. 17 Now, and this is my opinion, you can 18 make the argument that they would have been better 19 off keeping their resources deployed on completing 20 the track and the systems and the integration on 21 the other parts of the line in stages that were 22 underway at the time, okay, and deploying some 23 resources to fix the sinkhole and continue on with 24 that work, but the problem they had is they didn't 25 have money coming in.

1 In order to have the money coming in, 2 they had to finish the tunnel, and now they have 3 this disruption they have to deal with, and I think 4 it took them a month, right. 5 So that's an example of, well, I've got 6 to chase the milestone because even though it's 7 probably not the right thing to do -- and this is 8 my opinion, just other people may disagree with me, 9 but that's an example of one that is -- I think 10 that's a good example of -- and that's an actual 11 event that occurred. 12 So that's the danger that you have 13 unless your milestone is completion, right, because 14 if your milestone is completion, you're like I can 15 still redeploy my resources, right. 16 Yeah, so that's probably the best 17 example I would use. I would say that in a public 18 forum as well if I was asked that question. 19 KATE MCGRANN: Were you involved at all 20 in discussions about changes made to the 21 milestones? 22 REMO BUCCI: Not during -- because 23 by -- at financial close, we're done. We really 24 weren't involved in the construction 25 administration.

1	I would say that when we went to meet
2	with the City's construction staff, project office
3	staff and the lessons learned report if you want
4	to go and look at the section in the lessons
5	learned report that talks about milestones,
6	that'll that's when we got an ear full from
7	the from the from the from the I
8	shouldn't use that term.
9	Let's put it this way: The issues of
10	the administration and milestones were articulated,
11	and we documented them in our report.
12	KATE MCGRANN: And the issues with the
13	administration, were they the schedule-based issues
14	that
15	REMO BUCCI: Scheduled-based, lender's
16	consent. Because even in a situation where it was
17	described to us, we agree we should change that
18	event because things have changed, right.
19	KATE MCGRANN: Yeah.
20	REMO BUCCI: Then it's, like, now we
21	got to get lender's consent. Oh, my gosh. Okay.
22	All right. Let's how do we how do we deal
23	with this?
24	KATE MCGRANN: Bear with me for one
25	second. You had mentioned some issues with

1	provincial funding, or I thought that you did. Can
2	you talk about that a little bit?
3	REMO BUCCI: Yeah, so some of this
4	relates to how you account for the long-term
5	financing. So initially, it the rough construct
6	was 1.8 billion plus or minus the projectco was the
7	three bidders.
8	Of that, there was going to be these
9	milestone payments during construction. When
10	construction was done, 400 million would remain
11	that would then be amortized in equal payments over
12	the 30-year operating period.
13	The issue was whether or not and the
14	City was effectively funding that 400 million
15	because remember the way that the money flowed in
16	and flowed out.
17	So how you account for whether that
18	money is eligible to the City's share and it's
19	an accounting issue. It's not a cash flow issue.
20	This became problematic, and the City actually
21	engaged with the province to try to and I'm
22	you know, I the nuances of that I don't
23	remember. It's something more for City finance.
24	But as an example, that's an example
25	where the payment regime sort of trips over, let's

1	call it, accounting standards that affect how the
2	City can account for the money and potentially
3	affect its funding.
4	They got through it, but it was an
5	issue. That was a very obvious one. And that
6	wasn't clear that was blind to the procurement.
7	That was behind the scenes between the City finance
8	and the province specifically.
9	KATE MCGRANN: At what point in time in
10	the project did this issue arise or these issues
11	arise?
12	REMO BUCCI: That would have been
13	during the RFP period, so once so let's okay,
14	if we can just so go to council in the summer.
15	They issue an RFQ. You start working on the RFP at
16	that point in time, right.
17	Infrastructure Ontario is now engaged.
18	They're set up within the City office, and you've
19	got an integrated project team that's there. You
20	have legal advisors on board. Deloittes is sitting
21	in the financial working group working under a
22	group led by Infrastructure Ontario, and we've got
23	a set of, let's call them, issues and challenges
24	that we need to resolve to structure and get the

1 Construction period payments is one, 2 affordability, how you deal with it in the RFP, 3 Behind the scenes, City finance is et cetera. 4 doing its affordability assessment and determining 5 how that's going to work. 6 So that's all being done at the same 7 time, and as we're charging collectively to getting 8 anticipation RFO -- you know, you'll have your 9 shortlisted team set. Here's the date. You want 10 to get them the RFP relatively quickly shortly 11 thereafter because they're mobilized, so we need to 12 make all these financial decisions out of the way 13 so we can put contract documents out. 14 All of that work was happening to 15 understand is there a constraint in the funding 16 agreement that's a project agreement issue, or is 17 it a funding agreement issue, and the one I just 18 mentioned is a funding agreement issue. It wasn't 19 a project agreement issue. 20 But it's driven by the payment regime 21 that's -- but once you lock that down and the --22 you -- you make that decision to say this is how 23 we're going to pay projectco. Good. Out of the 24 That's one degree of freedom done. Now I can way. 25 see what the impact is on my funding agreement.

1 That doesn't impact my RFP, but as I'm 2 engaging with Ontario to get those terms and 3 conditions of that financing, funding agreement 4 done because I need that when I get to financial 5 close, I'm working through some of the issues on eligibility. What are the sign-offs we need to 6 7 have to have the money flow. Because obviously the City's concern is 8 9 it is always paying projectco. The funding doesn't 10 come direct from Canada or Ontario. It comes 11 through the City. 12 If there's a lag time between when the 13 City issues the remit to projectco and gets its 14 funding from Canada or Ontario, it has to pay for 15 that working capital, if you will, and they wanted 16 to try and cut that down to make sure that wasn't 17 months. It was -- I should say 60 to 90 days is 18 the general idea. Any more than that, then that's 19 another funding cost, financing cost you didn't 20 anticipate. 21 So they were trying to make that 22 alignment of money come -- City -- invoice from

²³ projectco to the City, City pays projectco, City ²⁴ issues invoices to Canada and Ontario, and that ²⁵ money is flowing fairly mechanically without any

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1	major issues. So that's happening behind the
2	scenes. That's not an RFP issue.
3	KATE MCGRANN: Okay. It becomes a
4	project agreement issue I would expect, though.
5	REMO BUCCI: Only only to the extent
6	that I wouldn't characterize it that way. It's
7	a you need to make the decision on how your project
8	agreement is structured, then you work backwards
9	and say, okay, now can I solve it within the
10	funding agreement.
11	And the idea was, okay, yeah, it's an
12	issue, but it's not going to be it's not going
13	to kill the project. You have to just work with
14	the policy makers to find a solution.
15	KATE MCGRANN: Okay. And at a very
16	high level, the nature of the issue that needed to
17	be resolved as between the City and the province is
18	how what is it?
19	REMO BUCCI: Just say how they
20	accounted for the private financing within a
21	within a funding form, within a project within a
22	funding agreement that assumed, I would call it,
23	traditional level of funding, meaning there isn't
24	any private financing.
25	My opinion was that the and both of

1	them actually, both Canada and Ontario's funding
2	agreements didn't take private financing income.
3	I'm not going to use the word P3. Private
4	financing, any deferred payments into account.
5	Now, as an analogy, if you look at the
6	way P3 Canada was set up later, they did. Their
7	legislation, their regulations all took into
8	account that it was going to be some form of
9	payments like we're talking about.
10	So as an example and I worked on
11	five P3 Canada projects. That was never an issue
12	because they factored in the fact that there would
13	be these type of payments during construction. It
14	didn't affect the eligibility or the form of
15	payment because it took the delivery model into
16	account. So I think it's just a maturity where
17	Canada was at at that time, Canada and Ontario.
18	KATE MCGRANN: Is one of the is an
19	issue or the key issue really the cost of financing
20	and how that gets worked into the various payments
21	that are being made along the way?
22	REMO BUCCI: Yeah, yeah, it is
23	because and, again, like, if you're if you
24	look at Ottawa's scenario is go back to that 2009,
25	you know, 600 million of 1.8. Well, 1.8 weren't

1 the project costs, and that number wasn't changing. 2 KATE MCGRANN: Switching focus for a 3 second, which I'm doing rather abruptly because I 4 only have so much time with you today, the decision 5 to exclude operations from this model -- so the two 6 precedent projects that we have spoken about were 7 both design, build, operate, finance, maintain. 8 Ottawa is a design, build, finance, maintain. 9 So can you just describe to me what 10 went into the consideration of excluding the 11 operations for starters? 12 REMO BUCCI: So the first is the system 13 is going to grow, and I have to say -- and I went 14 through all the documents, disclosure this weekend, 15 and somewhere in there you'll see this analysis 16 that we've done on the -- I think it was schedule 17 38, the project expansion protocol, and anticipated 18 three new stations to the west. 19 So at the time, one of the things we 20 wanted to solve is to say, all right, this is --21 it's a transit system. Transit systems by their 22 nature -- most of the time. Canada Line was 23 different because it was end-to-end. 24 Unless this endpoint and this endpoint 25 are never going to change, you want to make sure it

1	can grow. Now, any time you enter into a
2	contractual arrangement, particularly something
3	like an AFP that sets rules and it's designed this
4	way to make sure that you're only go to pay for
5	what you defined in the contract.
6	It really tries to limit changes
7	because it's about project governance and managing
8	scope, if you will. So you want to build
9	flexibility in to say, well, I don't want to tie my
10	hands here because I want the project to grow.
11	The thought was we have three new
12	stations potentially because that was on the
13	program in 2010, because by the way, there wasn't a
14	lot of funding available for transit projects. We
15	had gone about 20 years in Canada where there was,
16	you know, infrastructure gap issues and things like
17	that, but there weren't a lot of funding for
18	infrastructure.
19	So at the time at the time of
20	drafting of the project agreement, the thought was
21	three stations, that's something you can do through
22	a variation in the project agreement. Effectively
23	the way AFP describes a scope change.
24	We could negotiate that out, but you
25	know what, let's make that job simpler. If its
L	

1 operations -- if the City has operations, it makes 2 the -- you know, it makes one less moving part we 3 have to negotiate there. 4 And the other thing -- and this is just 5 sort of a general observation I would make with the 6 municipalities is they're very focused on who the 7 employees are, if you will, that are dealing with 8 the customers, the interface because rightfully, 9 you know, councillors feel they're public 10 accountable. 11 If there's an issue, it's a lot easier 12 to call someone up, you know, a commissioner who is 13 a direct employee of the City versus a contractor. 14 So operations, if you think about the 15 LRT system in Ottawa, the customers really don't 16 run into RTG because most of their people are the 17 maintenance facility or they're doing maintenance 18 on the line. The drivers are OC Transpo people. 19 That's the City employee. 20 So I think it's about -- it's about 21 accountability of the customer experience, and it 22 was about flexibility for the next stage of 23 projects, and then that accountability also was at 24 the time the -- because you always have to look at 25 these issues of labour.

1 And particularly you run into them on 2 transit and wastewater projects where you now say, 3 okay, if I'm now introducing a private operations 4 or maintenance into the program, it's a greenfield 5 new employees. It's not about them being unionized or 6 7 not. Like, that's not the issue. Like, the 8 union -- private companies deal with unionized 9 labour all the time. It's not their issue. Tt's 10 whether or not they're City employees or whether or 11 not they're City employees that have a right to 12 bargain for that work, right. 13 And at the time, the City had a legal 14 opinion done because its maintenance of light rail 15 on the O-Line -- so this is the predecessor to the 16 Trillium Line -- was contracted out. 17 The City didn't do light rail 18 maintenance. It was already done by third parties, 19 but the City was operating buses, and they were --20 and the thought was you can train a bus driver to 21 operate, particularly if it's computer-based train 22 control. This is not -- it's more like you've 23 got -- like, they call it, you know, like, a stop 24 switch, an emergency switch. 25 So when you look at flexibility,

1 expansion, a potential constraint on labour if you 2 include operations, then you do it maintenance. 3 And if you look, for example, Finch 4 light rail and Eqlinton light rail or DBFMs because 5 they have to be integrated in the TTC network. And б I wasn't part of that, but same logic would apply, 7 right. 8 So I think you would always start 9 out -- if you're looking at a pure output-based 10 contract, the easy -- let's go to the equivalent of 11 the construction period payments. 12 The easiest way to measure a train 13 system is to say is it on time, punctuality at the 14 station, and is it reliable. Did you give me the 15 number of trips over -- like, that were in the 16 schedule in the month. And I'll give you degrees 17 of freedom on all of those, but I'm going to 18 measure you on these things, and if you meet them, 19 I'll pay you a certain amount. If not, there's 20 deductions. 21 And you're always going to start there 22 because that's the easiest way to measure it. When 23 you -- when it's not operations and they don't have 24 the time dimension because they're not driving

²⁵ anymore, then you have to have a different regime,

and here it was the kilometre-based system. 1 2 But that was the logic. So it was --3 it probably -- it gave the City the flex -- and by 4 the way, it was a really good decision in foresight 5 because 2011, 2012 comes around. б Ontario and Canada say, hey, we've got 7 billions of dollars available now. The City of 8 Ottawa says, well, Stage 2 isn't just going to be 9 three stations. It's going to be to the east and 10 the west, and we're going to go down to Trillium 11 Like, we're going to really expand, and we Line. 12 want Stage 3. Like, we just don't want... 13 So in hindsight, keeping the operations 14 was a very smart move, even though at the time we 15 thought it was only three stations, but it was also 16 driven by, you know, the very practical issue, I 17 don't think they need to hide behind it. It was --18 you know, labour is always something you need to be 19 cognizant of, right, because you've got these 20 agreements that you need to be -- you need to be --21 you need to be respectful of. 22 So I think it was a -- it was driven by 23 And I can't tell you one was more impactful those. 24 than the other. I think they were all part of that 25 mix.

1 KATE MCGRANN: So having the City 2 retain operations introduces an additional 3 infacing [sic] as far as the running of the system 4 goes because now the City operators are interfacing 5 with RTG's maintainers at RTM; is that fair? 6 REMO BUCCI: Yeah, it's train control. 7 It's automated train control. And to be clear, I'm 8 qoing to say operations is -- let's -- I'll 9 describe it this way: Driving the trains or 10 sitting in the control booth, and number two, 11 dispatching the network, the control centre, okay, 12 recognizing that at the maintenance facility, 13 Belfast station, and in the way the project 14 described it -- project agreement described it, 15 projectco is responsible for getting the train 16 organized every morning, bringing it to -- if you 17 think the bay where the drivers show up, and 18 there's your train ready to go, it's clean, it's 19 got to right number of trains on it, we've 20 inspected it, tick, tick, tick, ready to go, and 21 now you come out of the coffee room, I'm 22 simplifying it, you walk onto the train, and you 23 drive out. You're at your first station when you're supposed to be there, right. 24 That interface 25 is not a challenge, particularly for automated

1 train control. 2 KATE MCGRANN: So my question was going 3 to be what consideration, if any, was given to the 4 need to manage that additional interface? 5 REMO BUCCI: Exactly the way it was --6 the way I described it was the way the output 7 specification describes their obligations. And 8 what -- and I'm simplifying. 9 What the OC Transpo drivers do is they 10 do their safety inspection, get on, go. If not, 11 they say, hold on a sec, you guys missed this 12 thing. This light is broken. Why is this light 13 broken? I can't drive the train with that broken 14 light. Oh, send it back. Then that's a -- that 15 would be like a service -- that's a service KPI 16 that wasn't met. 17 KATE MCGRANN: So the hand-over at the 18 beginning of the day is -- that interface is 19 accounted for by the fact that the obligation is 20 put on RTM to deliver the train in working 21 condition on time. 22 REMO BUCCI: Correct. 23 KATE MCGRANN: What about interfaces 24 throughout the day, reactionary maintenance, issues 25 that arise on the trains? How -- what

1 consideration was given to accounting for, 2 controlling, managing that interface in the project 3 agreement? 4 REMO BUCCI: So let's talk about the 5 first one, which is you're driving -- okay, it's automated train control, but let's just say now I'm 6 7 the driver. I'm controlling it, right. I'm 8 sitting on the train. 9 So the time dimension is now in control 10 of the City. So you can't blame projectco if 11 there -- you can't necessarily if the train is late 12 because now you need to look at the attribution of 13 that. 14 Was it a driver issue? Was it a --15 I'll call it a system-wide, like, from the City 16 dispatch centre, or was it a problem with the 17 vehicle availability, the station availability, the 18 track that caused that to occur. 19 So the lens and the payment mechanism 20 and the output specification where you see that 21 split is -- first of all, service availability was 22 defined by kilometres. 23 And what was done there is the City 24 then went through their technical advisors, did 25 simulations to say based on the number of trains

1 that we have on day one -- I'm sorry. 2 Based on our ridership forecast over 3 time, okay, the amount of people we think are going 4 to be at the platforms at a given point in time 5 every day -- morning and peak are parallel, so it 6 doesn't really matter which one you pick. 7 We think we need this many trains, 8 okay, or capacity. You don't maybe worry about the 9 number of trains because the projectco is picking 10 the size of the trains. 11 We need to have a train that has this 12 many seats. Think of it that way, right, because 13 we have riders to pick up, and we want to make sure 14 that these riders -- there's a certain standard. 15 Do you want every rider to be -- so 16 none are left on the platform. So you make these 17 decisions, right, in terms of capacity. 18 So you do that, and then you run some 19 simulations and you say, well, then when's the next 20 train need to come up because people are now 21 walking down the platforms, and they're building up 22 on -- based on that ridership forecast. That's 23 your frequency. 24 So you have your frequency and your 25 capacity of the trains. You program that in,

1	right, and then you come up with standards that
2	say, all right, in order for me to meet that
3	frequency, punctuality, and number of trips,
4	reliability, I need this many kilometres over the
5	day, right, and the trains have to have this much
6	capacity.
7	So if you give me trains of this size
8	and they deliver this many kilometres over the day,
9	effectively I'm going to get the punctuality and
10	reliability that I'm going to have in my schedule,
11	because you're bidding back kilometres. I'm going
12	to develop clock-facing schedules for the for
13	the customers to use, but it's going to work
14	because I'm taking those kilometres into account.
15	Now you got to say, all right, so that
16	does work as now, let's say a kilometre is
17	missed. All right, so is it missed because the
18	driver inadvertently hit the stop button because
19	they were worried that there was an emergency event
20	that was or wasn't the case?
21	Okay, so we need an excusing cause for
22	that. All right. We need to strip that out.
23	Driver issue, not your problem that the kilometre
24	was missed.
25	Did the passenger stick their arm in

1 the door for some reason and cause the train to be 2 delayed and emergency protocols. Oh, we need an 3 event for that. 4 So you work through those sorts of 5 things, and you create a set of rules called 6 projectco excusing causes which are in Schedule 20 7 that say, all right, here are the events that if 8 they're outside of your control that happened, 9 we're going to leave you off the hook for those 10 missed kilometres, but everything else is up to you 11 because therefore, what that says is if the train 12 isn't on time or didn't deliver my kilometres is 13 because there was a problem with the vehicle, or 14 there was an issue, an unforecasted maintenance 15 event on the track that you didn't take into 16 account, and because of those things, that train 17 had to run slower, and therefore, I didn't get the 18 kilometres, so therefore, you get a deduction based 19 on those kilometres. 20 In order to differentiate between --

In order to differentiate between - you know, a kilometre in the afternoon or the
 evening or on the weekend is not the same as a
 kilometre in the morning.

So remember, you're deciding on
 capacity on your peak periods, right, and, you

1 know, the easiest way to look -- they're looking at 2 YouTube at the events that occurred when the trains 3 weren't available, you know. 4 So system events were then introduced 5 to say, you know what, these peak periods are 6 really important for us, so if we lose a certain 7 amount of service in the peaks, you get -- this is 8 the idea of a financial deduction, so like your 9 driver's licence, right. 10 You get -- you know, you get a speeding 11 It's a financial deduction, but the size ticket. 12 of the speeding ticket, the amount of points you 13 accumulate depends on how -- how -- like, were you 14 5 kilometres over the speed limit or 100 kilometres 15 over the speed limit. 16 So what the system events did is said 17 if I -- if the City lost service in the peak 18 periods, 65 failure points apply. It's the right 19 number, but that was all calibrated to say 20 projectco, RTG, you got to deliver train service 21 during the peaks. Off peak we got a lot more 22 flexibility because if there's a nonavailability 23 event, there's not going to be as many people 24 standing around, and the City doesn't have to 25 deploy buses to get them to work or to miss their

1 appointment or to miss a class. 2 So that's how that all came together. 3 That was put together by, let's call it, the 4 commercial team, like, where I was working with 5 Infrastructure Ontario and the payment mechanism, б the technical advisors. 7 And then during the bid-open period, 8 all of that was, you know, debated, adjusted 9 through addendum, through the commercial 10 in-confidence to get to the deal structure at the 11 end of the day. 12 And that was the split of operations. 13 There wasn't a clear precedent that we saw that 14 worked for that type of regime because most of the 15 projects in North America, and the ones I cite were 16 all operations. 17 In the UK, they were more mature 18 systems. They had already split their -- and 19 they're interregional, so they already had an 20 entity that was doing rail operations, vehicle 21 maintenance, track maintenance, and they're 22 contractual splits were done. 23 But an integrated system, when it's 24 greenfield -- and you don't want to get into an 25 attribution because the moment you make that split

between, oh, it's a rail issue, go back to 1 2 rail-wheel interface. John was concerned at the 3 beginning. 4 The moment that kilometre is missed, 5 not because of one of the causes of the City or the б driver, now the way the City of Ottawa's regime 7 works is whether it's a vehicle, a track, a station 8 issue, it doesn't matter. Those are all degrees of 9 control that are -- that projectco has. 10 And the project agreement had set it up 11 that way, so you no longer have to get into --12 other than those events the City had control over 13 that are passenger caused, everything else from an 14 attribution perspective you don't need to worry 15 about because it's on their side of the -- of the 16 responsibility ledger. 17 KATE MCGRANN: We'll take the morning 18 break now and come back with some questions. 19 REMO BUCCI: What time do you want to 20 come back? 21 It's 10:24. Let's take KATE MCGRANN: 22 ten minutes. We'll come back at 10:35. 23 REMO BUCCI: Perfect. 24 -- RECESSED AT 10:24 A.M. --25 -- RESUMED AT 10:35 A.M. --

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1	KATE MCGRANN: Before the break, we
2	were talking about the payment mechanism that
3	applies throughout the maintenance period.
4	Were there any particular issues that
5	the bidders pushed back on during the period that
6	the City held as far as the application of the
7	payment mechanism or what it looked like?
8	REMO BUCCI: No, nothing major. I
9	mean, you the the payment mechanism
10	interaction during the bid-open period is part of
11	the project agreement, CCMs, because you got the
12	design the design stream where the output
13	specifications are being thought about, so for
14	example, how those surface levels are being
15	defined.
16	So that was on the technical stream,
17	but the way the meetings are organized usually do
18	technical on one day, legal and, like, where the
19	payment mechanism fit in, so they're coordinated
20	very well.
21	And then you get a cross-section of
22	members on both sides that are involved with all of
23	those things, so they're not done in a vacuum.
24	Deloittes was present or Deloitte

²⁵ representatives were present at the CCMs for the

1 payment mechanism specifically even though we were 2 providing input into the output specification 3 behind the scenes, the service failures, quality 4 failures, et cetera, all that stuff. 5 I would say that the payment mechanism б itself was a relative nonevent from the 7 perspective -- yes, there were comments and issues, 8 but it was not a strategic issue. The strategic 9 issue that we were dealing with was affordability 10 more broadly. 11 So, for example, whereas when the RFP 12 went out, I think the amount of private financing 13 was 400 million as -- again, collectively we were 14 working through the process, and, you know, I think 15 principally because of tunnelling issues and some 16 of the geotechnical risks there. 17 And it was communicated that the 18 project budget that was -- that was effectively the 19 affordability cap or the parameters that were the 20 affordability cap which were the payments -- the 21 total payments during construction and the amount 22 of long-term financing were -- and operations and 23 maintenance were not in that definition because the 24 City was more focused on -- at that time on the 25 capital side and the funding agreement components

1 because it had more flexibility on the operations 2 and maintenance end, that the proponents 3 articulated here's what's driving our concern. 4 The payment was not one of those. 5 Otherwise, we would have recal -- that's the -б that's an easy thing to do on other projects. We 7 go and recalibrate it. We would say which KPIs are 8 causing issues to you? Is the slope of the 9 availability curve of ductions for kilometres lost, 10 is that too steep? Is the failure points we're 11 assigning to a particular event too large? Right. 12 Those are really easy changes to make. 13 They were not a problem. They weren't a problem in 14 the procurement, and frankly, they weren't a 15 problem when the City had to renegotiate them as --16 I know Stage 2 is a different issue, but the City 17 negotiated maintenance services with RTG for 18 Stage 2 in 2016-17, and the payment mechanism had 19 to be recalibrated because the systems had to be 20 expanded. 21 The issue of the ability to meet that 22 performance regime was never a problem until it 23 became a problem based on real experience. 24 So nothing -- to go to your question, 25 it did not come up during the -- in my opinion and

1	my recollection, it was not a strategic issue
2	during the bid. It was more the affordability
3	itself and whether or not and that's why the
4	open period was extended to deal with you know,
5	some value engineering was done. Like, could the
6	City take you know, what does the City really
7	need, right.
8	Like, you start looking at the
9	stations, the number of escalators, elevators and
10	things like that. There was some ideas that the
11	proponents bring forward that were good, so the
12	City took them on, but ultimately it was it
13	was I think the biggest stress was on the was
14	on the tunnel, the geotechnical risk.
15	KATE MCGRANN: Okay. Let me come to
16	those with some questions in a second, but before
17	we leave the payment mechanism, I think two other
18	questions.
19	So my understanding is that there's two
20	aspects to the payment mechanism: There's failure
21	points that can be accumulated in the event of
22	failures, and they are accumulated over time over
23	months, however long they need to be, and there are
24	eventual triggers associated with those; is that
25	right?
l	

1 REMO BUCCI: Yeah, and they get reset. 2 So the 12 months is the maximum window, 3, 6, 12, 3 months and different ones apply, and then the idea 4 is -- and this is to get to the point of -- you 5 don't want to have really bad performance or just 6 to the point of its kind of acceptable on a daily 7 basis, but it's repeated over a long period of 8 time. 9 So accumulated poor performance, I got 10 you, but at the same time, if you had some events, 11 and fair enough, but you dealt with them, 12 months 12 plus a day, we wipe them away and you get a clean 13 That's failure points. slate. 14 KATE MCGRANN: Okay. 15 REMO BUCCI: That's the idea with 16 failure points. 17 KATE MCGRANN: That's great. And then on the deductions, I understand there are 18 19 deductions from the payments that are made on a 20 monthly basis as a result of a failure to meet 21 KPMs; is that right? 22 REMO BUCCI: Both from -- just -- we 23 use the terms availability base, so is the stations 24 available? Are the kilometres of service 25 available? That's availability. And then there's

1 service failures and quality filatures. 2 Quality filatures are typically more 3 for things like you needed to give me a report. 4 You didn't give me a report. It's on or off. 5 There's no rectification for that. Service failures are, oh, the seat was 6 7 You need to fix it, and if you don't fix it torn. 8 within a period of time, then you get a deduction, 9 and if you don't fix it within a period of time, 10 those deduction ratchet up. 11 KATE MCGRANN: Okay. And was there any 12 sort of ceiling or cap built into the deductions to 13 apply by month or otherwise? 14 REMO BUCCI: Well, this where you get 15 into the basic prem [sic] of AFP. So the reason 16 why you have \$300 million of financing that's 17 spread out over the operating period is to share 18 the risk, and if you now use the term the financial 19 pain of poor performance. 20 In a service-based contract, if you 21 deliver -- if you don't deliver service, I might 22 not be paying you for a certain amount of that 23 month, right, but you're not feeling any financial 24 pain, right. 25 So if you're capping the deductions,

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1	then why would you have private financing at risk?
2	The private financing at risk is there primarily
3	for if there's a disaster scenario and the
4	services it's my opinion, isn't delivering
5	and I think it's what AFP is based on, but I don't
6	want to speak for you know, AFP, P3, you know,
7	call it what you want. I'm just using AFP because
8	that's the form in Ontario here.
9	If you're going to have private
10	financing at risk and it's costing you sorry, if
11	you're going to have private financing that's
12	costing you more, roughly 6 percent versus 4, 6 and
13	a half if you waited the cost of the equity, and
14	it's not at risk, then you don't need the
15	financing, right. You have you can go and get
16	private you can get public financing at 4
17	percent.
18	By the way, that financing still shows
19	up on your balance sheet as debt. It's not a
20	source of financing. It's an and it's not an
21	input; it's an output.
22	The objective is to say, if there's a
23	problem with the system, you've also invested in
24	it, and financially you and me, public sector,
25	we're shoulder to shoulder here in trying to be

we're shoulder to shoulder here in trying to be

1 incentivized to make sure we collectively perform. 2 So if you decide to cap it, I would 3 say, well, that's not AFP. Then you might as well 4 move to a services-based contract, right, and then 5 you don't need all of the structure of a 6 special-purpose vehicle to drop down agreements and 7 all the other belt and suspenders that come with 8 the private financing. It's one or the other. 9 So I would say if you're going to cap 10 it, then why do you have the -- it's not AFP 11 That's the simplest way to answer that anymore. 12 question. 13 Okay. And I have some KATE MCGRANN: 14 questions because I want to make sure that first of 15 all I understand what you're saying and then 16 probably some follow-up. 17 So in terms of the idea that there 18 should not be a cap on the monthly deductions, 19 like, what in your view is the way that this was 20 supposed to operate, be that the deductions can go 21 up to the total monthly payment. If it goes beyond 22 the total monthly payment, then those deductions 23 roll into the next month? 24 REMO BUCCI: No, no, no, no, that's 25 not the intent. The intent is you've got -- your

1	financial deductions first of all, let's just be
2	clear. They're not liquidated damages, right.
3	They're incentive they're incentive regime.
4	And I don't I don't want to get
5	into and I'll just state this. Like, there some
6	positions that the City's taken because it's in
7	potential litigation here, but and putting that
8	aside, the objective is to say I you know,
9	the like, the financial if you perform so
10	poorly in a month, you shouldn't get paid because
11	you didn't deliver kilometres, right, that in
12	real simple form, right.
13	Like, if you didn't deliver those
14	kilometres, then you shouldn't get paid that month
15	because the service wasn't available and look at
16	the disruption that it's caused the city. It's not
17	a matter of rolling them over necessarily.
18	Again, I don't want to get into that
19	because that's more about some litigation positions
20	that's the City has taken.
21	But when you say cap, okay, it's like
22	you wouldn't get to a point where if you look at
23	the payment stack in the last, say, 20 percent of
24	the monthly service payment, annual service
25	payments and recovery of the financing, if you

1 decide to cap it there, then I would say what's the 2 point of having that financing. 3 KATE MCGRANN: Because the private 4 lenders are getting paid no matter what --5 They're going to get paid, REMO BUCCI: б right. 7 KATE MCGRANN: So there's no --8 REMO BUCCI: Go and get it at -- the 9 City has the source of funding available to it. Τt 10 will be at a lower cost. That 300 million shows up 11 on their balance sheet as debt anyways because it's 12 capital lease, not an operating lease. 13 So it's not a -- the financing isn't 14 there to displace public financing, and it's not a 15 requirement per se. It's because of the -- the 16 payment mechanism says I want you to have -- I want 17 to anchor performance. What's the best way to 18 anchor performance? Payment on performance. 19 So if you don't -- if you have 20 financial money invested either in the monthly 21 payments during construction, the milestone 22 payments, substantial completion payment and during 23 the operating period, you got money at risk for 24 poor performance, then you aren't incentivized as I 25 am to make sure that you're delivering the right

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1 service because it's output-based. I'm giving you 2 control basically on all the other things that are 3 not operator-based. 4 So why would you cap it then? It's not 5 And that's okay if you want to do that. AFP. If I 6 was giving advice to you, you're my client, I would 7 say that's your degree of freedom. Just recognize 8 you get some benefits for that, but here's the risk 9 you're taking for it. If that's what you want to 10 have versus this type of -- this type of program 11 where you're marking a pure output-based, and you 12 want to -- and you want to -- you want to allow the 13 other entity to have those degrees of freedom. 14 KATE MCGRANN: As far as incentivizing 15 performance, what role do the third party lenders 16 play in that incentive theory of an AFP? 17 REMO BUCCI: So I just want to disclose 18 here, like, when the -- and I'll answer that 19 question, but I'm just going to sort of skirt the 20 line here just a little bit because when the City 21 ended up having to swap the debt to deal with the 22 Stage 2 expansion, I sat on the City's credit 23 committee. 24 So I attended meetings with the

short-term lenders up to -- when the substantial

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1 completion delay was occurring and then afterwards, 2 so I just want to let you know that I did that, so 3 I don't want to comment on that specifically. 4 KATE MCGRANN: Well, and likewise, I 5 want to ask you how the dynamics of the 6 relationship changed once the City steps into the 7 shoes of the lender. So this is --8 Yeah, so I can -- I'll REMO BUCCI: 9 talk about it generally. So I just -- having got 10 that out of the way, the general concept is all 11 right, now, if you got payment -- I don't want to 12 call it private financing because I feel that 13 people misunderstand. 14 You don't want private financing. 15 You're not saying I need all this private 16 financing. It's the payment regime that is --17 that -- because you want to have -- like, if we 18 were going into partnership together, you'd want to 19 make sure I have my money, and you have your money, 20 and we're both incentivized to some extent. 21 And in the ideal world, you're kind of 22 making 50-50, right, but you can't because it's 23 going to cost you because affordability and the cost of that financing, so you try to find that 24 25 balance.

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1 And the amount that was selected here, 2 300 million, was really -- the thought process was 3 to anchor the life cycle risk. That left enough 4 over time in that midyear life of the 30 years. Τf 5 you look at the life cycle payment regime, which 6 it's pretty lumpy, right, you'll see a bunch of 7 forecasts in year 10 to 15, and that's when the 8 vehicles are being taken off-line, like your car, 9 doing major replacements to them. 10 So that amount of private finance, the 11 minimal amount is to anchor that life cycle risk 12 transfer. Got that, so now -- and during the 13 construction period, you've got short-term 14 financing to deal with those milestone payments. 15 So what do the lenders bring? Well, 16 they're going to have a technical advisor that's 17 going to look at the definition of those milestones 18 and that's going to say to those lenders at a due 19 diligence, you know, we think this is achievable or 20 we have some concerns here. 21 And those can be brought forward during 22 the bid-open period at the time of the RFP as 23 another set of independent eyes and analysis to say 24 this can or can't work. 25 And similarly during the construction

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1 period, whereas projectco, in this case RTG, had 2 their own advisors or they were doing it using your 3 own internal services reviewing the payment 4 mechanism, the appropriateness of the calibration. 5 In order for the underwriters to be 6 able to sell the bonds after the fact, they 7 would've had to have their own advisors look at the 8 calibration because in their disclosures, their --9 the CIMs they put out, the confidential information 10 memorandum to get the financing, they would have 11 had to tell the institutional investors here's the 12 deal structure, and we think it's appropriate. 13 It's on market or it's not, right. 14 So to go back to your other question 15 just if I may on the appropriateness of the payment 16 mechanism, not just RTG or the other two bids teams 17 that were looking at it, it was each of their 18 underwriter teams because once you become preferred 19 proponent, now you got to go out and sell those 20 bounds, you got to make sure you do enough work 21 during the open period to satisfy yourself that it 22 is financeable.

And that is the -- that is one of the benefits that was thought or that's theorized about the private financing, independent of what the

1 projectco brings. 2 So in our math, it's \$300 million of 3 private financing, 225 was debt, 75 was equity, 4 down payment that was provided by RTG. 5 So that's the benefit of the private 6 financing, and the idea is motivation because 7 you've got real financial pain in the event of 8 those monthly deductions or, more importantly, the failure points. 9 10 It's the default events that you're --11 that you're primarily anchoring, and that's why you 12 don't want any caps frankly. Otherwise, why would 13 you have it again, right. 14 KATE MCGRANN: Mm-hm. Okay. And then 15 when it comes to the debt swap that the City 16 executes, what was your role in advising on options 17 available, what to consider, and then ultimately 18 what was chosen? 19 REMO BUCCI: So you're now -- you're 20 now looking at a fairly substantive -- go back to 21 the discussion we had before. It's not three 22 stations. It's like you're doubling the system, 23 right. That was not contemplated in the project 24 agreement, right. 25 So now you've got a situation, and much

1	like Stage 1, you've got a certain amount of
2	funding. Same dynamics. No change, right. Bigger
3	numbers, same problems, and again recognizing that
4	every penny of private financing comes out of the
5	City's scope of those funds for which it has to
6	deliver existing service stations, right.
7	So now with respect to the extension,
8	because the way the project agreement was set up,
9	the DBFM project agreement, the lenders rightfully
10	have consent rights because they lent into a
11	project. What is their profile? It's not their
12	fault.
13	That's what those are the bonds they
14	bought at the time of 2013. They didn't buy a
15	project with an extension on it, right. Like, I
16	didn't come. You came to me. All right. I bought
17	the bonds. That's the project. Now you want to
18	change that? You want my consent?
19	Now you got to get to a situation where
20	you got to think about the complexity of that.
21	Well, in order to have you don't want to have
22	two maintainers. Why? You only have one
23	maintenance facility. You want to only have one
24	fleet of vehicles so you have a consistent set of
25	spare parts. Your mechanics are trained. It
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1	doesn't matter who they are, RTG, City, doesn't
2	matter, right. Like, TTC doesn't run mixed fleets
3	for that exact reason, right.
4	So you want to have one maintainer.
5	You're going to have one maintenance facility, so
6	you need to negotiate a variation to extend the
7	definition of where we started, kilometres, the
8	KPIs, KPMs, station availability, all that has to
9	be recalibrated on the same platform, right, to
10	deal with the extension so you can do that, but
11	you're basically doubling the monthly payment.
12	You're doubling the maintenance payment.
13	And if you think of the lender's
14	security, which is in the payment stream, you pay
15	the maintenance supplier first, then equity last,
16	they look at that equity underneath them as the
17	buffer. Much like a house mortgage, it's your down
18	payment, right. It's to make sure if there's a
19	problem, they're only taking a certain amount of
20	risk, the private lender.
21	So if you extend that, you're basically
22	not doubling the payment on the top, then they're
23	going to want to see the equity underneath there.
24	If you think about it, like,
25	proportionally, it has to get bigger, right, in

1 order to keep them in the same place. Otherwise, 2 they'll want to be what's call ring-fenced. 3 So the other concept is, well, you know 4 what, just ring-fence me. I'll take risk for 5 Stage 1, but that's what I signed up for. б So that's one option you could have 7 done, right, but now let's think about that from an integrated service. If you ring-fence the lenders 8 9 and now there is a problem with a lost kilometre, 10 you have to define what's the root cause? Is it on 11 Stage 1 or Stage 2, right. Like, that --12 administratively, that's unadministratable, right. 13 It solves the problem. If the lenders would sign 14 up for that, no problem. So deal with that. 15 Number two is to deal what we call the 16 resiliency, that buffer of financing that sits 17 underneath the lender and to bring them back to the 18 same place financially in terms of the math of the 19 amount of the principal and interest versus the 20 other payments that are available to it. 21 Well, how can you deal with that? 22 Easiest way is you put more equity into the 23 project, but that's going to cost you 11 percent. 24 That's fairly expensive. 25 You might be able to deal with things

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1 like reserve accounts. You just say, okay, well, 2 we'll set up a buffer that the City sets up on the 3 side, synthetic or otherwise. The City can use its 4 credit for that. But the same thing. I'm going to --5 you know, I'll be the buffer, so if there's a 6 7 problem, don't worry, you'll get your principal and 8 interest paid for. That could be done. 9 Canadian Infrastructure Bank didn't 10 exist at the time, okay, but the Canadian 11 Infrastructure Bank provides that type of financing 12 that's subordinate between the senior lenders and 13 the equity lenders if you get into project finance 14 terms. 15 So there wasn't a source of funding 16 available to fit in between there other than the 17 City, so the choices basically are you ring-fence 18 them, you put more equity in to restore the 19 resiliencies or you set up a set of rules, let's 20 say, for a reserve account that effectively is the 21 City -- the City is putting its balance sheet on 22 the line for that. 23 The problem to be solved is consent 24 rights because as part of the negotiation with RTG, 25 you want to give them maintenance services because

1 the rail-wheel interface, the customer 2 experience -- again, remember that? Like, you 3 don't want to disrupt that. 4 Then you've got two, two and a half 5 billion dollars of work to be done on the б extensions. How much do you sole source to them? 7 Recognizing that you've got two funding partners --8 I shouldn't be using my hands -- two funding 9 partners who are looking at it, and they want to 10 see competitive procurement because that's their 11 internal policies, right, to come back to where we 12 started before. 13 So you need to make the case that you 14 only sole sourced what you had to, and you went to 15 public procurement for the things that you didn't 16 need to go to the public procurement with. 17 So those were the negotiations that the 18 City entered into RTG with, that I was part of the 19 City's negotiation team, June 2016 and 2017. 20 At a minimum, the City's position was 21 you need to expand the maintenance -- so the City's 22 position was in order to preserve the customer 23 experience, that rail-wheel interface, I want one 24 fleet of vehicles, and I don't want to have a -- I 25 don't want to have two maintainers, two maintenance

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funding program.

1 facilities. I'll expand Belfast. 2 Well, that's RTG, so I'll give you 3 money to make it bigger. I'll also give you money 4 to buy new trains because I'm going to add new 5 kilometres, right, same trains as we have now so we 6 don't have a mixed fleet, and I'm going to pay you 7 to help you integrate the system because you need 8 to have some oversight into the procurement of the 9 train and the track and the civil works because 10 you're my maintainer. You're taking life cycle 11 risk, right, so you need to make sure that even 12 though you didn't build it, that it's to the same 13 standard that was in the project agreement, the 14 idea of no better, no worse. 15 So the City would pay RTG for 16 procurement services and design support services as 17 a consultant, right. 18 During the MOU, RTG says here's my 19 maintenance payment that I need to expand the 20 service. Here's the cost that we have for RTG for 21 the new buses -- for the new trains, sorry, and

here's the cost of expanding Belfast maintenance

facility, roughly 500 million in capital, right.

So the City carves that out of the

That goes to RTG.

The rest, the

1 civil, the stations, the track, the ballast, the 2 catenary is a design, build, finance. 3 And here's -- the tricky part is the 4 train control system, right, and there are 5 negotiations that were very circular around all of б these because RTG is a civil contract. You can 7 imagine they want as much scope as possible, right. 8 The City is trying to balance that 9 approach of customer experience, integrated 10 maintenance services. I got to get funding from --11 I anticipate when I go to my funding partners 12 that -- you know, the easiest way to defend the 13 funding is to have as much public procurement as 14 possible. 15 The train control system are really 16 It's a Thales train control system. tricky. It's 17 proprietary. The notoriously -- it's challenging. 18 It was challenging enough that RTG said we don't 19 want to be dealing with the train control system. 20 We'll deal with the vehicle supply. 21 And train control, if you talk to 22 people -- well, train -- the interesting thing 23 about train control is it's like a hundred million 24 dollar problem in about a \$3 billion project, but 25 it's a material issue if the trains don't run, so

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1 the risk is like a multiple effect. That's the 2 issue with the train. 3 So you had this hanging issue of the 4 train control. So here you've got these moving 5 parts of the risk profile, no better, no worse. 6 They have to deal with RTG to determine the amount 7 that you're willing to -- that you're willing to 8 agree to them to sole source. 9 And then you have to turn around when 10 that's all done and go get lender consent, right, 11 and the lenders could say rightfully, you know 12 what, well, we don't want to do that. And then 13 what do you do? You go to litigation process, 14 right. 15 So if you look at the timing, it was 16 working backwards. The schedule was something like 17 this: 2018 is the municipal election, right, so 18 you don't want to be -- you want to go -- you know, 19 the timelines ended up changing, but the original 20 objective was to have closure of Stage 2 in June 21 2018. 22 If you move backward roughly 12 months 23 and you sort of work backwards and say, well, I want to get an RFQ out in the spring of 2017 for 24 25 the Stage 2 parts, well, if I want to have my RFQ

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1	out in 2017, I need to have and I need to
2	communicate to the market what RTG's role is
3	because they're also going to affect who can bid on
4	the projects. They have a strategic advantage.
5	Market soundings were done.
6	You know, other bidders were saying,
7	well, if you're going to allow them to bid, we have
8	no interest in bidding on the project because they
9	have a competitive advantage.
10	So you have to sort so the MOU
11	discussions started in 2016, and the general
12	milestone on the schedule was a decision needed to
13	be made with respect to RTG's role by the at the
14	latest the winter of 2017. Otherwise, you're not
15	going to have RFQ prepared, right.
16	So discussions with RTG started in the
17	spring or summer of 2016, got to the tail end of
18	2017. The train control system, hanging issue.
19	Who is taking that risk? The City ended up having
20	to take it, but they RTG didn't want to deal
21	with it.
22	The Belfast thing was solved. The
23	vehicles supply thing from Alstom was solved,
24	et cetera, but the amount of scope for RTG on the
25	civil side, you know, they had provided I guess

1 I could say this. 2 They had provided indicative pricing to 3 do, like, the whole thing. I mean, the City was 4 open to it, so give us a price. Maybe draw the 5 split at the ballast. Like, that was a concept. б You know, someone else comes and does 7 the work that you lay the track and the systems on 8 top, et cetera, but the City is dealing with a 9 fixed budget envelope here again. 10 So, again, if the funding program was 11 different, like, what you might have in the Toronto 12 area LRTs, this wouldn't have been an issue because 13 you would have been going to the provincial fiscal. 14 Here you do, and the City is looking at 15 it thinking, well, if I now have to pay RTG this 16 much more to do that, what's my choice? I have a 17 fixed budget, and is it less stations? Is it less 18 quality of service? 19 Like, you're going to go to council and 20 say, well, we can't get what we thought we were 21 going to get. We're not going to be able to go out 22 as far to the east and the west because we've got 23 this contract, and we have to solve this problem 24 with RTG and the lenders, so you're going to get 25 less service. That's not, frankly, a good solution

1 and not something we would recommend -- I would 2 recommend. 3 So when it all got broken down and 4 you're running out of time, then you need to pick 5 options that are not your preferred option, frankly. They're not. They're a choice you need 6 7 to make, and often in these projects, you're taking 8 a choice that in its -- on its face, someone may 9 look and say, well, why would you ever have done 10 that? 11 Well, what's the next best option? 12 Ring-fencing the lenders? A reserve account? More 13 equity to buffer? By the way, we're not even sure 14 we can get that because we still don't have a deal 15 with RTG, and we want to go out with an RFO in 16 2017. 17 So the decision was, all right, you know what, if you do this swap thing, what it does 18 19 is it keeps the deal in place. You're not taking 20 the private finance, the \$300 million -- the \$225 million of bonds. Think about it that way. 21 22 There's bonds. There's an amortization 23 payment schedule. You're not getting rid of it. 24 You're just creatively going to those bondholders 25 and say, I'll give you another set of bonds that's

1	direct to me. You give me these ones, same terms
2	and conditions. I'm just going to pay you over
3	here like I would a municipal debenture.
4	It's a little bit more, 4 percent,
5	maybe 3. I'm paying maybe 1 percent more, but it's
6	worth it to me because I now have flexibility. The
7	consent issue no longer exists for Stage 2, but
8	most importantly, Stage 3 because City executive
9	was very clear to say we need to solve this you
10	need to solve this problem, not just for Stage 2,
11	but we don't want to come back on Stage 3 either.
12	We have the lesson learned from Stage 1. Let's
13	make sure this problem is solved forever.
14	Now, I want to come back to the options
15	you asked me. If you ring-fenced the lenders on
16	Stage 1, frankly it's the same concept from a risk
17	perspective as far as I'm concerned.
18	A reserve account, you can argue, well,
19	that would have you know, maybe they're still on
20	risk a bit. Okay, maybe, but I don't know about
21	that. I could say I could argue that both ways.
22	And I think administratively, that
23	would be really tough to administer. My advice to
24	the City was I don't know if that really keeps
25	them, quote/unquote, on risk. Adding more equity

1 into the project, again, you're taking scope away. 2 And here's the most important thing, is 3 this structure kept the debt in place so RTG was 4 still on hook for repayment to the City, right, and 5 we thought it was temporary. 6 Our thought process -- or the thought 7 process of the advisory team, the integrated team 8 with the City was by keeping and not -- like, you 9 could do a make-whole. You could just wipe that 10 debt away and pay the lenders off. The project 11 agreement allows you to do that. 12 The thought was, well, why not get the 13 project up and operational, then you could sell 14 those bonds back in the market. You had the 15 flexibility to do that because you kept the 16 structure in place, the secondary market 17 transaction. Happens all the time, right. 18 And in fact, when the CIB was formed, 19 the City approached the CIB with a deal to 20 refinance Stage 1 and Stage 2 by having the CIB 21 They were really interested, and the come in. 22 problem was the stacking rules. The federal 23 government has rules to say, I will only fund up to 24 33 -- 40 percent I think is the number, and all 25 sources of funds, my funding agreements, gas tax,

1 all the things that add up can't be above this. 2 The problem was, for example, the CIB 3 couldn't work. So it's not as if there were 4 other -- now, CIB came later. I'm just saying an 5 example of the City being open to try to find a 6 different way to solve that problem. 7 But at the time of the winter of 2017, 8 when you're trying to make a deal with RTG, because 9 you want to get an RFQ out, frankly I -- you know, 10 your public -- the problem that the City had is 11 those dates are in the public realm. 12 So from a negotiation perspective, 13 you're not in a great place, right. Like, they're 14 going to say, okay, well, wait. Well, you can't 15 wait. You know there's -- you got those fixed 16 commitments that are made. 17 So that -- the swap choice was made 18 primarily to solve the consent issues just to be 19 clear. And, again, not to get into the litigation 20 issues later on, I just want to point out that, 21 yes, as advisors we pointed out the credit 22 agreement has flexible -- much more flexible terms 23 with respect to default than the project agreement 24 has, but you have to dispatch default in the 25 project agreement first and declare the default

1 before the credit agreement applies. 2 And, you know, that's -- that's the 3 issue that's in front of the courts in the summertime that the City is moving forward. 4 Just 5 without getting too much into it, the swap was not 6 Yes, that was seen as a benefit potentially done. 7 at the time that it was put in place. 8 The relationship with RTG was very 9 That MOU would never have been signed. qood. The 10 City saw them as a good partner. 11 I can -- that's probably a better place 12 for the City staff, but the point being, it was 13 just a commercial deal that met the financial 14 construct. It was never like, oh, we're going to 15 have an opportunity to really put the hammer down 16 during the construction period because the City was 17 the creditor. 18 And by the way, I don't think the City 19 has used a single provision in that credit 20 agreement yet because the default -- through the 21 project agreement has not yet been declared. 22 So just to point out, the problem at 23 the time to be solved was the consent rights for 24 the extension to meet the timing. 25 Yes, there were administrative benefits

that I did and legal advisors and others had 1 2 pointed out that were obvious by reading the 3 agreement. I think City staff knew that, so we 4 didn't see that as a negative. 5 But we also said, okay, now you're б paying direct. Doesn't affect your budget. You 7 make the tradeoffs. Do you believe you're getting 8 benefits from the long-term lender and the 9 oversight? Well, the City had some experience 10 there they saw during construction, right. So I think what they saw was the 11 12 flexibility that this -- not speaking for the City, 13 I should be careful here, but my interpretation was 14 the flexibility that they saw, they weren't losing 15 any benefits of risk transfer. They were retaining 16 it. 17 RTG was still their prime contractor. 18 They're still on the hook for the repayment of the 19 debt, and the problem that was solved was getting 20 Stage 2 done at minimal financial impact to allow 21 the scope of the project to be built as it was and 22 to allow Stage 3. Now the -- Stage 3 doesn't have 23 to deal with this issue anymore. 24 You mentioned the CIB. KATE MCGRANN: 25 CIB, is that the Construction Infrastructure Bank?

1 REMO BUCCI: Canadian Infrastructure 2 Bank, which didn't exist until 2018, so there were 3 some -- there might have been in-confidence 4 meetings, but the advisory team, as part of Stage 2 5 procurement, it put together a con -- because --6 anyways, it was a problem that the CIB could have 7 solved at the time. 8 There wasn't -- there wasn't a lender 9 that could come in and be that buffer other than 10 the City or projectco. I suppose you could have 11 gone to the long-term lenders and got more money 12 from them, and they might have -- you know, what 13 is -- someone may ask the question, what's the cost 14 of consent? 15 We did a bunch of analysis. We never 16 got to the point of actually doing negotiations. 17 Maybe somewhere between 50 and \$100 million 18 would -- is the best guess. 19 KATE MCGRANN: And then you also 20 mentioned, I think, a May call. Is that the 21 termination for convenience provisions in the 22 project agreement that would --23 REMO BUCCI: Correct. 24 KATE MCGRANN: -- allow you to just 25 effectively buy out the lender?

1	REMO BUCCI: Yeah, you basically pay
2	yeah, you pay them principal and interest
3	outstanding based on a formula that looks at the
4	difference between the value of that interest rate
5	and the Canadian long-term rate as the only
6	substitute. Like, you go and you get a Bank of
7	Canada a Government of Canada bond plus 50 basis
8	points. You always have to add a half percent
9	interest.
10	KATE MCGRANN: Did you or anyone at
11	Deloitte remain involved in advising the City in
12	its role as lender throughout Stage 1 after the
13	debt swap was accomplished?
14	REMO BUCCI: I was on the City's credit
15	committee.
16	KATE MCGRANN: Okay. And did the City
17	as lender then you've been talking about a
18	consent issue, and the lenders have to consent.
19	The City is in a position where its consent is
20	required, where the lender's consent is required;
21	is that right?
22	REMO BUCCI: It issued consent to do
23	the to proceed with Stage 2, correct.
24	KATE MCGRANN: Okay. And were there
25	any other requests for consent to anything with

1	respect to Stage 1 coming from RTG to the City as
2	lender?
3	REMO BUCCI: Not that I'm aware of. I
4	mean, this is where we're it's a bit of a grey
5	line here, right. Like, I don't know if that's a
6	litigation issue or not to be honest with you.
7	KATE MCGRANN: Okay.
8	REMO BUCCI: So I should probably I
9	should probably retract that. I don't it's
10	probably not a question for me actually.
11	What I can say unreservedly is that
12	the that's not a good word. What I can say with
13	a high degree of confidence is the problem to be
14	solved at the time of the swap was the consent
15	issue on Stage 2. That was the primary reason.
16	And you asked the question of what are
17	the options available. Those are the options we
18	looked at. In order to give advice to our client,
19	we would say, well, here's the trade-offs you're
20	making, and they thought this was the best solution
21	given all the options in front of them.
22	KATE MCGRANN: To your knowledge, what
23	was RTG's reaction to the City choosing to go the
24	debt swap route?
25	REMO BUCCI: They weren't happy about

1 it. 2 KATE MCGRANN: Tell me how you came to 3 learn and what they were unhappy about. 4 REMO BUCCI: Well, the City -- so the 5 City -- there's a lender's direct agreement. So 6 you've got a project agreement, you have the City 7 project -- okay, so you got a triangle, right, with the lenders off to the right side. You got RTG, 8 9 and the you got the City at the top. Between the 10 City and RTG is the project agreement. 11 A schedule of the project agreement is 12 the lender's direct agreement, but the lender's 13 direct agreement is a three-way agreement between 14 the long-term -- between the lenders. In this 15 case, the short-term lenders are gone. Long-term 16 lenders in this case. 17 By the way, the short-term lenders and long-term lenders would have an inter-creditor 18 19 agreement off to the side. 20 But you got the long-term lenders, so 21 draw a triangle between the long-term lenders, RTG, 22 and the City. That's the three-way agreement. 23 Okay. The City is party to that agreement. 24 They're effectively the City's lenders too because 25 it shows up as debt on their balance sheet.

1 The payment stack is to RTG then to the 2 lender, so we get that. So the City has the right 3 if they have to, and they don't believe that 4 consent -- they need to understand what consent is. 5 And frankly, RTG even was clear during the MOU negotiations that they didn't feel the 6 7 consent was an issue that they could resolve on 8 their own, and they needed the City's help. 9 So the City reached out to the 10 long-term lenders to see what the potential 11 solutions would be. 12 So I shouldn't say I don't know. Ι 13 didn't talk to anybody at RTG directly about this 14 to understand what their point of view was. The 15 City, when it got to the point where we need to 16 look at more, let's call it, what are the options 17 on the table, reached out to say we would like to 18 meet with you to discuss. 19 There were meetings that were held 20 between RTG and the City and the lenders during the 21 MOU process, but the City reached out to the 22 lenders to say -- and I don't think this is a 23 litigation issue because it happened during the MOU 24 period -- to say let's talk about options for 25 Stage 2.

25

1 And that's what RTG reacted to. Ι 2 should be more specific. Okay. Other than that, I 3 can't answer that question. 4 KATE MCGRANN: Okay. And just so it's 5 clear on the record, the MOU process that we're 6 talking about here is the negotiations of an MOU to 7 allow for the Stage 2 and 3 to proceed? 8 REMO BUCCI: Correct. And just for 9 clarity on that, what the MOU did is lock down the 10 maintenance services pricing, the pricing for the 11 vehicles, the Belfast expansion, the procurement 12 and construction support services, and then set the 13 framework to develop the variations in the project 14 agreement, right, because those were done as part 15 of the Stage 2 procurement, basically to lock them 16 down so the prices were set so the City could then 17 move ahead with the procurement for the east and 18 west, get its funding from the federal government 19 and the province, and also make sure that it's got 20 affordable project that fits within its budget. 21 You know, same issues as Stage 1 but now much more 22 complex. 23 KATE MCGRANN: What was -- was IO 24 involved in advising on the available options and

the ultimate decision to do the debt swap?

1	REMO BUCCI: At the early at the
2	early stage of the MOU process.
3	KATE MCGRANN: What led to them not
4	being involved throughout the entire MOU process?
5	REMO BUCCI: I don't that's
6	something the City should answer. I don't know.
7	It was mutual, is my understanding.
8	KATE MCGRANN: When you say it was
9	mutual, that the City and IO agreed that IO
10	wouldn't step away from the project?
11	REMO BUCCI: You know what, I should
12	you should refer to the City on that one or
13	Infrastructure Ontario. I don't know for sure.
14	KATE MCGRANN: I haven't turned to my
15	co-counsel yet because we've been so busy chatting,
16	but, Ms. McLellan, do you have any follow-up
17	questions on anything we've discussed so far before
18	I move on?
19	LIZ MCLELLAN: I don't at this time.
20	Thanks.
21	KATE MCGRANN: Jumping back in time for
22	a second to the RFP, did anybody at any point in
23	time raise any concerns about the fairness of the
24	RFP process that was run?
25	REMO BUCCI: No.
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1	KATE MCGRANN: No?
2	REMO BUCCI: I wouldn't say that I
3	would say that the I would say the evaluation
4	process was a relative nonevent, if you will, in
5	the sense that it kind of went very smoothly.
6	I think the in-market period, you know,
7	had you know, there were challenges there, but
8	it's light rail. Like, you know, as we've seen
9	now, you know, it was almost like a like a
10	precursor of every light rail project urban
11	light rail project you see going forward but not
12	contentious.
13	It's more about this is the
14	advantage of the process, right. Like, what AFP
14 15	advantage of the process, right. Like, what AFP allows you to do is with these commercial
15	allows you to do is with these commercial
15 16	allows you to do is with these commercial in-confidence meetings, you can have discussions
15 16 17	allows you to do is with these commercial in-confidence meetings, you can have discussions with the other party, you can talk about things,
15 16 17 18	allows you to do is with these commercial in-confidence meetings, you can have discussions with the other party, you can talk about things, and then you take that information away and decide
15 16 17 18 19	allows you to do is with these commercial in-confidence meetings, you can have discussions with the other party, you can talk about things, and then you take that information away and decide whether or not you want to change either the
15 16 17 18 19 20	allows you to do is with these commercial in-confidence meetings, you can have discussions with the other party, you can talk about things, and then you take that information away and decide whether or not you want to change either the project agreement through an or the RFP through
15 16 17 18 19 20 21	allows you to do is with these commercial in-confidence meetings, you can have discussions with the other party, you can talk about things, and then you take that information away and decide whether or not you want to change either the project agreement through an or the RFP through an addendum, but it this is the value of the

²⁵ other side can bring you some ideas that might be

1	to their benefit, but to the benefit of the
2	project, and then you could take them into account.
3	So you take a little bit from each of
4	the three teams, and you end up coming with a
5	project that's much better at the back end than the
6	front end.
7	You expand the open period, and the
8	reason why you want to do that is because you've
9	got this bid-validly issue, which is the moment the
10	financial submissions come in, the clock is ticking
11	on when those prices expire, and they're 180 days.
12	And that means you got to finish the
13	evaluation, you got to do your negotiations with
14	your first nation your first your first
15	negotiation proponent, you got to get approval from
16	council on the preferred proponent negotiations,
17	then you got to get commercial close, you got to
18	get financial close, and all that's going to happen
19	within a 180-day window.
20	So you broaden out that in-market
21	period to make sure that you and you make the
22	decision, we think we got it, no more issues, lock
23	the project agreement down, RFP. There's about a
24	month or so, no more changes for them to finalize
25	their bid. You race through the evaluation

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1 process. 2 So from -- once you got to that point 3 of those, let's call it, value engineering, 4 affordability-type CCMs were addressed, from then 5 on it was a relative nonevent. 6 KATE MCGRANN: Okav. And the 7 challenges during the in-market period you 8 described, I -- based on what you said, it sounds 9 like they're due to the complexity of the project 10 and things like that. 11 It's -- there's no concerns raised to 12 your knowledge, for example, that somebody received 13 information that the other bidders did not. No 14 fairness concerns raised about --15 REMO BUCCI: No. 16 KATE MCGRANN: -- how it was conducted? 17 REMO BUCCI: No, no. Tunnelling was --18 the tunnelling and the affordability cap were 19 the -- were the -- were the major issues. 20 Okay. In your view, was KATE MCGRANN: 21 the in-market period long enough to address the 22 challenges --23 REMO BUCCI: Yeah. 24 KATE MCGRANN: -- that arose 25 throughout?

1 REMO BUCCI: Yeah, because you just 2 keep extending it. That's the value of it. And I 3 think the City also -- the other variable the City 4 has, it's a stipend, the design and bid fee it 5 pays, which frankly is -- they get tremendous value 6 for, right, because you're actually buying the 7 other two designs when you do that. 8 So I think the City increased the 9 stipend over that -- it doesn't recover all the --10 the bids are substantial to bid against. You can 11 appreciate, right, but it just at least respects 12 the efforts that are being made. 13 And particularly, like, third party 14 legal, like, out-of-pocket expenses, it helps 15 defray some of those costs, so it -- you -- and I 16 think what the proponents want to see is, like, 17 don't just cycle through these. Don't waste my 18 time, right. 19 Like, if I'm coming to these meetings 20 and I'm giving you input, and you're coming back 21 and you're making substant -- you're making changes 22 and you're hearing me, good. Okay. If you're not, you're wasting my time. I'm just going to go 23 24 somewhere else. I'm not in to bid on a stipend. Ι 25 want to get a -- and if somebody wins, they'll tell

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1	you that's okay, right. Like, you know, we bid
2	these projects. We lose them all the time. We
3	just want certainty on the process and don't waste
4	our time.
5	And I think that from that perspective,
6	it was a very good process. And I never heard
7	rumblings that people had issues with any of that
8	part of it. It was it was more just about, you
9	know, the challenges of the project.
10	KATE MCGRANN: I do want to understand
11	the affordability and the geotech transfer
12	challenges. Does speaking about one in advance of
13	the other make like, which makes sense to talk
14	about first?
15	REMO BUCCI: Let's talk about the
16	affordability cap. It's probably an easier one to
17	dispatch.
18	KATE MCGRANN: Yeah, sure. So just
19	explain to me, what was the challenge?
20	REMO BUCCI: So the challenge so the
21	affordability cap was basically how much is the
22	capital of the project going to cost. Okay.
23	So the first lever was to say so
24	typically you could say, well, like, would what
25	Infrastructure Ontario would do is say, well, we're

1 going to have 25 percent or 50 percent of it 2 long-term finance because you don't actually know 3 what the price is, right. 4 So -- but in this case, you know, as an 5 example of what makes things different in a 6 municipal project is the City had a fixed funding, 7 so we didn't want -- sorry, the finance didn't want 8 to have a variable on the amount of private 9 financing once you decided how much fit that bucket 10 of affordability, so it became a nominal number. 11 No more than \$400 million in private financing. 12 In our shadow bid, we did an assessment 13 of what we thought the costs of that were based on 14 the amount of debt and equity and the costs of it, 15 and we got that pretty much right. 16 So that was built into the shadow bid 17 and then replaced by the final bid, but I think we were really confident on that because we had good 18 19 information, lots of market soundings. 20 Plus Infrastructure Ontario had also 21 engaged Bank of Montreal as our capital markets 22 advisor, so we were pretty confident about the math 23 on the 400 million. 24 And then we talked about that being the 25 right amount of number, the appropriate number to

1	anchor the life cycle risk transfer, right. Can
2	you still hear me? Hello?
3	KATE MCGRANN: I sure can, yeah.
4	REMO BUCCI: Okay. Sorry. So then
5	that deals with the 400 million. Then it's a
6	matter of saying now how much of the capital the
7	construction period payments do you add up.
8	So the affordability cap was, in simple
9	terms, no more than \$400 million in long-term
10	financing, became 300 million, and the amount of
11	private financing during construction the amount
12	of the total amount of construction period
13	payments had to be less than X.
14	And on the operations and maintenance
15	side or the maintenance side, if you will, there
16	was no cap mostly because the City was had
17	enough flexibility in its funding program, and we
18	didn't see as much variability there frankly
19	because there were no issues coming forward during
20	the in-market period that raised a concern on the
21	maintenance pricing.
22	KATE MCGRANN: Okay.
23	REMO BUCCI: It was all on the now,
24	let's go to the let's go to the tunnelling
25	because of the of the issues of the civil
L]	

1 issues that arose on the project. 2 You know, the vehicle supply was more 3 or less dispatched during the RFO because the RFO 4 said -- and I don't want to -- I don't want to 5 skirt over that, if I may, just -- just to б backtrack for a bit because the RFQ said you don't 7 have to pick a vehicle supplier as part of 8 pre-qualification, only pre-qualify your ability to 9 procure vehicles. It was following the CENELEC 10 concept. Okay. 11 Allow the proponents to pick a vehicle. 12 The City did some work to make sure that there was 13 enough suppliers out there. You would see that the 14 RFO was initially for shortlisted. It went down to 15 three to meet with what the City believed based 16 on -- and some other markets who have done supply 17 of vehicles. 18 You know, there were still challenges 19 with local content and the weather conditions, but 20 that was all known at the RFQ. Didn't become an 21 RFP issue. 22 The major issue, then, was the 23 definition of the affordability cap, the math of 24 it, and then what was driving the cost was the 25 tunnelling risk allocation.

1 So where we started at before was --2 you know, if you go back to AFP at that time -- and 3 other than Windsor-Essex Parkway which had a cut, 4 didn't have a tunnel. It had this kind of section 5 that went underground. So we're talking about 6 boring, not digging and then putting a cap on top, 7 right. 8 So when you're boring and you're -- and 9 you're not certain and you're boring 2 kilometres 10 of a tunnel and you're not certain of the 11 conditions you're going to hit, whether it's clay 12 or rock or combinations thereof, it affects the 13 type of boring machine you need to pick because 14 you're mining basically. 15 So those issues were -- so on a -- on a 16 vertical project, when you're building up, social 17 infrastructure, you've got a limited space. You 18 can drill as many boreholes as you want, and you 19 get to a point where you can't have that many 20 changes between the boreholes, right. 21 So this idea of inferred or readily 22 inferable is the standard. I give you all the 23 boreholes that you want, that you asked for because 24 you can ask for -- I did some -- you ask for more 25 during the bid-open period. You have all the

1 information. 2 Yes, there's some assurance, reliance 3 that the geotechnical suppliers in terms of the --4 in terms of any accuracy of the lab results of that 5 borehole, but generally speaking, in between the б boreholes is your problem. 7 And on the social side, that works 8 really well because you've got limited space. Now 9 you're talking about a multiple-kilometre system 10 through an urban environment, right, on top of all 11 of that. 12 So, you know, the issue of the 13 geotechnical -- how to deal with the geotechnical 14 risk allocation was critical, and it wasn't 15 unprecedented. There is a Port of Miami Tunnel 16 project that had been done prior to Confederation 17 Line which had used a gating structure that was 18 similar to what was done in Ottawa. 19 But to cut -- to make a short story 20 long -- a long story short is that the solution, 21 much like the milestones that was arrived to was to 22 do a detailed geotechnical baseline report, the 23 City did as much geotechnical surveys as they 24 could. Additional surveys were done at the 25 proponents' -- at the three bidders' requests.

1 And then in order to find the right balance of risk allocation, there was basically a 2 3 gating approach again that wasn't -- it was 4 tailored to this project but not unprecedented that 5 basically said, look, for these unknown risks and 6 referables, the geotechnical assessment that was 7 done by the City, valued that I think at 8 \$90 million, so that was the risk that was up in 9 the air. 10 The City said, If you're willing to 11 take that risk -- the other way around, right. Ιf 12 you take that risk -- if you don't take that risk, 13 I'll add 30 million -- \$90 million to your price 14 because it's my risk, right, just so you know what 15 it is. That's disclosed in the RFP. And if you 16 don't, I won't add it to your price. 17 And in between, there's another option where we could share -- there's kind of a 18 19 deductible sort of concept to it, and so there was 20 a way to financially put value on it and then allow 21 the proponents to select the one that was most 22 suitable to them, and that's how that problem was 23 solved. 24 And I thought it got to a good solution 25 at the time frankly, and the other thing that it

1 brought was, you know, the additional insurance 2 that comes along with P3s. As the City saw the 3 tunnel collapse, it actually worked to the -- it 4 actually worked out well in the end. 5 KATE MCGRANN: The Port of Miami 6 precedent project, did it also -- was one of the 7 gating options a complete transfer of the risk? 8 I think so, yeah. REMO BUCCI: There 9 was -- there was three there. I thought somewhere 10 we had -- we had presented a summary of that. I'm 11 doing that by memory. 12 So a lot of times what you see with 13 these P -- with these -- I'll call them P3, these 14 P3 projects is it's not projects that haven't 15 occurred elsewhere. So the first thing you do is 16 you go, hey, did anybody else deal with this 17 somewhere else, right. 18 Now, this was a tailored solution, but 19 I just say conceptually the issue of coming up with 20 bands of risk and putting it to the market to 21 decide wasn't -- wasn't -- in my opinion, wasn't --22 wasn't new, but the solution that the City came up 23 with was specific to the project itself, including 24 how shallow the tunnel needed to be, et cetera. 25 KATE MCGRANN: Yeah, I was going to ask

you. If you could just high level for me, what
was tailored about it? Like, what was specific to
the
REMO BUCCI: The quantum. The quantum.
The quantum, the 90 I think it was 90 I
should the quantum of the 90th percentile of
those unknown risks, right, and that was that
was what the geotechnical engineers on the City's
side came up with when you know, based on the
number of boreholes they had drilled, the
uncertainty between the ones that they couldn't
drill, what they saw in the soil samples, that was
very that was arm's-length technical assessment.
It was quantified, right, as best as you could.
KATE MCGRANN: Okay. And it makes
sense to me that that calculation would have to be
specific to what's known about the tunnel.
Anything any other ways in which the
approach taken here differed from the Port of Miami
precedent that you looked to?
REMO BUCCI: Conceptually, the I
would just I would say the analogy is the gating
process, right, because because when you're
advising your client, you're trying to get the best
solution for them, right, either cost or risk, and

1	the best way to do it is use competitive tension to
2	your benefit, right, and if you don't know, let the
3	market decide. That's always the best approach to
4	take.
5	KATE MCGRANN: Okay. And then just
6	trying to understand how analogous the Port of
7	Miami project was, was the tunnel there of a
8	similar nature in terms of size, challenges with
9	being in an urban environment, things like that?
10	REMO BUCCI: That was in Miami. I
11	don't remember nothing about it to be honest with
12	you.
13	KATE MCGRANN: Okay. You mentioned a
14	shadow bid. What's that?
15	REMO BUCCI: Oh, that's just our
16	est. cost. That's a cost estimate on the City's
17	side, construction, maintenance costs, and then
18	what Deloitte did was we then put it in the
19	construct of the payments in the project agreement.
20	We mimic those milestone payments. We
21	mimic the payments during the maintenance period,
22	and that becomes a payment schedule.
23	12 milestones, substantial completion,
24	and every month or every year let's simplify
25	it. Every year, and that's a shadow. We create

1 that. That gets fed into the City's affordability 2 model and then we basically in the RFP described a 3 schedule that mimicked exactly what we were 4 modelling. 5 You think of the output schedule of 6 those payments. The RFP had a schedule that was 7 identical to that. So what the City would do then 8 is -- when the final bid came in, you could take 9 that schedule from their financial model, take the 10 one away that Deloitte had done, and you plug that 11 It's configured in the same way, and you one in. 12 can run the real numbers to make sure it's still 13 affordable. 14 In terms of the lessons KATE MCGRANN: 15 learned report, Boxfish worked with Deloitte on 16 that report; is that right? 17 REMO BUCCI: Yes. Yeah, we did that 18 together. 19 Sorry, go ahead. KATE MCGRANN: 20 REMO BUCCI: Yeah, we did it together. 21 KATE MCGRANN: How did you divide the 22 work as between you? Did Boxfish focus on --REMO BUCCI: 50-50. It was -- honestly 23 24 it was more of an investment. We just thought as 25 a -- so we had to do a bunch of interview -- we

1	identified the City identified people to talk
2	to, and, you know, it was pretty straightforward.
3	Just do a whole bunch of interviews, take the data
4	in, take the notes, and then filter it up and write
5	the document. So we just split it 50-50.
6	KATE MCGRANN: One of the
7	recommendations coming out of lessons learned
8	report was the use of an owner's engineer. Was
9	that recommendation different than what the City
10	did with Capital Transit Partners on Stage 1?
11	REMO BUCCI: No. I think what the
12	what the report was getting to was maybe just a
13	little bit more focused. So, like, what the owner
14	engineers. What the engineers sometimes the
15	engineers have to do is come up with a reference
16	concept design to make sure you've got the land
17	that's needed, confirm the output specifications,
18	constructability, and the cost.
19	The question becomes how much work does
20	that entail and how much degrees of freedom do you
21	restrict when you then write the output
22	specification? In other words, is the output
23	specification a reflection of the reference concept
24	design because that's what you're comfortable with,
25	or is it truly open to allow flexible design and

1 construction solutions to come forward? 2 That's a delicate balance. I -- as an 3 engineer and a commercial advisor, I don't 4 underestimate that problem. I'll just say that 5 sometimes the output specification is just a 6 reflection of the reference concept design. 7 And the point was try to be more --8 like, use a reference concept design for what it is 9 but make the output specifications more 10 output-based and not just a pure reflection unless 11 it has to be. 12 Like, for example, if you get to a 13 certain stage in configuration and the degrees of 14 freedom are zero, it has to be like this, fine, but 15 in those other areas where you have degrees of 16 freedom on where to put a switch, et cetera -- I'm 17 trying to simplify things -- then you should leave 18 that open because you're buying a train service 19 plan, right. 20 You're buying kilometres. You're 21 actually not buying steel concrete vehicles. 22 You're actually being measured. The actual what 23 you're buying -- like, the stick -- the analogy of 24 the sticker price on your vehicle is service level, 25 train service plans.

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1 KATE MCGRANN: Were there any 2 particular aspects of the project-specific output 3 specifications from Stage 1 that in your view were 4 too prescriptive, too specific, too close to the --5 No, I think -- I think the REMO BUCCI: 6 idea was more just, look, you can always improve on 7 things. Go back and -- I mean, the general 8 consensus was can you make it more flexible. 9 That was -- I wouldn't say that that 10 was a major thing, but I -- that's -- I would say 11 that on any project actually. I would tell any 12 advisor going in. Like, be careful here. Like, 13 don't get -- don't get caught into a particular --14 if you're going to do a solution that looks at 15 design construction, operations, and maintenance, 16 be very careful that if you're going to use that 17 process, then you need to buy in to the 18 output-based approach. You can't kind of go half 19 ways. 20 There's also mention of KATE MCGRANN: 21 a need to develop a project definition report. 22 REMO BUCCI: Yeah. 23 KATE MCGRANN: Was that done on 24 Stage 1? 25 This is trying to get REMO BUCCI: No.

1	back to the challenge of how you communicate to
2	so council what is council concerned about,
3	right. The local constituents most of the time
4	it's the station, the plat like, the how the
5	station fits into the local community.
6	And then you have this tension of
7	during the open period, you're still going out
8	consulting with the public, and you may need to
9	make changes to your technical ask based on that
10	feedback. That's another delicate balance.
11	If you can try to define that upfront
12	as best as you can, then that could alleviate some
13	of the issues you have to deal with when you go out
14	to procurement.
15	KATE MCGRANN: Okay. And was there
16	a project sorry, I just didn't catch it. Was
17	there a project definition report done for Stage 1?
18	REMO BUCCI: I don't I think the
19	closest thing was I think what we were trying to
20	get is don't use the environmental assessment
21	report for that. That's it kind of does it, but
22	it's actually meant that's to define the
23	undertaking. It's not principally to get at it
24	kind of does because you still have to communicate
25	with all the parties, but the thought was be a

1 little bit more focused, bring the community in, 2 the decision-makers. 3 That was my interpretation. If you 4 could do that -- and maybe it can help you set 5 expectations with, for example, the local б councillors in their ward when they're dealing with 7 those station requirements. 8 KATE MCGRANN: Coming back to the 9 project agreement for a second, the trial running 10 requirements, did you have any involvement in the 11 drafting of those in the project agreement? 12 REMO BUCCI: No. 13 KATE MCGRANN: And to your knowledge, 14 who was in charge or who was working on that aspect 15 of it? 16 REMO BUCCI: It would have been Capital 17 Transit -- it would be probably -- well, Keith 18 MacKenzie or Charles, either would be the --19 whether they did directly, I -- it would be a --20 those would be the -- that's where I would start to 21 ask them. 22 It's probably a -- it just wouldn't be 23 one person. It would be multi. You got systems 24 issues, you got station issues, vehicle issues. 25 It's a combination thereof and between AECOM and

1 STV, and they were -- along with Morrison 2 Hershfield and Jacobs Associates, not Jacobs 3 Engineering, but the main sort of subject matter 4 experts, if you will, were AECOM and STV people. 5 KATE MCGRANN: Okay. Were you involved 6 in any discussions about whether a vetting-in or a 7 burning-in period should be included in the project 8 agreement? 9 REMO BUCCI: I don't -- I don't 10 remember if that came up actually. John 11 Traianopoulos might remember that from 12 Infrastructure Ontario. I don't remember if that 13 ever came up. 14 Again, Kate, that's something -- like, 15 on the payment mechanism side, that's really easy 16 to put in. Like, if that was a big strategic 17 issue, I would have just said, hey, if that's 18 getting in the way of a deal -- like, it's been 19 done on other projects. 20 I don't -- I just don't -- like, if 21 it's not in the top of my mind, then we didn't 22 dwell on it. We didn't put an analysis together. 23 We didn't give the City advice on that, not that I 24 remember. 25 KATE MCGRANN: And was Deloitte at all

1	in advising the City did Deloitte provide the
2	City with any advice on the approach it should take
3	to oversight of the construction of the project, so
4	the governance model, project management agreement,
5	anything like that?
6	REMO BUCCI: Only and, again, this
7	is just the declaration of litigation issue. Only
8	once the City got to the point of realizing that
9	the project was delayed, we got reengaged on
10	Stage 1 to help inform the strategy to deal with,
11	if you will, the construction claims, and then that
12	morphed into the to maintenance issues.
13	So I'm going to that's all I want
14	that's all I can say at this point in time on that.
15	I'm just concerned about the litigation. But up
16	until then so that would have been 2017ish.
17	Between 2013 and 2017, nothing.
18	KATE MCGRANN: Okay. And heading into
19	it, sort of at the time of financial close, were
20	you having any discussions with them about this is
21	the kind of governance model you would want. These
22	are the project management plans, anything like
23	that?
24	REMO BUCCI: No. No. We were
25	basically done, you know, at financial close.

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1 Other than the -- other than that lessons learned 2 and then getting engaged on Stage 2, nothing on 3 Stage 1 until, like, 2017ish. 4 KATE MCGRANN: Any involvement in 5 assessing the substantial completion submissions 6 from RTG either the first time or the second time? 7 REMO BUCCI: So during the 8 commissioning period when a colleague -- so the 9 City was -- during the trial running -- I think it 10 was around August, July, August. I think 11 commissioning was in September. 12 They just needed some additional 13 support, because during the trial running, you're 14 doing these mock daily meetings with RTG, RTM 15 looking at the data that's coming in off of the 16 systems and trying to mimic how it works within the 17 project agreement. 18 And they needed help with that. They 19 just needed additional support, not strategic. So 20 one of my colleagues was involved literally for a 21 month there, but it was mechanical. Like, for 22 example, no advice on what to do with it. 23 And then we had a team -- during that 24 period of time, the City was concerned -- and, 25 again, this gets into the litigation side -- of the

suitability of the systems that RTG/RTM was putting
in place to monitor things like work orders and a
compliance with the particularly the service
standards.
Like, I talked about the rectification
times and things like that. Like, practically
there's an issue, you issue a work order, you close
it, you measure it. Is there a deduction or not?
So we had an IT team come in and just
during that period of time do an assessment of
an independent assessment of the systems compared
to what was asked for in the project agreement.
But nothing around and we had a very
detailed report we issued there, but nothing around
should the system be commissioned, was it
meeting you know, that was a decision that was
made by others primarily. I suspect the
independent certifier but not Deloitte.
But those are the two that's the
level of involvement that we had during the trial
running period.
KATE MCGRANN: Okay. And when you say
the mechanical support, just can you at a high
level, what did that look like? What's involved in
that work?

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1 REMO BUCCI: So think about every day 2 the City gets a report on kilometres delivered and 3 if there were events because you're -- you're 4 mimicking, oh, train had a problem. The drivers 5 showed up that day -- let's go back to our 6 analogy -- and the light was broken. Just silly 7 example, right. Then you would -- that would be 8 logged, and you would agree, okay, how that -- you 9 know, how would that apply. 10 So this -- so at the same time I should 11 say, we had a team -- I think you've interviewed 12 some of them -- that was helping the City get operationally ready for implementation of the 13 14 payment mechanism, the mechanics of it, how you do 15 the math, how you interpret the administration of 16 it, right, so we were helping them bring that team 17 up to speed. 18 So one additional person -- because 19 effectively they were short-staffed. There was 20 just -- there was too much work to do, and they

²¹ needed help. That's what I mean by mechanical.

It wasn't a matter of, hey, Deloittes,
we need you to come in and tell us by the
interpretation of this data whether or not we
should be agreeing to -- to the extent that the

1 City agrees it's the independent certifier raising 2 any issues with respect to trial running results. 3 That was not our role. 4 KATE MCGRANN: Okay. So this is more 5 like a running reports --6 REMO BUCCI: Like, it's almost -- I 7 would call it a staff augmentation, right. So the 8 individuals there, I was just like, What are you 9 doing? Okay, everything is good. 10 It's not coming back to me to make a 11 recommendation or Deloittes to make a 12 recommendation. That never happened, but we did do 13 a report on the systems. 14 KATE MCGRANN: And the systems, would 15 that be the integrated management infrastructure --16 REMO BUCCI: That's part of it, yeah. 17 There's a title to it. I forget the name of it, 18 but it was September, October of 2018. It was, 19 like, a seven or eighty [sic] page PowerPoint, and 20 that was provided to RTG as well. 21 KATE MCGRANN: Okay. And did you say 22 it was in the fall of 2018 that that --23 REMO BUCCI: Yeah, the work was --24 yeah, it was -- you know, it was based on the 25 observations during the trial running period. Then

1	they had to write it, get the City's input, and
2	then by the time that was all done, I think it was
3	October.
4	KATE MCGRANN: Trial running is done in
5	2019, so is it possible it's a 2019 report?
6	REMO BUCCI: Sorry. Yes.
7	KATE MCGRANN: No, don't be sorry. I
8	just want to make sure that I'm following.
9	REMO BUCCI: Yeah, I get my years mixed
10	up there. Sorry about that.
11	KATE MCGRANN: Any involvement in the
12	negotiation of the term sheet
13	REMO BUCCI: No.
14	KATE MCGRANN: that was negotiated
15	at the end of August of 2019? No.
16	To the extent that you can answer this,
17	the gated affordability cap approach that was taken
18	here, do you think that is there still market
19	appetite to respond to an approach like that today?
20	REMO BUCCI: You know what's
21	interesting is that Canada Line had cut and cover
22	and bored. It was on time, on budget. It was the
23	only LRT at the time. I think right now with the
24	amount of projects like, we have a huge capacity
25	issue. It's a good thing. Lots of projects being
1	

1 done. 2 The reason I'm raising all this is 3 because right now, if you're going out with an --4 if I was going out -- if I was advising on a 5 project like Stage 1 today, the recommendation on 6 delivery model would be completely different 7 because market conditions are different, and 8 they're different primarily because of experiences 9 on every LRT, Purple Line in Maryland, you know, 10 where they had to replace the DB contractor. 11 I'll park Montreal for a moment because 12 I don't know enough or understand about that 13 structure, but Ontario all the way out to Alberta. 14 And whatever the cause is, people can 15 tell you different things, supply chain, et cetera, 16 exacerbated by COVID, but if you put out a deal 17 that kind of did a turnkey, I'm going to, you know, 18 hold you to the substantial completion date with 19 this payment, and you're going to take all that 20 coordination risk, you wouldn't have any bidders,

right, so that's this shift towards more 22 collaborative.

21

23 KATE MCGRANN: You had mentioned early 24 in our conversation of the impact of the election 25 schedule on the project, and then I'm wondering if

1	there was anything else in terms of impact of the					
2	election schedule on the project other than what					
3	we've already discussed.					
4	REMO BUCCI: Can I just recharacterize					
5	that a bit? Any time we lay out a schedule, we					
6	work backwards from what are the decisions that					
7	need to be made, the appropriations sorry if you					
8	hear barking again in the background that need					
9	to be made that you don't the project team					
10	doesn't have control over, right.					
11	So those are typically defined as					
12	and I would say I'm just thinking quickly. Most					
13	municipalities we P3s we've done are the same					
14	way. You go out with the RFQ decision, you update					
15	at the time that you shortlist it, but the next					
16	major decision is here's the preferred a					
17	recommendation for a preferred proponent. If you					
18	agree on this, we're going to move to financial					
19	close.					
20	You mark those two checkpoints in, and					
21	then you build your timelines of your bid-validity					
22	period, your bid-open period, and you build around					
23	it. And then you look at it, and you go, Is that					
24	council in a place where they can make that					
25	decision, right.					

1	So I just want to be clear. I should				
2	have described that better to you. And typically				
3	municipal in municipal politics, when you				
4	approach and provincial would be the could be				
5	the same way.				
6	Like, Infrastructure Ontario would get				
7	authority. They'd work around that because they				
8	would have approval prior to going into the to				
9	the writ period, but you just need to be cognizant				
10	of when you're blacking out or you're in that				
11	laned-up (ph) period, don't assume that you're				
12	going to get a decision made, so build your				
13	schedule around it.				
14	It's not because of political issues.				
15	It's just the reality of whether or not with the				
16	cycle that you're in, can you get an is it				
17	practical to go and get a decision, and typically				
18	we don't look past June if it's a municipal				
19	election here on in any province.				
20	KATE MCGRANN: And then during revenue				
21	service, after the launch of the system, if you				
22	could just describe to me what Deloittes' role with				
23	respect to Stage 1 has been.				
24	REMO BUCCI: So this is, again,				
25	skirting into the litigation issue, so the				

1	interpretation so the support of let's just
2	back up. So I'll call it generally.
3	We are not expert witnesses in any way.
4	We can't be because we're an advisor to the City.
5	We're not independent. But we've helped the City
6	quantify the potential construction issues that are
7	known to both parties and help them assess the
8	financial and commercial risk of each to inform
9	their approach with respect to mitigating those
10	issues, dispute resolution or some commercial
11	arrangement thereof. Okay.
12	And then during the operating period
13	I'll separate the role that my other colleagues Sam
14	and Bing Bing did, which was help like, I'll
15	call it mechanically. You take the data. You
16	write the quarterly performance reports. There's
17	no interpretation of that.
18	My job, for example, similar to the
19	construction was then to look at those reports and
20	to help the City assess, particularly as January,
21	February, and March 2020 came on, and the
22	declaration or the City's declaration of default
23	which and, again, I just want to be careful here
24	because more of a litigation issue is, you know,
25	what's the reality of that. I mean, if I can just

1 describe it as simply -- I don't want to get too much more into it because it does affect the -- you 2 3 know, the ongoing litigation that's there. 4 So I would say the more -- you apply a 5 practical or a commercial lens to what those --6 what the availability, service and quality 7 performance data the City had available to it from 8 RTM systems. 9 KATE MCGRANN: Okay. So other than the 10 more mechanical work of producing the quarterly 11 performance reports, the litigation support work 12 that you were doing that you've described, any 13 other involvement in the day-to-day --14 REMO BUCCI: No, that's it. 15 KATE MCGRANN: -- operations of the 16 system? 17 REMO BUCCI: But I have been in front 18 of council in commercial in-confidence meeting 19 giving -- as part of the legal advice, giving 20 advice related to, you know, what that -- why that 21 default may be appropriate, let's put it that way, 22 based on the terms of the project agreement. 23 KATE MCGRANN: You mentioned in terms 24 of what the market is willing to bear on projects 25 like this now for a variety of factors. I think

1 you described it as more of a -- well, I don't want 2 to put words in your mouth. 3 I think you described it as more 4 collaborative or more shared, but could you just, 5 to the extent you can, characterize what the approach looks like for projects like this today? 6 7 REMO BUCCI: Okay. I try and stay away 8 from acronyms because they mean different things, 9 DBFM, et cetera, P3s. All right, so -- and let's 10 use Stage 1. 11 You describe the construction period 12 payment regime, milestone payments, the amount of 13 long-term private financing. You put that over --14 and the conditions of acceptance. You put that 15 over. You define it in the project agreement. 16 Projectco bids that. They have 17 coordination completion risk. Utilities were 18 carved out. They were in a cash allowance. The 19 specified utilities. 20 Okay. So other than that, you -- that 21 date that they pick -- I forget. The revenue 22 service date was July 2018. That's why I got 2018 23 in my head. That's -- that was RTG's date. That 24 was their assessment of all the things that they 25 had control over.

1 Their schedule, they could have made 2 that as long, as short as they wanted to, right. 3 They picked that date, and the substantial 4 completion payment and all of the issues of missing that was on their shoulders. 5 б Collaboration in my view -- and I'll 7 get the governance of alliance, progressive 8 design-build, all that, throw that out -- is to say 9 you now have a target schedule and a target budget 10 with an incentive mechanism to meet or not meet, 11 okay, and therefore, you work together with the 12 other party to solve those problems, right. 13 In an alliance, you don't have a 14 subcontractor-contractor relationship. You're all 15 together, right. In a progressive design-build, 16 you might be doing some development work up front 17 to confirm that target -- the price and target 18 schedule, but eventually you lock it down into a 19 subcontract. 20 But it's a -- it's an incentive regime 21 to meet a schedule, not a -- I'm going to come down 22 and hit you hard because -- with a substantial 23 completion payment because it's all your problem. 24 That's my interpretation of the 25 differences, and it's about dealing with, you know,

1 the engineering procurement construction. It's --2 everyone forgets about the procure -- the thousands 3 of procurements you need to do, the contractor 4 needs to do, and how they deal with those interface 5 issues and how they coordinate all those activities 6 to meet a schedule. That's done sort of 7 differently in the sense of it's not fixed or 8 turnkey anymore. 9 KATE MCGRANN: Okay. And the incentive 10 regime is different -- it's high level. Are there 11 benefits --12 It's negotiated. REMO BUCCI: It's 13 basically they put their overhead or profit margin 14 at risk, some portion thereof. So, like, basically 15 the idea is you'll get your base costs recovered. 16 The amount of money you make depends on whether or 17 not you hit our budget that we agreed to and the 18 schedule we agreed to. 19 So therefore, you don't really get 20 construction claims, do you, right, because you're 21 making those decisions to collaborate. An 22 alliance, it is -- basically it should be 23 claim-free because there is no contract or 24 subcontract relationship. You're effectively 25 one -- in a -- in a -- in a progressive

1	design-build, you still end up having a					
2	design-build agreement, but because you've gone					
3	through a development phase upfront and you're					
4	dealing with a target price and target schedule					
5	that both parties sign off on, the likelihood of					
6	there being issues are significantly mitigated.					
7	KATE MCGRANN: Ms. McLellan, any					
8	follow-up questions based on what we've discussed					
9	or otherwise?					
10	LIZ MCLELLAN: I don't have any, no.					
11	Thanks.					
12	KATE MCGRANN: Okay. Couple final					
13	questions: The Commission has been tasked with					
14	looking at the commercial and technical					
15	circumstances that led to the breakdowns and					
16	derailments that took place on Stage 1.					
17	Are there any topics or areas that we					
18	haven't discussed this morning that you think the					
19	Commission should be looking at as part of its					
20	work?					
21	REMO BUCCI: Yeah, I think if you look					
22	at like, again, I'll trip into it a little bit,					
23	but I'll sort of stay high level.					
24	If you look at the issues that occurred					
25	post-substantial completion or revenue service					

1 primarily in January going forward, they're all 2 tied to the quality of the vehicle. They're 3 manufacturing issues. 4 And I think if you look at Canada Line 5 and you say, well, did Canada Line have those б No. Where did their vehicles come from? issues? 7 They were assembled in Korea on an established 8 assembly line. 9 Because of local content requirements 10 for this project, in order to meet them, they had 11 to be assembled in the maintenance facility in 12 Ottawa. 13 To the extent that -- you know, this is 14 Alstom, right. This is not somebody who doesn't 15 build trains, and I don't -- I'm not a technical 16 I don't know for -- but I'm just -- the person. 17 question that needs to be asked is is the 18 assembly -- the requirement to have those vehicles 19 assembled or local content requirement which 20 necessitated the assembly in the maintenance 21 facility, did it contribute to the manufacturing 22 issues, as compared to Canada Line where they did 23 because it was a known -- they picked a vehicle 24 that was already in assembly. 25 They didn't get the first vehicle or

1	the first 15 the first 30 vehicles coming off				
2	that assembly line, and it certainly wasn't an				
3	assembly line that was temporarily built in their				
4	maintenance garage.				
5	And I think the question needs to be				
6	asked, is that what contributed to the				
7	manufacturing issues? Because these vehicles were				
8	new, and the problems that occurred weren't a				
9	preventative maintenance issue. They weren't in				
10	that 10- to 12-year life cycle that we're talking				
11	about, the moving parts where you had to take				
12	things off and to replace them where you could then				
13	point, well, that's a maintenance problem.				
14	Maybe they are maintenance, but to the				
15	extent that they're manufacturing issues and it was				
16	contributed to the fact that there were not it				
17	wasn't an assembly in Canada at the time, and this				
18	wasn't the only project where that was encountered.				
19	I mean, Waterloo came to the same issues in a				
20	different way with respect to the vehicles that				
21	they purchased.				
22	So I think that's something that I				
23	would say is something that should be looked at.				
24	KATE MCGRANN: Okay. And when you say				
25	look at January going forward, that's January of				

1 2020 and the first January after revenue service? 2 REMO BUCCI: Correct. Yeah. And I 3 would just characterize -- my opinion is the issues 4 that occurred prior to then were the bumpy issues 5 that you would have -- they weren't like I'm taking 6 vehicles off-line anymore because I've got a 7 problem, right. Like, that started in January. 8 Okay. So before that KATE MCGRANN: 9 was kind of like the -- this is a whole new system. 10 There's going to be --11 REMO BUCCI: And in October, the buses 12 qot -- you know, this was -- this is a -- this is 13 unique from LRT in North America because from day 14 one, it was going to be crowded. They weren't 15 growing into the ridership. It was -- so there 16 weren't a lot of room for errors if there were some 17 integration issues because you're going to -- you 18 know, it's like -- it's not quite like the subways 19 in Toronto, but you got crush loads in the morning, 20 right. 21 KATE MCGRANN: Yeah. Any other areas 22 or topics that you think we should be looking at as 23 part of our investigation? 24 REMO BUCCI: I think the other one 25 would be the extent to which -- within RTG, when

1	the problems occurred, whether they were					
2	infrastructure or vehicle-based, between the					
3	parties, RTG, RTM, and Alstom on both sides,					
4	because Alstom was a subcontractor to the DB joint					
5	venture for the vehicle supply and on the					
6	maintenance on the RTM side to the extent to					
7	which within that sphere of contracts and					
8	subcontracts, were they were they spending time					
9	litigating with each other, or were they actually					
10	trying to solve the problems?					
11	And was RTM, RTG dealing with Alstom?					
12	Like, were they paying them or not, right. Like,					
13	why did why was why was why were they not					
14	behaving to solve the problems? Why are the					
15	vehicles so late?					
16	KATE MCGRANN: Okay. And when you say					
17	"why are the vehicles so late," do you mean, like,					
18	the delivery of the vehicles themselves or					
19	REMO BUCCI: Yes, because remember					
20	stage we talked about that term sheet. I mean,					
21	13 times 226 vehicles, there's supposed to be 30 in					
22	December. What, they just got those additional					
23	vehicles, what, three months ago?					
24	KATE MCGRANN: The Commissioner has					
25	been asked to make recommendations to try to					

1 prevent issues like this from happening going 2 forward. Any specific recommendations or areas 3 that you would suggest he consider in that work? 4 REMO BUCCI: I think that the other one 5 to look at is the terms of the project agreement 6 when you get to default or the declaration of 7 default. What gets really challenging when you get 8 into the -- I'm just looking at the time, Kate. Τ 9 know we're one minute past, but is --10 KATE MCGRANN: Go ahead. 11 REMO BUCCI: You declare default. Υου 12 go into rectification plan, okay, and then you've 13 got dispute resolution going forward. 14 There is no longer -- the project 15 agreement doesn't say how long that rectification 16 period is or how it gets resolved. It just -- it 17 becomes too litigious. 18 So as a marker, the City declares 19 default in March. You can agree with it or not. 20 Courts will settle that out, right, but the 21 decision of a default won't be made until June 22 2022 That's two years and a bit through the 23 project agreement. 24 And it just seems to me if you've got 25 bad service and you're like the City of Ottawa, the

1 public, and you want to solve the problem, to go back to my other point, and your contractor is RTG, 2 3 not RTM and not Alstom, you can't get down to, oh, 4 is there a problem with the system or the vehicles, 5 and I'm willing to solve that problem because I'm 6 more interested in getting the system up and 7 running and dealing -- because that's the way the 8 public sector works, right. 9 I can't do that because my contract

¹⁰ doesn't allow me to, and I have to work through the ¹¹ process, and here I am two years plus later, and ¹² I'm still not able to get to what caused it. Like, ¹³ what really caused it, and what's the fix?

14 And I think that's where, you know, 15 collectively as advisors and policy makers and you 16 name them, we need to look at the project agreement 17 and say, all right, when -- if we thought this 18 default event was going to be this big sledgehammer 19 that was going to motivate everybody, why didn't it 20 work here, and why is it just endless litigation 21 between the parties?

Because if that's the case, simplify the contracts, right, and then just as the City goes, okay, Alstom, what's the problem? Three new vehicles. There you go. Here's the cheque.

1 I'm just making a silly analogy, but 2 you can't do that in this circumstance, right, 3 because that's not your contractor. 4 KATE MCGRANN: Right, because the City 5 can't get directly to Alstom because there's layers 6 of subcontracts in between them, and the issue that 7 you've identified that is worth a look is there's 8 no time limits. There's no sort of --9 REMO BUCCI: Read the supervening event 10 regime in the project agreement frankly and, like, 11 just try to map out what default looks like. Tt. 12 is -- it's circular. It's not clear. 13 And typically -- and look, I'll admit 14 to be part of that, right. I mean, we're all part 15 of the drafting of those documents. And not to pin 16 the blame on anybody, like, when we thought 17 about -- I'll just say as an advisor, like, 18 default? Oh, my gosh, like, default, right. Okay, 19 it's happened now, right. So go back and look at 20 it and say, all right, can you provide a 21 clarification? 22 So my point of this is if I'm back in 23 the shoes of the public sector, someone like the 24 City of Ottawa, doesn't matter who it is in the 25 future, if you feel your hands are tied because

1	your project agreement doesn't allow you to get to
2	the source of the problem, then collectively the
3	industry on the public sector policy side needs to
4	solve that because, you know, like, this I think
5	this my opinion, this problem could have been
6	solved a long time ago if it wasn't for the
7	complexity of the project agreement.
8	KATE MCGRANN: All right. Well, I
9	think that is it for my questions for you today.
10	Thank you very much for your time. We can go off
11	the record.
12	
13	Adjourned at 12:05 p.m.
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1	REPORTER'S CERTIFICATE				
2					
3	I, CARISSA STABBLER, Registered				
4	Professional Reporter, certify;				
5					
б	That the foregoing proceedings were				
7	held remotely via Zoom videoconference at the time				
8	therein set forth, at which time the witness was				
9	put under oath by me;				
10					
11	That the testimony of the witness				
12	and all objections made at the time of the				
13	examination were recorded stenographically by me				
14	and were thereafter transcribed;				
15					
16	That the foregoing is a true and				
17	correct transcript of my shorthand notes so taken.				
18					
19	Dated this 18th day of May 2022.				
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