

Ottawa Light Rail Commission

Steve Cripps
on Thursday, April 14, 2022



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OTTAWA LIGHT RAIL COMMISSION
CITY OF OTTAWA - STEVE CRIPPS
APRIL 14, 2022

--- Held via Zoom Videoconferencing, with all
participants attending remotely, on the 14th day of
April, 2022, 1:00 p.m. to 5:01 p.m.

1 COMMISSION COUNSEL:

2
3 Christine Mainville, Co-Lead Counsel Member

4 Emily Young, Litigation Counsel Member

5
6
7 PARTICIPANTS:

8
9 Steve Cripps, City of Ottawa

10 Jesse Gardner & Catherine Gleason-Mercier,

11 Singleton Urquhart Reynolds Vogel LLP

12
13
14 ALSO PRESENT:

15
16 Joanne Lawrence, Stenographer/Transcriptionist

17 Benjamin Bilgen, Virtual Technician

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I N D E X

The following list of undertakings, advisements and refusals is meant as a guide only for the assistance of counsel and no other purpose

INDEX OF UNDERTAKINGS

The questions/requests undertaken are noted by U/T and appear on the following pages: 32:24, 38:5, 45:23, 157:5

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1 -- Upon commencing at 1:00 p.m.

2 CHRISTINE MAINVILLE: Good afternoon.
3 So the purpose of today's interview is to obtain
4 your evidence under oath or solemn declaration for
5 use at the Commission's public hearings. This will
6 be a collaborative interview such that my
7 cocounsel, Ms. Young, may intervene to ask certain
8 questions. If time permits, your counsel may also
9 ask follow-up questions at the end of the
10 interview. This interview is being transcribed,
11 and the Commission intends to enter the transcript
12 into evidence at the Commission's public hearings,
13 either at the hearings or by way of a procedural
14 order before the hearings commence.

15 The transcript will be posted to the
16 Commission's public website, along with any
17 corrections made to it, after it is entered into
18 evidence. The transcript, along with any
19 corrections later made, will be shared with the
20 Commission's participants and their counsel on a
21 confidential basis before being entered into
22 evidence. You'll be given an opportunity to review
23 the transcript and correct any typos or other
24 errors before the transcript is shared with the
25 participants or entered into evidence. Any

1 nontypographical corrections made will be appended
2 to the transcript.

3 STEVE CRIPPS: Okay.

4 CHRISTINE MAINVILLE: And finally,
5 pursuant to Section 33(6) of the Public Inquiries
6 Act:

7 "A witness at an inquiry shall
8 be deemed to have objected to answer
9 any question asked of him or her
10 upon the ground that his or her
11 answer may tend to incriminate the
12 witness or may tend to establish his
13 or her liability to civil
14 proceedings at the instance of the
15 Crown or of any person, and no
16 answer given by a witness at an
17 inquiry shall be used or be
18 receivable in evidence against him
19 or her in any trial or other
20 proceedings against him or her
21 thereafter taking place, other than
22 a prosecution for perjury in giving
23 such evidence."

24 And as required by Section 33(7) of that act, you
25 are advised that you have the right to object to

1 answer any question under Section 5 of the Canada
2 Evidence Act. Okay.

3 So on those terms, I will start with
4 some questions. Could you first explain your role
5 in Stage 1 of Ottawa's LRT project?

6 STEVE CRIPPS: Certainly. So I was
7 hired by the City of Ottawa to act as the director
8 of the -- at that time, it was the Rail
9 Implementation Office, so this was in the spring of
10 2014. The Rail Implementation Office was later
11 renamed O-Train construction. So I was the
12 director of the office. I was on contract with the
13 City as a City representative from October --
14 sorry, from May of 2018 to -- sorry, May of 2014
15 until the end of 2018.

16 CHRISTINE MAINVILLE: Okay. So where
17 were you on contract from?

18 STEVE CRIPPS: So I -- most of my
19 career, 30 years of my career, was with the Ontario
20 Ministry of Transportation. So right after
21 university, I started with the Ministry in 1984 and
22 spent 30 years there and then it came time that I
23 was eligible to retire, but I was actually
24 interested in working a few more years. I wasn't
25 quite ready for retirement, and this opportunity

1 with the City came along via a headhunting firm,
2 and I -- it was very interesting to me, the -- the
3 project and the challenge associated with it, so I
4 met with the City on several occasions and -- and I
5 was offered the position of director. So I retired
6 from the Ministry of Transportation and then went
7 to the City.

8 CHRISTINE MAINVILLE: Okay. And maybe
9 we can put up your résumé there, which you kindly
10 provided. So we do see your time there, if we go
11 down, with the Ministry of Transportation. Did
12 you, in that context, have experience with P3
13 projects?

14 STEVE CRIPPS: Yes. So in my last
15 position, I was the chief engineer for the Ministry
16 of Transportation and the executive director of the
17 Provincial Highways Management Division. MTO at
18 that time had about five different divisions. The
19 Provincial Highway Management Division was
20 responsible for the design, construction, and
21 maintenance of the -- of the province's highway
22 network.

23 So as part of that role, when I went
24 into that role, there was four different offices,
25 so the head office functions as well as the Windsor

1 border group, so that was being led by a director,
2 and that director reported to me, so I think I used
3 the term executive oversight of that Windsor
4 project. So as the executive director, I had a
5 director reporting to me, and then of course he had
6 a team under him. So that was the -- the P3
7 involved was the Right Honourable Herb Gray Parkway
8 in Windsor. It was about a \$1.4 billion design,
9 build, finance, maintain project for a six-lane
10 freeway to solve the -- the traffic issues at the
11 Windsor border.

12 CHRISTINE MAINVILLE: Did you have the
13 opportunity to work with Infrastructure Ontario?

14 STEVE CRIPPS: Yeah. So on that
15 project, it was a little -- a little bit different
16 in that they were the leads on that project, and
17 MTO was really the -- you know, it was the client
18 and the knowledgeable owner. I guess I could use
19 that term. So what I mean by that is, you know, at
20 the time, MTO had a hundred years' worth of
21 experience in building highways, so we really
22 provided the technical expertise and the technical
23 background, but Infrastructure Ontario were really
24 the -- the leads on the project.

25 So -- so we had a team, you know,

1 similar to what the City had in terms of overseeing
2 the Confederation Line. We had a team of
3 structural experts, highway design experts,
4 foundation experts, soil experts, and so we worked
5 jointly with Infrastructure Ontario on delivering
6 that project.

7 CHRISTINE MAINVILLE: And so when you
8 went to the City, what -- do I take it you were
9 hired specifically because of the LRT project and
10 to work on that?

11 STEVE CRIPPS: Yes, I was hired as the
12 director of that project. That's what they were --
13 that's what they were looking for. The previous
14 director had -- had moved on, the one that led them
15 through procurement had moved on. They had a
16 temporary director in there, and then they were
17 looking for somebody full time to lead the office.
18 So I was hired specifically as the director of the
19 Rail Implementation Office.

20 CHRISTINE MAINVILLE: Who was the
21 interim director?

22 STEVE CRIPPS: So I think -- well, the
23 interim director, Gary Craig did it for a little
24 bit, and then Gary Craig then stepped down into
25 his -- his position as a manager in the office, and

1 Nancy Schepers, who was at the time the -- one of
2 the deputy city managers, she filled in, so she was
3 doing that role as director and her sort of home
4 position as the deputy city manager. So she was --
5 she was doing a dual role there in the interim
6 until I started.

7 CHRISTINE MAINVILLE: Okay. And so the
8 director that had led them through procurement, was
9 that John Jensen?

10 STEVE CRIPPS: Yes, it was.

11 CHRISTINE MAINVILLE: We can take your
12 résumé down, and we'll file that as an exhibit,
13 please.

14 EXHIBIT 1: Résumé of Steve Cripps

15 CHRISTINE MAINVILLE: So could you
16 explain your responsibilities as director of the
17 Rail Implementation Office?

18 STEVE CRIPPS: Sure. It was really
19 to -- to lead the team in the -- in the oversight
20 of the project basically was what it was. So in
21 terms of the team structure, within the office
22 itself, there was - and it varied - probably
23 anywhere between about 40 and 50 staff. And by
24 "staff," that was a combination of City staff, like
25 full-time City staff as well as consultants who had

1 been retained to provide expertise in those areas
2 where the City didn't have expertise, and so it was
3 leading that group.

4 I was the -- the City representative,
5 of course, in terms of dealing with the
6 concessionaire, RTG, so I was the signing authority
7 for the -- for the City. My roles included, you
8 know, briefing and participating on the Executive
9 Steering Committee, staffing, budget control,
10 contract control. I did a lot of media liaison, I
11 did a lot of councillor liaison, so that was --
12 that was the nature of the -- the leadership role.

13 CHRISTINE MAINVILLE: Would you agree
14 you were effectively in charge of construction
15 oversight?

16 STEVE CRIPPS: Yes, I think that's a
17 fair statement, yes. The team that I led were
18 responsible for ensuring general compliance with
19 the project agreements.

20 CHRISTINE MAINVILLE: Okay. And when
21 RIO became the O-Train construction office, do I
22 take it you had the same role, just a different
23 title?

24 STEVE CRIPPS: Yeah, nothing really
25 changed. Well, nothing really changed as far as my

1 role or the role of the office. It was after the
2 new city manager, Mr. Kanellakos, came in and the
3 reorganization within the City happened, and my
4 reporting relationship changed to the general
5 manager of Transit Services, but my role didn't
6 really change.

7 CHRISTINE MAINVILLE: And before that,
8 did you report to Nancy Schepers?

9 STEVE CRIPPS: Yeah, Nancy Schepers at
10 the start. Nancy retired and there was a deputy
11 city manager, but it was just a really short
12 interim measure until the new structure was put in
13 place by Mr. Kanellakos, and then I was reporting
14 to Mr. -- Mr. --

15 CHRISTINE MAINVILLE: Manconi.

16 STEVE CRIPPS: Manconi, sorry.

17 CHRISTINE MAINVILLE: And was that in
18 2014 or 2015? Do you recall?

19 STEVE CRIPPS: That the reorg took
20 place?

21 CHRISTINE MAINVILLE: That Mr. Manconi
22 took place -- took charge.

23 STEVE CRIPPS: 2015, I believe. Yeah.

24 CHRISTINE MAINVILLE: And could you
25 just briefly explain the different branches or

1 streams in the RIO office? For instance, I see
2 there was a light rail design and construction
3 stream and then also a light rail projects branch.
4 Could you explain the difference?

5 STEVE CRIPPS: Yeah. So -- so the
6 organization morphed a little bit during the --
7 during the time that I was there, but the sort of
8 fundamental structure of the office under me was
9 three branches. So one of them -- one of them
10 dealt primarily with the light rail vehicles, the
11 systems, the safety assurance processes, and that
12 was under Richard Holder's leadership.

13 The other branch was more -- I'll
14 generalize it as civil construction, so stations,
15 track, overhead catenary systems, tunnelling,
16 geotechnical work, bridge work, roadwork. There
17 was a number of other ancillary projects that were
18 part of this project, so Gary's area -- that fell
19 under Gary's area as well, so more or less civil
20 construction, if I can broadly categorize it that
21 way.

22 And then the third area I would call
23 project controls, so budget control, quality
24 control, scheduling, contract management, quality
25 control. They were under Claudio Colaiacovo's

1 area. So those were the three main branches.

2 The City also had a very robust
3 stakeholder relations group, so there were times
4 where that fell under my office, but it ended up in
5 Mr. Manconi's area and the Transit Services area.
6 But what there was really, as you can imagine in a
7 project of this magnitude in the heart of the
8 nation's capital, a lot of stakeholder issues and
9 stakeholder management required. So that group was
10 dealing with the public, dealing with special
11 interest groups, dealing with councillors in terms
12 of sort of maintaining that relationship between
13 the City and them. So that -- they did report to
14 me for part of that period, but I'd say for most of
15 my tenure, they were under Mr. Manconi's area.

16 CHRISTINE MAINVILLE: Who headed that
17 group?

18 STEVE CRIPPS: It varied. There was a
19 few different people - Simon Dupuis, for a little
20 while. For probably most of it, when it was
21 reporting to me and to Mr. Manconi, was Rosemary
22 Pitfield. She's no longer with the City, but she
23 headed up that group for a good portion of the
24 time.

25 CHRISTINE MAINVILLE: And you mentioned

1 Gary being in charge of the civil works. That's
2 Gary Craig; correct?

3 STEVE CRIPPS: Correct, yep.

4 CHRISTINE MAINVILLE: And am I right
5 he's passed away; right?

6 STEVE CRIPPS: He did, yes.
7 Unfortunately, yes.

8 CHRISTINE MAINVILLE: What -- well,
9 first of all, were you -- was this your first rail
10 project?

11 STEVE CRIPPS: Yes, it was. All of my
12 previous work had been in the highway area, so --
13 but first rail project, yeah.

14 CHRISTINE MAINVILLE: And you have an
15 engineering background; correct?

16 STEVE CRIPPS: Yeah. I have a degree
17 in civil engineering.

18 CHRISTINE MAINVILLE: Could you speak
19 to your involvement with FEDCO and also the
20 steering committee as it related to your role and
21 what level of interaction you had.

22 STEVE CRIPPS: So the Executive
23 Steering Committee you're referring to, Christine?

24 CHRISTINE MAINVILLE: Yes. Yes.

25 STEVE CRIPPS: So I was a member of the

1 Executive Steering Committee, and you probably know
2 it comprised of the city manager, deputy city
3 managers, Mr. Manconi, the city clerk treasurer,
4 the city -- sorry, the city -- the city clerk
5 solicitor, the city treasurer. So I was a member
6 of the Executive Steering Committee but was also
7 the one who was generally leading the meetings in
8 terms of my office would schedule the meeting and
9 do the -- the project updates on the meeting -- on
10 the project as well too. So that would generally
11 consist of PowerPoint presentations, you know,
12 focussing on not just a project update but any
13 issues that needed the Executive Steering
14 Committee's approval.

15 In terms of FEDCO, and other council
16 committees, so I guess, you know, broadly speaking,
17 we communicated with council in a number of
18 different ways, and I guess in -- for two different
19 reasons as well, two different -- two different
20 drivers of the communication: One was updating,
21 and the other was approvals under the -- the City's
22 delegated authority -- delegation of authority
23 framework. So in terms of -- in terms of updates,
24 we would update both city council in terms of
25 quarterly memos, so my office would produce a

1 quarterly memo just providing sort of an update on
2 where the project is timing-wise and any issues,
3 and we would also do presentations to council or
4 memos to council if needed.

5 In terms of FEDCO, so FEDCO was the --
6 the -- the council committee that we reported to,
7 so they had -- they had jurisdiction over the
8 project. So again, we would update FEDCO in terms
9 of project -- project status, any issues that are
10 presenting themselves, but there was also a need to
11 update FEDCO -- or not update FEDCO, sorry, to go
12 to FEDCO under the delegation of authority
13 framework. So if there was changes to -- to sort
14 of major elements of the project - so, you know,
15 numbers of vehicles or numbers of stations or
16 station locations - that type of change would
17 require FEDCO approval.

18 We would also update Transit
19 Commission. So Transit Commission had delegation
20 of authority for things like the appearance of
21 stations or retail space within stations or, you
22 know, that type of thing, or how buses would
23 interact with stations, how passengers would
24 interact with stations. If there's any changes in
25 those areas, FEDCO had -- sorry, Transit Commission

1 had delegation of authority in that area.

2 We would also -- also, under the
3 delegation of authority agreement, if there was
4 minor changes to stations -- so for example, some
5 of the underground stations were -- had integrated
6 entrances, so they were part of an existing
7 building - federal government buildings, for
8 example, at Lyon Street. So for example, if the
9 entrance moved from one side of the building to the
10 other side of the building, a minor change like
11 that would require approval of both the mayor and
12 the affected ward councillors, so we would -- under
13 the delegation of authority, we would go to them to
14 provide updates on that. And then -- and then,
15 lastly, just one-on-one councillor briefings as
16 well too, either with me, either with Mr. Manconi,
17 either with the stakeholder relations group we were
18 dealing with. We would do a lot of one-on-one
19 councillor briefings as well.

20 So that's probably a bit broader than
21 you asked for, but that's sort of the big slate of
22 how we dealt with council.

23 CHRISTINE MAINVILLE: No, that's very
24 helpful. So in terms of the delegation of
25 authority framework, do I understand that

1 council -- city council's authority was delegated,
2 depending on the subject matter, to one of either
3 FEDCO or the Transit Commission, but in some cases
4 to particular individuals, such as the mayor?

5 STEVE CRIPPS: Yeah, again, if it was a
6 fairly minor change in the -- you know, the example
7 I gave of an entrance moving from one side of an
8 office building, you know, onto another side, it
9 would be the mayor and the ward councillor. So we
10 would do up what's called a consent report, and
11 that would just detail -- and what it goes back to
12 is back in 2012, I guess, you know, council saw a
13 report on the project that said this is what it's
14 going to look like; this is what stations will look
15 like; here's where our entrances are. So if there
16 was a change to what they had seen -- a change of a
17 minor nature to what they had seen, then we would
18 go back and say, Okay, in 2012 the report said the
19 entrance is going to be on the east side of the
20 building; we're now moving it to the north side of
21 the building; we're looking for your concurrence on
22 it. So that's when it would be the mayor and the
23 ward councillor.

24 CHRISTINE MAINVILLE: And am I right
25 that most of the delegated authority was to FEDCO?

1 STEVE CRIPPS: Correct.

2 CHRISTINE MAINVILLE: How would you
3 characterize the City's approach to oversight of
4 the construction? So just big picture, the level
5 of involvement of the City during the construction
6 phase.

7 STEVE CRIPPS: Yeah, I would say we
8 were appropriately involved. I think -- it's my
9 opinion that on any project - and particularly a
10 project of this complexity - the City needs -- the
11 City needs sort of a parallel or matching expertise
12 to what the concessionaire has. You know, I
13 think -- I think some people are of the view that a
14 P3 can be an arm's length contract management
15 process, but the complexity of this project, in my
16 view, required the City to have sort of that
17 level -- equal level of expertise in a parallel
18 structure as RTG, so, you know, in terms of --
19 so -- so we would build that -- the City built
20 that -- that type of team.

21 That team became very knowledgeable of
22 the PA, and we were very active -- I think we were,
23 you know, a good partner with RTG. This was a
24 long-term contract, and partnerships are important,
25 so we worked very closely with them. You know, I

1 think the -- one of the major -- or most
2 fundamental structures that was in place was the
3 working group structure, and there was working
4 groups for pretty well every facet of this project,
5 and that would involve people from the City and,
6 depending on what the working group was, either
7 City staff, experts in that field that we had
8 retained, as well as RTG and OLRTC as the
9 constructor.

10 So, you know, those teams were able to,
11 you know, track progress, deal with challenges,
12 deal with issues, resolve any -- any differences in
13 contract interpretation. So -- so I'd say we had a
14 very robust team, and I think it was very
15 appropriate for a project of this complexity and
16 this magnitude.

17 CHRISTINE MAINVILLE: And you spoke
18 about embedding consultants in this -- in RIO.

19 STEVE CRIPPS: Yeah.

20 CHRISTINE MAINVILLE: What would have
21 been the percentage, would you say, of external
22 consultants versus in house?

23 STEVE CRIPPS: With the overall staff,
24 if -- you know, let's say if there was 40 -- it
25 was -- it would generally be in that range, a total

1 of 40 to 45. I'd say in terms of consultants
2 sitting in the office, it probably would have been
3 in the 10 to 15 range, but then we had the ability
4 to tap into other consultants, so the -- you've
5 probably heard about people talking about the CTP
6 or Capital Transit Partners. So most of those
7 folks weren't embedded in our office, but they were
8 resourced to us and had been prior to procurement
9 or right through procurement, so we had the ability
10 to tap into those people. Other people who, you
11 know, we could bring in for short-term --
12 short-term assignments or we could use them
13 remotely, we would draw on them as well too.

14 So -- but I would say in the office,
15 you know, we had vehicle experts, systems experts,
16 tunnelling experts. They were probably the main
17 areas where we were drawing on the expertise of
18 the -- of others.

19 CHRISTINE MAINVILLE: And they were --
20 all or most of them were part of Capital Transit
21 Partners?

22 STEVE CRIPPS: A lot of them -- a lot
23 of them were. I would say most of them were, yeah.

24 CHRISTINE MAINVILLE: And later on --

25 STEVE CRIPPS: And --

1 CHRISTINE MAINVILLE: Sorry, keep
2 going.

3 STEVE CRIPPS: Sorry, I -- there were
4 probably -- there was probably some that were just
5 brought in just because of their expertise. We
6 didn't solely focus on CTP as a source. We would
7 look at where the expertise is and go from there.

8 CHRISTINE MAINVILLE: For instance, I
9 think later on Parsons was brought in?

10 STEVE CRIPPS: Yes, yeah, Parsons was
11 part of the team.

12 CHRISTINE MAINVILLE: And that was
13 because of a particular specialization? Do you --

14 STEVE CRIPPS: Yeah.

15 CHRISTINE MAINVILLE: And I think it
16 relates to engineering and train control, and I --
17 if I'm right, and I just wonder what that related
18 to specifically.

19 STEVE CRIPPS: I think the person
20 you're referring to was -- was an expert in -- in
21 train control systems. That's probably who you're
22 referring to, and he was a gentleman called Glen
23 McCurdy, so I think that's who you're tapping into.
24 But yes. So his experience -- well, he had
25 experience with Thales, and he has extensive

1 experience in communications-based train controls.
2 So he was one of the experts we brought in simply
3 because of the challenges that the constructor was
4 facing with both vehicles and train control systems
5 and the integration of those two.

6 CHRISTINE MAINVILLE: Do you recall
7 when he was brought in, approximately?

8 STEVE CRIPPS: We did have other
9 expertise in that area before that, but Glen was
10 probably brought in -- I don't remember the exact
11 time. I think it was probably 2017.

12 CHRISTINE MAINVILLE: And would you
13 then have direct involvement with either OLRTC or
14 Alstom or Thales or anyone on the ground?

15 STEVE CRIPPS: Sorry, did he have it or
16 did I have it?

17 CHRISTINE MAINVILLE: Did he, or he
18 would inform you? How did that work in terms of --

19 STEVE CRIPPS: Well, again, he'd be
20 integrated into the team, so he'd be part of the
21 systems or train control working groups. He would
22 be -- he would be working closely with the
23 equivalent staff in terms of OLRTC, so he'd be
24 meeting with them. He'd probably be meeting on
25 occasion directly with Thales or Alstom if it

1 suited it. I mean, the subs and the suppliers
2 weren't generally part of working groups, but OLRTC
3 would have been his link into those -- into those
4 parties.

5 CHRISTINE MAINVILLE: And would that
6 have been mostly for oversight purposes or to
7 provide input, help to facilitate the work?

8 STEVE CRIPPS: Well, it would be
9 oversight certainly in terms of general conformance
10 with the requirements of the contract, but again,
11 we tried to work as a team, but realizing, you
12 know, as the concessionaire and the constructor,
13 RTG's responsible for delivering what they
14 committed to deliver. So it's -- you know, it's
15 their responsibility to employ the means and
16 methods to deliver what they need to deliver, but
17 certainly our approach -- you know, my personal
18 approach and the City's approach was all about
19 collaboration and trying to work together with
20 the -- with this team and, you know, put the 'P' in
21 partnership, you know, to -- 5 years of
22 construction and 30 years of maintenance, so we
23 tried to work collaboratively with them, but again,
24 realizing, you know, our role versus their role
25 and -- and so living and working within those

1 boundaries.

2 CHRISTINE MAINVILLE: And was IO
3 embedded with -- after the procurement phase, or --

4 STEVE CRIPPS: Yes, so IO's main role
5 while I was there from 2014 through to 2018 was
6 they were members of the City's Executive Steering
7 Committee, so they would attend meetings, either
8 virtually or in person, and the role was -- at that
9 point was primarily advisory: So in terms of
10 contract interpretation, in terms of their
11 experience with -- with transit projects in other
12 areas - Toronto, for example - we could tap into
13 some of the folks they had with transit experience
14 as well too. So they -- they're more or less
15 advisors on sort of special issues as part of the
16 Executive Steering Committee, but they were -- they
17 were members.

18 CHRISTINE MAINVILLE: Did they provide
19 advice just about how to implement the P3 during
20 the construction, or input as to approach on when
21 issues arose, or?

22 STEVE CRIPPS: Absolutely, yeah, yeah.
23 If it was contract interpretation or their advice
24 on how to implement certain things, that's what --
25 that's where we would tap into them.

1 CHRISTINE MAINVILLE: And do you recall
2 any particular disagreement with IO during the
3 construction phase about some of these issues?

4 STEVE CRIPPS: I -- I don't recall
5 particular disagreements with them, no.

6 CHRISTINE MAINVILLE: Okay. And did
7 they do a lessons learned workshop on oversight? I
8 think as it relates to transit, potentially?

9 STEVE CRIPPS: Not during my tenure.

10 CHRISTINE MAINVILLE: No? Okay.

11 STEVE CRIPPS: No.

12 CHRISTINE MAINVILLE: Aside from the
13 consultants I've mentioned, I believe Deloitte
14 advised on some financial aspects?

15 STEVE CRIPPS: Sorry, what was the
16 name --

17 CHRISTINE MAINVILLE: Deloitte.

18 STEVE CRIPPS: Oh, Deloitte's. Not
19 necessarily on my project, no.

20 CHRISTINE MAINVILLE: Okay. Not during
21 the construction phase, really.

22 STEVE CRIPPS: No, no. I mean, they
23 did -- eventually, towards the end of my tenure,
24 the Executive Steering Committee expanded to
25 include Stage 2 as well too, and so Deloitte's had

1 a strong role in Stage 2, so there were times at
2 the Executive Steering Committee where a Deloitte
3 representative would be there, but not advising
4 necessarily on the -- on my project.

5 CHRISTINE MAINVILLE: Okay. And what
6 about Boxfish? What was their role?

7 STEVE CRIPPS: Yeah, so Boxfish -- and
8 again, during my time, Boxfish was an invited guest
9 to all of the Executive Steering Committees, and so
10 they -- they weren't -- they weren't monthly --
11 they weren't regular monthly attendees. We did
12 Executive Steering Committees on a monthly basis.
13 So they would -- a Boxfish representative would
14 attend some of the executive steering committees,
15 and again, basically as an advisor, as somebody who
16 was involved during the procurement and as somebody
17 who had involvement in other transit projects in --
18 in Toronto and expertise in that area, he would be
19 called upon for advice or expertise based on his
20 experiences.

21 CHRISTINE MAINVILLE: "He" being Brian
22 Guest?

23 STEVE CRIPPS: Correct.

24 CHRISTINE MAINVILLE: And so that could
25 be on a wide-ranging series of issues?

1 STEVE CRIPPS: It could be on anything,
2 yeah: contract interpretation, how other -- how
3 other concessionaires have done things, how other
4 owners have done things. It could be on all sorts
5 of issues, yeah.

6 CHRISTINE MAINVILLE: And was there
7 occasionally conflict as between the advice
8 received on the same issue or similar issues from
9 different consultants?

10 STEVE CRIPPS: Sorry, can you just
11 clarify that? Conflict between?

12 CHRISTINE MAINVILLE: Well, so let's
13 say IO is providing advice also on contract
14 interpretation or, you know, implementation or what
15 approach to take when some issue arises. Perhaps
16 Boxfish is opining on the same thing. You know,
17 ultimately, would it be your call, or how would
18 those be dealt with?

19 STEVE CRIPPS: If it -- this was all
20 happening at the Executive Steering Committee. I
21 don't remember a conflict as such. I do remember
22 discussions and varying opinions. I wouldn't say
23 "conflict," but -- but generally those things would
24 be resolved and agreed upon and the path forward
25 agreed upon by the Executive Steering Committee and

1 Mr. Kanellakos as the chair.

2 We also -- you know, in terms of if it
3 was an issue of contract compliance or PA
4 interpretation, we also had BLG as our -- as our
5 legal representative, so they would be a primary
6 source of -- of contract interpretation - later on,
7 Singleton Reynolds, of course, too.

8 CHRISTINE MAINVILLE: Yes, and I don't
9 want you to get into any legal advice or anything
10 like that. Would anyone have more authority or any
11 consultant carry more weight in decisions?

12 STEVE CRIPPS: At the Executive
13 Steering Committee?

14 CHRISTINE MAINVILLE: Yes.

15 STEVE CRIPPS: No, I don't -- I
16 didn't -- I didn't see it that way. I think there
17 was always good discussion, always lively
18 discussion. It was a very engaged committee and --
19 and I thought a very effective committee in terms
20 of providing the executive direction to the
21 project.

22 CHRISTINE MAINVILLE: Now, in terms of
23 project management, were there -- did the City have
24 management plans in terms -- for instance, a change
25 management plan, an engineering management plan,

1 project controls plans, these sorts of documents?

2 STEVE CRIPPS: Yeah, in terms -- I
3 guess, in terms of project controls, as an example,
4 we would have a -- a quality management plan,
5 which -- which was basically an audit plan. So --
6 so we had a small sort of quality oversight or
7 quality management team that would develop an audit
8 plan, and we would develop that in cooperation with
9 both RTG and OLRTC because what -- you know, to me,
10 when you look at contract compliance or, you know,
11 quality oversight, it's not the City's role solely.
12 It's the City providing oversight to RTG and OLRTC.
13 It's RTG providing oversight to their contractor,
14 OLRTC, and it's OLRTC providing oversight to their
15 subs and their suppliers, right?

16 So if we're going to develop, as an
17 example, a quality -- or an audit plan, we would
18 look at what audits RTG is doing on OLRTC, and we
19 would look at what audits OLRTC's doing, and we
20 would make sure we were coordinated -- you know, we
21 weren't duplicating efforts on that and that we
22 were addressing what we saw as, you know, the
23 critical areas to -- to be doing audits on. So,
24 you know, we had an audit plan in that regard.

25 In terms of contract management, we had

1 a contract manager. Didn't have a documented plan
2 as such, but he would -- he would deal with -- he
3 was -- had expertise in contract management and
4 very knowledgeable about the PA, so he would
5 provide that oversight.

6 CHRISTINE MAINVILLE: Was that
7 Mr. Colaiacovo?

8 STEVE CRIPPS: Claudio Colaiacovo
9 looked after the project controls office. So he
10 had a contract manager, so that was Lorne Gray; and
11 then had a quality person, that was Joanne
12 Paquette; and he also had a scheduling expert, that
13 was Craig Killin; and then he had the budgeting
14 area under him as well. So in terms of project
15 budget, office budget, and contingency budget,
16 their office tracked all that, and again, all that
17 was reported through to the Executive Steering
18 Committee as well.

19 CHRISTINE MAINVILLE: Okay. So first
20 of all, could -- if -- could we have an
21 undertaking, Catherine, to -- or Jesse, for the
22 audit plan? I don't think we've located that as
23 yet.

24 U/T JESSE GARDNER: Yes. So we'll take a
25 look at that, and assuming we can find that, we'll

1 pass it along.

2 CHRISTINE MAINVILLE: Thank you.

3 So you've spoken about this a bit, but
4 I take it in terms of describing how the City
5 planned to provide the necessary assurance reviews
6 and -- and nontechnical audits, is that -- would
7 that be limited to what you've described about the
8 audit plan, or is there more about that that you
9 can --

10 STEVE CRIPPS: In terms of the audit
11 plan, that -- that's -- I think that covered it,
12 but in terms of oversight or -- or contract
13 management? Is that --

14 CHRISTINE MAINVILLE: Well,
15 definitely -- you can explain even more broadly
16 about how the City was going to perform its
17 governance and oversight role.

18 STEVE CRIPPS: Sure. Okay. So again,
19 in terms of the City, the first thing, you know, we
20 had to -- that was -- that was created was a very
21 solid team, and, you know, when I talk about the
22 City's team, it covers my office, of course, staff
23 and consultants. It covered other City offices:
24 you know, primarily OC Transpo or Transit Services
25 as the client or the operator of the system once it

1 was done. Covered many other city offices:
2 building code services, fire services, police
3 services, environmental services. So they were all
4 part of the oversight team for their respective
5 areas of authority.

6 You know, so we put the team together.
7 Everybody had copies of the PA. Certainly experts
8 were very knowledgeable about output specifications
9 of their area of the PA. As I mentioned, we had --
10 we had experts embedded in our office; we had
11 experts -- sort of ad hoc experts that we would --
12 that we would bring in if necessary. The working
13 groups I mentioned before, but to me a real
14 critical area in terms of just day-to-day workings
15 and dealing with their particular subject, dealing
16 with issues, dealing with disagreements, dealing
17 with PA interpretation, dealing with status of the
18 work, scheduling of the work, that's all part of
19 what the working groups were doing.

20 Onsite monitoring, of course both the
21 City staff and consultants were out in the field
22 fairly extensively. Part of our review was
23 reviewing documentation, so design reviews; I
24 mentioned the quality audits, compliance audits,
25 so -- independent certifier tours, so they were

1 done on a regular basis - so sort of the senior
2 level folks, so me, RTG representatives, the
3 independent certifier - we would go out on monthly
4 tours as well too, and RTG would present the key
5 elements to the project to us, and we would talk
6 about scheduling, any challenges they were having.
7 So the independent certifier was -- was a part of
8 that process as well.

9 So that's sort of the -- that's sort of
10 the people that -- in the -- the sort of processes
11 we use for contract compliance.

12 CHRISTINE MAINVILLE: And in terms of
13 documents, though, like, is there anywhere we can
14 find some of the -- that in terms of, as I
15 mentioned, some management plans or anything beyond
16 the audit plan that you've mentioned?

17 STEVE CRIPPS: Certainly minutes of
18 working groups would be available, monitoring
19 reports -- onsite monitoring reports. I'm sure we
20 could provide samples of -- of those. Design
21 reviews, I think we could -- there's probably
22 documentation that shows many design reviews.

23 CHRISTINE MAINVILLE: I understand
24 these to be their work product, though, but was
25 there anything setting out what the plan would be

1 or what the structure would be or the process to be
2 followed?

3 STEVE CRIPPS: Yeah, the -- I think the
4 office as a whole before I got there created
5 documentation to -- to lay out what the general
6 approach would be and what the management structure
7 would be and the plan that would go along with
8 that. Now, I -- I'd have to see if we could dig
9 that up, but I believe that was put in place as
10 part of the outset of the office.

11 CHRISTINE MAINVILLE: Was that
12 something you would have been familiar with coming
13 into your role and, you know --

14 STEVE CRIPPS: Yeah, I -- the -- I
15 don't recall reviewing it specifically when I came
16 into the office. I mean, the office was -- you
17 know, the office was functioning as it was set up,
18 but it was -- certainly by the time I got there,
19 construction had been underway for about a year, so
20 my main role was to look at -- well, not my main
21 role, but what I did when I got there was really
22 look at how it was functioning, you know, who we
23 had in place, what expert -- what experts we had,
24 you know, where -- where the project was going and
25 how our office would have to -- would have to morph

1 over time.

2 You know, in the early days, it started
3 off -- you know, it was somewhat of a construction
4 project versus a -- you know, a systems or a
5 transit project, so over time we would look at the
6 consultants and look at the staff and look at the
7 expertise we have in the shop and look at how that
8 needs to change, depending on where we were in the
9 project. So that's really what -- you know, sort
10 of how I was looking at the office on how we best
11 provide the oversight that we need to provide.

12 CHRISTINE MAINVILLE: There was a
13 project management plan? Is that -- do you recall
14 that document?

15 STEVE CRIPPS: I -- I recall in my very
16 early days seeing it, yeah.

17 CHRISTINE MAINVILLE: And I take it
18 from your answer that you don't know necessarily
19 what subplans there -- there were, so plans that
20 flowed from that specific to different areas --

21 STEVE CRIPPS: No.

22 CHRISTINE MAINVILLE: -- and what
23 existed in writing or not?

24 STEVE CRIPPS: No. It's been quite
25 some time, so I couldn't speak to that.

1 CHRISTINE MAINVILLE: Okay. Counsel,
2 if you're able to look into that, it would help, in
3 terms of submanagement plans flowing from the
4 broader project management plan.

5 U/T JESSE GARDNER: Sure. We'll take a
6 look.

7 CHRISTINE MAINVILLE: Do you recall the
8 independent certifier having performed a readiness
9 review and a project agreement compliance report?
10 So, you know, at the beginning of the P3 project,
11 but would it have been something that you would
12 have been aware of?

13 STEVE CRIPPS: A readiness review?

14 CHRISTINE MAINVILLE: Yes, being ready
15 to effectively begin this P3 project.

16 STEVE CRIPPS: No. That would have
17 been prior to my -- to my time. The IC's main role
18 when I was there is, you know, producing --
19 producing monthly reports on the status as well as
20 certifying certain elements, primarily milestone
21 payments, one of the key functions of the
22 independent certifier during that time.

23 CHRISTINE MAINVILLE: And in terms of
24 audits, was there an internal audit team, or did
25 the City rely on third parties for that?

1 STEVE CRIPPS: No, we had -- we had a
2 small consulting firm -- well, we had one rep from
3 a small consulting firm as part of Claudio's area
4 in -- doing quality and compliance audits, so we
5 did everything in house.

6 CHRISTINE MAINVILLE: Was there a
7 master project schedule for the entire OLRT
8 project?

9 STEVE CRIPPS: A master schedule? So
10 the constructor would -- would provide a master
11 schedule at the beginning of it and then provide
12 monthly updates to it, if that's what you're
13 referring to.

14 CHRISTINE MAINVILLE: The City didn't
15 maintain its own?

16 STEVE CRIPPS: Schedule of the project?

17 CHRISTINE MAINVILLE: Yes.

18 STEVE CRIPPS: No, no. On a P3
19 project, doing our own schedule is very
20 challenging. I would say it's almost impossible.
21 I mean, our role was to look at their schedule and
22 track their schedule and track their performance
23 against their baseline schedule, but in terms of
24 doing our own, our office didn't do that.

25 CHRISTINE MAINVILLE: And so you -- you

1 were tracking against their -- I guess not their --
2 not just their original schedule but the evolving
3 schedule?

4 STEVE CRIPPS: Yes, so every month they
5 were required to provide a monthly update to
6 their -- to their schedule, and so several things
7 would happen as a result of that. So again, under
8 Claudio's area, he had Craig Killin (indiscernible)
9 scheduling, and he has extensive experience in the
10 area of schedule management and schedule analysis.
11 So he would receive the schedule; he would do a
12 fairly high-level look at it - and by that I mean,
13 you know, what's changing, how much float is -- you
14 know, what's changing in terms of float for
15 different items, what's on the critical -- what was
16 on the critical path, what's on the critical path
17 now, how many -- you know, how many things have
18 been added to the critical path, what's slipping
19 from the baseline schedule - he would look at, you
20 know, production rates and say, Okay, they're
21 forecasting this element to be done by this date,
22 you know, but based on their production rate so
23 far, unless they change something, they're not
24 going to meet that.

25 So he would -- he would do sort of the

1 high-level analysis of it, but then he would also
2 distribute that within the office to the various
3 functional experts, and they would -- they would
4 look at their particular areas of that -- of that
5 schedule and again look at the same types of
6 things, only in more detail because they've got the
7 knowledge of coming from working groups; they've
8 got the knowledge from looking out in the field and
9 seeing how the work was actually progressing. So
10 they would -- they would look at it from sort of a
11 functional perspective whereas Craig was looking at
12 it from an overall perspective.

13 And then from that point, if we saw
14 slippage, if there was concerns in the
15 schedule - and obviously, over time, concerns grew
16 with the schedule - then we would meet with both
17 OLRTC and RTG and go over those items of concern to
18 us.

19 CHRISTINE MAINVILLE: Okay. And what
20 reporting did RIO have to provide? So what were
21 the regular reports that you would have to -- to
22 provide on the construction?

23 STEVE CRIPPS: So we would provide
24 project updates to -- to council, of course. We
25 would provide regular updates to the Executive

1 Steering Committee --

2 CHRISTINE MAINVILLE: But in terms of
3 format, are these the quarterly memos, or do they
4 take some other format?

5 STEVE CRIPPS: They would be quarterly
6 memos, and then if there was specific areas or
7 specific issues to be addressed, then it would just
8 be a standalone memo to council. Yeah, we will --
9 again, to -- monthly updates to the Executive
10 Steering Committee. Reports would go to
11 Infrastructure Ontario. We would meet regularly
12 and provide regular reports to our funding
13 partners, so -- so Transport Canada and the
14 Ministry of Transportation would receive -- they
15 would be part of the -- the independent certifier's
16 field tours as well as we would provide them
17 regular progress updates as well to -- both written
18 reports and face-to-face meetings with the funding
19 partners.

20 CHRISTINE MAINVILLE: And so just to be
21 clear, because the project management plan
22 references monthly -- RIO monthly reports, is that
23 to -- the ones you mentioned that did occur to --
24 to the Executive Steering Committee, or?

25 STEVE CRIPPS: Yeah, and to the funding

1 partners. I'm just trying to think if there was
2 any other kind of regular reporting, like formal
3 reporting. That's all that's coming to mind right
4 now, Christine.

5 CHRISTINE MAINVILLE: Is there -- were
6 there schedule reports?

7 STEVE CRIPPS: Well, schedule reports
8 would -- would be -- would be contained within sort
9 of the overall project report. In terms of
10 reporting out to people, the schedule would be
11 part -- would form a big element of -- of the
12 project status.

13 CHRISTINE MAINVILLE: And what do you
14 mean by the "project reports"?

15 STEVE CRIPPS: Well, there wasn't
16 really, like -- there wasn't really separate
17 reports just on the schedule. I mean, if we were
18 providing a quarterly report to council, it would
19 talk about, you know, here's where the project is;
20 here's what the contractor's working on now; here's
21 what their schedule says; and here's what's coming
22 up; here's what you can expect in the near future.
23 And so the same type of information would be to
24 funding partners and to the Executive Steering
25 Committee. So -- so the schedule was one of the

1 elements or one of the major elements in any of the
2 reporting we did.

3 CHRISTINE MAINVILLE: And then were
4 there other quarterly reports to the Executive
5 Steering Committee?

6 STEVE CRIPPS: No, we -- no, we met --
7 we met monthly with them and then did the monthly
8 reporting to them.

9 CHRISTINE MAINVILLE: And were there
10 key indicators reports?

11 STEVE CRIPPS: A key indicators report.
12 Not as a standalone document. Certainly as part of
13 reporting, we would -- you know, whether it be to
14 FEDCO or to council or to Executive Committee, we
15 would talk about, you know, here's the things we're
16 watching; here's the key elements that are coming
17 up that we're tracking that are perhaps on the
18 critical path or are key to them achieving revenue
19 service availability. But it wasn't -- it wasn't a
20 standalone item.

21 CHRISTINE MAINVILLE: And how -- did
22 RIO communicate, like, metrics on overall progress
23 completion to city council?

24 STEVE CRIPPS: Yeah, that was generally
25 part of the quarterly reports to council. So they

1 would have a whole list of metrics in terms of
2 track installed, overhead catenary system numbers
3 of metres installed, how many vehicles assembled,
4 you know, how many metres of tunnelling, that type
5 of -- that type of reporting.

6 CHRISTINE MAINVILLE: Okay. So that
7 would have been the --

8 STEVE CRIPPS: Yeah. And that would
9 include graphics with those as well too, from memos
10 to council, just so it's easier to read.

11 CHRISTINE MAINVILLE: Okay. Jesse and
12 Catherine, the only thing I believe we've
13 identified to date are the quarterly memos to
14 council, so if you're able to look into some of
15 these other items, that would be helpful, other
16 reports.

17 JESSE GARDNER: Sure. Any of the
18 reports to council, FEDCO, anything like that?

19 CHRISTINE MAINVILLE: And the Executive
20 Steering Committee.

21 JESSE GARDNER: Okay.

22 CHRISTINE MAINVILLE: Yes, please.

23 U/T JESSE GARDNER: Okay.

24 CHRISTINE MAINVILLE: And then in terms
25 of the approach to risk management, were there risk

1 assessment reports, or how did you go about that?

2 STEVE CRIPPS: So the -- within
3 Claudio's area again, in project controls, we had a
4 risk review board. So we would -- we would manage
5 risks that way, and so -- so how that was generated
6 was the folks sort of at the working level, so
7 either City staff or experts, if they saw risks
8 evolving or the potential for risks to generate
9 themselves, they would -- they would do up a report
10 to their manager identifying what the risk is, what
11 the potential for the risk is and what the impact
12 of the risk might be. That manager, if he or she
13 endorsed that that was a valid risk, he or she
14 would bring that forward to the risk review board.
15 The risk review board met regularly, and we would
16 discuss any new risks coming forward, and if we
17 agreed that it was a valid risk that needed to go
18 on our risk register, we would add it to the risk
19 register. If we saw something that we thought it
20 might be premature to add to our risk register, we
21 would put it sort of in a holding pattern to look
22 at next month to see if it warranted bringing
23 forward if that risk was coming to fruition, for
24 example, and we would add it. So we maintained a
25 risk register.

1 Of course, like any risk register, it
2 talks about probability, it talks about impact, and
3 then also an important element of that was the
4 potential monetary impacts to the City, if there
5 was monetary impacts to the City, and that fed into
6 the -- the contingency management reporting as well
7 too. So we had -- as part of the project budget,
8 there was a contingency fund of \$100 million, so
9 every month we would report on how much of that
10 money has been spent and how much any risks coming
11 forward, how much they might add to that
12 contingency budget. So that's -- you know, that
13 was one way we managed the risks, and the other was
14 being dealt with more locally at working groups or
15 at the Works Committee, at one-on-ones with RTG, at
16 one-on-ones with OLRTC, we would -- not necessarily
17 the management of risk, but that's where the topic
18 of risks were discussed.

19 The Executive Steering Committee, risk
20 was a huge topic of discussion there, and, you
21 know, partway through the project, the sort of
22 standard format for Executive Steering Committee
23 expanded to include a component -- a component with
24 RTG as well too. So risks to schedule, risks to
25 quality was discussed with the senior executives at

1 Executive Steering Committee.

2 CHRISTINE MAINVILLE: And who was on
3 this risk review board?

4 STEVE CRIPPS: So it would have been
5 me, my three managers, Lorne Gray as the contract
6 manager, and I believe that's all.

7 CHRISTINE MAINVILLE: Okay. And then
8 if we wanted to see, then, what was being reported
9 on the risk assessments, is that the risk register
10 that we should look at --

11 STEVE CRIPPS: Yes.

12 CHRISTINE MAINVILLE: -- or is it --
13 okay.

14 STEVE CRIPPS: Yes, there's a risk
15 register.

16 CHRISTINE MAINVILLE: Okay. So if we
17 could also obtain that, that would be helpful.

18 And finally, in terms of a formal
19 governance framework for the project delivery, are
20 you able to explain what governance was set up for
21 the project at the early stages? You know,
22 something that does define the guidelines, the
23 requirements in -- for each project management area
24 at each life cycle stage?

25 STEVE CRIPPS: No, I -- I'm -- I

1 believe that was done before my -- before my
2 arrival on the project, so I -- I can't really
3 speak to that.

4 CHRISTINE MAINVILLE: How did RIO plan
5 to manage the P3 relationship and the project
6 management process, then? Like, you're coming into
7 this. Is there a plan, or are -- you just assessed
8 how things were functioning in terms of what the
9 process would be?

10 STEVE CRIPPS: Yeah, I guess -- you
11 know, in terms of function of the office, again,
12 when I arrived, it had been underway for -- well,
13 the construction had been underway for over a year,
14 and the office had been in -- in effect longer than
15 that. So -- so really the way I approached it
16 is -- is, you know, meeting weekly with my three
17 managers and looking at where the project is, you
18 know, what our priorities are for oversight,
19 what's -- what we have in the office currently, you
20 know, where we see -- where we see the project
21 going in terms of what we're going to need to
22 supplement in terms of oversight.

23 You know, over time -- I mean,
24 obviously we had a budget to work within, so over
25 time, we would look at our consultant budget, for

1 example, and see if there's areas we could wind
2 down and ramp up in other areas. So for example,
3 if Gary had staff on in sort of the civil
4 construction area that we could either eliminate or
5 reduce in terms of number of hours to deal with the
6 increasing need with, you know, vehicle expertise
7 or CBTC expertise or tunnel ventilation expertise,
8 that's kind of really the way we went about it, and
9 my three managers and I would -- you know, we met
10 weekly, I met with them both one-on-one weekly and
11 as a group we met weekly too. So that was, you
12 know, one of our main -- one of our main focusses.

13 CHRISTINE MAINVILLE: And I understand
14 that in 2015, the Contingency Management Committee
15 was established as well as the Change Control
16 Board; is that right?

17 STEVE CRIPPS: CM -- CMC --

18 CHRISTINE MAINVILLE: CMC.

19 STEVE CRIPPS: Yeah, so Contingency
20 Management Committee and CM -- sorry, Risk Review
21 Board, no, they were -- they were established at
22 the outset of the project, so sort of --

23 CHRISTINE MAINVILLE: Okay.

24 STEVE CRIPPS: -- they were in place
25 when I arrived, let me put it that way, so I can't

1 actually say when they were -- when they were --

2 CHRISTINE MAINVILLE: Established.

3 STEVE CRIPPS: -- implemented. But
4 they were there upon my arrival.

5 CHRISTINE MAINVILLE: Okay.

6 STEVE CRIPPS: So the -- so CMC -- did
7 you want me to describe sort of the CMC's role?

8 CHRISTINE MAINVILLE: No, that's fine.
9 But the change control board, CCB, was that
10 established when you arrived?

11 STEVE CRIPPS: That was in place when I
12 arrived. Both the Change Control Board --

13 CHRISTINE MAINVILLE: Okay.

14 STEVE CRIPPS: -- and the Risk Review
15 Board were elements of my office. It was a part of
16 my office structure, and they were in place when I
17 arrived, yeah.

18 CHRISTINE MAINVILLE: And other than
19 Mr. Jensen, if we had questions about the initial
20 plans and framework that was put in place, would
21 that -- who would be best to speak to that?
22 Ms. Schepers?

23 STEVE CRIPPS: Yeah, probably. Nancy
24 Schepers would -- was there during that time, yeah,
25 John Jensen, and I think they'd probably be the

1 best sources.

2 CHRISTINE MAINVILLE: And I understand
3 that Capital Transit Partners was engaged to
4 provide final cost estimates and implementation
5 schedules? We've seen some estimates from Capital
6 Transit Partners prepared, but are you able to
7 speak to how the cost baselines were established?

8 STEVE CRIPPS: At the outset of the
9 project?

10 CHRISTINE MAINVILLE: Right, in --

11 STEVE CRIPPS: No. No, that would --

12 CHRISTINE MAINVILLE: So it would be --

13 STEVE CRIPPS: Sorry, Christine. No,
14 that was all done before my arrival.

15 CHRISTINE MAINVILLE: Okay. And would
16 these be something that you would see over the
17 course of the project, to measure against, or not
18 really?

19 STEVE CRIPPS: In terms of, like,
20 baseline estimates --

21 CHRISTINE MAINVILLE: Yes.

22 STEVE CRIPPS: -- for the project? No.
23 No. Really, you know, in terms of expenditure, we
24 would see their -- their expenditure curves, for
25 example, but not necessarily tracking against what

1 CTP's estimates would have been. You know, one of
2 the -- one of the -- you know, we would track their
3 expenditure to some degree, specifically in terms
4 of milestones, in terms of what they were being
5 paid versus what they had expended on the project,
6 but -- you know, but in terms of how they're
7 comparing to a baseline schedule, we didn't compare
8 the two.

9 CHRISTINE MAINVILLE: Okay. And do you
10 know, going back to the CMC, do you know how the
11 contingency was determined? And --

12 STEVE CRIPPS: The \$100 million?

13 CHRISTINE MAINVILLE: Yes.

14 STEVE CRIPPS: No, I don't know how
15 that figure was arrived at.

16 CHRISTINE MAINVILLE: Okay. And do you
17 know what contingency was included within the
18 \$2.1 billion budget and what was outside the
19 budget?

20 STEVE CRIPPS: I believe the -- I
21 believe the \$100 million contingency, if my
22 recollection is correct, was outside of the
23 2.1 billion.

24 CHRISTINE MAINVILLE: Okay.

25 STEVE CRIPPS: But -- I think we could

1 easily confirm that, but I believe it was outside
2 of the 2.1.

3 CHRISTINE MAINVILLE: Okay. You've
4 spoken about your relationship or the City's
5 relationship with RTG. Did that evolve or change
6 during your time on the project?

7 STEVE CRIPPS: In terms of the
8 relationship, I -- I'd say -- I'd say throughout
9 the project, it was a very professional and
10 respectful working relationship. I know that
11 before I came onto the project, the City and RTG
12 did some partnering sessions. I think they wanted
13 to get off on the right foot. So there was a good
14 working relationship when I arrived on the project,
15 and it was one of my personal goals to maintain
16 that good working relationship. I think a project
17 of this magnitude, there's going to be lots of
18 interaction and a lot of issues to be dealt with,
19 and it's always been my philosophy that, you know,
20 being professional, being respectful to other
21 people is the way to go about things, and, you
22 know, with Mr. -- Mr. Estrada is the CEO of -- of
23 RTG. I -- I'd say I had an excellent working
24 relationship with him. We would do one-on-ones.
25 Of course, we would all be part of the Works

1 Committee. Of the various directors for OLRTC, I
2 would meet with them one-on-one as well too. And
3 so, you know, as things got tense throughout the
4 project, I didn't see that relationship diminishing
5 at all. We could disagree respectfully and move
6 forward and have our opinions, but I don't think --
7 the relationship never degraded, in my eyes.

8 CHRISTINE MAINVILLE: And what about
9 with Mr. Lauch?

10 STEVE CRIPPS: Same thing. Mr. Lauch I
11 knew, obviously, when Antonio Estrada was the CEO
12 and Peter Lauch was his technical director - I
13 think that was his title - had a great working
14 relationship with him too, and that continued --
15 that continued after Antonio left the project.

16 CHRISTINE MAINVILLE: Did you have any
17 concerns about how RTG was structured or organized?

18 STEVE CRIPPS: Well, RTG has a pretty
19 small -- pretty small structure. You know, I
20 guess -- I guess, you know, what I -- I looked more
21 at was OLRTC, really, than RTG. I mean, RTG was --
22 was, you know, providing oversight, so they had
23 Peter and they had some other representatives
24 providing oversight. You know, really, where
25 the -- where my -- my focus was in OLRTC and how

1 they were -- how they were structured and what they
2 had in place.

3 CHRISTINE MAINVILLE: And were there
4 any concerns there?

5 STEVE CRIPPS: Well, you know, it --
6 certainly there -- you know, if you start at the
7 top of OLRTC, they had several directors during
8 the -- during the process. I think all of those
9 directors had very strong experience in large --
10 large infrastructure projects. I think, you know,
11 one of them had direct experience in transit
12 projects, so they were fairly strong individuals,
13 experienced individuals, so not a lot of concern
14 there.

15 You know, I think -- I think once you
16 got down into more the working levels, I think
17 there was concerns from -- from me and my staff
18 that they were perhaps underresourced in certain
19 areas, in some of the key -- the key systems area
20 and the sort of the more complex areas, and I
21 think, you know, throughout the project, they
22 probably admitted that they were -- they were
23 underresourced at times in certain key -- key
24 areas.

25 So, you know, systems assurance was one

1 of the areas that they certainly acknowledged they
2 were underresourced in. Testing and commissioning,
3 I think that was another challenging area that was
4 discussed a lot in terms of them being
5 underresourced. And then over time, the -- they
6 did increase -- increase resources and bring on
7 more staff and additional expertise to the project.

8 CHRISTINE MAINVILLE: What do you mean
9 by "systems assurance"?

10 STEVE CRIPPS: Oh, so as part of any --
11 any huge, complex project like this, there's a
12 systems assurance process. So what it does, it's a
13 very specialized field of engineering that takes --
14 takes complex projects with, you know, many, many
15 systems and goes from the sort of concept stage to
16 the design stage to the build stage to the operate
17 stage and makes sure all the elements within that
18 are integrated. This project, like, everything
19 was -- everything had connectivity to everything
20 else in this project, so the systems -- the systems
21 assurance process is a very rigorous and detailed
22 and methodical process to -- to sort of lay out all
23 that documentation on -- on how safety is going to
24 be ensured through all of this -- all of these
25 processes and documentation. So it was an area

1 that they had to do a lot of catch up on, and I'd
2 say it's one example where they were sort of
3 underresourced.

4 CHRISTINE MAINVILLE: And around
5 what -- when was there a recognition of the fact
6 that they needed more resources on this, would you
7 say?

8 STEVE CRIPPS: Not a particular area.
9 I think it came to -- came to a head in probably
10 2017. So at that time, the City brought on the
11 independent safety auditor, and around that same
12 time, RTG brought on a consultant. The company
13 name is SEMP, S-E-M-P. They brought on a
14 specialist in systems assurance too, and both of
15 those parties did their own audit or review, I
16 guess, or state of the -- see what the state of
17 progress was, and both those parties recognized
18 that for a project of this size and complexity,
19 OLRTC was -- was well behind in their systems
20 assurance processes.

21 CHRISTINE MAINVILLE: Did you come to
22 understand why that hadn't been provided for
23 earlier?

24 STEVE CRIPPS: I just think they didn't
25 have the right people on or -- they didn't have the

1 right people on; they didn't have enough people on.
2 It think it was either underestimating the effort
3 involved in it, and I know there was areas -- not
4 specifically that one, but there was areas where
5 RTG admitted that they had underestimated the
6 effort involved.

7 The other reason was I think just cost
8 management. I think in certain areas -- and again,
9 I'm not -- I don't know if it's this specific area
10 of systems assurance, but in certain areas, they
11 were just trying to manage costs and would --
12 would -- you know, would try to be as efficient as
13 possible with the expertise and resources they're
14 bringing onboard.

15 CHRISTINE MAINVILLE: And who in
16 particular would have acknowledged this to you?

17 STEVE CRIPPS: It would be everybody up
18 to and including -- well, everybody up to and
19 including and above Antonio, as an example - he was
20 quite open about things like that - OLRTC's
21 directors, even their Executive Committee. So RTG
22 had an Exco that Antonio would have reported to, so
23 that was an executive representative from each of
24 the three firms: one from ACS Infrastructure, one
25 from SNC-Lavalin, of course, and one from EllisDon.

1 So there were times when Exco came to our Executive
2 Committee as well too, and they -- there were times
3 when they -- they openly admitted that they had
4 underestimated or underresourced certain things and
5 obviously made commitments to -- to deal with that
6 issue.

7 CHRISTINE MAINVILLE: Okay. And is
8 that the same for testing and commissioning, in
9 terms of the level of acknowledgement that that had
10 not been sufficiently looked at and the timing of
11 when that was recognized?

12 STEVE CRIPPS: I would -- I would agree
13 with that. Testing and commissioning is
14 something -- right from the start, I think, you
15 know, Antonio probably talked about it in 2013,
16 before I got there, but certainly in 2014, testing
17 and commissioning was one of his -- he saw that --
18 testing and commissioning and vehicles he saw as
19 probably his primary risks on this project.

20 CHRISTINE MAINVILLE: He saw as a
21 primary risk but didn't sufficiently provide for
22 that, or he recognized that late in the day, that
23 it was a risk?

24 STEVE CRIPPS: I think he recognized
25 the risks early on, and -- and I just -- you know,

1 I -- it's my view that the constructor just didn't
2 bring on -- didn't always bring on the appropriate
3 resources early enough.

4 CHRISTINE MAINVILLE: Is this something
5 that the City had previously recognized or just
6 understood that when it was raised by RTG or OLRTC?

7 STEVE CRIPPS: These would have been
8 discussed at everything from the working groups up
9 to the -- up to and including Works Committee
10 this -- these discussions would have happened.

11 CHRISTINE MAINVILLE: Do you mean as
12 things were -- as they were material --

13 STEVE CRIPPS: Yes. As we --

14 CHRISTINE MAINVILLE: -- materializing?

15 STEVE CRIPPS: Yes, sorry. As we saw
16 risks coming to fruition or we -- or even before
17 that, if we had concerns, again, they'd be
18 discussed at sort of all levels up to Works
19 Committee, up to Executive Steering Committee. I
20 mean, Works Committee was the committee we really
21 used to focus on issues like this too, and it
22 wasn't so much of, you know, a project update. It
23 was -- it was dealing with very specific issues,
24 whether they be quality issues, scheduling issues,
25 you know, major risks like this. This was -- this

1 was where -- this is where, you know, the senior
2 folks in my office and the senior folks with both
3 the concessionaire and the constructor were
4 present. As well as the independent certifier too.

5 CHRISTINE MAINVILLE: And what would
6 the City do in response when these risks
7 materialized?

8 STEVE CRIPPS: Well, again, that's
9 where -- I mean, all -- what our role was is
10 identifying where we're seeing risks, ask them what
11 their mitigation plans are. You know, it's same
12 with scheduling risks: you know, identifying what
13 we're seeing as the challenges at -- demand
14 mitigation schedules from them, follow up, track
15 these things, document these things, keep following
16 them up, escalate them up to Executive Steering
17 Committee.

18 CHRISTINE MAINVILLE: So was there an
19 original plan or a schedule for testing and
20 commissioning?

21 STEVE CRIPPS: Yeah, well, it always
22 would have been part of RTG's schedule, so it would
23 have been on their baseline schedule at the outset,
24 and then every month -- every month that came along
25 and they provided a new schedule to us, it

1 covered -- it covered all aspects of the project,
2 right through to revenue service availability. So
3 you could go through that schedule and look at --
4 look at what they planned for everything from, you
5 know, station construction to tunnelling to systems
6 to vehicles to -- right through to revenue -- right
7 through to substantial completion and revenue
8 service availability.

9 CHRISTINE MAINVILLE: What about the
10 criteria for the various pieces of testing and
11 commissioning?

12 STEVE CRIPPS: So like what level did
13 it go down to? It would --

14 CHRISTINE MAINVILLE: What was it
15 devised and how, if you know?

16 STEVE CRIPPS: Yeah, the schedule would
17 have shown various elements of testing and, you
18 know, what -- the systems integration testing,
19 systems acceptance testing for the various
20 elements, when they would all be achieved, and an
21 overall testing and commissioning, leading into
22 trial running, leading into -- or pretrial running,
23 sorry, leading into trial running, substantial
24 completion and so on. So it would show all of
25 those sub-elements as well too.

1 CHRISTINE MAINVILLE: But when you say
2 that this piece was underresourced, was it just in
3 terms of execution, then, or also in terms of
4 planning?

5 STEVE CRIPPS: Well, you know, I think
6 what we found with the schedules is their -- is
7 that their planning -- and this is -- you know,
8 this probably really came to a head in late 2016 or
9 early 2017, when our concerns on scheduling
10 really -- really escalated is that their planning
11 just wasn't reflecting reality.

12 They were have -- they were showing,
13 you know, production rates that weren't -- that
14 they weren't exhibit -- that they weren't achieving
15 elsewhere. They were showing deadlines that we
16 didn't think they'd be able to achieve. You know,
17 they weren't showing us any plan on how to achieve
18 these things, so I think it was -- you know, that's
19 when we started -- well, that's when we started
20 formally documenting the failure to maintain
21 schedules.

22 That's when we started asking them for
23 a formal recovery plan: So not just give us your
24 schedules - show us how you're going to get onto
25 that schedule, because that doesn't really -- you

1 know, that wasn't really part of the monthly
2 updates. Part of the monthly update is updating
3 the schedule, but once it became apparent that
4 things were just slipping on a month-by-month
5 basis, the City asked for a plan, a very detailed
6 plan, on how they're going to achieve what they've
7 been showing on their schedule.

8 CHRISTINE MAINVILLE: And did they
9 provide that?

10 STEVE CRIPPS: We -- I -- they -- they
11 provided sort of their best-efforts plan, but they
12 never -- they never provided the level of detail
13 that we were -- we were seeking. So, you know,
14 that went on -- that went on for probably mid-2017
15 to the end of 2017, and we continued to write and
16 continued to ask for a plan, and again, what they
17 provided wasn't sufficient. It wasn't satisfactory
18 to the City.

19 CHRISTINE MAINVILLE: Did the City have
20 the tools and sufficient options to ensure
21 compliance with the project agreement during the
22 construction phase?

23 STEVE CRIPPS: Yeah, I think we were
24 well positioned to -- to provide -- to provide
25 compliance and monitoring of the project. Again,

1 we -- we had folks embedded in all the disciplines
2 involved in this project: We were out in the
3 field; we were watching their schedule; you know,
4 the experts knew the output specifications that are
5 relevant to their area, and they tracked those; we
6 provided -- we provided rigorous reviews of their
7 Schedule 10 design submissions; we looked at their
8 documentation. Again, the working groups I
9 mentioned were embedded, ad hoc experts. So I
10 think we were well positioned to know -- or to
11 ensure that they were in general compliance with
12 the project obligations and requirements.

13 CHRISTINE MAINVILLE: And so did this
14 cause any significant concerns on the scheduling
15 piece and the delays and how they were going to
16 mitigate those delays?

17 STEVE CRIPPS: Can you say again,
18 Christine? I'm --

19 CHRISTINE MAINVILLE: Well, how
20 concerning was it -- you know, and of course you
21 can speak to how this evolved over time, but what
22 RTG's planning was or OLRTC's planning was for how
23 they were going to mitigate the delay and what --
24 and in terms of the level of information the City
25 was receiving about that.

1 STEVE CRIPPS: Well, yeah. There
2 was -- it was a very concerning period of the -- of
3 the project. Again, you know, in mid-2017, revenue
4 service, the original date of May 24th was really
5 just around the corner, you know, and one of the
6 huge concerns of the City is what has to happen
7 when -- when they get to revenue service
8 availability.

9 So, you know, if I look at my
10 background of highway construction, when a highway
11 is commissioned, you know, flipping traffic over to
12 a new highway -- let's say we're building a new
13 freeway. Flipping traffic over to a new freeway is
14 a pretty -- a relatively simple task compared to
15 what had to happen with this system. So you got --
16 you got OC Transpo running buses, and at some point
17 you have to flip that entire system over to -- to
18 light rail. So -- so not knowing -- you know, not
19 knowing how they're going to achieve this plan
20 they're going to get us was a huge concern to the
21 City and had huge repercussions on Mr. Manconi's
22 Transit Services office in terms of, you know,
23 having them all ready, having drivers trained and
24 ready, in terms of having controllers trained and
25 ready, in terms of having, you know, the whole

1 system flipped over.

2 So -- so it was hugely concerning that
3 we weren't getting good information from them; we
4 weren't getting good schedules from them; we
5 weren't getting a good plan from them; and, you
6 know, they seemed to be sort of focussing their --
7 their -- focussing their -- I won't say excuses,
8 but focussing their concerns on how certain
9 events -- or how delay events may affect the
10 revenue service date too. So -- so by that I mean,
11 you know, they were -- they were very noncommittal
12 in terms of what the date is going to be.

13 CHRISTINE MAINVILLE: And what did you
14 understand that -- what did you understand was the
15 main cause of the delays?

16 STEVE CRIPPS: Whoa. Everything. So I
17 mean, you know, when you're -- when -- the
18 scheduling experts will look at what's on the
19 critical path, and throughout this project, what
20 was on the critical path changed -- changed
21 numerous times. So, you know, vehicles, certainly
22 a huge one. Station construction, systems, tunnel
23 ventilation, CBTC, traction power, systems
24 assurance, as I mentioned before.

25 So at different times, the critical

1 elements were vehicles; at certain times, the
2 critical element was a certain section of the
3 track - for example, the -- what was referred to as
4 the test track; at certain times, stations in the
5 west end were critical. So there was just sort of
6 a huge array of things that were causing delays on
7 the project.

8 CHRISTINE MAINVILLE: What was your
9 understanding of the main cause of delay to the
10 rolling stock, to the vehicles?

11 STEVE CRIPPS: Oh. So I guess -- and
12 again, lots of -- lots of things. So, first of
13 all, they were constructing in the -- or, sorry,
14 assembling vehicles in the maintenance and storage
15 facility, so of course, you know, that required
16 them to set up -- or to take what was meant to be a
17 maintenance function and turn it into an assembly
18 function. So again, for a company like Alstom,
19 that was probably a first, if it's -- either very
20 unusual or a first that they'd be producing
21 vehicles not in a specific purpose-built plant.
22 They had to -- they had to staff that up, of
23 course, with local staff, and a lot of those staff
24 didn't have experience in that area. Certainly,
25 you know, the management team and the -- the

1 experts that had come over from France had
2 experience in that area.

3 Production of other major elements, the
4 bogies was an issue. Typically, I think -- it's my
5 understanding that Alstom had produced bogies in
6 other plants around the world, and they moved that
7 production to Quebec, so there's a plant there
8 that's now producing an element of the -- the
9 vehicle that wasn't built before.

10 Integrating it with the Thales control
11 system, that -- that took time and caused issues.
12 There was supply chain issues that affected
13 production. That caused -- well, both supply chain
14 issues and quality issues with parts caused issues
15 in that they would assemble a vehicle most of the
16 way and then eventually have to do retrofits on
17 that vehicle so when the proper piece came in or
18 the piece that met the quality requirements came
19 in, they'd have to swap that out, so now you've
20 got -- you've got vehicles sort of sitting waiting
21 for other parts to be put on them, so you've got
22 backlogs, storage issues.

23 You know, you've got the cascading
24 effects of, you know, if a vehicle's -- if a
25 vehicle's out on the tracks, OLRTC may need that to

1 do running on the test track for testing and
2 commissioning. Thales may need it to do work on
3 the vehicle for the CBTC installation and testing.
4 Alstom may need it for -- to do retrofits on it.
5 Transit Services may need it for driver training
6 purposes. So you've got competing interests for
7 vehicles, and sort of those cascading effects
8 caused challenges. So there was a lot of -- a lot
9 of elements, I think, to that, the vehicle
10 production.

11 CHRISTINE MAINVILLE: Do you -- well, I
12 take it from what you've said that the City was
13 receiving sufficient information about what was
14 happening on the ground and the causes of delay.
15 Is that fair to say?

16 STEVE CRIPPS: Yeah, so we would be
17 very plugged into all of those issues and what was
18 happening. Again, we had vehicle experts on board,
19 but certainly, you know, when RTG came to Executive
20 Committee, they were very forthcoming with
21 information on production, what challenges they
22 were having with production, how they were going to
23 remediate those -- those issues.

24 There were times when -- when
25 executives or senior personnel from Alstom were

1 brought into City meetings as well too, which, you
2 know, was perhaps a little bit unusual or
3 unorthodox in a P3 in that the owner's meeting with
4 the sub of a sub, but, you know, given the
5 seriousness of the situation and the critical
6 nature of vehicles on this project, the City felt
7 that was certainly a prudent thing to do, to bring
8 in Alstom to hear, you know, firsthand what their
9 mitigation strategies were.

10 CHRISTINE MAINVILLE: Do you have a
11 sense of what the root cause or causes of a lot of
12 these issues were on the rolling stock?

13 STEVE CRIPPS: Well, you know, when you
14 look at -- when you look at Alstom, like, they got
15 thousands of Alstom Citadis vehicles in the world,
16 right? And Thales -- Thales has train control
17 systems in dozens and dozens of cities, and, you
18 know -- so -- so you ask yourself, Okay, Alstom's
19 got thousands of Thales -- or, sorry, of Citadis
20 vehicles in use around the world, and what happened
21 here? And I guess -- you know, I think it comes
22 down to some of the things that I talked about
23 already.

24 You know, perhaps the other element I
25 didn't talk about was they did -- you know, they

1 were modifying the vehicle to some degree for North
2 American standards. So -- so likely that design
3 element associated with that and some of the
4 changes to the vehicle to meet North American
5 standard -- North American standards would have --
6 would have been a contributing factor with that,
7 you know, as well as -- you know, not manufacturing
8 it in one of their plants, as well as staff and on
9 and on. So, you know, I think there was a lot of
10 factors that all -- that all played into the
11 challenges Alstom had.

12 CHRISTINE MAINVILLE: And did the City
13 have a clear understanding of the fact that the
14 Citadis had to be adapted to North American
15 standards? Did they understand when -- you know,
16 upon procuring this -- and I know you weren't
17 there, but that this was to be done?

18 STEVE CRIPPS: Yeah, I -- I believe so,
19 yeah. Certainly -- certainly during the time I was
20 there, it was well known that -- that a number of
21 different elements of the vehicle would be
22 changing.

23 CHRISTINE MAINVILLE: And did the City
24 understand that the interface between Thales's
25 system and Alstom's trains was also a first, was

1 being done for the first time, that particular
2 integration?

3 STEVE CRIPPS: I would say yes, it was
4 probably -- it would have been very well known.
5 I'm not sure that fact was discussed during my
6 tenure, and it certainly -- the challenges
7 associated -- the challenges associated with that
8 were discussed when I was there but not
9 specifically the fact that it was a first that they
10 were working together.

11 CHRISTINE MAINVILLE: Did -- would you
12 say -- would you have considered the Citadis Spirit
13 a proven vehicle or a train, you know, with a track
14 record, or was it new? Did you understand it to be
15 a new design?

16 STEVE CRIPPS: No, I understood it to
17 be -- you know, the base vehicle, again, is in
18 thousands -- thousands of them are in use around
19 the world in similar climates, and -- and so I --
20 you know, it's -- that was always my understanding
21 of it, that the base vehicle was a proven -- it was
22 a proven vehicle and it had been in use elsewhere.

23 CHRISTINE MAINVILLE: And so you
24 wouldn't consider that whatever adaptations they
25 needed to make to adapt, either to the North

1 American market or to the City's requirements in
2 particular, you didn't understand that to mean that
3 this was no longer a tried-and-tested vehicle.

4 STEVE CRIPPS: Yeah, that's correct.
5 That was not my understanding. I'm certainly not
6 an expert in vehicles, but it certainly was not my
7 understanding, from talking to folks who are expert
8 in vehicles, that the changes are so significant
9 that, you know, we've got a brand-new vehicle here.
10 It's -- that was never really a concern that was
11 voiced within my office.

12 CHRISTINE MAINVILLE: Did you ever
13 receive any information on that point from Alstom?

14 STEVE CRIPPS: In terms of --

15 CHRISTINE MAINVILLE: In terms -- was
16 it represented in a certain way along -- you know,
17 was that -- did they make any representations
18 consistent with what your understanding is or was?

19 STEVE CRIPPS: I don't remember
20 specific references to the fact that it's a proven
21 vehicle, but it was generally an accepted fact
22 within the -- the City that it -- that it was.

23 CHRISTINE MAINVILLE: Do you recall the
24 requirements for the rolling stock and the output
25 specifications for it, did you deem them to be

1 fairly prescriptive?

2 STEVE CRIPPS: Yeah, I -- I think there
3 was probably cases where some of the specifications
4 were -- were overly prescriptive, you know, rather
5 than performance -- performance-based. I mean,
6 obviously a P3 project should be primarily
7 performance-based specifications. There were
8 probably some within the output specs that were
9 overly prescriptive, and there were some of those
10 we had -- we took some time in dealing with those.

11 CHRISTINE MAINVILLE: Do you know why
12 that was?

13 STEVE CRIPPS: I can't really say why
14 those were put in there. I know we had to deal
15 with -- with some of them. One really good example
16 is the -- the steel of the body of the vehicles,
17 that was a very prescriptive specification. I --
18 I'd only be speculating why, and it -- I think
19 often, you know, folks who are expert in their
20 field are drawing on their particular experience in
21 putting things into the project agreement, but
22 again, you know, that's -- that's my speculation,
23 but I think it was -- you know, the role of the
24 contract administrator - you know, basically my
25 office - was to deal with any of those sorts of

1 issues and any changes resulting from those issues.

2 CHRISTINE MAINVILLE: Do you recall the
3 speed requirement for the train - or in particular
4 the journey times - being guaranteed by Thales,
5 probably, in particular, as part of the project
6 agreement?

7 STEVE CRIPPS: I -- my recollection
8 is -- sorry. My recollection is there -- there was
9 end-to-end running times and dwell times at each
10 station. Yeah. In terms of?

11 CHRISTINE MAINVILLE: Well, let me ask
12 you this -- and, of course, I know the contract
13 is -- the City's contract is with RTG --

14 STEVE CRIPPS: Right.

15 CHRISTINE MAINVILLE: -- that -- do I
16 take it you wouldn't have insight into the OLRTC
17 and Thales or Alstom subcontracts? Would you see
18 those?

19 STEVE CRIPPS: Oh, into the actual
20 contract? No.

21 CHRISTINE MAINVILLE: Okay.

22 STEVE CRIPPS: No.

23 CHRISTINE MAINVILLE: Would -- was
24 there -- would there be an expectation that the
25 trains could not necessarily meet the same speed

1 depending on weather conditions?

2 STEVE CRIPPS: There was never
3 discussions that I was involved in that talked
4 about not being able to achieve the necessary
5 speeds to meet the project agreement.

6 CHRISTINE MAINVILLE: Do you recall the
7 changes to the location of manufacturing and
8 testing for the first two LRVs?

9 STEVE CRIPPS: Yeah. So it's -- it's
10 my recollection that the first two LRVs were going
11 to be assembled at Alstom's plant in Hornell, New
12 York, and that Vehicle Number 1, I believe, was
13 going to be sent to a test track in Colorado for --
14 for initial testing. And so my recollection is
15 that the gauge -- the track gauge at the test track
16 in Colorado was not compatible with the track gauge
17 of the LRV vehicle, so it would have meant
18 temporary modifications to the light rail vehicle
19 to send it to Colorado for testing.

20 So in that case, the decision was made
21 to do the test -- the test track on the actual
22 Confederation Line, and the test track consisting
23 of sort of the east end of the line, so from where
24 the track from the maintenance and storage facility
25 came onto the main line, from there out to the east

1 end section became the test track.

2 So then in terms of Vehicle Number 2,
3 Vehicle Number 2, I think, was initially going to
4 be assembled in Hornell, and it was basically
5 assembled in -- in the maintenance and storage
6 facility in -- in Ottawa.

7 CHRISTINE MAINVILLE: And do you recall
8 when that decision was made, to move it from
9 Hornell to Ottawa?

10 STEVE CRIPPS: Oh, 2015 is my
11 recollection. I can't remember more specifically
12 than that, but I believe it was 2015.

13 CHRISTINE MAINVILLE: Do you recall
14 whether there were any risks foreseen in terms of
15 the -- either the MSF or the test track being made
16 available in -- in time to accommodate that move?

17 STEVE CRIPPS: Yeah, certainly the test
18 track -- and I talked earlier about certain
19 elements coming onto the critical path and going
20 off the critical path, and, you know, something
21 like that decision would have put the east end
22 track on -- and overhead catenary system onto the
23 critical path, so that all of a sudden became, you
24 know, a very important element to -- to get done.
25 So, you know, I think it was -- I can't remember

1 the specific timing, but -- but that certainly put
2 the pressure on OLRTC to -- to build -- to build
3 that portion of track, as well as the track and the
4 short tunnel that led from the maintenance and
5 storage facility out to that area as well too. So
6 that -- that put urgency on -- on all of those
7 elements.

8 CHRISTINE MAINVILLE: And did you
9 understand that that was ultimately delayed?

10 STEVE CRIPPS: That the test track was
11 delayed?

12 CHRISTINE MAINVILLE: The test track.

13 STEVE CRIPPS: Yeah, it took longer,
14 and again, they had a schedule for that, and it
15 took longer than anticipated too, so that -- that
16 pushed initial testing back.

17 CHRISTINE MAINVILLE: Yes. And in
18 terms of validation testing, did you understand
19 that to have taken place much later than initially
20 planned?

21 STEVE CRIPPS: Yeah, valid -- yeah, so
22 validation testing, as I recall, actually happened
23 later, and it happened over -- I believe it was
24 spread over three or four vehicles. So it's
25 typically validation -- validation testing takes

1 place on, you know, one element, no matter what the
2 element is - in this case, a vehicle - and the
3 validation testing just makes sure that that
4 element, you know, meets the requirements of the
5 project before serial production starts. So I
6 think to try and -- to try and make up some time
7 and start recovering the schedule, I recall that
8 OLRTC did and Alstom did validation testing over
9 several vehicles to test different elements of it
10 at the same time.

11 CHRISTINE MAINVILLE: And were there
12 late changes to the vehicle design that you recall?

13 STEVE CRIPPS: Late changes? No. I
14 know very early in the project there was some
15 discussion on certain elements of the vehicle, but,
16 you know, nothing that really impacted -- impacted
17 schedule, but there were some -- some design
18 issues, both City requested and certain elements
19 that, you know, upon review of the early vehicles
20 or the -- or the mockup, you know, didn't meet
21 the -- the City's requirements.

22 CHRISTINE MAINVILLE: What did not meet
23 the requirements?

24 STEVE CRIPPS: So I was just saying
25 that the City -- early on, the City may have made

1 some changes and added on -- like, tripoles, for
2 example, that was a change, but there was also
3 elements earlier on where Alstom's design didn't
4 meet the City's requirements, and I think one
5 example of that is that the -- the initial vehicle
6 design had a ramp within the vehicle that -- that
7 wasn't part of what the -- what Alstom had
8 committed to the City in terms of accessibility in
9 the vehicle. So there was some design changes
10 Alstom had to make, and there were some that we --
11 we requested, but certainly -- certainly any City
12 design changes were very early in the process and
13 really had no impact whatsoever on production of
14 the vehicle.

15 CHRISTINE MAINVILLE: You don't recall
16 whether there was a late City decision in respect
17 of the radio supplier?

18 STEVE CRIPPS: There was -- yeah, there
19 was -- the radio supplier issue took some time to
20 resolve, so I guess that's a good -- that may be --
21 perhaps that is an example where RTG had to do some
22 changes to the vehicle to accommodate those --
23 accommodate those -- those radios. But again, you
24 know, any changes we made like that, as part of the
25 change management process, we would look at the

1 cost impacts and schedule impacts, and there was no
2 schedule impacts as a result of that type of
3 change.

4 CHRISTINE MAINVILLE: That was the
5 City's understanding?

6 STEVE CRIPPS: Right.

7 CHRISTINE MAINVILLE: And did this --
8 was the City aware that Alstom or OLRTC were
9 awaiting that information in respect of the radio
10 specifications from very early on in the project?

11 STEVE CRIPPS: Yeah, there was a lot of
12 discussion, especially at the working levels, on --
13 on the P25 radios and -- and how they're going to
14 be acquired and roles and responsibilities. So,
15 you know, there was no surprises there. That was
16 a -- that was a topic of discussion for quite some
17 time.

18 CHRISTINE MAINVILLE: Okay. And the
19 City understood that some retrofits would need to
20 be done once the City made a decision on the radio
21 supplier?

22 STEVE CRIPPS: Yeah, I believe so, yes.

23 CHRISTINE MAINVILLE: And do you recall
24 delay in the City -- City's decisions in respect of
25 the design book?

1 STEVE CRIPPS: Yeah. Again, earlier
2 on, there was -- there was some discussion on a --
3 sort of a design book, and again, there is really
4 no such PA term as a design book, but there were
5 certain elements that RTG was looking for
6 confirmation or information from the City on. And
7 this is going back to 2013, and I think those
8 elements were provided to the City in early 2014, I
9 think just around the time I got there - so again,
10 very early in the process. And during that same
11 time, the City was looking -- looking to RTG or
12 Alstom for things too as well - for example, the
13 ramp issue, on how -- on how they were going to
14 address the ramp issue - so again, issues -- issues
15 very early on in the process that were dealt with.

16 CHRISTINE MAINVILLE: So are you aware
17 of any City design decisions that had not yet been
18 made by the time you left the project?

19 STEVE CRIPPS: Design decisions?

20 CHRISTINE MAINVILLE: In respect of the
21 rolling stock.

22 STEVE CRIPPS: Nothing -- nothing is
23 coming to mind.

24 CHRISTINE MAINVILLE: Can you speak to
25 what impact the Rideau sinkhole had on the project?

1 STEVE CRIPPS: Sure. The Rideau
2 sinkhole, as I'm sure you're aware, happened in the
3 summer of 2016. So, you know, in terms of how it
4 affected the project, again going back to what's on
5 the critical path -- and that's really how we look
6 at things or look at how certain -- certain things
7 affect the schedule or affect the project. The
8 tunnelling at that time wasn't on the critical
9 path, so I mean, it had a very localized effect on
10 the project, if I could use that term.

11 At the time the sinkhole happened,
12 there was about 50 metres of tunnelling left to do,
13 and then the -- the complete tunnel would have been
14 excavated. You know, RTG were very quick to -- you
15 know, both on the day that that happened, they were
16 very quick to remediate the site or secure the
17 site, and they were very quick to take what actions
18 are necessary to sort of stabilize the road to
19 continue tunnelling, and with -- with the City's
20 cooperation, we closed down Rideau Street
21 completely so they could do remediation work on
22 the -- on the sort of whole area of the sinkhole
23 that would allow them to continue tunnelling.

24 So -- so I believe that it was about
25 2 months later that they resumed tunnelling. So

1 it -- in that -- you know, one isolated area, it
2 did put them back a couple months, but it -- you
3 know, it really had minimal or no impact on
4 everything else that was going on in the project.
5 So station construction was well underway, east and
6 west station construction was underway in the
7 Rideau station, in the -- in the Lyon Station, in
8 the Parliament Station. So all the underground
9 stations continued track work, overhead catenary
10 systems.

11 So, I mean, it was a pretty -- it was a
12 pretty dramatic event, but in terms of, you know,
13 how it affected the project, I would say that
14 wasn't on the critical path. They were back to
15 tunnelling 2 months later, and they had lots of
16 other things on the go, lots of other things that
17 were on the critical path, and so -- so we didn't
18 see it as having any -- any major impact on revenue
19 service availability.

20 CHRISTINE MAINVILLE: So it didn't have
21 the effect of diverting resources and attention
22 from other parts of the project?

23 STEVE CRIPPS: You know, I think -- I
24 think management attention obviously was focussed
25 on dealing with the -- with the sinkhole,

1 obviously, so it was -- it perhaps took away
2 some -- some management focus from other areas, but
3 again, work was -- you know, work was going on in
4 those other areas as well too. Like, work didn't
5 stop for that. So -- so yeah, it was -- it was
6 certainly a distraction, I would say, to -- to RTG
7 and their team, and -- and some of the management
8 focus went away, but again, they were tunnelling
9 within 2 months and sort of back to doing what they
10 were doing before the sinkhole happened.

11 CHRISTINE MAINVILLE: Did it not have
12 an impact on the availability of the track, of the
13 east guideway?

14 STEVE CRIPPS: Yeah, so what -- so over
15 time it would have -- it would have had impact on
16 their ability to -- ability to do some end-to-end
17 running, so it did push back some of -- some of
18 those elements and some systems installation as
19 well too.

20 CHRISTINE MAINVILLE: It pushed back
21 some of the testing.

22 STEVE CRIPPS: Some of the testing and
23 things like tunnel ventilation systems. Obviously,
24 that would have -- that would have been delayed to
25 some degree, but...

1 CHRISTINE MAINVILLE: How much do you
2 understand the testing period to have been
3 compressed - in particular, the integration
4 testing?

5 STEVE CRIPPS: Yeah, by the time I
6 left, you know, they weren't -- there wasn't a lot
7 of integration testing going on. They weren't
8 running -- well, they did a little bit of running
9 end to end. They were still doing integration
10 testing, acceptance testing. They hadn't got --
11 you know, they hadn't got all -- all vehicles
12 running on CBTC, so there was still a lot of work
13 at the end of 2018, when I left, and I can't
14 obviously speak to beyond that. But there was,
15 yeah, a lot of tunnel ventilation system work to do
16 and the integration of that, station work to do,
17 vehicle work to do, SCADA, which is all sort of the
18 communication systems. Again, systems assurance
19 work was still underway when I left, so...

20 CHRISTINE MAINVILLE: Did the sinkhole
21 have any impact on the relationship between the
22 City and RTG?

23 STEVE CRIPPS: In my view, no. I mean,
24 there was obviously a lot of -- a lot of discussion
25 on -- on root cause of the sinkhole, and we had

1 meetings with RTG to discuss root cause and expert
2 reports on root cause, but again, in my view, the
3 relationship remained professional and respectful:
4 We shared opinions, we differed in opinions, and we
5 moved forward on that basis.

6 CHRISTINE MAINVILLE: And the
7 relationship was respectful, but was it
8 collaborative?

9 STEVE CRIPPS: Yeah, I would -- I would
10 say so. And I mean, an example -- I'd just go back
11 to an example. So to allow them to -- to allow
12 OLRTC to sort of remediate the sinkhole area, they
13 had to do a lot of work from the surface of Rideau
14 Street down, and without getting into
15 nitty-gritties, they had to undertake both jet
16 grouting and compaction grouting. What that
17 basically does is sort of stabilizes the whole
18 area, right from the surface right down to bedrock.
19 So -- so as you can imagine, the sinkhole disrupted
20 a lot of -- a lot of the earth that was there.
21 They poured a concrete plug in there the day of the
22 sinkhole, just to stabilize everything, so now
23 you've got a very different structure there that
24 required them to do this jet grouting and
25 compaction grouting.

1 So they started off, like, doing it
2 after hours, when the -- when the City -- when OC
3 Transpo were able to divert buses somewhere else.
4 They came to us and said, like, you know, to really
5 get this done quickly and allow us to tunnel again,
6 we're achieving very low production rates with jet
7 grouting and compaction grouting since we can only
8 do it, you know, after certain hours, and we have
9 to be off by early in the morning, when the buses
10 are needed again.

11 So my office worked with OC Transpo and
12 looked at how we could accommodate them. So OC
13 Transpo did -- did rerouting of its buses and
14 schedules. We allowed 24/7 closure of Rideau
15 Street, and that allowed to get it -- that allowed
16 to get there -- allowed them to get in there and
17 achieve decent production rates. So -- so again,
18 that's -- you know, that's an example, I think, of
19 how we -- we worked together.

20 CHRISTINE MAINVILLE: Do you have a
21 sense of how RTG was able to withstand that risk
22 material -- materializing?

23 STEVE CRIPPS: How they were able to
24 withstand it, or --

25 CHRISTINE MAINVILLE: Yes.

1 STEVE CRIPPS: So -- so RTG, of course,
2 took -- they took the risk of -- the geotechnical
3 risk on this project. You know, most of the
4 geotechnical risk would have been in the area of
5 tunnelling. Obviously there's geotechnical risks
6 everywhere in the project in terms of track work
7 and stations, but obviously the big risk is
8 tunnelling. You know, out of a 2 and a half
9 kilometre tunnel, all of it except, you know, a
10 very short section is in reasonably solid bedrock,
11 and, you know, RTG did their own testing on that
12 material, and they also did the -- the testing on
13 the -- soil testing in the area of the soft ground.

14 So out of 2 and a half kilometres,
15 you've got almost all of it very solid bedrock;
16 you've got one very short section of soft ground,
17 as it was referred to; and then you had -- they had
18 intimate knowledge of what that soft ground
19 comprised. So -- so I think both during
20 preliminary -- preliminary engineering, the City
21 had done boreholes there and provided that data,
22 but since RTG undertook the geotechnical risk, it's
23 my understanding that at the outset of the project,
24 they also did their own geotechnical
25 investigations. So they had -- they had excellent

1 knowledge of both, you know, the tunnel from end to
2 end as well as that very short section of what was
3 a buried glacial valley, as it was referred to.

4 So it wasn't -- you know, in my view,
5 there was no real unknowns to them. They knew --
6 they knew where the soft ground was, and they knew
7 what the material was and what the associated risks
8 with that material were.

9 CHRISTINE MAINVILLE: And quite aside
10 from what they knew or understood, do you have a
11 sense of whether that was a risk that may have been
12 too large to take on?

13 STEVE CRIPPS: I personally don't think
14 so. I think, again, you know, when -- I mean,
15 geotechnical work can be generally a risky area,
16 but in this case, I think the risks were very well
17 known, they were very well documented, and I
18 personally don't think it was too much to take on.
19 It was a -- especially in the area of the borehole,
20 again, it was a very known entity. They had, you
21 know, CAD 3D models of it; they had borehole logs
22 of it; they had tunnelling folks in charge of the
23 tunnelling that had extensive experience in
24 tunnelling. They knew exactly what they're getting
25 into, so I -- I would certainly say that was a very

1 manageable risk.

2 CHRISTINE MAINVILLE: And would you
3 say, even in hindsight, that -- was the risk placed
4 on the party best placed to address it or to take
5 it on?

6 STEVE CRIPPS: Absolutely. Yes, I
7 would say that.

8 CHRISTINE MAINVILLE: Are you aware
9 that there has been a move to share this type of
10 risk in other types of projects?

11 STEVE CRIPPS: I guess I've heard
12 anecdotally, but quite frankly, I don't follow that
13 level of detail. I've been retired for a number of
14 years now, and I don't really follow the industry
15 that closely, but I have heard anecdotally that
16 agencies and constructors are looking at the issue
17 of risk transfer on P3s.

18 CHRISTINE MAINVILLE: And I understand
19 that RTG made a claim for a relief event in respect
20 of the sinkhole?

21 STEVE CRIPPS: Yes, correct. A delay
22 event and a relief event, I believe.

23 CHRISTINE MAINVILLE: Right. And you
24 were involved in the decision -- or would you have
25 been involved in the decision to deny that -- those

1 requests?

2 STEVE CRIPPS: Yes, I would.

3 CHRISTINE MAINVILLE: And was there any
4 consideration given to whether -- even though RTG
5 had taken on that risk, whether there should be
6 some accommodations made in the greater interest of
7 the project?

8 STEVE CRIPPS: Accommodations in terms
9 of dealing with the sinkhole, or?

10 CHRISTINE MAINVILLE: And the impact on
11 the delay, although -- on the schedule, although I
12 understand your view that it didn't have a
13 significant impact.

14 STEVE CRIPPS: Yeah, it was our view it
15 didn't have a material impact on the -- the
16 schedule. It wasn't on the -- it wasn't on the
17 critical path, so no, there was no -- there was no
18 discussions on sort of sharing in that risk. We
19 were -- we were administering the project agreement
20 the way it was -- or the way we interpreted the
21 project agreement, the way it was written.

22 CHRISTINE MAINVILLE: And did -- aside
23 from making the claim, were there -- did RTG
24 express a different view as to the impact on the
25 schedule of the sinkhole and --

1 STEVE CRIPPS: Yeah, they expressed
2 that the sinkhole was going to have an impact on
3 their schedule. They expressed the opinion that
4 they should be entitled to a delay event as a
5 result of that -- of that delay, but based on --
6 based on the PA definitions of, you know, relief
7 events and delay events and latent defects, we
8 denied any -- any relief on the RSA on that basis.

9 CHRISTINE MAINVILLE: What were the
10 guiding principles that drove the City's work and
11 decisionmaking, if you're able to speak to that, in
12 terms of, you know, what parameters were you
13 working within in terms of, you know, what could be
14 deviated from or not? Are you able to talk about
15 your approach to that?

16 STEVE CRIPPS: I guess every situation
17 is unique. I think, you know, our general
18 philosophy was that RTG is compelled to meet the
19 requirements of the project agreement, but, you
20 know, with this project and probably every other
21 project I've worked on, you know, things aren't
22 that black and white, and there's always a need to
23 look at individual situations and see if it
24 warrants further discussion and warrants some
25 change. So, you know, I think that's the approach

1 we took. You know, one example might be in
2 milestone payments: In terms of keeping cash
3 flowing, I think we worked with them in somewhat
4 redefining some milestone payments or looking at
5 how milestone payments could be accommodated.

6 So certainly our philosophy wasn't the
7 PA is the PA and that's the end of the story. It
8 was you need to meet the requirements of the
9 project agreement, but if there's a reason to
10 discuss -- discuss certain elements, and if there's
11 the ability to make changes, then we make those
12 changes, but any -- you know, any changes we make,
13 we would look through the lens of -- first of all,
14 is it -- is it good for the contractor, but more
15 importantly, is it good for the City, is it fair to
16 the City, is it reasonable to the taxpayer? Like,
17 are we compromising the City's position or the
18 taxpayer's position in any way? So we're certainly
19 not going to do anything that would sort of lead to
20 that. But -- so I think that was our general
21 philosophy. If we could, as an example, keep cash
22 flowing to RTG, then we would do that, as long as
23 there's no compromises.

24 And when it came to milestone payments,
25 you know, if we could alter the definition in some

1 way and we got the appropriate approvals for that,
2 we would look at, okay, if we make this milestone
3 payment that we're looking at to amend, how much
4 cash has been flowed to RTG, and how much
5 expenditure has there been from RTG on this
6 project, looking at their spend curves.

7 So we would always ensure that their
8 expenditures -- your financial commitment to the
9 project exceeded any amounts that the City was
10 going to pay, just to do our due diligence. So --
11 so that was kind of the lens we looked at -- we
12 looked through. I think we -- we were very -- we
13 were always receptive to those sorts of
14 discussions, and I think we were a very reasonable
15 owner when it came to those sorts of potential
16 changes.

17 CHRISTINE MAINVILLE: So on the
18 milestone payments, do I understand that even at
19 the outset, they did not -- there was no
20 correlation between the amount of the payment and
21 the scope of the work on any given milestone?

22 STEVE CRIPPS: In general, yes. So as
23 an example to that -- of that, the milestone
24 payment for completion of the maintenance and
25 storage facility didn't represent the cost invested

1 in the maintenance and storage facility, so
2 milestones were a way to systematically flow money
3 to RTG given their progress on the work. They were
4 selected during the bidding process is my
5 understanding. You know, I obviously don't have
6 detailed insight to that, but my understanding is
7 during the bidding process, they could select the
8 milestones that they wanted from a -- from sort of
9 a menu of options, and that's what they did.

10 And the challenge with milestones --
11 and this is the reason we were always receptive to
12 discussing changes to milestones. The problem with
13 milestones is they're selected at the time when a
14 detailed schedule hadn't been developed by -- by
15 the concessionaire. So, you know, when it came
16 time to actually building it, their schedule may
17 not perfectly line up with the milestones they had
18 selected, and so, you know, that -- that becomes
19 somewhat problematic if a concessionaire is doing
20 things to meet a milestone versus they're doing
21 something because it's the right thing to do from a
22 schedule perspective.

23 CHRISTINE MAINVILLE: Right.

24 STEVE CRIPPS: So for that reason, we
25 looked at how we could alter some of the

1 milestones. Of course, that required -- depending
2 on the change, that did require approvals, but --
3 but there were certainly several instances where we
4 did that.

5 CHRISTINE MAINVILLE: Is that from
6 FEDCO?

7 STEVE CRIPPS: Executive Steering
8 Committee would have -- if it was a change, the
9 Executive Steering Committee; and if it was a
10 change to the milestone, the funding partners - so
11 Transport Canada, federal government, and the
12 Ministry of Transportation representing the Ontario
13 Government would have to approve the change.

14 CHRISTINE MAINVILLE: And am I right
15 that that happened in particular in respect of the
16 tunnel and the yard?

17 STEVE CRIPPS: Yes, they're the two
18 that come to mind - the tunnelling, the yard.
19 There might have been others that required a
20 change. They're the two that are coming to mind
21 right now.

22 CHRISTINE MAINVILLE: And so do I
23 understand this was just a result of -- well, was
24 it a result of particular -- a particular event
25 that there were discussions around modifying the

1 milestone payments, or was that just something that
2 was raised by RTG or the City?

3 STEVE CRIPPS: It could have been
4 either case. It could have been an event or
5 just -- or just the milestone itself and them
6 looking for some relief on it.

7 CHRISTINE MAINVILLE: And so the City's
8 way of ensuring that the concessionaire would
9 always be committed to the project would be
10 ensuring that they had inputted more money than the
11 amount of --

12 STEVE CRIPPS: Correct, yeah. We would
13 always make sure -- and I believe those -- I
14 believe there was a specific percentage, and that
15 may have been 15 percent, but I stand corrected on
16 that. So there was always insurance that they had
17 committed more money than what we would be paying
18 out -- out of that milestone.

19 And the milestones allowed for minor
20 deficiencies, so we were -- we were always
21 receptive to looking at what RTG was proposing in
22 terms of a minor deficiency to ensure that it met
23 the requirement of a minor deficiency, and if there
24 was -- if there was items that were on that minor
25 deficiency list that wouldn't be done, we would

1 always ask from them a schedule of when those
2 particular items would be done, so if there wasn't
3 going to be downstream effects from the -- from the
4 minor deficiency list.

5 CHRISTINE MAINVILLE: And did you
6 understand that there was significant financial
7 pressure on RTG over the course of the project?

8 STEVE CRIPPS: Yes, that was my
9 understanding, both in hearing that directly
10 from -- from the concessionaire as well as the
11 constructor's senior personnel.

12 CHRISTINE MAINVILLE: And was that --
13 and so was there any resulting pressure on the City
14 from RTG to change these milestone payments?

15 STEVE CRIPPS: I wouldn't say -- there
16 was certainly requests to make changes to them,
17 certainly not pressure. If we -- if there was a
18 request that we wanted to entertain, we would have
19 a discussion with the funding partners and
20 Executive Steering Committee. If we could
21 accommodate those changes, we would, and if not, we
22 would deny that request, but certainly not
23 pressure. Certainly -- certainly conversations
24 about whether it was doable or not.

25 CHRISTINE MAINVILLE: Was this mostly

1 with Mr. Lauch or others as well?

2 STEVE CRIPPS: Yeah, would have --
3 would have started with Antonio Estrada and then
4 over time Peter Lauch.

5 CHRISTINE MAINVILLE: So there was some
6 financial pressure even fairly early on in the
7 project.

8 STEVE CRIPPS: Yeah, the -- the
9 constructor talked about, you know, cash flow
10 and -- and financial pressures they were -- they
11 were facing.

12 CHRISTINE MAINVILLE: Do you know why
13 there -- they were facing such pressures, even
14 early on?

15 STEVE CRIPPS: No, we didn't get into
16 that level of discussion.

17 CHRISTINE MAINVILLE: Would you
18 consider the budget for the overall project as a
19 tight budget?

20 STEVE CRIPPS: That's pretty tough for
21 me to assess. I mean, huge -- huge project, and
22 for me to come in and say it was appropriate or not
23 appropriate I would say is pretty well impossible.
24 It's -- it's -- you know, it's the budget that
25 they -- that they bid and -- and that they -- they

1 were required to manage too, so -- but I can't -- I
2 couldn't speculate on whether it was an appropriate
3 budget.

4 CHRISTINE MAINVILLE: Okay. Do you
5 recall any concern being expressed with --
6 internally at the City about the budget and whether
7 it was sufficient?

8 STEVE CRIPPS: No concerns about the
9 budget. Not -- no.

10 CHRISTINE MAINVILLE: Perhaps we could
11 go off the record for a minute.

12 -- OFF THE RECORD DISCUSSION --

13 -- RECESS AT 3:24 --

14 -- UPON RESUMING AT 3:38 --

15 CHRISTINE MAINVILLE: Just on the
16 resourcing piece, in terms of the City recognizing
17 at some point in time that RTG wasn't devoting
18 enough resources, perhaps, to certain areas, I just
19 want to get a better sense of what the City could
20 do in a circumstance like that. And we spoke a bit
21 about, you know, the -- what the tools available to
22 the City were, but if the City had concerns such as
23 this, what could they do or what approach might you
24 take to that sort of issue?

25 STEVE CRIPPS: Not a lot the City can

1 do. And, you know, their resourcing challenges
2 were in several areas too, not just -- I talked
3 about system integration and testing and
4 commissioning, but, you know, they had resource
5 issues just in, like, skilled tradespeople too,
6 right, just, like, even in tradesmen working on
7 the -- on the project or getting people in the
8 tunnels. So the resourcing issue was, you know, in
9 a number of different areas of the project.

10 But, I mean, if we saw -- certainly
11 meetings at every level, if we saw issues of
12 resourcing and falling behind schedule, I mean, we
13 would focus more on, you know, what's the output of
14 what they're doing versus how many resources they
15 need. It's a P3 project, and it's up to them to
16 resource it appropriately. So our concerns would
17 be, you know, how they're proceeding on the project
18 and are they meeting their schedule and is RSA at
19 risk. You know, in terms of helping them or
20 supplying -- or supplying names of people, I'm not
21 sure we really go down that road, but it's -- it's
22 more -- it's more a concern -- raising concerns
23 with them and finding out what they plan to do
24 about it.

25 CHRISTINE MAINVILLE: Okay. So in

1 terms of -- never mind the resourcing issue, but if
2 there are concerns about delays and things falling
3 behind, it would -- that's effectively what you
4 would say were the tools available, at least during
5 construction, to the City to address those concerns
6 was really just trying to ask for mitigation plans?

7 STEVE CRIPPS: Yeah, we would certainly
8 have conversations about the resources, but -- but,
9 you know, where -- yeah, where the tool comes or
10 where the real concern is is are they producing on
11 a timely basis and are they producing on a quality
12 basis to meet the PA requirements.

13 So -- so how they achieve that is
14 really up to them, but -- but, you know, certainly
15 back to the issue of systems assurance, it was --
16 there was discussions, lots of discussions on how
17 they were resourcing that, and even their own
18 consultant was concerned about how they're
19 resourcing that and how they're -- again, how
20 they're -- how much work has to be done before this
21 project, you know, heads into testing and
22 commissioning, substantial completion, and revenue
23 service availability.

24 CHRISTINE MAINVILLE: Which consultant
25 are you referencing?

1 STEVE CRIPPS: Oh, in the particular
2 example, systems assurance. So they retained --

3 CHRISTINE MAINVILLE: SEMP.

4 STEVE CRIPPS: SEMP, yeah. I was just
5 going to say the expert's name was Sean Derry. So,
6 you know, he came on, and in his opinion, his
7 written opinion that was shared with us is they
8 haven't -- they're just not where they should be on
9 a project of this magnitude and this complexity,
10 and they hadn't dedicated the necessary effort in
11 getting it done. So -- so that was...

12 CHRISTINE MAINVILLE: Is that in the
13 form of a report?

14 STEVE CRIPPS: Yes, a report or a
15 letter, yes.

16 CHRISTINE MAINVILLE: Okay. Was there
17 any talk of SEMP coming in earlier on to assist
18 with systems integration, or was that a later --

19 STEVE CRIPPS: Yeah, not -- not to my
20 knowledge. I mean, SEMP was -- SEMP was RTG's
21 consultant, so -- so unless they had conversations
22 about that sooner, but -- but the -- he actually
23 came on when our -- or when the -- the project's
24 independent safety auditor came on and did sort of
25 a health check on where RTG was in the field of

1 systems engineering, and his -- his conclusion
2 pretty well matched that of SEMP's in that they've
3 got a lot of work to do to get this done and get it
4 done in time.

5 CHRISTINE MAINVILLE: So it -- you said
6 it was an RTG consultant. Do you know whether
7 OLRTC had any involvement in that relationship?

8 STEVE CRIPPS: Well, I guess it was
9 through OLRTC, yes.

10 CHRISTINE MAINVILLE: Okay.

11 STEVE CRIPPS: It wasn't -- I misspoke.

12 CHRISTINE MAINVILLE: Okay.

13 STEVE CRIPPS: It was OLRTC's
14 consultant or their -- their engineering joint
15 ventures consultant.

16 CHRISTINE MAINVILLE: Okay. Was there
17 any impact on Phase 1 -- any impact of Phase 2 on
18 Phase 1?

19 STEVE CRIPPS: Yeah, I guess a couple
20 of areas. So eventually there would be, but that
21 didn't come to fruition during my time there, but
22 obviously when Phase 2's underway, there's -- there
23 was a role for RTG, plus there was issues of system
24 integration between the two -- between the two
25 stages of LRT, so while that was being discussed

1 and that was going on, it didn't have a direct
2 impact on Phase 1 of the project in that RTG still
3 had to complete what they had to complete in Phase
4 1. So eventually it would have an impact.

5 And I guess the other -- the other
6 impact that comes to mind is in terms of Phase 2,
7 buying light rail vehicles for -- from Alstom for
8 Phase 2, and so of course that had the impact of
9 the maintenance and storage facility continuing to
10 assemble vehicles. So -- but what that required
11 was an expansion to the facility, moving some of
12 the maintenance operations into a new building
13 since -- since the maintenance building would
14 continue to be used for -- for vehicle assembly.
15 So those are really the two major ones that come to
16 mind.

17 CHRISTINE MAINVILLE: Is that the
18 Brampton facility that you're referencing?

19 STEVE CRIPPS: The what, sorry?

20 CHRISTINE MAINVILLE: The Brampton
21 facility.

22 STEVE CRIPPS: No, no. Sorry, this is
23 the maintenance and storage facility in --

24 CHRISTINE MAINVILLE: No, but did they
25 move to -- move assembly to the Brampton facility?

1 Is that the second one that was used to alleviate
2 that pressure?

3 STEVE CRIPPS: Not during my time
4 there. I don't know if they did that eventually or
5 not.

6 CHRISTINE MAINVILLE: Okay.

7 STEVE CRIPPS: When I was there --
8 well, sorry. When I was there, they were still
9 producing mostly Stage 1 vehicles. They had just
10 started one or two of the Stage 2 vehicles, so if
11 they moved production after that, I'm not -- I'm
12 not aware of that.

13 CHRISTINE MAINVILLE: So when they
14 started the first two Phase 2 vehicles, that was at
15 the MSF.

16 STEVE CRIPPS: Yes.

17 CHRISTINE MAINVILLE: And did that
18 already create some issues in terms of the space?

19 STEVE CRIPPS: Well, again, just in
20 terms of, you know, where you -- well, let me back
21 up. So the issue it created was the original plan
22 was to assemble 34 vehicles -- or 33, I guess, in
23 the maintenance and storage facility, put them out
24 into the system, and then turn the assembly
25 facility back into a true maintenance facility. So

1 once it was decided that Stage 2 would get their
2 vehicles from Alstom, the same vehicle from Alstom,
3 that would therefore delay the ability to turn the
4 MSF back into a true maintenance facility.

5 So that's where an expansion to the
6 storage shed was undertaken, so the MSF had the
7 actual MSF building and administrative offices.
8 There was a storage shed for vehicles, so the
9 storage shed got expanded and another building for
10 undertaking the maintenance of vehicles that
11 couldn't be done because now Stage 2 was continuing
12 to occupy the MSF.

13 CHRISTINE MAINVILLE: Was there any
14 consideration given to delaying Stage 2?

15 STEVE CRIPPS: Not that I'm aware, but
16 I didn't have -- I had virtually no involvement in
17 Stage 2.

18 CHRISTINE MAINVILLE: Okay. And did it
19 divert resources at the City from Stage 1?

20 STEVE CRIPPS: Oh, insignificant. I
21 mean, so -- you know, the folks that were
22 overseeing vehicle production would have continued
23 in that capacity. The folks that were overseeing
24 civil construction would now be also overseeing the
25 extension of the -- the storage -- the storage shed

1 and the new building, so there was some extra work
2 that was done that my staff would have been
3 overseeing.

4 But that was a -- that was a fairly
5 natural progression anyway because a number of the
6 staff would be -- or some of the staff in my office
7 would be transitioning to Stage 2, so, you know,
8 the fact that they were actively involved in
9 Stage 1 that got extended into Stage 2 because of
10 that arrangement, sort of a natural progression,
11 anyway.

12 CHRISTINE MAINVILLE: Did you have much
13 involvement in or awareness of the City
14 underwriting RTG's debt in connection with --

15 STEVE CRIPPS: I had no involvement --
16 no involvement in that other than just awareness
17 that that had happened.

18 CHRISTINE MAINVILLE: Okay. Did you
19 see any implications of that? Any ramifications?

20 STEVE CRIPPS: Not directly on the
21 project. You know, I guess at -- it gave the City
22 insights into the senior creditor's technical
23 advisor role. I mean, normally we wouldn't have
24 had meetings with him or conversations with him or
25 that firm, and that -- once that arrangement took

1 effect, that did sort of open up the door to
2 meetings with -- with them and discussions on
3 schedules.

4 CHRISTINE MAINVILLE: And did that have
5 any impact on the partnership or the dynamics with
6 RTG?

7 STEVE CRIPPS: I would -- I would say
8 not a huge impact. I don't think RTG -- well, RTG
9 wasn't necessarily comfortable with the -- with
10 sort of the project -- the project and the City as
11 the lender, blending the roles together with the
12 senior creditor's technical advisor, if I can put
13 it that way.

14 So what we did is -- so we have our
15 scheduling folks and our technical folks that were
16 reviewing schedules, and the senior creditor's
17 technical advisor was doing the same thing in
18 parallel. So for the first part of the project,
19 there was really no discussion between those two
20 parties, but once -- once that arrangement took
21 place, then that opened up that door.

22 So I'm not sure -- I wouldn't say it
23 caused any -- a difference in the relationship or a
24 strain on the relationship. I would just say
25 perhaps RTG wasn't comfortable in -- in both of

1 those sort of roles being the City's -- both of
2 those roles being blended together.

3 CHRISTINE MAINVILLE: And did the City
4 do anything to address those concerns?

5 STEVE CRIPPS: Not during my tenure,
6 no.

7 CHRISTINE MAINVILLE: Would you --
8 would it have had an impact on -- or did you
9 perceive an impact on RTG's willingness to share
10 information with the City in some respects?

11 STEVE CRIPPS: I didn't see any real
12 change in the way they operated.

13 CHRISTINE MAINVILLE: When did it
14 become apparent to the City that the original RSA
15 date would not be met?

16 STEVE CRIPPS: Well, so I guess we --
17 our concerns -- I mean, we saw slippage at the
18 beginning of the project but a lot of time to
19 recover or sufficient time to recover. Probably
20 when our concerns really started coming forward
21 would be the very end of 2016 but mostly starting
22 in 2017, and we saw slippage -- month-over-month
23 slippage in their schedule, so that's really when
24 our concerns started and us expressing those
25 concerns to them.

1 I think it was around that time that
2 the City also retained the independent assessment
3 team to look at their schedules to -- to offer a
4 second opinion and -- and to verify what we were
5 seeing and what our concerns were. So -- so I
6 would say those concerns of ours really started in
7 earnest at the beginning of 2017. They carried on
8 through summer of 2017.

9 In the summer of 2017, that's when I
10 believe we first wrote to them with a letter
11 indicating they have failed to maintain under
12 Section 22(3), I believe it is, failed to maintain
13 schedule. So we put that in writing to them, that
14 they hadn't maintained schedule and that we needed
15 a recovery plan from them.

16 And then we talked a little bit about
17 this earlier, but that's when, you know, they gave
18 us -- they gave us somewhat of a plan that didn't
19 really meet our needs. I mean, we didn't want just
20 a schedule. We wanted -- because their schedules
21 over the last 6 months had been almost meaningless
22 in terms of -- they're not meeting the production
23 rates, they're not following their own schedule,
24 they're not hitting their own targets.

25 So we wanted -- instead of just another

1 schedule that said all those same things, we wanted
2 a plan, like a very distinct and detailed plan, on
3 how they were going to get on schedule because all
4 that time they were still maintaining that the RSA
5 date would be May 24th of 2018. So our view was,
6 okay, it's your schedule and your project to
7 deliver. We don't think you're going to make it,
8 so we need to see a very detailed plan on how
9 you're going to do it, whether it's, you know, 24/7
10 in certain areas, bringing on additional people,
11 whatever it happens to be.

12 So that -- that back and forth happened
13 I would say from summer of 2017 right through to
14 the end of 2017. Yeah. So we never did get the
15 type of schedule we were looking for. We got
16 schedules that said basically we're still going to
17 meet May 24th, 2018, you know, subject -- and I'll
18 paraphrase -- subject to the resolution of delay
19 events on these particular items. So it was now a
20 qualified -- a qualified schedule, which I believe
21 we rejected, a couple of them, based on the fact
22 that you can't produce a qualified schedule based
23 on the fact that they hadn't shown -- I mean, it's
24 always up to the contractor to mitigate delays, and
25 they weren't showing how they were mitigating this

1 delay, so we continued to reject their schedule.

2 So in the fall of 2017, they gave us --
3 and I think this went through probably into the
4 beginning of 2018. They continued to give us
5 schedules showing May 24th, 2018, as the RSA date,
6 subject to the resolution of delay events for
7 sinkhole, whatever else it happened to be. So they
8 were hinging their bets on -- on being
9 successful -- well, it's our view that they were --
10 they were hinging their schedule on them being
11 successful in -- being successful with delay events
12 or relief events.

13 So that went through 'til February
14 2018, I believe. Yeah, February '18, at which
15 time -- well, I think in that interim we also did
16 another -- we also retained the independent
17 assessment team another time to have another look
18 at their schedule, and then I believe it was
19 February of 2018 that they gave notice that RSA
20 would be November 2nd of 2018.

21 CHRISTINE MAINVILLE: Am I right that
22 when they said subject to delay events, that would
23 only serve to extend the schedule, would it not, if
24 they were successful?

25 STEVE CRIPPS: Correct. I mean, that

1 was our view, that they were looking to extend the
2 schedule, and based on -- and extend it based on
3 the City's actions, the City's -- you know, based
4 on what the City had done or not done, and --
5 and -- and pin it onto the City.

6 CHRISTINE MAINVILLE: So those
7 schedules effectively made it apparent that --
8 well, isn't it internally inconsistent? It made it
9 apparent that it would not reach the May 2018 --

10 STEVE CRIPPS: Absolutely, yeah.
11 Absolutely. So I guess backing up all of that
12 story, so when did it become apparent to us? Well,
13 we had concerns middle -- sorry, beginning of 2017
14 we had concerns, and I'd say probably the middle of
15 2017 we were reasonably confident that they weren't
16 going to make May 24th. I believe it was around
17 that same time, the summer of 2017, the independent
18 assessment team did their review and came to the
19 same conclusion, that May 24th was not achievable.

20 CHRISTINE MAINVILLE: And did they
21 provide a reason - "they" being RTG - about why
22 they wouldn't provide a detailed plan showing how
23 they could meet the May 2018 deadline?

24 STEVE CRIPPS: I don't recall them
25 providing, like, detailed rationale why not. They

1 would provide us a schedule, and their view was
2 that the PA requires us to provide you a schedule,
3 and we're providing you with a schedule.

4 So, you know, perhaps their rationale
5 was that the PA didn't compel them to provide this
6 plan, and that may be the case, but to -- to us as
7 a prudent owner, we needed -- if they're continuing
8 to hang their hat on May 24th, we needed to see
9 something that would give us some level of
10 confidence that they were going to meet that, and
11 again it comes back to Mr. Manconi and this huge
12 switchover of the transit system from, you know,
13 buses to light rail. So -- so we -- we needed to
14 know whether this was going to happen or not.

15 CHRISTINE MAINVILLE: Do you have a
16 sense of what may have incentivized them not to
17 extend the RSA date earlier?

18 STEVE CRIPPS: Well, I -- no, but I
19 guess -- you know, if they had extended it earlier,
20 then it has a whole lot of repercussions for their
21 lenders, you know, senior creditors or lenders and
22 that. You know, they were still -- I think what
23 their strategy was to show we can hit May 24th --
24 or we could have hit May 24th except for these
25 things that you, the City, have done to cause us

1 delays. And I think that's what I, in my view, and
2 others in the City's view was that's what they were
3 hanging their hat on to avoid the financial
4 repercussions of a late RSA.

5 CHRISTINE MAINVILLE: Was OLRTC at the
6 table for discussions about the schedule and status
7 updates once delays were becoming a concern?

8 STEVE CRIPPS: Yeah, it depends where
9 they were -- it depends where they were discussed,
10 but certainly at -- at -- at the Executive Steering
11 Committee, if the Exco was there, they -- OLRTC was
12 represented there. At Works Committee, which was
13 one of the primary places we would discuss things
14 like this, OLRTC were represented at Works
15 Committee, so they were -- yeah, they were front
16 and centre in all of these discussions.

17 CHRISTINE MAINVILLE: They were
18 participating. They were --

19 STEVE CRIPPS: Yes.

20 CHRISTINE MAINVILLE: Yes?

21 STEVE CRIPPS: And really, they did --
22 you know, throughout the project, you know, while
23 our contract was with RTG, we dealt very closely
24 with RTG and OLRTC as the constructor, and -- and
25 so, yeah, they were privy to all of these

1 conversations.

2 CHRISTINE MAINVILLE: And so do I take
3 it they maintain the same line as RTG on this
4 schedule?

5 STEVE CRIPPS: Yeah. Well, it's -- it
6 was probably the other way around, that RTG is
7 supporting their contractor, so OLRTC is producing
8 a schedule, and RTG is backing them up on it.

9 CHRISTINE MAINVILLE: Got it. You
10 mentioned the independent assessment team tracking
11 what the schedule in fact was. Is there a reason
12 why the City couldn't rely on the independent
13 certifier's schedule updates? Because I understand
14 the independent certifier was tracking the progress
15 and the schedule.

16 STEVE CRIPPS: I think the City -- I
17 would say that the City relied on both the IC and
18 on its own staff. So I don't think there was
19 any -- you know, there was never any concern that
20 my office wasn't providing accurate assessments of
21 the schedule. I think Executive Committee was
22 quite supportive of the work that we were doing and
23 quite -- quite supportive of the information we
24 were providing. But -- and same with the
25 independent certifier, but I think what the City

1 was looking for was just really a second set of
2 eyes from industry experts on how this is
3 progressing and, you know, what their view of RSA
4 may be, based on their experience.

5 So the independent assessment team had
6 extensive experience in a number of different
7 areas, and -- and probably the majority of the team
8 was involved in the Second Avenue subway extension
9 in New York City, so they had really just come off
10 a transit project and had that fresh experience.
11 So it was really just looking to other industry
12 experts to confirm, provide a -- you know, a second
13 opinion on what we were seeing and what we were
14 assuming, and -- and I would say in all cases they
15 did a number of reviews, and I would say in all
16 cases their assessment was consistent with what the
17 City was reporting.

18 CHRISTINE MAINVILLE: How were
19 extensions to the RSA date dealt with at the City?

20 STEVE CRIPPS: Dealt with in terms --
21 like, contractually, or?

22 CHRISTINE MAINVILLE: Both. How -- how
23 were they -- how were the changes made? And then
24 we can speak about what the City's reaction was to
25 these extensions.

1 STEVE CRIPPS: Well, the City would
2 rely -- well, was trying to rely on the timelines
3 for notice of substantial completion, so we were
4 tracking -- you know, we were tracking back in
5 November what notices we were going to be receiving
6 from them because the -- the countdown to
7 substantial completion I believe was -- well,
8 basically 6 months, so 120 days. So back in
9 November, that 6-month timeline when they have to
10 give notice was coming due, so we started tracking
11 RSA at that point.

12 Once a different RSA was given, then we
13 just started tracking that -- you know, the whole
14 process all over again. In terms of tracking their
15 schedules and looking for notifications of revised
16 dates -- and again, the RA -- sorry, the PA laid
17 out quite clearly, you know, if they're not going
18 to meet the first date, what steps they have to go
19 through to provide a revised date, so we tracked
20 all that. We've reported on that to FEDCO and to
21 council on, you know, changes -- changes to the
22 date.

23 So after the new date came in place, it
24 was just continuing on the same thing - just
25 continued monitoring, continued schedule

1 assessment. The independent assessment team
2 continued to come up to provide that sort of silver
3 second look at -- at the project from -- from their
4 expertise and their experience, and yeah. And so
5 we just kept on -- kept on tracking from that.

6 CHRISTINE MAINVILLE: I take it that it
7 was always up to RTG to say what the new date was.
8 It wasn't a matter of City input.

9 STEVE CRIPPS: No, the PA's very
10 detailed in how they notify us and when they notify
11 us.

12 CHRISTINE MAINVILLE: Okay. And what
13 was the City's reaction to each change to the RSA
14 date?

15 STEVE CRIPPS: Well, I think -- you
16 know, even with the new RSA date, as I recall, they
17 were still giving RSA dates, you know, subject to
18 the resolution of -- of a number of issues, you
19 know, in terms of delay events and relief events.
20 So -- so, you know, starting -- starting in -- in
21 November, I guess, when the City started giving us
22 that sort of qualified -- qualified schedule, it
23 was very disappointing to the City. You know, the
24 City can't operate with something like that, a
25 qualified schedule. We need a schedule, and it's

1 up to them -- I mean, they're not -- they, RTG,
2 aren't meeting their contractual requirement to
3 mitigate the schedule. All they're saying is,
4 here's what it is, and it's subject to these things
5 whether we make that or not.

6 So it was very -- it was a frustrating
7 time for the City. You know, even the City manager
8 was involved in writing letters to -- to RTG, which
9 was a bit of an -- a bit of an exception, but I
10 think it spoke to the fact that this was a very
11 challenging time for the City - and perhaps a
12 challenging time for RTG, but very challenging time
13 for the City - to try to be prepared for what
14 was -- what was coming.

15 CHRISTINE MAINVILLE: And was that
16 still the state of play after the November 2018 RSA
17 date was moved, in terms of not getting accurate --
18 or a clear deadline or accurate mitigation plan
19 from RTG?

20 STEVE CRIPPS: Sorry, say -- just --

21 CHRISTINE MAINVILLE: So after the
22 first -- after the RSA date already changed once
23 and it's November 2018 and then it's moved back
24 again, is the schedule becoming clearer in terms of
25 how RTG is going to achieve that new RSA date, or

1 is it still the same state of play in terms of --

2 STEVE CRIPPS: No.

3 CHRISTINE MAINVILLE: -- the City

4 not --

5 STEVE CRIPPS: Sorry. I would say it
6 never really got a lot better. It was still -- it
7 was still something that we really couldn't --
8 couldn't track. I mean, I think they were
9 producing a schedule because it was the PA
10 requirement, so we're getting a schedule that --
11 every time we looked at it and every time the
12 independent assessment looked at it, it was the
13 same thing about the amount of float on many items
14 was -- was diminishing, more and more items onto
15 the critical path, deadlines being missed, critical
16 milestones being -- being missed. So -- so that --
17 that continued on throughout -- throughout 2018.

18 CHRISTINE MAINVILLE: And I know you
19 weren't there in 2019, but was there a point in
20 time before your departure where the City believed
21 that the August 2019 date would be the true RSA
22 date?

23 STEVE CRIPPS: I believe at the -- I
24 believe at the end of 2018, RTG was -- was talking
25 about a -- an RSA date earlier in 2019, perhaps

1 April. So I know at that time, again, we were
2 doing our assessments.

3 In December, before I left the
4 independent assessment team did yet another review,
5 and our conclusions at the City were the same as
6 the independent assessment team's in that spring of
7 2018 looked -- sorry, spring of 2019 looked very
8 unlikely. I mean, you know, when I left the
9 project, there was still lots of issues with
10 vehicles, both in production and retrofits. There
11 was issues with CBTC, stations were not complete,
12 tunnel ventilation systems were not running
13 properly and commissioned, CBTC challenges, there
14 was no consistent end-to-end running. So in
15 December 2018, there was a lot of work yet to be
16 done, so the chances of that being done in the
17 spring of 2019 looked to us like a very low
18 probability.

19 CHRISTINE MAINVILLE: Was there a point
20 in time while you were still there where there was
21 no longer any appetite for delay on the City's end?

22 STEVE CRIPPS: Well, I mean, I guess
23 there was -- there was never a lot of appetite for
24 delay, but, I mean, while I was there, we were
25 dealing with what -- what was presented to us by

1 RTG, and we were working on that basis. I mean --
2 so in terms of appetite, I'm not sure what you
3 mean, but -- but -- I guess it was frustration with
4 where we were, but by the time I left, the City
5 again was at the point where you're saying 2019,
6 early in 2019, and we're just not seeing it. So
7 it -- I'd say that's probably -- kind of captures
8 the City's view at that point.

9 CHRISTINE MAINVILLE: Okay. When the
10 general manager of OC Transpo came on board,
11 Mr. Manconi, was there a shift in how the project
12 was being managed?

13 STEVE CRIPPS: I guess a shift -- I
14 wouldn't say a shift. On a day-to-day basis, the
15 project was managed by my office. OC Transpo was
16 obviously -- or Transit Services was always a huge
17 part of the team. I guess, you know, the change
18 with Mr. Manconi, when he -- when he came into that
19 position was, you know, he was -- he was the client
20 of the project, if I could put it that way, and now
21 he became part of the responsibility of the
22 project. So -- so I would say, you know, he took a
23 different role, took a more active role, and -- and
24 yeah. And he was -- and he came at it from a bit
25 of a different perspective, but in terms of -- of

1 how we operated as a City, I mean, Mr. Manconi was
2 always on the Executive Steering Committee. He and
3 the Transit Services team were always a huge part
4 of this, so I would -- I would say, you know,
5 that -- that kind of categorizes the changes that
6 were made when he came on.

7 CHRISTINE MAINVILLE: So it wasn't
8 really a change in terms of we're bringing in the
9 operator because the operator was always at the
10 table.

11 STEVE CRIPPS: Oh, absolutely. From --
12 from Day 1, from before I got there, OC Transpo was
13 a big part of this project. Yeah.

14 CHRISTINE MAINVILLE: And did
15 operational considerations influence the
16 construction process?

17 STEVE CRIPPS: I wouldn't say
18 operational consideration -- I mean, operational
19 considerations were always very huge, and it came
20 down to, as I mentioned before, you know, the
21 challenge, for example, of training drivers at the
22 same time OLRTC was trying to retrofit vehicles and
23 those sort of things. So, you know, the operator
24 never influenced construction, but they were a big
25 part of how the project was going to flow, and --

1 and yeah, and they were always -- they were always
2 at the table, and a lot of the construction was for
3 them. The transit control centre was part of the
4 construction, and that was for them to work out of,
5 training the drivers, training the -- the
6 controllers. It was always part of the project.
7 So -- so it -- you know, they didn't influence
8 construction, but they were a huge component of
9 the -- of the project.

10 CHRISTINE MAINVILLE: Was there much
11 planning around how the interface would work
12 between OC Transpo and the maintainer, including
13 not only RTM but Alstom and in addition to the
14 interface with OLRTC and Thales?

15 STEVE CRIPPS: Yeah, I wouldn't say as
16 much with -- you know, the operator wouldn't, while
17 I was there, have had a lot of direct contact with
18 Alstom or Thales. I mean, over time, Alstom being
19 the maintainer, maybe that came on after I left,
20 but the -- but certainly as the operator and the
21 maintainer, that -- those relationships started
22 very early.

23 The -- the gentleman that led RTM, that
24 leadership changed, I think once, anyway, during
25 the time I was there, but RTM was always at the

1 table, was always a player, and always involved,
2 and OL -- or, sorry, OC Transpo always had linkages
3 into -- into the maintainer.

4 You know, the other -- the other
5 thing -- I don't know if other witnesses have
6 talked about RAMP meetings or not, but as we got
7 closer to operational readiness, the RTM lead would
8 be brought into those RAMP meetings as well, so
9 that was a bit of a change. Typically, it was City
10 staff and consultants - RTG, OLRTC - but then there
11 was a recognition that operations were coming, and
12 RTM should be at the table as well, so that further
13 strengthened those linkages between OC Transpo and
14 the maintainer. There would have been working
15 groups, again, that would have involved all of
16 those relevant folks, like the -- I think there was
17 an operational readiness working group, so that
18 would have formed those linkages. So yeah, strong
19 linkages with the maintainer and the operator.

20 CHRISTINE MAINVILLE: Were you involved
21 in RAMP?

22 STEVE CRIPPS: Yes.

23 CHRISTINE MAINVILLE: Were there any
24 discussions about either creating memorandums of
25 understanding or interface agreements between --

1 for the operational phase in terms of the various
2 entities who would need to interface on the
3 operations side on maintenance but also in respect
4 of the systems?

5 STEVE CRIPPS: There was certainly
6 discussion sort of on the whole regulatory regime
7 and the whole sort of safety requirements and the
8 safety case. So at RAMP, that would have been, you
9 know, a key element of the project as well too,
10 because obviously bylaws had to be created for
11 OLRTC, operating rules, and so that was -- that was
12 part of the -- that was part of the project, and
13 again that was all part of the systems assurance
14 and part of the safety case for operating a -- a
15 railroad, so -- so yes.

16 CHRISTINE MAINVILLE: What was the plan
17 for the start of service early on in the project?
18 So, you know, when -- when service would start
19 following RSA and what that would look like.

20 STEVE CRIPPS: Yeah, in various
21 presentations to FEDCO or Transit Commission or
22 council, Mr. Manconi was always very clear that RSA
23 doesn't mean start of service, that there would
24 always be some transition period, and it wasn't
25 really defined that -- what that would be, but

1 there was always talk of receiving a system and
2 then, at some point, transitioning over.

3 So, you know, it wasn't -- it wasn't
4 very specific. It was really -- it was really to
5 let people know that -- because we were talking to
6 various council committees a lot about RSA, and so
7 it was really just to make sure that they could
8 distinguish between RSA and the start of revenue
9 service. So I think Mr. Manconi - and he can
10 certainly speak to this in more detail than I
11 could - there was always going to be a transition
12 of some sort.

13 CHRISTINE MAINVILLE: And do you know
14 what it was meant for in terms of not having it
15 correspond? Like, what was the concern in terms of
16 why it would not immediately follow?

17 STEVE CRIPPS: I think it was just
18 making sure -- and again, Mr. Manconi would speak
19 better, but I think just in terms of making sure
20 the entire system was ready, rolling out to the
21 public, okay, we've got the system now and here's
22 what's going to be happening. In terms of, you
23 know, transitioning from -- how the buses would
24 transition to light rail and how all that would
25 happen and making sure, just on Day 1, there was

1 total Day 1 readiness, because I know Mr. Manconi
2 and his team did extensive work on Day 1 readiness,
3 on what that really meant and how that would all
4 roll out, so I think that all played into what
5 would be the Day 1 of revenue service.

6 CHRISTINE MAINVILLE: And you said it
7 was not necessarily clearly defined. Did you have
8 a sense of how long a period was intended between
9 RSA and the start of service?

10 STEVE CRIPPS: No, I can't really say
11 with any certainty what that would have been. I
12 don't recall discussions on that.

13 CHRISTINE MAINVILLE: And do you recall
14 any discussions about whether Day 1 would be a full
15 start of the entire system as opposed to a
16 progressive start of service?

17 STEVE CRIPPS: No, I wasn't involved in
18 a lot of those discussions. I know Mr. Manconi
19 would -- again, within his team and Transit
20 Services had a very extensive plan, but in terms of
21 details on that, it wasn't really sort of within my
22 scope as the director.

23 CHRISTINE MAINVILLE: Okay. And we
24 touched on this a little bit before, the plan for
25 testing and commissioning, but what was your

1 understanding of whether the criteria for -- let's
2 start with integration testing, whether that had
3 been devised -- whether that was fully in place and
4 whether it was agreed upon by the City.

5 STEVE CRIPPS: Yeah, I think you're
6 talking to the lead up into substantial completion,
7 like the trial running, the 12 days of trial
8 running, and I think there was -- I know there was
9 some discussion while I was there on how that would
10 be interpreted. I think, you know, the PA and --
11 the PA was maybe not as specific as it could have
12 been, so there was a lot of conversation between
13 the City and RTG and OLRTC on what 12 days really
14 meant and what would be -- what would be considered
15 a successful 12 days and what would trigger the
16 start of 12 days. So those conversations were
17 going on while I was there.

18 The final outcome of that and the
19 resolution, the documented resolution I think
20 happened after I left the project, but -- but I
21 know it was an issue that had to be dealt with,
22 just because, you know, we all wanted to be very
23 clear on what that meant.

24 CHRISTINE MAINVILLE: So that wasn't
25 quite settled by the time you left.

1 STEVE CRIPPS: Correct.

2 CHRISTINE MAINVILLE: And do you recall
3 some requirements being devised by STV in 2017?

4 STEVE CRIPPS: I'm not sure
5 specifically what you're referring to in that --

6 CHRISTINE MAINVILLE: So for trial
7 running... First of all, was there a plan to have
8 a trial running team when you were there?

9 STEVE CRIPPS: A trial running --

10 CHRISTINE MAINVILLE: Trial running
11 review team.

12 STEVE CRIPPS: Yeah, I think one of the
13 other -- yeah, I don't think they called themselves
14 that, but there was -- there was a sort of
15 operational readiness team that was looking at
16 everything leading up to substantial completion,
17 and they would have been dealing with 12 days of
18 trial running.

19 CHRISTINE MAINVILLE: Okay. Is the
20 document you're referencing the trial running test
21 procedure, in terms of what was finalized later
22 after your departure, or would you know?

23 STEVE CRIPPS: I wouldn't know.

24 CHRISTINE MAINVILLE: You wouldn't
25 know.

1 STEVE CRIPPS: I can't say for sure
2 because -- I believe it was finalized later, so I
3 don't know.

4 CHRISTINE MAINVILLE: How did the City
5 ensure that the criteria were sufficient for trial
6 running? Was the City going to -- maybe I can
7 start with would the City assess, you know, the
8 sufficiency of that criteria from their
9 perspective?

10 STEVE CRIPPS: So how would the City
11 assess it? I --

12 CHRISTINE MAINVILLE: Well, whether you
13 were satisfied with the criteria that they -- they
14 would ensure a certain level of reliability of the
15 system, or what was the City looking to ensure with
16 the criteria, and how were they verifying that?

17 STEVE CRIPPS: Well, I guess, you know,
18 before trial running, there would be a pretrial
19 running period, so that would be the lead into it,
20 so that would give some sense of confidence,
21 end-to-end pretrial running. But in terms of trial
22 running -- and again, you know, after I left, but
23 my sense would be that once given criteria on what
24 would constitute successful trial running, the same
25 folks that had been administering this part of the

1 project before I left would continue administering
2 that, and there would be -- there would be fairly
3 senior level involvement on whether the criteria
4 had been met or not, but again, you know, that
5 was -- that was after I departed the project.

6 CHRISTINE MAINVILLE: But in terms of
7 setting the metrics and the criteria, would the
8 City provide input?

9 STEVE CRIPPS: Oh, absolutely. That
10 would -- that was done jointly, yes. Certainly
11 while I was still there, there was joint
12 discussions on what the -- what the 12 days -- what
13 that would look like and what it would actually
14 mean. So -- so again, I didn't see the resolution
15 to that, to my recollection, but it was recognized
16 that -- by both parties that it needs to be better
17 defined than what it was, just for sake of clarity
18 going forward.

19 CHRISTINE MAINVILLE: And I mean not
20 just in terms of 12 days but how many events were
21 permissible, what kind of events, the number of
22 kilometres that needed to be run. Were these
23 things that the City was looking at in terms of
24 assessing what it deemed sufficient or not?

25 STEVE CRIPPS: Right. Yes, the City

1 was looking at all of those things.

2 CHRISTINE MAINVILLE: Who was -- who
3 was primarily responsible for assessing that?

4 STEVE CRIPPS: Well, it would have been
5 everyone from the City, starting with Mr. Manconi,
6 going down to my office, rail experts in my office.
7 It would have been -- Mr. Manconi had some advisors
8 with extensive rail experience in his office. He
9 would have tapped into those -- into that person -
10 I guess it was one specific advisor to Mr. Manconi
11 with extensive rail experience - probably would
12 have tapped into some of the members of the
13 independent assessment team who had a lot of
14 experience. So I think there was a lot of -- a lot
15 of support in terms of what is reasonable and what
16 would give the City the confidence to move forward.

17 CHRISTINE MAINVILLE: Were you directly
18 privy to these discussions and assessments?

19 STEVE CRIPPS: Some of them, when I was
20 still there, yeah. It was -- it was one of the
21 topics that was discussed at every RAMP meeting in
22 terms of operational readiness and sort of what was
23 deemed to be a go/no-go list, that there was --
24 there was -- there was that being discussed, and
25 then the -- the 12 days of -- of -- 12 days of

1 trial running was discussed at RAMP as well.

2 CHRISTINE MAINVILLE: And do you have a
3 sense of what -- how high the metrics were and how
4 high the City wanted them to be in terms of
5 ensuring a reliable system?

6 STEVE CRIPPS: No. In terms of the
7 discussions and where they landed, I don't have a
8 sense of that.

9 CHRISTINE MAINVILLE: Okay. What was
10 the City's understanding of the parameters of the
11 IC's role in the criteria for trial running?

12 STEVE CRIPPS: Well, I guess the IC's
13 role was to make sure that RTG and its constructor
14 had met all the requirements for substantial
15 completion, and that was -- that was a number of
16 items, so they were to certify that. Trial running
17 would have been part of that. You know, to my
18 knowledge, the IC would not have been directly
19 involved in any discussions on how the 12 days was
20 defined, but I think what they would have done --
21 and again, they would have done this after I left,
22 but I would assume that what they would have done
23 is say, okay, if the City and RTG have agreed on
24 this, has -- has that been met, and if it's yes,
25 then that's one of the elements for substantial

1 completion - among a number of other things as well
2 too. So --

3 CHRISTINE MAINVILLE: Right. So the
4 City understood that the IC wasn't evaluating the
5 criteria to assess for sufficiency. Is that fair?

6 STEVE CRIPPS: While I was -- while I
7 was there, the IC didn't have a role in evaluating
8 criteria.

9 CHRISTINE MAINVILLE: There were some
10 changes made for Stage 2 of the LRT -- is that fair
11 to say? -- in terms of things that were done
12 differently, perhaps, having lived through Stage 1
13 and perhaps identifying areas for improvement or
14 lessons learned? Yes. You just have to say, for
15 the record.

16 STEVE CRIPPS: Oh, sorry. The answer
17 is yes. I know the director for Stage 2 and his
18 team undertook lessons learned exercises and tapped
19 into many resources of folks that had varying
20 involvement in the various phases of Stage 1.
21 So -- so yes, that -- that was done.

22 CHRISTINE MAINVILLE: Is that Michael
23 Morgan?

24 STEVE CRIPPS: At the time, Chris Swail
25 was the -- was directing Stage 2.

1 CHRISTINE MAINVILLE: Were you
2 conducted about that, given your involvement in
3 Stage 1?

4 STEVE CRIPPS: A number of us were, I
5 think in more detailed areas. So my quick answer
6 is yes, but certainly when it got into greater
7 detail, Chris's team that was conducting the
8 lessons learned would go to folks like -- like
9 Richard Holder as an example and some of his team,
10 who had, you know, more direct and more granular
11 experience with the PA, and same on Gary Craig's
12 side and the civil side, they obviously would have
13 gone to the procurement team. And so yes, we were
14 all involved in varying degrees.

15 CHRISTINE MAINVILLE: And maybe let's
16 start with what your perspective is on what might
17 have been done differently in hindsight or what you
18 would recommend or perhaps did recommend to be done
19 differently on Stage 2.

20 STEVE CRIPPS: Yeah, I mean, there was
21 nothing really -- you know, in my view, there was
22 no -- what's the word? -- critical errors in terms
23 of Stage 1, like in terms of the PA, in terms of
24 how we administered the PA. I think, you know,
25 there was solid teams on both sides undertaking

1 this project - obviously, challenges on RTG's side
2 in delivering the project.

3 So in terms of, you know, lessons
4 learned, from my perspective, there wasn't
5 really -- as I said, really critical flaws. The
6 milestone issue I talked about before caused
7 some -- caused some challenges, I think, for
8 everybody. It created a lot of work where work
9 didn't need to be created. It took people's focus
10 away from what, you know, everybody should be
11 focussed on. So -- so, you know, I -- I think if I
12 were doing it again, I would look to different
13 payment strategies other than milestones. And I'm
14 not sure -- I know that's a message we gave loud
15 and clear to Stage 2, so I don't know where that
16 landed, but I think it's -- it's my understanding
17 too that Infrastructure Ontario has moved away in
18 their P3 template from milestones, so I think
19 everybody's probably of the same opinion on that.

20 There are other areas -- you know, in
21 terms of schedules, as I mentioned earlier, you
22 know, there was probably a year's worth of
23 frustrations on schedules, and perhaps either --
24 either more teeth in the PA to deal with that or
25 some sort of, you know, independent certifier role

1 for schedules would -- would help in that area. It
2 was just -- it was a source of frustration, and it
3 became very challenging for the City to operate
4 with schedules like that.

5 You mentioned before, I think, you
6 know, methods specs versus performance specs. I
7 think, you know, the City should continue to look
8 at -- looking at how they -- you know, the specs
9 that they put in and focussing on output versus
10 inputs.

11 We didn't talk a lot about disputes,
12 but on this project, a lot of disputes came in in
13 one big pile late in the project and -- and not
14 respecting timelines for disputes, so, you know, it
15 sort of -- you know, when that happens, it's tough
16 to mitigate any delays that are associated with the
17 dispute. It's tough to have timely discussions and
18 mitigations or analysis on those disputes, so I
19 think, you know, something -- some more teeth in
20 the PA that would deal with dispute resolutions.
21 Yeah. I don't know.

22 You know, we talked a bit about risk
23 transfer earlier, so I didn't see -- I didn't see
24 any real areas where risk transfer was appropriate
25 in this PA, but as I think you alluded to, that

1 other agencies are looking at -- are looking at the
2 issue of risk transfer in P3s, so, you know, I
3 think that's something that I would look at.
4 Again, in the risk transfer in terms of vehicles or
5 systems or geotechnical, I think it was very
6 appropriate for this project.

7 You know, the big challenge of vehicle
8 production obviously had -- I think needs to be
9 looked at going forward, in how vehicles are
10 produced and where they're produced, and again,
11 it's -- it's my understanding, not being -- closely
12 following the industry, but obviously there's a lot
13 of light rail projects going on in Ontario, and
14 there's a lot of dedicated facilities being
15 implemented that will maybe, you know, alleviate
16 some of the problems or some of the issues or
17 challenges associated with developing or assembling
18 vehicles in a nondedicated facility.

19 So, you know, I -- those are the things
20 that I think I would, you know, look at in other
21 P3s for -- for projects. You know, I think it was
22 a -- I think it was a solid P3 I think where -- or
23 a solid project agreement. I think where it
24 needed -- where there's any grey areas, I think we
25 worked well with RTG in addressing those grey areas

1 and coming to resolution in most cases.

2 CHRISTINE MAINVILLE: Just going back
3 to the milestones, would you say that was mostly
4 an -- did it cause administrative issues,
5 challenges? Was it more a -- a nuisance than -- or
6 was it something that could have had an impact on
7 the actual performance, perhaps ultimately on the
8 reliability of the system?

9 STEVE CRIPPS: Yeah, I wouldn't say
10 reliability, but in -- in nuisance, I guess -- I
11 guess, you know, to some degree nuisance, but I
12 think the real key is the problem with milestones
13 is that it didn't reflect the most efficient way to
14 go about the project, and that was an opinion that
15 was reflected to me by RTG, not just the City's
16 opinion.

17 And, you know, the term "chasing
18 milestones" gets -- you know, got used on the
19 project or bandied around, and that's to some
20 degree - you know, I wouldn't say it was huge.
21 Like, it didn't -- it wasn't a major disruption to
22 their schedule, but what it does is maybe take some
23 of the focus off what is the right thing and what
24 is the most efficient thing to do right now versus
25 what do I need to do to achieve the milestone. So

1 I wouldn't say it affected quality. I wouldn't say
2 it affected reliability. I'd say it was a bit of a
3 nuisance for everybody, but I would say it was
4 somewhat of a diversion for RTG and their
5 constructor.

6 CHRISTINE MAINVILLE: Okay. Do you
7 understand that on Stage 2, there is a bigger City
8 team and more onsite monitoring of the
9 construction?

10 STEVE CRIPPS: I can't say I'm aware of
11 the --

12 CHRISTINE MAINVILLE: Okay.

13 STEVE CRIPPS: -- of the delivery, no.

14 CHRISTINE MAINVILLE: Nor about the
15 City's responsibility for the vehicles?

16 STEVE CRIPPS: No. Well -- no.

17 CHRISTINE MAINVILLE: Are you aware of
18 there being a longer trial running period or some
19 provision for a burn-in period?

20 STEVE CRIPPS: No, none whatsoever.

21 My -- my focus was strictly on -- on Phase 1.

22 CHRISTINE MAINVILLE: In terms of the
23 ultimate issues that the system encountered in
24 terms of breakdowns and derailments, obviously you
25 weren't there when that happened, but having lived

1 through the construction of the project, do you
2 have any sense of, you know, root causes for why
3 this system encountered these issues?

4 STEVE CRIPPS: Well, again, that's --
5 that's tough to say. I'm not really -- I don't
6 have detailed information on what all the issues
7 are. I mean, I have anecdotal information from
8 what I might see in the newspaper, but I live 3 and
9 a half hours away from Ottawa, so I'm not really
10 plugged in totally with what's going on.

11 I know -- you know, I guess just as a
12 general comment - and I don't know if this is a
13 root cause, but it is a general comment - RTG had,
14 you know, a lot of challenges with the performance
15 of suppliers and subcontractors, and, you know,
16 that goes from vehicles to train control systems to
17 overhead catenary systems to the people building
18 stations. So, you know, they had a lot of
19 challenges with subcontractors and suppliers. So
20 whether that's led to the issues that have happened
21 in revenue service, I can't say, but it certainly
22 was an area that they were challenged with.

23 CHRISTINE MAINVILLE: You may be aware
24 that the City -- well, Transport Canada delegated
25 to the City the role of implementing a regulatory

1 framework around safety and security?

2 STEVE CRIPPS: Yes.

3 CHRISTINE MAINVILLE: Were these
4 devised for this project specifically?

5 STEVE CRIPPS: Yeah. So part of --
6 part of the whole systems -- safety and systems
7 assurance process deals with safety on the
8 project -- or -- yeah, safety on the system. Not
9 on the project - the safety on the system. And
10 that is all sort of documented in a safety case,
11 and the safety case, you know, deals with hazard
12 analysis; it deals with operating procedures; it
13 deals with regulatory requirements; it deals with
14 the bylaws that were put in place.

15 So that was all part of -- well, it was
16 part of the role of RTG and the City in developing
17 all of those, so RTG had a role in that whole --
18 well, in developing the safety case, that was their
19 role, but as part of that, the whole regulatory
20 regime associated with operating it because safety
21 cases deal with how to integrate a complex project
22 from conception to design, to building it, to
23 testing it, to commissioning it, to operating it.
24 So yeah, in terms of that regulatory role, that was
25 all part of safety and systems assurance and all

1 part of the safety case that was part of this
2 project.

3 And I know just towards the end of my
4 tenure there, RT -- sorry, Transit Services brought
5 on a -- I'm not sure what his title was with
6 Transit Services, but the regulatory monitor that
7 would be responsible for ensuring that the operator
8 works within that regulatory regime and the bylaws
9 and reporting to council on the requirements and
10 how they met those requirements.

11 CHRISTINE MAINVILLE: So can you tell
12 me a little bit more about how the safety case was
13 devised? Like, who -- what was that process?

14 STEVE CRIPPS: So it was part of -- it
15 was part of RTG's engineering team, or I guess the
16 constructor's engineering team that would do it.
17 There's very detailed, documented guidelines and
18 processes to do that -- on how this is to be done.
19 It's a hugely detailed and methodical and organized
20 way of dealing with everything from -- as I say,
21 from what are the project requirements - you know,
22 subsystem requirements, subsystem design, system
23 requirements, system design - you build it, and you
24 do -- you do integration testing, you do systems
25 testing, you do testing of the overall system and

1 then you launch it. So it's -- it's a hugely
2 detailed and complex project, and -- but the idea
3 is extreme rigour in the whole project, and what
4 you get out of it is what a lot of people -- what's
5 referred to as RAMS, which is a system that's
6 reliable, it's available, that's maintainable and,
7 most importantly, is safe.

8 So again, I'm far from an expert on
9 this, but there's a number of I believe American
10 standards, there's a European standard, that detail
11 how all of this should happen. So it's up to the
12 constructor or his designer or his system
13 integrator, whoever's doing this, to take those
14 requirements and apply them to the project that's
15 going on here because they're sort of generic
16 requirements. They're not all specifically for
17 rail projects. They're a guideline on -- on how
18 you -- on how you do proper system assurance. So
19 at the end of the day, it's -- it's how all of
20 these systems work together, and most importantly,
21 how they provide safety.

22 And again, part of that whole safety
23 thing is the -- the regulatory aspects as well. So
24 there's -- excuse me. I'm losing my voice.
25 There's the safety case that analyzes hazard

1 analysis: how hazards are being treated, looking at
2 the probability of risk, looking at the impact of
3 risk, how those risks are mitigated - again,
4 regulatory requirements. What else? I'm probably
5 forgetting things, but that's sort of the basis of
6 the whole process. So all of that was RTG and
7 their constructor's requirements.

8 CHRISTINE MAINVILLE: Is the safety
9 case the same or does it correspond to the
10 consolidated safety file?

11 STEVE CRIPPS: Yeah, it's really a
12 bundle of documentation that the independent safety
13 auditor -- so the City retained a company called
14 TÜV Rheinland as the independent safety auditor, so
15 it would be up to him to take that whole safety
16 case and -- and, again, this is part of the
17 requirements for substantial completion. It would
18 be up to the independent safety auditor to look at
19 that whole bundle of documentation and the process
20 associated with it and say, I am certifying this,
21 that this is -- you know, meets the requirements of
22 the appropriate standards.

23 CHRISTINE MAINVILLE: And I understand
24 that that audit -- am I right that it was done in
25 November 2017 it was completed?

1 STEVE CRIPPS: Yeah, so kind of talking
2 two different things. So sort of a health check
3 was done, so an interim audit or an interim
4 assessment was done of how OLRTC and their team is
5 proceeding with the safety case, and the -- the
6 independent safety auditor's report was that they
7 are well behind where they should be, and there's
8 insufficient sort of progress to date on -- on that
9 safety audit. And then at the same time we talked
10 about SEMP and SEMP doing a similar audit on behalf
11 of his client, coming up with pretty well the same
12 conclusions.

13 So those were both sort of state of the
14 union audits, versus at the end of the project, as
15 part of the whole substantial completion process,
16 the independent safety auditor has to certify that
17 the constructor has met the requirements of the
18 safety case or has -- has provided a safety case
19 that meets the requirements and -- and, you know,
20 what a prudent operator would do.

21 CHRISTINE MAINVILLE: And that's the
22 one that took place in November 2017, the letter.

23 STEVE CRIPPS: No, no, the letter --
24 the letter I talked about is where -- this --
25 everything would be done, and we're leading into

1 substantial completion, and one of the checks has
2 to be, okay, Mr. Manconi, I have reviewed the
3 safety case, and I am certifying that it meets the
4 requirements of the appropriate standards, and
5 it's -- it addresses what a reasonable constructor
6 would do and has produced the appropriate
7 documentation, bylaws, et cetera. So that's the
8 safety auditor saying to Mr. Manconi at the end of
9 the project, from a safety perspective, it has met
10 the requirements of the project agreement.

11 The other two audits I talked about,
12 again, one by TÜV and one by SEMP, were really to
13 say, Okay, we're well into this project; it's --
14 you know, it's early 2017. We're really not that
15 far from RSA, so where is the constructor in terms
16 of safety assurance processes? So sort of like --
17 like just a check-in, really.

18 CHRISTINE MAINVILLE: I just meant to
19 ask this question earlier, about OC Transpo's role
20 in the building phase. Did they have a role in the
21 design and -- well, in the systems integration work
22 of the rolling stock?

23 STEVE CRIPPS: Systems integration. I
24 guess... So their role during the design and
25 construction -- so of course they were focussed on

1 their role as an operator, but in terms of
2 construction going on and integration, you know,
3 one of their primary roles was the customer -- from
4 the customer perspective or the customer
5 experience - so how do customers move around;
6 where's the signage; you know, where's -- how do
7 they get off a bus and into a station; how do we
8 secure stations after hours; what's -- you know,
9 what's in the station in terms of facilities or --
10 you know, so it was all -- it was all
11 customer-focussed on how the system would operate
12 once it's up and running.

13 So in terms of true system integration,
14 I mean, part of system integration is passenger
15 information display systems, right - the next
16 train's coming in 1 minute and 30 seconds - so
17 while they were certainly interested in the outcome
18 of all of those things and making sure they were
19 all integrated, and fare gates and fire alarms and
20 all that sort of stuff, they were all interested in
21 ensuring all of that was working, their role wasn't
22 really in terms of overseeing system integration,
23 if I can put it that way. We had the expertise on
24 our team in terms of system integration and train
25 control systems and SCADA, so -- you know, while OC

1 Transpo had experience running a railway, as far as
2 the north-south O-Train goes, they had experience
3 in that area. They weren't really responsible for
4 day-to-day sort of oversight of integration of
5 services.

6 CHRISTINE MAINVILLE: Okay. My last
7 question: Was there an MOU or something else that
8 governed the relationship between the City and OC
9 Transpo as operator in terms of the City having
10 oversight of OC Transpo?

11 STEVE CRIPPS: In terms of the City --

12 CHRISTINE MAINVILLE: Well, for RIO,
13 for instance, to be able --

14 STEVE CRIPPS: RIO being the contract
15 managers and OC Transpo being the client as such?

16 CHRISTINE MAINVILLE: M-hm.

17 STEVE CRIPPS: You know, I -- I don't
18 recall a -- a documented MOU.

19 CHRISTINE MAINVILLE: Is there anything
20 informally that governed that or that addressed --
21 that was followed, in terms of --

22 STEVE CRIPPS: Informally, it was just
23 a very close working relationship: making sure they
24 were on the appropriate working groups, making
25 sure, you know, they were involved in RAMP

1 meetings. Often, Michael Morgan -- so Michael
2 Morgan undertook a number of roles throughout --
3 throughout the project before -- both before and
4 after, so often Michael Morgan would be a guest at
5 Works Committee. He wasn't a member, but because
6 of the -- obviously them being the client, he would
7 attend Works Committee as a regular guest, so we
8 got -- we had linkages there.

9 Obviously, once Mr. Manconi undertook
10 that role of general manager, there was linkages --
11 linkages there with OC Transpo. So I -- I can't
12 say I recall a formal -- formal documentation on
13 it, but I can tell you there was a very close
14 working relationship with -- with them.

15 CHRISTINE MAINVILLE: Thank you. We're
16 at time, but I -- if we have a couple minutes, and
17 I'll just see if my cocounsel has any follow-up
18 questions and otherwise if your counsel do.

19 MS. YOUNG: I think I'm good,
20 Christine. Thank you.

21 JESSE GARDNER: I don't have any
22 questions, Christine. I just -- back to the
23 comment or discussion about the -- essentially the
24 safety certificate being signed off by the ISA, is
25 that -- we can provide that to you, if that would

1 help, to have the date that that was done?

2 CHRISTINE MAINVILLE: Sure, and it may
3 be something that we have, but if you can identify
4 it, certainly.

5 U/T JESSE GARDNER: Sure. Okay.

6 CHRISTINE MAINVILLE: Thank you.
7 Anything that you wanted to add that you want to
8 make sure we know, we're aware of, Mr. Cripps? No,
9 okay.

10 STEVE CRIPPS: No, I told you
11 everything I know.

12 CHRISTINE MAINVILLE: Great.

13 STEVE CRIPPS: No, I think that's been
14 very comprehensive, and I think we've covered a lot
15 of subjects, so I have nothing further to add.

16 -- Concluded at 5:01 p.m.

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1 REPORTER'S CERTIFICATE

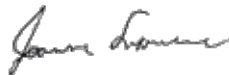
2
3 I, JOANNE A. LAWRENCE, Registered
4 Professional Reporter, certify;

5 That the foregoing proceedings were
6 taken before me at the time and place therein set
7 forth, at which time the witness was put under oath
8 by me;

9 That the testimony of the witness
10 and all objections made at the time of the
11 examination were recorded stenographically by me
12 and were thereafter transcribed;

13 That the foregoing is a true and
14 correct transcript of my shorthand notes so taken.

15
16 Dated this 28th day of April, 2022.

17
18 

19 _____
20 NEESONS, A VERITEXT COMPANY

21 PER: JOANNE LAWRENCE, RPR, CSR

22 COURT REPORTER
23
24
25

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