

RED HILL VALLEY PARKWAY INQUIRY

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

VOLUME 88

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INDEX

	PAGE
CLOSING SUBMISSIONS BY MR. LEDERMAN	16437
CLOSING SUBMISSIONS BY MR. CHEN	16453
CLOSING SUBMISSIONS BY MS. CONTRACTOR	16503
CLOSING SUBMISSIONS BY MS. TALEBI	16587
CLOSING SUBMISSIONS BY MS. MCALEER	16611

LIST OF EXHIBITS

NO.	DESCRIPTION	PAGE
239	Practice guidelines from the Professional Engineers Ontario, 2017 and 2020, HAM64292.	16430
240	Practice guidelines from the Professional Engineers Ontario, 2017 and 2020, HAM64293.	16430
241	City PowerPoint presentation titled Traffic Engineering Collision Countermeasures Review, HAM62336.	16431
242	Signed version of Golder's PMTR Phase 3 report, GOL7504.	16432
243	E-mail attachment, pictures and brochures sent by Trevor Moore of Miller Paving to Dr. Uzarowski on December 20, 2013, GOL6504.	16463
244	E-mail attachment, pictures and brochures sent by Trevor Moore of Miller Paving to Dr. Uzarowski on December 20, 2013, GOL6505.	16463
245	E-mail attachment, pictures and brochures sent by Trevor Moore of Miller Paving to Dr. Uzarowski on December 20, 2013, GOL6506.	16463
246	E-mail attachment, pictures and brochures sent by Trevor Moore of Miller Paving to Dr. Uzarowski on December 20, 2013, GOL6507.	16463
247	E-mail attachment, pictures and brochures sent by Trevor Moore of Miller Paving to Dr. Uzarowski on December 20, 2013, GOL6508.	16464

LIST OF EXHIBITS

NO.	DESCRIPTION	PAGE
248	E-mail attachment, pictures and brochures sent by Trevor Moore of Miller Paving to Dr. Uzarowski on December 20, 2013, GOL6509.	16464
249	Affidavit of Byrdena MacNeil, affirmed on March 15, 2023, RHV1045.	16435
250	Affidavit of Janette Smith, affirmed on February 22, 2023, RHV1044.	16436

1 Arbitration Place Virtual

2 --- Upon resuming on Wednesday, March 22, 2023

3 at 9:30 a.m.

4 JUSTICE WILTON-SIEGEL: Good
5 morning.

6 MS. LAWRENCE: Good morning,
7 Registrar, Commissioner, participants. I'm going
8 to open today's proceedings with our land
9 acknowledgment.

10 I would like to open this
11 hearing by acknowledging that the City of Hamilton
12 is situated on the traditional territories of the
13 Erie, Neutral, Huron-Wendat, Haudenosaunee and
14 Mississaugas. This land is covered by the Dish
15 With One Spoon Wampum Belt Covenant, which is an
16 agreement between the Haudenosaunee and
17 Anishinaabek to share and care for the resources
18 around the Great Lakes. We further acknowledge
19 that the land on which Hamilton sits is covered by
20 the Between the Lakes Purchase, 1792, between the
21 Crown and the Mississaugas of the Credit First
22 Nation.

23 Many counsel appearing on this
24 hearing today are in Toronto, which is on the
25 traditional land of the Huron-Wendat, the Seneca

1 and most recently the Mississaugas of the Credit
2 River. Today this meeting place is still home to
3 many indigenous people from across Turtle Island
4 and I'm grateful to have the opportunity to work
5 on this land.

6 Commissioner, if I may, before
7 we turn to the events of the day, being the
8 closing submissions of the participants, I have
9 some housekeeping matters and, in particular, the
10 introduction of additional documents into
11 evidence.

12 JUSTICE WILTON-SIEGEL: Okay.

13 MS. LAWRENCE: These documents
14 include documents that were referenced in
15 participants' closing submissions that are not yet
16 in evidence, as well as affidavit evidence from
17 two additional witnesses. The first two documents
18 are HAM64292, and HAM64293, and both of these are
19 practice guidelines from the Professional
20 Engineers Ontario. That's the regulator for
21 engineers in Ontario. And these practice
22 guidelines are from 2017 and 2020. These
23 documents were referred to in the submissions by
24 the City and by Golder. At present, only the 2012
25 version of the PEO practice guidelines on this

1 particular topic are in evidence and commission
2 counsel agrees that all three versions of the
3 guidelines should be in evidence and before you.

4 Registrar, I would ask that
5 you mark these exhibits as the next exhibits,
6 which, by my count, are Exhibits 239 and 240
7 respectively.

8 THE VIRTUAL TECHNICIAN:
9 Noted, counsel.

10 EXHIBIT NO. 239:
11 Practice guidelines from
12 the Professional
13 Engineers Ontario, 2017
14 and 2020, HAM64292.

15 EXHIBIT NO. 240:
16 Practice guidelines from
17 the Professional
18 Engineers Ontario, 2017
19 and 2020, HAM64293.

20 MS. LAWRENCE: Thank you. The
21 next document, which will be Exhibit 241, is
22 HAM62336 and that is a City PowerPoint
23 presentation titled Traffic Engineering Collision
24 Countermeasures Review. This document was
25 referred to in the City's submissions, the written

1 closing submissions. It was raised during the
2 examination of Stephen Cooper before you,
3 Mr. Commissioner, but it wasn't marked at that
4 time. Counsel for the City has requested that it
5 be entered into evidence now, and, of course, it's
6 been circulated and part of the inquiry database.
7 As such, I would ask that the Registrar mark this
8 exhibit again, HAM62336, as Exhibit 241.

9 THE VIRTUAL TECHNICIAN:

10 Noted.

11 EXHIBIT NO. 241: City
12 PowerPoint presentation
13 titled Traffic
14 Engineering Collision
15 Countermeasures Review,
16 HAM62336.

17 MS. LAWRENCE: Thank you. The
18 next exhibit is GOL7504, and this is a signed
19 version of Golder's PMTR Phase 3 report. It was
20 referred to in Golder's closing submissions. A
21 draft version of this report is already in
22 evidence, although it is not identical to the
23 current draft, but this signed version is not.
24 Golder's counsel has requested that this document
25 be entered into evidence and commission counsel

1 agrees that it should be before you. As such,
2 Registrar, I would ask that you mark this as the
3 next exhibit, it is GOL7504, as Exhibit 242.

4 THE VIRTUAL TECHNICIAN:

5 Noted, counsel.

6 EXHIBIT NO. 242: Signed
7 version of Golder's PMTR
8 Phase 3 report, GOL7504.

9 MS. LAWRENCE: Thank you.

10 Next, there are six e-mail attachments, which
11 Golder's counsel has requested be entered into
12 evidence. These are GOL6504, GOL6505, GOL6506,
13 GOL6507, GOL6508 and GOL6509. These are pictures
14 and brochures sent by Trevor Moore of Miller
15 Paving to Dr. Uzarowski on December 20, 2013. The
16 e-mail attaching these documents is already in
17 evidence as GOL6503. It's in the overview
18 document. And we agree, just as a matter of
19 completeness and at Golder's counsel's request,
20 that these six e-mail attachments should be
21 entered into evidence.

22 Registrar, I ask that you mark
23 these documents as Exhibits 243 to 246, pardon me,
24 248, respectively.

25 THE VIRTUAL TECHNICIAN:

1 Noted, counsel. Thank you.

2 EXHIBIT NO. 243: E-mail
3 attachment, pictures and
4 brochures sent by Trevor
5 Moore of Miller Paving to
6 Dr. Uzarowski on
7 December 20, 2013,
8 GOL6504.

9 EXHIBIT NO. 244: E-mail
10 attachment, pictures and
11 brochures sent by Trevor
12 Moore of Miller Paving to
13 Dr. Uzarowski on
14 December 20, 2013,
15 GOL6505.

16 EXHIBIT NO. 245: E-mail
17 attachment, pictures and
18 brochures sent by Trevor
19 Moore of Miller Paving to
20 Dr. Uzarowski on
21 December 20, 2013,
22 GOL6506.

23 EXHIBIT NO. 246: E-mail
24 attachment, pictures and
25 brochures sent by Trevor

1 Moore of Miller Paving to
2 Dr. Uzarowski on
3 December 20, 2013,
4 GOL6507.
5 EXHIBIT NO. 247: E-mail
6 attachment, pictures and
7 brochures sent by Trevor
8 Moore of Miller Paving to
9 Dr. Uzarowski on
10 December 20, 2013,
11 GOL6508.
12 EXHIBIT NO. 248: E-mail
13 attachment, pictures and
14 brochures sent by Trevor
15 Moore of Miller Paving to
16 Dr. Uzarowski on
17 December 20, 2013,
18 GOL6509.

19 MS. LAWRENCE: Thank you. In
20 addition to these documents, Commissioner, there
21 are two affidavits that commission counsel has
22 circulated to participants' counsel, and both of
23 them, we ask be made exhibits. The first is the
24 affidavit of Byrdena MacNeil, affirmed on
25 March 15, 2023, which is document ID RHV1045, and

1 this affidavit relates to this affiant's evidence
2 regarding matters relevant to this inquiry while
3 she was in the role as a solicitor in the City's
4 legal department. As I've said, it's been
5 circulated to participants' counsel, and thus I
6 ask that it be made the next exhibit, Exhibit 249.

7 JUSTICE WILTON-SIEGEL: If
8 there are no objections from any of the
9 participants, then it should be marked as an
10 exhibit.

11 MS. LAWRENCE: Commissioner, I
12 can confirm no participants have raised any
13 objection to having this entered as an exhibit
14 without examination.

15 JUSTICE WILTON-SIEGEL: Okay.

16 THE VIRTUAL TECHNICIAN:
17 Marked as an exhibit. Thank you.

18 EXHIBIT NO. 249:
19 Affidavit of Byrdena
20 MacNeil, affirmed on
21 March 15, 2023, RHV1045.

22 MS. LAWRENCE: Thank you. And
23 the last document is the second of the two
24 affidavits. It's the affidavit of Janette Smith,
25 affirmed on February 22, 2023, and it's doc

1 ID RHV1044. This affidavit details various
2 policies and process improvements that the City
3 has undertaken or implemented relating to matters
4 relevant to the inquiry's terms of reference and
5 primarily those policies and process improvements
6 all post date the disclosure of the Tradewind
7 report. It's also been circulated to all parties
8 and my understanding is that no participant
9 objects to it being filed as an exhibit without
10 examination. And, thus, I would ask it be marked
11 the next exhibit, which is Exhibit 250.

12 JUSTICE WILTON-SIEGEL: Okay.

13 THE VIRTUAL TECHNICIAN:

14 Marked as Exhibit 250.

15 EXHIBIT NO. 250:

16 Affidavit of Janette

17 Smith, affirmed on

18 February 22, 2023,

19 RHV1044.

20 MS. LAWRENCE: Thank you.

21 Those are the exhibits that commission counsel
22 wish to include. Commissioner, of course, you
23 also have been provided with the written
24 submissions of each of the participants and I can
25 confirm that these written submissions are posted

1 on the inquiry's website and they are part of the
2 inquiry database.

3 JUSTICE WILTON-SIEGEL: Good.

4 Thank you.

5 MS. LAWRENCE: Thank you.

6 Today we have the first two participants' oral
7 closing submissions. First, the City of
8 Hamilton's counsel will proceed for much of the
9 morning and into the afternoon and then Dufferin's
10 counsel, and tomorrow we will have Golder's
11 counsel and counsel for Ontario.

12 JUSTICE WILTON-SIEGEL: Okay.

13 MS. LAWRENCE: Thank you.

14 With that, I'm going to turn it over, I believe,
15 to Mr. Lederman.

16 CLOSING SUBMISSIONS BY MR. LEDERMAN:

17 Good morning,

18 Mr. Commissioner. Can you hear me? There seems
19 to be a bit of a slight echo. Just give us one
20 second.

21 JUSTICE WILTON-SIEGEL: Sure.

22 MR. LEDERMAN: Okay. I think
23 we should be okay now.

24 JUSTICE WILTON-SIEGEL: Okay.

25 I'm fine at this end.

1 MR. LEDERMAN: Okay. Great.

2 Thank you.

3 So, the City of Hamilton
4 commenced this inquiry in 2019 to investigate the
5 issues identified in the terms of reference with
6 respect to the Red Hill Valley Parkway, and we're
7 going to provide you with our closing submissions
8 this morning. We've prepared a PowerPoint slide
9 deck that will guide our submissions, and I'll
10 explain how we're dividing up the different issues
11 amongst our team.

12 So, if just pull up the slide
13 deck here, you'll see that if we go to the first
14 slide, we're going to be breaking this up so that
15 I'm going to provide a little bit of an overview.
16 Mr. Chen will address the points and the evidence
17 regarding safety of the Red Hill broadly.
18 Ms. Contractor will speak to the maintenance and
19 improvement of the Red Hill and the steps that
20 have been taken in respect of that and, finally,
21 Ms. Talebi will speak to improvements to the
22 City's policies and procedures that has come out
23 in the form of the evidence during the course of
24 this inquiry.

25 Let me just begin, if I could,

1 by saying a few words about the fact that there
2 were other ways that the City could have
3 investigated the issues in this inquiry, but city
4 council chose to proceed with this judicial
5 inquiry process in the interest of accountability
6 and transparency and to maintain the trust of the
7 public.

8 And I think, as you've heard
9 over the several months of evidence, that the City
10 of Hamilton has demonstrated its full commitment
11 to this inquiry process since it was commenced in
12 April of 2019. Through the efforts of commission
13 counsel and their team, as well as the other
14 participants, the inquiry has received, as you
15 know, significant amounts of evidence on the
16 issues related to the terms of reference. I do
17 want to, just looking at this slide, you can see
18 that over 131,000 documents were produced, 64,000
19 of which were City documents. There were prep
20 sessions and interviews of 107 witnesses,
21 including 55 from the City. This inquiry received
22 evidence from 75 fact and expert witnesses and, as
23 you know, we have completed 85 hearing days in
24 this inquiry.

25 I do want to just stop for a

1 moment and, on a note of gratitude, thank
2 commission counsel and, in particular,
3 Ms. Lawrence and Mr. Lewis and their entire team
4 for leading this comprehensive inquiry through all
5 stages and with a tremendous degree of
6 professionalism, so I just wanted to, on behalf of
7 the City and all of the legal counsel involved,
8 just express that note of gratitude.

9 I do want to speak about the
10 terms of reference and, as you know, they are the
11 guiding principles for this inquiry, and each term
12 of reference posed specific questions that the
13 inquiry is tasked with investigating. City
14 counsel had identified 24 questions, which we
15 categorize effectively into six categories.

16 The first category,
17 Category 1, really relates to the Tradewind report
18 and enquires about the individuals who received a
19 copy of the Tradewind report, who were advised of
20 the report or the information contained in it when
21 it came in, in 2014, it asks about any individuals
22 who are responsible for any failure to disclose a
23 copy of the report or the information and
24 recommendations contained in it to City counsel.
25 It also asked about the individuals who received a

1 copy of the report, were advised of the report and
2 the information and recommendations in the 2018
3 timeframe.

4 And I think it is clear that
5 although the Tradewind report was not provided to
6 City counsel until 2019, we do intend to spend the
7 majority of our closing submissions today
8 addressing the impact of any non-disclosure of
9 that report on the safety of the Red Hill, and
10 that really deals with the next five categories of
11 the terms of reference.

12 Category 2 deals with the role
13 of friction in collisions and, based on the terms
14 of reference, these are the questions that really
15 address the standards of acceptable levels of
16 friction in Ontario for Ontario roadways. The
17 friction testing conducted by the MTO, whether
18 information about friction levels on roadways in
19 Ontario is publicly available, and the role of
20 frictions in collisions, particularly when
21 compared to other factors, such as driver
22 behaviour, lighting, weather conditions, and the
23 impact of that on collisions on the Red Hill.

24 Category 3 really broadly
25 deals with the terms of reference relating to

1 safety of the Red Hill and whether there was any
2 potential risk to road users as a result of the
3 failure to disclose the Tradewind report, the
4 implications of the contents of the report
5 regarding safety and whether the failure to
6 disclose the Tradewind report or the contents
7 therein contributed to accidents, injuries or
8 fatalities on the Red Hill.

9 Also related to the
10 determination of safety on the Red Hill, the
11 questions that are posed in this category of terms
12 of reference address the contents and disclosure
13 of the MTO report, its implications on the safety
14 of the Red Hill and any friction testing, asphalt
15 testing and general road safety reviews and
16 assessments conducted on the Red Hill by the MTO.

17 The fourth category addresses
18 the steps taken by the City to monitor and improve
19 safety on the Red Hill. And quite apart from any
20 lack of disclosure of the Tradewind report, the
21 questions that are posed in the terms of reference
22 relating to this topic relate to further friction
23 testing, asphalt assessments and general road
24 safety reviews and any assessments conducted on
25 the Red Hill and the results of consultant reports

1 obtained by the City in that regard.

2 Fifth, we will talk about the
3 steps taken by city staff after the discovery of
4 the Tradewind report in 2018 by Mr. McGuire, and
5 the questions that arise from the terms of
6 reference here address the discovery of the
7 Tradewind report in 2018, the steps to disclose
8 the report once it was discovered in 2018 and
9 whether there was any negligence, malfeasance or
10 misconduct in failing to disclose the report or
11 the information and recommendations contained in
12 it, whether in 2014 and also once it was
13 discovered or brought to Mr. McGuire's attention,
14 in 2018.

15 Lastly, we will deal with
16 Category 6, which deals with the City's by-laws,
17 policies and procedures. And from the terms of
18 reference, these are questions that consider
19 whether the by-laws, policies and procedures that
20 were in place in 2014 would impact disclosure of
21 the Tradewind report within city staff and city
22 council and the changes to the City's by-laws,
23 policies and procedures to prevent any future
24 incidence of non-disclosure of significant
25 information to city council.

1 So, that's broadly,
2 Mr. Commissioner, the categories of the
3 information and what we intend to address before
4 you today in our closing submissions. And, as I
5 said at the outset, just in terms of a road map
6 for that, I will deal briefly with the evidence
7 relating to the limited disclosure of the
8 Tradewind report, Mr. Chen will then deal with
9 categories 2 and 4, which is the road safety and
10 pavement friction issues, Ms. Contractor will deal
11 with categories 2 and 5 relating to action and
12 steps that the City took to monitor and improve
13 safety on the Red Hill, as well as the impact of
14 the discovery of the Tradewind report in 2018, and
15 then lastly Ms. Talebi will address the steps the
16 City has taken to improve its procedures and
17 policies.

18 So, let me just say a few
19 words about the Tradewind report and that issue.
20 The inquiry has heard significant evidence on the
21 disclosure of the Tradewind report and the
22 information contained therein, and I don't intend
23 to provide a comprehensive summary of that
24 evidence and only seek to highlight a few pieces
25 that I think are material pieces of evidence that

1 this inquiry heard during the course of this
2 proceeding that addresses those specific questions
3 that have been raised in the terms of reference.

4 It does appear, based on the
5 information and the evidence that's been brought
6 forward, that there was only limited disclosure of
7 the Tradewind report or the information contained
8 therein prior to August 2017. However, I think,
9 as you'll hear from my colleagues in the way in
10 which they deal with their submissions, the
11 evidence would tend to indicate that there was no
12 significant impact on the safety performance of
13 the Red Hill in light of the limited disclosure of
14 the Tradewind report. And they'll deal with those
15 points more specifically based on the evidence
16 that this inquiry heard.

17 But I do have this slide up
18 just to give you that chronology that sets out the
19 receipt of the Tradewind report, that, in November
20 of 2013, Golder had, after having retained
21 Tradewind to perform friction testing, that
22 testing took place in late November 2013 using the
23 measurement device called the grip tester.
24 Tradewind provided Golder with its report and
25 recommendations based on the friction guidelines

1 from United Kingdom, and my colleagues will speak
2 to those issues, including the significance of
3 those friction values and the UK guidelines in
4 greater detail. I just wanted to highlight, just
5 in terms of the chronology, about the receipt of
6 the Tradewind report.

7 It was in January of 2014 --

8 JUSTICE WILTON-SIEGEL: Just
9 to be clear, that slide says Tradewind provided
10 Golder its report and recommendations in November,
11 but that's not accurate, is it?

12 MR. LEDERMAN: No. Pardon me.
13 That's when the Golder draft report had appended
14 the --

15 JUSTICE WILTON-SIEGEL: It's
16 in January?

17 MR. LEDERMAN: That's right.
18 It's in January that --

19 JUSTICE WILTON-SIEGEL: Right.
20 The slide says Tradewind provided Golder with its
21 report and recommendations under November 13.
22 That's not correct.

23 MR. LEDERMAN: That's right.
24 I actually don't have that detail in front of me
25 as to when Tradewind provided Golder with its

1 report, but there is the --

2 JUSTICE WILTON-SIEGEL: I
3 think January 26. Counsel, Golder, can perhaps
4 correct us if that's wrong?

5 MS. JENNIFER ROBERTS: Thank
6 you. So, I'd have to check the chronology and see
7 if -- it's January 26 is the Tradewind report.
8 Yes, thank you.

9 JUSTICE WILTON-SIEGEL: Yeah.
10 I think January 24 was when the short-form
11 information was provided over the telephone,
12 January 26 when the report was delivered.

13 MS. JENNIFER ROBERTS: That's
14 correct, Commissioner.

15 JUSTICE WILTON-SIEGEL: Okay.

16 MR. LEDERMAN: Yes. Certainly
17 January 2014, Mr. Commissioner, is when Mr. Moore
18 received the draft Golder report that appended the
19 Tradewind report to it.

20 JUSTICE WILTON-SIEGEL:
21 Absolutely.

22 MR. LEDERMAN: I think the
23 November 2013 reference is the date that Tradewind
24 had -- I think the report itself, there was a
25 November 2013 date on that. I just doesn't have

1 it at my fingertips, but --

2 JUSTICE WILTON-SIEGEL: Okay.

3 MR. LEDERMAN: The key piece
4 of this is that it was only received by Mr. Moore
5 in January of 2014.

6 JUSTICE WILTON-SIEGEL: Yes.

7 MR. LEDERMAN: Okay. Now, it
8 does appear that between January 2014 and 2017,
9 the Tradewind report itself was not circulated
10 amongst the public works group, but there were
11 pieces of evidence that you heard during the
12 course of this inquiry that indicated that
13 Mr. Moore did share the information or at least
14 some of the information regarding the Tradewind
15 report with city staff, and I do want to just
16 highlight for you a couple of those references, if
17 I could.

18 Just by way of example, on
19 February 15, 2016, Mr. Moore advised Mr. Ferguson
20 and Mr. Lupton that friction testing was completed
21 and that he was still trying to get the analysis
22 for it to put the results into context,
23 particularly as to how they relate to other
24 highways of a similar type. You heard evidence
25 that friction testing results was added as an

1 agenda item for a meeting in May 2017 entitled
2 RHVP/LINC Plan, which was attended by senior
3 members of the public works leadership team, which
4 included Mr. Dan McKinnon, who was the GM of
5 public works at the time, Gary Moore, who was the
6 director of engineering services, and Betty
7 Matthews-Malone. And in addition to the sharing
8 with those groups within public works, Mr. Moore,
9 you heard the evidence, shared the testing results
10 with Brian Malone of CIMA in August 2015, in the
11 context of the 2015 CIMA report, although to be
12 clear, I think the evidence showed that Mr. Moore
13 provided just the average friction numbers and the
14 friction range numbers to Mr. Malone in that 2015
15 timeframe.

16 Mr. Moore also provided, as
17 you heard the evidence, a copy of the Tradewind
18 report to the City's external legal counsel in
19 August of 2017 at their request, I think, because
20 there was a request for it to be produced in the
21 usual course of litigation.

22 And then with respect to the
23 2018 time period, you heard evidence that
24 indicated that Mr. McGuire learned of Tradewind
25 report on September 26, 2018; however, I think we

1 acknowledge that there was some evidence which
2 suggests that Mr. McGuire may have learned of the
3 report in August of 2018 instead. There was some
4 lack of clarity on the evidence on that point.

5 The evidence also showed that
6 Mr. McGuire, upon obtaining a copy of the
7 Tradewind report, subsequently shared that report
8 with senior members of public works, which
9 included Edward Soldo, Mr. Dan McKinnon, Ms. Susan
10 Jacob and Mr. Mike Zegarac. In addition, City of
11 Hamilton legal services, which included Ms. Nicole
12 Auty, Ms. Byrdena MacNeil and Mr. Ron Sabo, were
13 subsequently made aware of and had access to the
14 Tradewind report as a result of a freedom of
15 information request.

16 And, as you heard the
17 evidence, Mr. Commissioner, over the next few
18 months in that timeframe, in 2018, public works
19 staff, in consultation with legal services, made
20 efforts to collect information surrounding the
21 contents and implications of the Tradewind report
22 for the purpose of presenting a comprehensive
23 report to city council.

24 You also heard that following
25 a meeting with the mayor, in December -- I think

1 it was on December 18, 2018, staff were advised
2 against bringing an urgent report to council in a
3 piecemeal fashion and the mayor directed staff to
4 ensure that they had all the information before
5 briefing city council with the matter. And then,
6 indeed, on January 23, 2019, a closed session was
7 held to advise council with respect to the
8 Tradewind report and any liability, any related
9 liability, that may arise from the release of the
10 report in light of the pending FOI request.

11 And then on February 6, 2019,
12 city council had a comprehensive briefing on the
13 history of the Tradewind report as well as the
14 various improvements implemented on the Red Hill
15 since the Tradewind report was authored.

16 And although, as I mentioned
17 above, although the Tradewind report was not
18 widely disclosed when it was received, the scope
19 of this inquiry, Mr. Commissioner, has allowed a
20 comprehensive investigation and inquiry into the
21 contents and implications of that report and to
22 consider whether any failure to circulate the
23 information contained in that report or the report
24 itself posed a safety risk with respect to the
25 safety performance of the Red Hill Valley Parkway.

1 And, as I expect that you are going to hear from
2 my colleagues, they will address the evidence
3 about whether the lack of disclosure or limited
4 disclosure of that Tradewind report or the
5 information contained in it had any material
6 effect on the safety of the Red Hill.

7 With that, I will turn it over
8 to Mr. Chen, but before I do, I do want to also --
9 I noted with gratitude at the outset of my
10 submissions the assistance and the hard work of
11 the commission counsel team, but I certainly don't
12 mean to exclude you, Mr. Commissioner, who has sat
13 through patiently and has heard a number of
14 witnesses testify and dealing and cooperating with
15 counsel throughout this inquiry, and so just as a
16 note of thanks to you, I know this has been a long
17 road, it has been a lengthy inquiry and we are
18 grateful to you for your attentiveness to the
19 issues in this inquiry and do want to thank you
20 for that.

21 JUSTICE WILTON-SIEGEL: Thank
22 you, Mr. Lederman. It goes with the territory.

23 MR. LEDERMAN: Thank you.
24 Okay. With that, I'm going to pass it over to
25 Mr. Chen and just give us a moment, if you would,

1 as we just have to -- I'm going to move seats and
2 he will take over from here.

3 JUSTICE WILTON-SIEGEL:

4 Mr. Chen, if you were speaking, at least I can't
5 hear it. I don't know whether other counsel can
6 hear it or not.

7 MR. CHEN: Can you hear me
8 now, Mr. Commissioner?

9 JUSTICE WILTON-SIEGEL: Yes,
10 loud and clear.

11 CLOSING SUBMISSIONS BY MR. CHEN:

12 Okay. Perfect. I had started
13 originally by also extending my thanks to
14 everyone, but it's less impactful now that my
15 colleagues have heard it.

16 In any event, as Mr. Lederman
17 indicated, I will primarily be speaking to the
18 road safety and friction evidence that we heard
19 over the course of the inquiry, which
20 substantially was the evidence that was tendered
21 by the friction and road safety expert, so I think
22 I have the benefit of that evidence being fresh,
23 somewhat fresh, in our minds. Some of the factual
24 evidence related to those issues also involve
25 Golder and the MTO, so you will hear a little bit

1 about them in my submissions.

2 In terms of a road map, I will
3 first touch briefly on background and a bit on
4 planning, design and construction, but my
5 submissions will largely focus on the topics
6 related to traffic safety, such as design guides
7 and collision rates, and I will then talk about
8 friction, which, of course, is a very broad topic
9 that includes things like its role in collisions,
10 the results that were taken over the years and
11 others, and then I'll hand it over to
12 Ms. Contractor.

13 JUSTICE WILTON-SIEGEL: Okay.

14 MR. CHEN: So, starting with
15 very brief background, as we all know, the Red
16 Hill Valley Parkway is an urban freeway in the
17 City of Hamilton. It's approximately seven and a
18 half kilometres long and located in an
19 environmentally sensitive area. It runs
20 north/south and is the link between Highway 403
21 and the QEW, and of course the Lincoln Alexander
22 Parkway or the LINC runs east/west and connects
23 Highway 403 with the Red Hill Valley Parkway.

24 So, with respect to planning,
25 design and construction, there was, you know, a

1 fair bit of evidence on each of these topics.
2 Planning, design and construction of the Red Hill
3 spanned from the 1980s until its completion in
4 2007, and we heard evidence that the Red Hill was
5 constructed with an experienced team consisting of
6 managers, consultants, contractors and city staff
7 involvement. In our view, what was under the
8 microscope during that portion of the hearing are
9 the three bullets that you see on the slide,
10 quality of the aggregates, the question of the
11 quality and appropriateness of the surface layer,
12 which was a stone mastic asphalt or SMA, and the
13 work quality of the construction work.

14 On each of those topics, the
15 City's view is that what the evidence strongly
16 shows is that, first, that the aggregates used for
17 the surface layer was high quality and fully
18 adequate for its use, for use, on the Red Hill,
19 that the mix design used for the SMA is current
20 and appropriate, and that the placement of the SMA
21 was properly undertaken. And the significance of
22 this is that there were no anomalies or issues
23 that would detrimentally impact the friction on
24 the Red Hill Valley Parkway.

25 Now, I'm quite certain that

1 you'll hear about these topics a bit more from
2 some of the other participants, but that is all I
3 intended to say on this topic.

4 So, just moving forward now,
5 one of the topics that occupy this inquiry was
6 traffic safety or road safety, and you heard from
7 both experts and fact witnesses. I'll be sticking
8 mostly with the experts.

9 If we can go to the next
10 slide, from an expert perspective, you heard from
11 two experts, both of whom are Professional
12 Engineers of Ontario and other provinces. So, on
13 the left, Mr. Dewan Karim was retained by the City
14 of Hamilton. He's the practice lead of the
15 transportation and engineering and safety group at
16 the consulting firm, 30FE. Mr. Russell Brownlee
17 was retained by commission counsel. Mr. Brownlee
18 spent a decade of his career also at 30FE and he
19 is now the president of True North Safety Group.
20 Considering their credentials, and I don't plan on
21 going through them, and their previous
22 experiences, they were both, we say, well
23 qualified to address the mandate that was given to
24 them in this inquiry.

25 Mr. Brownlee and Mr. Karim

1 primarily addressed three broad topics on roadway
2 safety. You see that on this slide. And then
3 certainly they did address some other issues. But
4 here, they looked at the nominal safety review,
5 questions of driver expectations and collision
6 rates.

7 There is one topic that the
8 roadway experts and the friction experts all
9 opined on, and that's the question of contributory
10 factors to wet road crashes. I'll make brief
11 submissions on that all together when I go into
12 some of the friction issues.

13 So, Mr. Brownlee and Mr. Karim
14 substantially disagreed on each of these topics,
15 and for today's purpose, I'll be touching on these
16 topics at a high level and addressing really where
17 I think the evidence has left off.

18 So, turning first to the
19 safety review that was undertaken, as you will
20 recall, Mr. Brownlee was asked to review whether
21 the Red Hill Valley Parkway, in its design,
22 followed the MTO's 1985 geometric design guide.
23 And there's no dispute that the Red Hill Valley
24 Parkway was designed with reference to the 1985
25 design guide.

1 So, both Mr. Karim and
2 Mr. Brownlee agree on how to interpret or
3 understand the application of design guides, and I
4 think you have this point from the evidence, but
5 it is worth repeating, that nominal safety is a
6 consideration of whether a road designed element
7 meets minimum design criteria. That's what was
8 undertaken. But roadway safety is not a matter of
9 simply ticking off a box or meeting the minimum
10 values of a design guide. Both experts agree that
11 following a guideline does not mean a highway is
12 safe. They also agree that not following a
13 guideline does not make a highway unsafe.

14 And then so, with respect to
15 design guides and the application of it, there
16 are, of course, many situations, because of
17 environmental constraints, that make following a
18 guideline simply impossible. That's something
19 that came out of the evidence.

20 So, just with that in mind,
21 I'll turn to the application of it. So,
22 ultimately, Mr. Brownlee's analysis showed that
23 the Red Hill, by and large, followed the minimum
24 design values set out in the MTO design guide, and
25 some of the more key criterias that we talked

1 about, he indicated that the design values for the
2 design speed were met, the design values for the
3 horizontal alignment or curvature were also met,
4 except for one where Mr. Brownlee didn't have
5 enough information to make a determination. And
6 just along those lines, there were some aspects,
7 like sight distance, that Mr. Brownlee couldn't
8 confirm for certain logistical reasons or reasons
9 related his scope of the mandate.

10 So, it was really the
11 interchange spacing that did not, in most cases,
12 follow the design values for a full interchange
13 spacing for an urban freeway. And on that aspect,
14 with respect to an urban freeway, the spacing, the
15 interchange spacing, is generally, not always, but
16 generally in the range of two kilometres to three
17 kilometres.

18 So, Mr. Brownlee, when he
19 looks at this, he does somewhat of a rudimentary
20 analysis. He simply looks at is the spacing above
21 two kilometres or below two kilometres, but that
22 analysis doesn't quite present the full picture on
23 interchange spacing, and so Mr. Karim did a deeper
24 dive into the question of interchange spacing and
25 he gave a bit more insight in three ways. And the

1 first and second ways are really comparisons that
2 he looked at. You'll recall, Mr. Commissioner,
3 that he looked at minimum spacing values set out
4 in other resources and he noted a rule of thumb of
5 1.6 kilometres. He looked at guidelines from
6 other countries, which varied from one kilometre
7 to two kilometres to put in perspective the
8 interchange spacing on the Red Hill Valley
9 Parkway.

10 He also looked at interchange
11 spacing of peer highways and peer segments, so
12 such as the DVP and Highway 7, where those are,
13 you know, dense urban freeways with frequent
14 arterial spacing. And so, in those cases, the
15 average spacing was similar. And, you know,
16 Mr. Brownlee did try to challenge whether the
17 right comparator was used, as you would expect in
18 an analysis of this type, but Mr. Karim emphasized
19 that it's not about comparing the entire roadway,
20 so he's not comparing the entire Red Hill to the
21 entire Don Valley Parkway. He's selecting what is
22 comparable based upon segments and the relevant
23 segments. In a comparison like that where you're
24 comparing like or similar segments is a type of
25 analysis I think Mr. Brownlee would agree with.

1 So, the third and I would say
2 the most important point is that Mr. Karim looks
3 at what the MTO design guide says on interchange
4 spacing in its entirety, not just a partial
5 statement from the design guide. What Mr. Karim
6 highlights is that the guidance from the MTO
7 design guide is that where the two kilometre
8 spacing can't be met, then the suggestion is
9 partial interchanges or an alternative
10 configuration.

11 So, on that aspect,
12 Mr. Karim's evidence was that the Red Hill
13 employed both partial interchanges and alternative
14 configurations and Mr. Brownlee doesn't comment on
15 this point. And so, you'll recall Mr. Karim
16 talked about partial interchanges, so one less
17 ramp, so four ramps instead of six ramps, which
18 you'll see on the LINC. Mr. Karim talked about
19 the inclusion of traffic signals to delay traffic.
20 So, when Mr. Karim undertook that analysis,
21 looking at the comparisons with other guidelines
22 from other jurisdictions, peer highways and also
23 the guidance on what to do based on the MTO guide
24 when the two kilometre spacing can't be met, in
25 his view, he doesn't see there being a deviation

1 from the design values set out in the MTO design
2 guide. And, again, as I say, the real forceful
3 aspect of that is the third point where he
4 actually looks at the wording and what the MTO
5 design guide has suggested.

6 JUSTICE WILTON-SIEGEL: All of
7 that being true, it's not suggested that these
8 alternative approaches are a perfect solution.

9 MR. CHEN: So, I don't know
10 that the MTO design guide purports to set out a
11 perfect solution, but I think the design guide
12 speaks to two different situations. One is the
13 recognition that in urban freeway, often because
14 the arterial roads are already built, that you
15 can't meet the two-kilometre --

16 JUSTICE WILTON-SIEGEL: Right.

17 MR. CHEN: -- minimum, so do
18 this. And so, in Mr. Karim's view, the planners
19 had that in mind and, you know, they took steps
20 for sure to address that situation.

21 And that's all I wanted to say
22 about the MTO design guide, because in my view,
23 interchange spacing, when you're doing a nominal
24 safety analysis, it was the interchange spacing
25 that raised the most questions.

1 So, what flows from this
2 discussion about how the Red Hill was designed is
3 the topic of driver expectations and how does the
4 design affect or influence driver expectations?
5 You know, you can meet the design values. We've
6 heard evidence of that, but it can have an impact
7 based on where you land within the range of the
8 design values. And that was a point of
9 disagreement between Mr. Brownlee and Mr. Karim
10 and we spent a fair bit of time in the City's
11 written closing submissions addressing this issue.

12 But very briefly, of course
13 driver expectancy is really about a driver's
14 readiness to respond to situations and events on
15 the roadway and its form by, you know, what they
16 see in front of them and their past experiences.
17 So, we have emphasized in the written closings how
18 expectations can be and are actively managed on
19 the Red Hill that primarily through signage.
20 Certainly there is some dispute by Mr. Brownlee
21 about the effectiveness of some of those steps to
22 manage expectations, but in reality, it's a
23 difficult thing to actually measure and quantify
24 and Mr. Karim points out that a substantive
25 analysis wasn't undertaken. I think the key point

1 is something that Mr. Brownlee admits, which is
2 that any alleged expectancy violation, they are
3 just things that could or may have an effect on
4 the driver. I don't think he was purporting to
5 say that these things actually did have an effect
6 on the driver, since no analysis was actually
7 undertaken to confirm whether that was the case
8 for any particular driver.

9 So, now moving to the next
10 slide, which is the collision rate on the Red Hill
11 Valley Parkway, and this was a topic that was
12 discussed at various points in the inquiry, not
13 just Phase 2 of course. The collision rate is an
14 important factor in looking at roadway safety and
15 comparing with other highways or parts of a
16 highway and it's most informative when the
17 comparison is between comparable highways or
18 comparable segments of a highway. The experts
19 agree on that basic point, that you need an
20 apples-to-apples comparison.

21 And so, for ease of reference
22 and discussions and as you will have seen in the
23 City's written submissions, the focus here is on
24 the collision rate that was calculated by CIMA in
25 2019. And when we look at those numbers, we see

1 it shows comparable collision rates to its peer
2 highways by segment, and what that means is that
3 the Red Hill Valley Parkway is not, you know, some
4 sort of an outlier highway in Ontario. In
5 comparing the collision rates, we look at two
6 rough groups.

7 If we can just go to the next
8 slide, you'll see the CIMA collision rates, the
9 ones that they calculated for the Red Hill on the
10 left side, and then the comparator highways on the
11 right side. So, within each highway, we look at
12 the figures in two rough groups. And I might be
13 fast and loose with my terms here, but there were
14 the tangent segments and the curvature segments.
15 So, for the Red Hill, we know that the curvature
16 is tighter from segments, from Greenhill to
17 Barton, that includes, of course, the King Street
18 interchange, and what we see there, not
19 surprisingly based on what is expected, is a
20 higher collision rate at those segments than where
21 the roadway is not defined by curvature. So, the
22 collision rate ranges from 0.94 to 1.87.
23 Otherwise, the collision rates range from 0.59 to
24 0.72.

25 And so, comparing those

1 ranges, for example, to Highway 406, the collision
2 rate for the segment more defined by curvature is
3 1.76, and that's the Westchester and Fourth Avenue
4 segment, and the other segments are lower, between
5 0.32 and 0.60. So, what we see is that the
6 collision rates are different but within the same
7 range, and what we draw from that is we can't say
8 one highway is significantly more or less safe
9 than the other. Had the Red Hill collision rates
10 been, you know, significantly higher, for example,
11 then that would be information to take into
12 account regarding safety.

13 JUSTICE WILTON-SIEGEL: So, I
14 just have to stop for a second here. Your
15 position is that of all of these other segments,
16 the only comparable segment to Greenhill to Barton
17 is the Westchester to Fourth Avenue on Highway
18 406. Is that correct?

19 MR. CHEN: That is an example
20 of --

21 JUSTICE WILTON-SIEGEL: No,
22 not an example. Because all the other numbers are
23 substantially lower.

24 MR. CHEN: For all the other
25 highways, Commissioner?

1 JUSTICE WILTON-SIEGEL: All
2 the other segments of all the other highways have
3 substantially lower collision rates than the
4 Greenhill to Barton segment of the Red Hill
5 Valley.

6 MR. CHEN: So, the reason why
7 we were comparing the Greenhill and Barton to the
8 Westchester and Fourth Avenue is those are both,
9 as I was mentioning before, similar segments. We
10 wouldn't be --

11 JUSTICE WILTON-SIEGEL: My
12 question is, we can go back and see exactly what
13 the evidence of that being a similar segment is,
14 but is your position that's the only similar
15 segment?

16 MR. CHEN: Well, from what the
17 evidence has shown and, you know, the reason why I
18 point out the Westchester and Fourth Avenue is
19 because there is evidence that the Westchester and
20 Fourth Avenue curvature or that segment is most
21 similar to the Red Hill.

22 JUSTICE WILTON-SIEGEL: Well,
23 the evidence that you're referring to with
24 Mr. Ferguson's, if I can call it, anecdotal
25 evidence, not expert evidence, and it also was

1 tied in to the 2018 CIMA numbers, which were
2 different, and included, as a similar segment,
3 Fourth Avenue to QEW in some manner or other,
4 which you may or may not fully understand. But
5 then in going to 2019, you've dropped the other
6 segment and focused solely on Westchester to
7 Fourth Avenue.

8 MR. CHEN: So, I'm not
9 dropping the other segments. We are looking at
10 the collision rates for the other segments, as I
11 say, is 0.59 to 0.77, and comparing that to the
12 segments that are not defined by curvature, we say
13 that there's a similar range. I'm not sure that
14 the years matter. It's really the focus on the
15 design, the geometric design.

16 JUSTICE WILTON-SIEGEL: But
17 the only evidence that you have with respect to
18 any comparable segment is Mr. Ferguson's anecdotal
19 evidence that is particular segment seems to be
20 comparable in his mind. Correct?

21 MR. CHEN: Yeah. I believe
22 that is correct, subject to any of my colleagues
23 telling me that that's not right, but the evidence
24 does largely come from Mr. Ferguson.

25 JUSTICE WILTON-SIEGEL:

1 Whereas CIMA obviously thought that this entire
2 table was relevant.

3 MR. CHEN: Sorry, could you
4 repeat that?

5 JUSTICE WILTON-SIEGEL: CIMA
6 felt that these segmented table was relevant, as
7 well as the aggregate numbers. I'm not sure why I
8 would conclude that the relevant portion of the
9 RHVP is comparable in the manner that you have
10 suggested solely on the basis of the limited
11 evidence that's before me with respect to this one
12 segment.

13 MR. CHEN: So, we're not
14 saying that we should just be looking at this one
15 segment. We are looking at the other segments as
16 well --

17 JUSTICE WILTON-SIEGEL: Yeah,
18 but the reality is that this is a -- I apologize.

19 MR. CHEN: No problem.

20 JUSTICE WILTON-SIEGEL: The
21 reality is that the segment that we are most
22 concerned with probably is the Greenhill to Barton
23 segment of this roadway.

24 MR. CHEN: We look at it as,
25 well, kind of, all segments and comparing the

1 curvature segments with the curvature segments of
2 another highway and I don't think there's a
3 dispute amongst the experts or CIMA really that if
4 you're looking at -- if you're doing a comparison
5 and you're trying to determine an
6 overrepresentation of collisions, you would be
7 looking at it from, you know, the apples-to-apples
8 comparison. So, we do focus, of course, on the
9 Greenhill to the King segment, but equally we're
10 looking at the other segments.

11 And I appreciate that, you
12 know, Mr. Ferguson did not testify as an expert,
13 but he does come to this with expertise. He's not
14 simply a layperson. He's been in his role and he
15 understands traffic safety, as that's his job.

16 JUSTICE WILTON-SIEGEL: Right.
17 And the other question that does come to mind is
18 perhaps Westchester to Fourth Avenue is similarly
19 challenging, let me put that term as a neutral
20 term, but that doesn't necessarily mean that one
21 should take great comfort from that. We don't
22 know anything about that segment, whether, for
23 example, it isn't also an area of concern for the
24 MTO.

25 MR. CHEN: And I take your

1 point, but I think directionally we can expect
2 that where there's curves, there's a higher or
3 there's a higher collision rate. And I think your
4 point is that, well, maybe they're both high.

5 JUSTICE WILTON-SIEGEL: Yes.

6 MR. CHEN: And I think that's
7 valid, but this is what we're working with and
8 there's no indication, of course, one way or
9 another, but we do know it's similar.

10 JUSTICE WILTON-SIEGEL: Okay.

11 MR. CHEN: So, that is the
12 traffic safety topics that I wanted to touch on
13 and I'll come back to one of the topics of the
14 contributory factors to wet road collisions later
15 on, but now I want to turn to friction.

16 So, pavement friction was, of
17 course, the core focus of this inquiry. A number
18 of fact and expert witnesses testified on the
19 topic generally and very specifically. In the
20 City's closing submissions, we address a number of
21 issues and it's not necessary for me to go through
22 all of them, so I will be touching mainly on the
23 ones that we see are core to answering some of the
24 terms of reference.

25 So, on the topic of friction,

1 you heard primarily from two experts. On the
2 left, David Hein, who was retained by the City.
3 He's worked in pavement friction for over three
4 decades, primarily in Ontario, and at various
5 engineering firms that have pavement specialties,
6 including pavement friction. Dr. Flintsch, who
7 was retained by the Commission, he's a professor
8 at Virginia Polytechnic Institute and State
9 University. And I, of course, don't mean to leave
10 Dr. Hassan Baaj out. The only reason why he's not
11 up here is because he had a more limited role,
12 speaking about, you know, the aggregate and
13 polished stone value and that side of things, in
14 case Ms. Roberts is wondering.

15 So, there's no question that
16 both Mr. Hein and Dr. Flintsch are both eminently
17 qualified on pavement friction matters, but their
18 expertise does diverge. We say where Mr. Hein has
19 the upper hand is the breadth of his Canadian
20 experience with respect to friction measurement
21 and friction management. And Dr. Flintsch, you
22 know, readily admits that his experience in Canada
23 is limited.

24 So, Mr. Hein has testified
25 about his extensive pavement experience regarding

1 pavement friction testing in Canada and
2 specifically in Ontario, you know, his use of
3 friction testing devices from the locked-wheel
4 tester to the grip tester and his experience
5 working with different pavement restoration
6 techniques, like shot blasting and microsurfacing.

7 And we say Mr. Hein's
8 Canadian-based expertise matters because this
9 inquiry is about an Ontario roadway, so we're
10 dealing with a Canadian aggregate, you know,
11 friction numbers on an Ontario roadway and
12 friction value interpretation in that context,
13 amongst other issues. So, as you consider the
14 opinions of these experts, Mr. Commissioner, it's
15 important to keep in mind, you know, the source of
16 their expertise and experience, which forms the
17 basis of their particular opinion.

18 So, with that in mind, if you
19 can go to the next slide on the role of friction,
20 one of the key issues in this inquiry is the role
21 of friction in collisions, so it's important to
22 recognize, and there's no dispute about this, that
23 deficient friction or low friction is rarely the
24 main cause of a collision. That said, friction
25 can certainly be a potential contributing factor,

1 but by no means does it stand out from the other
2 potential contributing factors.

3 All the experts agree that
4 collisions are complex. Just go to the next
5 slide. They are caused by a number of factors and
6 friction is just one of them. In his report,
7 Mr. Hein has provided a table that, you know, sets
8 out over 25 potential contributing factors to
9 collisions. Of course, every accident has its own
10 causes and it takes some investigative work to
11 determine what those contributing causes actually
12 are. So, in our view, these basic propositions
13 are important to appreciate and understand the
14 context of what friction work, for example, may be
15 needed or not.

16 So, moving beyond the role of
17 friction now to the question of, well, how do we
18 understand friction values? What do we do in
19 Ontario? We heard significant evidence on what is
20 known as the investigatory level, FN30, which is
21 commonly used in Ontario and, in particular, by
22 the MTO. And FN30 is, of course, engaged with
23 friction values taken with a locked-wheel tester.

24 Separately, for which there is
25 no guidance in Ontario, values obtained with the

1 grip tester device, there was evidence on using
2 guidelines instead that were developed for roads
3 in the UK. And that dichotomy is what I turn to
4 next. You'll see this slide --

5 JUSTICE WILTON-SIEGEL: Can I
6 just stop you for a second? I took something
7 slightly different from the evidence of the MTO,
8 which relates to the context in which the testing
9 takes place. In the context of testing for
10 material on the DSN list, you're quite right
11 they're comfortable, absent anything else, that
12 FN30 plus is acceptable. If it were below that, I
13 guess, it would depend on how far below, but that
14 would start raising questions about the aggregate.

15 But in the context of the
16 broader issue of traffic safety where, from the
17 MTO's perspective, that's sourced by the regions
18 presenting the problem, testing of FN30 has a
19 rather more flexible kind of application.
20 Something below FN30 might merit more
21 consideration depending upon the circumstances
22 that had prompted concern for the collision
23 experience for the particular segment at issue
24 that's been raised by the region, but also
25 depending upon the nature of the area, something

1 above FN30 could also be considered a cause for
2 investigation as to whether it is a contributing
3 factor, certainly not the main factor. I think
4 that that was more or less agreed generally, but
5 that it could have some consideration as a
6 potential contributing factor. Do you want to
7 speak to that?

8 MR. CHEN: I think the experts
9 would agree on that, that you can be below 30, you
10 can be above, you can be above 30, but as we've
11 heard Mr. Hein talk about, he doesn't just use
12 FN30 as looking at aggregates. In his view and
13 his expertise, FN30 is used to assess the friction
14 levels and, as an investigatory level, if it's
15 below, we may investigate.

16 That said, I think the concept
17 of friction demand is separate from the
18 investigatory level and that is also something I
19 will be discussing, but in Ontario, and I think
20 the MTO evidence does bear this out a bit but
21 certainly Mr. Hein has talked about it, is that
22 FN30 is a guideline to use when you are assessing
23 locked-wheel values.

24 So, if we could actually just
25 go back one slide, if I could quickly summarize

1 the positions of the experts, with regards to
2 FN30, the Canadian expert, Mr. Hein, as I say,
3 strongly endorses the use of FN30 to understand
4 and interpret friction values. Dr. Flintsch
5 doesn't quite take a position on the use of FN30.
6 And with regards to the UK guideline, Mr. Hein
7 doesn't see value in using them in Ontario to
8 interpret friction values that were taken using
9 the grip tester. Dr. Flintsch believes that there
10 is value in referring to the UK guideline because
11 no guideline exists in Ontario for the grip
12 tester. And I'll get into the details of that a
13 bit more, but just to lay out what I think the
14 positions are.

15 The City's view is that
16 Mr. Hein's approach should be preferred, as it is
17 based on local practices and local knowledge. So,
18 first, why is FN30 appropriate? There are many
19 reasons for the case of applying FN30, and we've
20 set those out in the City's written submissions
21 and I've already mentioned this, but FN30 or
22 greater is considered to be an acceptable friction
23 value and generally results below FN30 may merit
24 further investigation, and I know you have that
25 point, Mr. Commissioner.

1 As Mr. Hein testified, FN30 is
2 the prevailing guideline applied in respect of
3 roadway friction in Ontario, and that's not meant
4 to suggest that there is some other guideline.
5 That is it in Ontario. It's also accepted that
6 the Province of Ontario has not established a
7 friction management system for provincial or
8 municipal roads. Certainly that would provide
9 some assistance. But we also recognize that in
10 Canada as a whole there are no published
11 standards, so Ontario are not alone in that.

12 And importantly, there's no
13 suggestion that FN30 should not be used to
14 understand friction values taken by the
15 locked-wheel. Certainly the MTO, I don't think
16 they say that. Neither does Dr. Flintsch.
17 Dr. Flintsch does not say that FN30 is not
18 satisfactory as an investigatory level, nor has he
19 suggested that it's just not to be used.

20 And Mr. Hein referred to the
21 U.S., a couple of states, what investigatory
22 levels they use. Those figures hover below and
23 above FN30. FN30 sits roughly in the middle of
24 the comparisons that Mr. Hein located. So, in our
25 view, there's no ambiguity in the evidence on the

1 purpose and value of FN30.

2 Where the expert views depart
3 is the purpose and value of the grip tester
4 results and the application of the guidelines from
5 the UK guideline. So, what do the experts say on
6 this? Mr. Hein's view that even if you have grip
7 tester results, like in the Tradewind report, you
8 should not examine them using guidelines that were
9 developed in the UK for the UK. In contrast,
10 Dr. Flintsch believes that there is value in
11 relying on the UK values because you don't have a
12 criteria in Ontario otherwise to assess those
13 values against. Dr. Flintsch is correct that
14 there is no guideline in Ontario to understand
15 those values, but we say there's no criteria
16 because friction testing, as we've heard Mr. Hein
17 talk about extensively, in Ontario is done using
18 the locked-wheel tester. Mr. Hein, in his decades
19 of experience, has not seen the application of the
20 UK guidelines to evaluate friction values on a
21 roadway in Canada, and no one has questioned that
22 evidence. Of course, Mr. Hein was surprised that
23 Golder went down that road.

24 So, the situation here with
25 the grip tester results is a foreign one and

1 trying to address it now using a foreign
2 guideline, we say, is not the answer. In terms of
3 why a foreign guideline is inapplicable, the
4 undisputed evidence is that the UK guidelines were
5 developed for the local conditions and environment
6 in UK, their specific asphalt designs, their
7 aggregates, their vehicle types and a host of
8 other factors.

9 JUSTICE WILTON-SIEGEL: So,
10 Mr. Chen, is the City's position is that Tradewind
11 report is simply of no value?

12 MR. CHEN: No, that is not the
13 position and we rely on what Mr. Hein has said in
14 his evidence, that he's not looking at individual
15 values because there is no criteria. What he's
16 doing with the report and the values is looking at
17 them comparatively. Are there significant
18 deviations that he sees? That's the main use of
19 it in his view.

20 So, it's not, and I think
21 Mr. Lewis had asked Mr. Hein this question, that
22 you wouldn't just put it aside. What Mr. Hein
23 says is that you would look at it and see where
24 the values may differ drastically. And he didn't
25 see any significant deviations when he looked at

1 the results.

2 JUSTICE WILTON-SIEGEL:

3 Mm-hmm.

4 MR. CHEN: And just to
5 continue on the point of why the UK guideline is
6 inapplicable and should not be used, you know,
7 because of the differences, because the UK
8 guidelines were developed for the UK, Mr. Hein
9 says that if we don't do that verification, if we
10 don't do that analysis, that it can be applied
11 here, then we shouldn't use it. Dr. Flintsch says
12 effectively, well, let's just use it this time,
13 but that opinion is tough to square with the other
14 opinion, that you wouldn't adopt a standard from
15 another country without first verifying that it
16 can be applied to your own country.

17 So, Dr. Flintsch acknowledges
18 that he doesn't know if the UK guidelines are fit
19 for our Ontario roads and you should verify it
20 first, but at the same time he says you should use
21 it. Dr. Flintsch makes that statement without
22 undertaking any analysis or taking any steps to
23 satisfy himself that there is some conformance,
24 which I appreciate is a difficult task given his
25 unfamiliarity with Ontario. There's no evidence

1 on his familiarity with how the UK guidelines were
2 developed. He doesn't point to other
3 jurisdictions that casually rely on the UK
4 guidelines to assess their roadways. So, from the
5 evidence, we say there appears to be little, if
6 any, support for Dr. Flintsch's suggestion that
7 it's fine to use it here.

8 But aside from unreliability
9 and inapplicability, what else is the problem?
10 Mr. Hein's evidence is helpful on that and, in his
11 view, it creates confusion. Here, Mr. Hein says
12 that if you apply the UK guidelines and you apply
13 the FN30, you actually get two different answers.
14 He says that the UK guidelines say that action is
15 needed. That's not the case when you apply FN30.
16 Just to be clear, he makes that statement
17 obviously by looking at the 2014 MTO results.

18 So, you can see what the
19 practical effect is when you use two different
20 guidelines, one of which has not been tested or
21 verified. So, ultimately, Mr. Hein comes at this
22 question in a reasonable manner focused on local
23 practices, focused on certainty over ambiguity and
24 prioritizing engineering rigour. It's for those
25 reasons that Mr. Hein's opinion should be

1 preferred.

2 JUSTICE WILTON-SIEGEL: But
3 Mr. Hein said if he had received that document,
4 you asked him about the concerns and he was asked
5 about the concerns, and he said he would indeed
6 look for higher or lower numbers and try to see
7 whether that's explicable in terms of the -- I'm
8 going to generalize now -- roadway surface, he was
9 asked did he see anything that troubled him? The
10 answer is no, it wouldn't concern him until he
11 looked at the road, but he would have looked at
12 the road, having received that report.

13 MR. CHEN: So, he would have
14 looked -- so, for that values that are in the 20s,
15 I think was what he was referring to, so he --
16 just stepping back, he didn't see any significant
17 deviations, but he did see some values in the 20s.
18 So, one thing he may have undertaken is a field
19 inspection on those locations where the values
20 were --

21 JUSTICE WILTON-SIEGEL: That's
22 what he -- but the real question here is not so
23 much in the abstract as in the application. What
24 should have happened when this report was
25 received? That, at least, is one of the central

1 questions in this inquiry and I think Mr. Hein and
2 Dr. Flintsch essentially were saying the same
3 thing in this one. They may come at it slightly
4 differently, but they were basically saying that
5 some further investigation in the field or, in
6 Dr. Flintsch's case further testing, others may
7 say the same thing, would have been warranted. Do
8 you want to speak to that?

9 MR. CHEN: I think
10 Dr. Flintsch goes much further.

11 JUSTICE WILTON-SIEGEL: But
12 whatever Dr. Flintsch says, you're relying at this
13 point on Mr. Hein and he said at a minimum a field
14 examination would have been warranted.

15 MR. CHEN: Yeah. Dr. Flintsch
16 says -- I think Dr. Flintsch says that a field
17 investigation and probably friction testing as
18 well. He comes at that, though, from the UK
19 guidelines.

20 JUSTICE WILTON-SIEGEL: Right.

21 MR. CHEN: Mr. Hein takes a
22 somewhat different view in that he's only looking
23 at the 20s and he may go out and look at the
24 pavement. He's not committing to any additional
25 friction testing as being necessary, but he also

1 said he may have done it the following year with a
2 locked-wheel tester.

3 JUSTICE WILTON-SIEGEL: Right.

4 MR. CHEN: So, we see the
5 obligations as being different and, of course,
6 that comes from, you know, what guideline they're
7 looking at. And had, you know, locked-wheel
8 testing been done in 2014, of course, we have the
9 2014 results, which Mr. Hein sees as being
10 acceptable to him.

11 I note that it's 11:00 and it
12 escapes me when we take the break.

13 JUSTICE WILTON-SIEGEL: It's a
14 good guess, Mr. Chen. We normally take our break
15 at 11:00, so if this is a convenient time to do
16 so, let's take a 15-minute break.

17 MR. CHEN: Perfect. Thank
18 you.

19 JUSTICE WILTON-SIEGEL: We'll
20 come back at 11:15.

21 --- Recess taken at 11:01 a.m.

22 --- Upon resuming at 11:15 a.m.

23 MR. CHEN: Thank you,
24 Mr. Commissioner. May I proceed?

25 JUSTICE WILTON-SIEGEL: Yes,

1 please do, Mr. Chen.

2 MR. CHEN: So, just before the
3 break we were talking about the grip tester
4 results and Mr. Hein's approach. Just to
5 highlight those points, of course, he's looking at
6 significant deviations, which he talked about in
7 his evidence, was that he didn't see significant
8 deviations and that he may have undertaken some
9 sort of the a field inspection with respect to the
10 values in the 20s.

11 Another important point that
12 comes out of that discussion is that Mr. Hein
13 would have no basis and no reason to link the
14 values in the 20s to the occurrence of wet weather
15 accidents on the Red Hill at that point, and he
16 had talked about the limits of the 2013 CIMA
17 study.

18 Mr. Hein was also asked in
19 cross-examination about his view of the grip
20 tester results by Mr. Lewis, that wouldn't it be
21 the case that FN values would actually be lower
22 than the grip tester values since sometimes
23 directionally that is the case, and Mr. Hein's
24 response to that was that it would be possible,
25 but he didn't know for sure. So, it's not an

1 inference that can be drawn. You know, there's no
2 evidence as to whether it's always the case, on
3 every single pavement, that FN values would be
4 lower than GN values. And he wasn't shown any
5 locked-wheel results from 2014 that in fact
6 showed, you know, the type of directionally lower
7 values that I think the principles may suggest.

8 I had intended on talking
9 about the locked-wheel results first, so let me
10 just go to that now, which is the next slide.
11 These are straightforward. There isn't really
12 much dispute about them in the evidence. Of
13 course, there's locked-wheel testing from 2007 to
14 2014, of course not 2013, and also 2019. And what
15 the evidence shows from the locked-wheel results
16 is that the values are acceptable, they were
17 above, on average, FN30, with the exception of
18 some that were below FN30 by less than one decimal
19 point when you look at the ARA data from 2019.

20 Mr. Hein's view is that the
21 values just below FN30, and I'll come to those,
22 are minor and inconsequential. In terms of the
23 arc or what we see on this figure here, the
24 Canadian experts, Mr. Hein and Dr. Baaj, agree
25 that the decline is within the norm and I think

1 Mr. Hein calls it a classic SMA curve, I think the
2 word was. And there's also no dispute that the
3 friction results had levelled off on average above
4 FN30 either in 2013 or 2014.

5 So, I just want to look at the
6 2019 ARA friction results, which is what Mr. Hein
7 featured in in his report. What Mr. Hein is
8 looking for when he's assessing these values are
9 really values that are in the low 20s, which would
10 be concerning to him, and if there's some sort of
11 a trend. So, he looks at the different lanes and
12 here, on the screen, you see northbound lane one
13 and the trend here is above FN30.

14 Just going to the next slide,
15 which is northbound lane two, here the obvious
16 question to Mr. Hein was what you see a 29.2 at
17 the two-kilometre mark, which is the third bar
18 from the left. He sees that as an outlier and not
19 a trend. Again, what the trend shows here is
20 above 30.

21 Go to the next slide.
22 Southbound lane one, similar to northbound lane
23 one, a trend again above FN30.

24 And finally, southbound lane
25 two, here there are three values that are just

1 below FN30. You'll see that at the 6.5, 5.5 and
2 5-kilometre mark. Again, Mr. Hein's evidence was
3 he sees no obvious trends suggesting any localized
4 friction problem. These are minor and
5 inconsequential. I mean, they're 0.3 or 0.4 below
6 the average of FN30. That said, because there are
7 consecutive numbers, he said he may conduct a
8 visual inspection for pavement irregularities.
9 That's what he might do.

10 But overall from the friction
11 values, Mr. Hein is not concerned. He sees them
12 as being acceptable. There are no red flags, no
13 safety concerns. And I just point out, as I
14 understand it, that the MTO is of the same view,
15 that at least the results from 2007 and 2014 don't
16 show that there are any problematic friction
17 values. There's no extended pattern of low
18 friction numbers or the types of deviations or
19 patterns that might have created concern. And
20 then certainly the City was never advised of any
21 safety concerns arising from the friction results
22 taken by the MTO. That is something that MTO
23 would have done if there were any safety concerns.

24 Just go to the next slide.
25 Keep going. Right. And so, I just touched on the

1 first bullet there, that the MTO didn't raise any
2 safety concerns. We say the same point could be
3 made with respect to Golder, which we've detailed
4 in the City's closing submissions. With respect
5 to any of the friction values that Golder was
6 aware of, they never advised the City that there
7 was any safety concerns.

8 JUSTICE WILTON-SIEGEL: So,
9 help me out on this, because I think you must be
10 coming at this in a slightly different way from
11 the way I thought we would be looking at this.

12 The MTO, they're looking at
13 these numbers from the point of view of
14 acceptability of the SMA pavement, for which their
15 experience would say FN30, so I think that at
16 least I would understand safety concerns to be
17 numbers in the low 20s, in that context. But if
18 someone had -- one of the regions had come to them
19 and said, look, here's this collision history
20 we've got with wet weather accidents, my
21 understanding is the MTO wouldn't necessarily have
22 said, well, with these numbers, there can't be a
23 friction problem. There's some other explanation.
24 They would have said, we should at least consider
25 whether there's a friction problem.

1 Now, do you see this
2 differently? Even though the number is slightly
3 above FN30, do you see this any differently?

4 MR. CHEN: I think what you're
5 describing is consistent with the MTO. They do
6 talk about -- many of their witnesses talked about
7 friction demand and it's not always about the 30,
8 if you have additional information. And it goes
9 back to the experts also, I think, aligning with
10 the experts' views on that.

11 And the point here is that
12 when the City, the MTO witnesses, were questioned
13 as to whether the results, you know, raised any
14 safety concerns, and it was a broad question,
15 safety concerns, their response was that, no, it
16 didn't raise any safety concerns, and so they
17 didn't reach out to the City.

18 The friction demand -- and I
19 think we touched on this earlier -- the friction
20 demand and the FN30 or the investigatory levels
21 are somewhat two different things, and so we've
22 talked and I will talk about friction supply and
23 friction demand.

24 JUSTICE WILTON-SIEGEL:

25 Mm-hmm.

1 MR. CHEN: But they are two
2 separate --

3 JUSTICE WILTON-SIEGEL: Sure.

4 MR. CHEN: -- things.

5 JUSTICE WILTON-SIEGEL: So,
6 with respect to Golder, again, it seems to me,
7 again, I invite your comments, but the analogous
8 situation for Golder would be, because these
9 numbers aren't in the low 30s, low 20s, they don't
10 by themselves -- I don't think anybody has
11 suggested that by themselves they reflect a
12 concern for safety in the sense that they can
13 create, be the principal cause of an accident.
14 But for Golder to be in the same sort of situation
15 as we were just analogizing to the MTO would
16 require that the City advise Golder that they were
17 aware of and concerned with a collision experience
18 in one or more areas, which the City never did, as
19 far as I can see. The first time that Golder was
20 aware that there was a concern for fatal accidents
21 on the highway seems to have been, in fact, as a
22 result of an e-mail from the City's expert,
23 Mr. Hein, in January of 2018.

24 So, is it meaningful to say
25 that Golder didn't raise any safety concerns?

1 MR. CHEN: So, I think there
2 is still meaning to, you know, when we say neither
3 the MTO or Golder raised any safety concerns. And
4 I appreciate that Golder has been pushing that
5 they're not safety experts and, if that is the
6 case, I think that supports why, in their
7 recommendations, they haven't suggested or told
8 the City that there is a safety issue when a
9 particular remedy is not taken. I think there
10 still can be an expectation that you do and should
11 raise, if they had any safety concerns with
12 respect to the information that they had at the
13 time.

14 The interesting point about
15 Golder is, of course, they are a consultant and
16 telling us what we should -- they should be
17 advising us properly, you know, and, while they
18 have said that they're not safety experts, I think
19 in the same breath they have also, kind of, said
20 they warned the City about skid hazards. So,
21 there is a bit of, I think, insincerity there as
22 to what their role is and what they can do and
23 what they should have done for the City.

24 JUSTICE WILTON-SIEGEL: Okay.

25 MR. CHEN: In the evidence, it

1 was explored through various witnesses as to the
2 wording and language, you know, in the draft
3 Golder report and the Tradewind report. Just in
4 terms of this point of not raising any safety
5 concerns, there was certainly no urgency expressed
6 in the language. There were no real specific
7 timelines expressed. Again, no indication of a
8 safety concern. And that's who the City is
9 relying on for advice. And, of course, my
10 colleague will talk about Ms. Baker, but she
11 emphasized those principles.

12 So, with the role of friction
13 and friction values in mind, I want to turn now to
14 remedies and more particularly on something you've
15 asked me about, which is friction supply and
16 friction demand on a particular roadway.

17 JUSTICE WILTON-SIEGEL: Okay.

18 MR. CHEN: Skid resistance can
19 be improved by increasing the supply of friction,
20 for example, by physically addressing the
21 characteristics of the pavement. Skid resistance
22 can also be improved by taking steps to reduce the
23 friction demand. And there was discussion on both
24 sides, the supply and demand, by both experts.
25 Right? The supply topic came up in the context of

1 the recommendations that were made. The demand
2 came up in the context of countermeasures, as a
3 way of addressing friction demand.

4 So, I'll talk about friction
5 supply first. So, one of the issues that
6 Dr. Flintsch and Mr. Hein addressed are
7 recommendations that Golder made in relation to
8 microsurfacing in 2014 and shot blasting in 2019.
9 With respect to microsurfacing, they have
10 differing views because they disagree on the
11 interpretation of the friction values and whether
12 it's low or not. Mr. Hein's view is that
13 microsurfacing was not needed, you know, in light
14 of the friction values and certainly not justified
15 for its costs, which would perhaps, I believe, be
16 in the order of a million dollars or so. So, in
17 his view, the return on that investment and
18 considering, you know, a municipality's balancing
19 of pros and cons, that's just not there.

20 An important point to note,
21 though, is Dr. Flintsch said microsurfacing could
22 have addressed a friction problem, but he actually
23 didn't go on to say when it should be done or how
24 to address microsurfacing in the context of other
25 options which may have been available. And just

1 to go forward, friction demand is, of course,
2 something he agrees is another way of addressing
3 skid resistance issues.

4 With respect to shot blasting,
5 again, Mr. Hein doesn't believe it's necessary,
6 but in any event, Mr. Hein and Dr. Flintsch agree
7 that at the time of considering shot blasting, it
8 was not necessary given that resurfacing was in
9 the works. And shot blasting itself is a very
10 temporary remedy, in the range of months, with
11 some uncertainty as to its effectiveness, which
12 was raised by Mr. Hein, who has actually done it
13 before.

14 JUSTICE WILTON-SIEGEL: So, I
15 had a little trouble understanding the evidence
16 with respect to microsurfacing in 2014 in terms of
17 what was intended. If I understand correctly, and
18 please help me if I've got it wrong, Dr. Uzarowski
19 proposed microsurfacing not principally to address
20 friction at all but in the context of pavement
21 prevention, as a pavement prevention tool, for
22 extending the life of the surface coat. And
23 Mr. Moore was of the view that he didn't like
24 microsurfacing for that purpose. He had some
25 experience with it in the City and it had been a

1 negative or uniformly negative and, therefore, he
2 wasn't accepting it. But this discussion was all
3 in the context of treatment of the pavement
4 surface, as it existed at that time.

5 Is that your understanding or
6 do you have a different understanding of that
7 discussion back in 2014?

8 MR. CHEN: So, I confess I may
9 need to go back to some of the documents to
10 confirm. I think it's on the right track, but if
11 I can have the opportunity to come back.

12 JUSTICE WILTON-SIEGEL: Okay.
13 So, the followup and the reason for asking the
14 question is I had trouble understanding Mr. Hein's
15 evidence, whether he was actually talking about or
16 commenting on the appropriateness of
17 microsurfacing in that context in 2014 or simply
18 as a means of increasing friction back in 2014,
19 which he wouldn't have felt was necessary, or
20 whether in fact he was talking about
21 microsurfacing when it reappeared as a
22 recommendation of Dr. Uzarowski later on, around
23 about 2017.

24 How do you understand
25 Mr. Hein's evidence?

1 MR. CHEN: So, Mr. Hein's
2 opinion on microsurfacing was focused on whether
3 the friction aspect --

4 JUSTICE WILTON-SIEGEL: Right.

5 MR. CHEN: -- of the question,
6 that --

7 JUSTICE WILTON-SIEGEL: As of
8 2014?

9 MR. CHEN: As of 2014, yes.

10 JUSTICE WILTON-SIEGEL: And he
11 felt it wasn't appropriate from a cost-benefit
12 analysis, given how he estimated the friction
13 situation?

14 MR. CHEN: That's correct.

15 JUSTICE WILTON-SIEGEL: Right.

16 MR. CHEN: That's his view.

17 JUSTICE WILTON-SIEGEL: Okay.

18 MR. CHEN: So, now looking at
19 friction demand, the skid resistance from the
20 friction demand side, both Mr. Hein and
21 Dr. Flintsch agree that friction demand is
22 affected by various factors, like speed,
23 curvature, ramps, human factors and so on.
24 Mr. Hein and Dr. Flintsch were both asked about
25 the 2015 CIMA report, which concluded that a

1 combination of speed and wet surface conditions
2 may be the primary contributory factors to wet
3 road collisions. And it was also agreed by both
4 the experts that there's not enough evidence to
5 say, you know, which one of speed or wet surface
6 conditions is the primary contributor of those
7 collisions.

8 So, in that case, it's again
9 accepted by both experts that a perfectly
10 acceptable way to try and reduce the number of
11 collisions or the severity of collisions is
12 through countermeasures, such as reducing
13 speeding. And why is that acceptable? As the
14 experts have told us, reducing speeding lowers
15 friction demand. It's the simple point that the
16 faster you go, the more friction you need; the
17 slower you go, the less friction you need.

18 So, it's not necessary for a
19 municipality, for example, to immediately hire,
20 you know, a road construction crew and bring out
21 the large machinery to change or alter the
22 pavement surface. Of course, that comes with
23 significant cost, whether it be monetary or
24 impacts on traffic, and it comes with some
25 uncertainty about the effectiveness as well. And

1 in Mr. Hein's experience, countermeasures such as
2 signage or speed enforcement will have a
3 substantially higher impact on collisions than
4 incrementally increasing the friction on the
5 pavement surface. And in his evidence, he warned
6 us that increasing friction does not necessarily
7 reduce collision frequency. It may have no effect
8 at all, so it's going back to the balancing aspect
9 of, really, what to do.

10 Mr. Hein's evidence on this
11 point is not disputed and I think it's important
12 to keep in mind as you hear the submissions of my
13 colleague Ms. Contractor. I just have one final
14 topic to talk about before I turn it over to her.

15 So, with friction values in
16 mind and having regard to the role of friction, I
17 just wanted to briefly address the topic that all
18 experts address, which is ranking contributory
19 factors to wet road collisions and, you know, the
20 four factors that were looked at from the legal
21 memo was slipperiness, speed, curves and proximity
22 of ramps. With the exception of Mr. Brownlee, all
23 of the experts effectively testified that to rank
24 those factors, more analysis needs to be done,
25 like accident reconstruction or, as Dr. Flintsch

1 says, more scientific evidence is necessary.

2 So, Mr. Brownlee concludes,

3 though, that reduced road surface friction is the

4 primary or the highest ranking contributory cause

5 of overrepresentation of wet road crashes and that

6 the four factors can be ranked. Unfortunately,

7 he's alone in that conclusion and, for that reason

8 alone, I think the conclusions of all the other

9 experts should be preferred. But moreover, as

10 we've detailed in our closing submissions, his

11 conclusion is not based on any overrepresentation

12 analysis that he did in general or specifically in

13 the context of the Red Hill Valley Parkway to

14 actually substantiate his conclusion, nor is his

15 view supported by the Highway Safety Manual, which

16 we talked about and is a manual that is based

17 on -- it's a quantitative based on an abundance of

18 quantitative data as to what the key causes of

19 particular accidents are. So, he's inconsistent

20 with the experts, he doesn't do his own analysis

21 and he's not supported by the available

22 authorities.

23 So, that is all I intended to

24 make submissions on today, Mr. Commissioner, with

25 respect to friction and road safety.

1 JUSTICE WILTON-SIEGEL: Thank
2 you.

3 MR. CHEN: I can say I will
4 review with respect to the conversation between
5 Mr. Moore and Dr. Uzarowski, so I will look into
6 that.

7 JUSTICE WILTON-SIEGEL: Okay.

8 MR. CHEN: It is now 11:45.
9 Would I be imposing if we asked for an early lunch
10 due to scheduling issues?

11 JUSTICE WILTON-SIEGEL: I'm
12 sorry, you have a scheduling issue?

13 MR. CHEN: I don't have a
14 scheduling issue, but we're just trying to --
15 obviously there's a couple others that will be
16 making submissions and is it possible to have an
17 early lunch?

18 JUSTICE WILTON-SIEGEL:
19 Ms. Contractor would prefer to defer. Is that
20 what you're asking or saying?

21 MR. CHEN: In effect, yes.

22 JUSTICE WILTON-SIEGEL: Okay.
23 I'll just look if -- do any of the other counsel
24 have any concern about taking our break now and
25 returning at 1:00? I don't have the other counsel

1 on my screen, but I'll assume the silence
2 indicates no. In that case, then let's stand
3 adjourned until 1:00.

4 MR. CHEN: Thank you,
5 Mr. Commissioner.

6 JUSTICE WILTON-SIEGEL: Okay.

7 --- Luncheon recess taken at 11:45 a.m.

8 --- Upon resuming at 1:01 p.m.

9 MS. CONTRACTOR: Good
10 afternoon, Mr. Commissioner. May I begin?

11 JUSTICE WILTON-SIEGEL: Yes,
12 please do, Ms. Contractor.

13 CLOSING SUBMISSIONS BY MS. CONTRACTOR:

14 So, in my submissions this
15 afternoon, I'm going to continue the theme of
16 looking at the impact of the limited disclosure of
17 the Tradewind report on the functionality of the
18 Red Hill, the safety performance of the Red Hill.

19 Next slide. And as you'll see
20 in the three categories that I'm going to be
21 focused on with respect to the terms of reference
22 are, Category 3, looking at the steps that the
23 City has already taken and has been taken since
24 2010 to monitor, to maintain and to improve the
25 safety of the Red Hill. And the Category 4 terms

1 of reference asked us to consider the impact of
2 the non-disclosure or the limited disclosure of
3 the Tradewind report on the safety performance on
4 the Red Hill. And lastly, I'll speak to the steps
5 taken after Mr. McGuire learns of the report, in
6 2018.

7 Sorry, would you like me to
8 slow down?

9 JUSTICE WILTON-SIEGEL: No,
10 it's fine.

11 MS. CONTRACTOR: Okay. And
12 the last category will largely be about the issue
13 of interim measures and the dealings between legal
14 services and public works.

15 Thank you. So, I'm going to
16 start by touching very briefly on the various
17 programs that the City had already put into place
18 to improve the Red Hill, and we've detailed those
19 in our closing submissions, and so I don't want to
20 spend too much time on that, but I do want to
21 highlight a couple of them.

22 Then I will look at the
23 independent third-party safety reviews that the
24 City had arranged for the Red Hill and
25 specifically will spend some time on the 2013 and

1 the 2015 CIMA reports. And lastly, I'll take you
2 through the evidence regarding the steps taken by
3 the City to confirm that the Red Hill continued to
4 operate safely in the latter half of 2018, after
5 Mr. McGuire learns of the 2014 draft Golder report
6 and the Tradewind report.

7 Next slide. Just to take a
8 step back first and, you know, we, of course, over
9 the past two years, learned a great deal about the
10 City's public works department. It's a busy
11 department, to be sure. It's got an important
12 job. It provides essential services to the
13 residents and visitors of Hamilton, including
14 roads operation, maintenance and infrastructure
15 rehab for over 7,000 lane kilometres of urban and
16 rural roads, of which the Red Hill is about 7.5
17 kilometres. And, of course, in addition to the
18 roads work that public works is responsible for,
19 there is infrastructure rehab, parks, open spaces
20 and a number of other matters and subject areas
21 that you can see up on the screen.

22 And so, given these competing
23 priorities, save, for example, between waste
24 management, forestry and water, it's really
25 important that municipalities and the sections and

1 divisions and really city staff members be mindful
2 about how they allocate their resources and that
3 they do so in an effective way. And I'll just
4 stop here and highlight a quick example of this.

5 And if I could get to the next
6 slide, please. And, you know, one of the ways
7 that city staff can make a decision about how to
8 effectively allocate resources when faced with
9 competing priorities is, of course, to rely on the
10 advice from their consultants with respect to, you
11 know, what really needs to be done versus what's
12 optional. And, of course, in her report,
13 Ms. Baker, the public policy expert put forward by
14 commission counsel, she provides some really
15 helpful guidance on that. And her quote is up on
16 the screen there, but essentially she notes that
17 recommendations from consultants about things that
18 the City must do versus things that are optional
19 are so essential in ensuring that the City's time,
20 its efforts, its resources, are assigned to the
21 right priorities.

22 And I'm going to take you back
23 to this a little bit more when we get to the 2013
24 CIMA reports, but I did want to highlight that
25 point quickly here as well, because, you know,

1 Mr. Commissioner, it really does provide important
2 context in assessing the decisions of city staff.

3 Okay. So, the next slide,
4 please. So, we know as well from all of our
5 education in the public works department, we know
6 that it's been restructured and reorganized quite
7 a bit, and a lot of that is the result of
8 recommendations from an external consultant, and
9 they strive to make the department run more
10 efficiently. One of the main divisions in that
11 department, the transportation, operation and
12 maintenance group, that's the group that was
13 responsible for the safety and maintenance of the
14 Red Hill, you know, which included evaluating
15 existing traffic conditions. We're going to stay
16 focused on that group for the majority of my
17 submissions and, because, as I say, they are the
18 ones that were putting in all the work to maintain
19 and improve the Red Hill.

20 The asset management section
21 and the engineering services division, as you
22 know, is responsible for the infrastructure, the
23 durability of the roadway. That's a fairly clear
24 line in the sand, but, of course, as we know,
25 there's some confusion about that when it comes to

1 friction and largely because friction, in and of
2 itself, lays somewhere in the middle of those two
3 things.

4 So, here are a few of the City
5 programs and initiatives that I would like to
6 highlight for you. Again, this is not a
7 comprehensive list and we've included some
8 additional materials in our closing submissions,
9 but I wanted to highlight a couple of things here
10 for you. So, the traffic safety status reports
11 and annual collision reports are similar reports
12 that provide traffic collision statistics, and
13 basically, a breakdown of the collisions and
14 identifies and patterns that emerge from those
15 collisions. The traffic safety status reports ran
16 until 2010, I believe. And they included network
17 screening data for the last few years before that.

18 The annual collision reports
19 began in 2017 and they both function as a way to
20 have some transparency between the public and
21 council and keep people up to date as to the work
22 of these departments when it comes to the safety
23 of the roads and the safety of the Red Hill in
24 particular.

25 Pardon me, I'm just going

1 to --

2 JUSTICE WILTON-SIEGEL: I just
3 want to confirm. Between 2010 and, really, the
4 end of the 2018, when the collision report was
5 finalized, and, I guess, beginning of 2019,
6 actually published, there were no published
7 collision statistics. Correct?

8 MS. CONTRACTOR: That's
9 correct. And if we could go to slide 55, and that
10 touches on that a little bit. So, you're right
11 that the last traffic safety report included
12 network screening information from 2005 to 2009.
13 The 2007 annual collision report included network
14 screening information for 2013 to 2017, so it goes
15 all the way back to 2013, but you are correct in
16 that it doesn't come out until 2017.

17 JUSTICE WILTON-SIEGEL: No,
18 2018. Right? My recollection is that the first
19 draft was in the summer of 2018. Mr. Soldo wanted
20 considerable changes to it and --

21 MS. CONTRACTOR: Correct.

22 JUSTICE WILTON-SIEGEL: -- it
23 was approved in February of 2019.

24 MS. CONTRACTOR: So, there's
25 a -- I think the reference to the 2017 annual

1 collision report, and I'm happy to double check
2 this, it contains the network screening list for
3 2013 to 2017.

4 JUSTICE WILTON-SIEGEL: Right.

5 MS. CONTRACTOR: And it was --

6 JUSTICE WILTON-SIEGEL: The
7 information itself wasn't actually published --

8 MS. CONTRACTOR: That's right.

9 JUSTICE WILTON-SIEGEL: It
10 wasn't actually available to anyone until the
11 summer of 2018.

12 MS. CONTRACTOR: That's right.

13 I think it's still maybe called the 2007 annual
14 collision report.

15 JUSTICE WILTON-SIEGEL: Of
16 course. It's for the period that ends at the end
17 of 2017.

18 MS. CONTRACTOR: That's right.

19 Okay. So, you're right in that there is a hiatus
20 largely, as we understand from the evidence,
21 because the director that was responsible for that
22 program had moved on, and so there's some
23 personnel issue. But I did want to note here that
24 notwithstanding the hiatus on the network
25 screening program, we know that staff were doing

1 their own collision reviews of the Red Hill in
2 2013, in 2014, particularly with respect to wet
3 weather collisions, and, of course, in
4 January 2018, the City engages CIMA to do a
5 collision memo. Later that year, there is a
6 roadside review, along with a number of the other
7 CIMA studies, through which a collision analysis
8 is being completed. And then the January 2019
9 memo as well.

10 So, there's a number of folks
11 that have their eyes on collision data for the Red
12 Hill between 2014 and 2019 time period,
13 notwithstanding the fact that the network
14 screening program and collision countermeasure
15 program was not up and running at that time.

16 Okay. Just going back a
17 couple of slides, I wanted to chat a bit more
18 about the network screening and collision
19 countermeasure program, so I guess we could go to
20 the next -- you're already there. Perfect.

21 So, the City's network
22 screening program, and we've heard evidence on
23 this, it uses a sophisticated methodology to carry
24 out a comprehensive review of the City's entire
25 road network and to identify locations at which

1 collisions are overrepresented and that could most
2 benefit from improvement in order to best allocate
3 the use of the City's resources. And, at the
4 time, under the collision countermeasures program,
5 there would be monthly meetings where the list
6 identified by the network screening program were
7 discussed, specific segments of the road were
8 provided to specific members of the group, and
9 then there would be a presentation from that
10 member identifying, you know, what the issues
11 might be on that roadway or segment of the roadway
12 and ways to address it. And I wanted to provide
13 an example about the Red Hill because it shows
14 that this program worked exactly the way that it
15 ought to have.

16 And so, if we can go, please,
17 to slide 54.

18 JUSTICE WILTON-SIEGEL: Can I
19 just confirm?

20 MS. CONTRACTOR: Sure.

21 JUSTICE WILTON-SIEGEL: We are
22 talking in terms of timeframe of the period up to
23 2010. Is that correct?

24 MS. CONTRACTOR: That's
25 correct.

1 JUSTICE WILTON-SIEGEL:

2 Nothing past that?

3 MS. CONTRACTOR: So, as I
4 mentioned, the collision countermeasures program
5 worked from 2007, from the start of the Red Hill,
6 2007, to 2010. It did operate before 2007, I
7 believe, and it went on a hiatus because of some
8 personnel issues and then was resumed in 2017.

9 JUSTICE WILTON-SIEGEL: I'm
10 just wondering if we have any evidence about its
11 operation in 2018, for example, or 2019.

12 MS. CONTRACTOR: So, I believe
13 Mr. Soldo confirmed that it continues to be a
14 program that the City is using.

15 JUSTICE WILTON-SIEGEL: But in
16 terms of specifics, in terms of what it's
17 identified and whether that includes sections of
18 the Red Hill Valley, I don't recall any evidence
19 in that timeframe as opposed to much earlier.

20 MS. CONTRACTOR: So, I believe
21 the -- is your question, sir, whether there's
22 evidence that the network screening program, once
23 it was resumed, worked to address any issues that
24 may have been identified on the Red Hill through
25 that list? Is that your question?

1 JUSTICE WILTON-SIEGEL:

2 Essentially, yes.

3 MS. CONTRACTOR: Okay. So, I
4 think in part the chronology will play a bit of
5 a -- will present a bit of a challenge. But, as
6 you'll recall, in his examination, in Mr. Soldo's
7 examination, he did a very comprehensive review of
8 the annual collision report with commission
9 counsel and, at that point, went to the network
10 screening list, and that would have been from 2013
11 to 2017, so all those years. And I can confirm
12 this, although I'm fairly certain, that there were
13 no sections of the Red Hill mainline that
14 appeared, but that there were some sections of the
15 Red Hill ramps that did appear. And at the time,
16 as you'll recall, Mr. Soldo had just started at
17 the City. There were discussions about
18 resurfacing, the roadside assessment review had
19 begun.

20 And so, I'm happy to go back
21 and find some pinpoints, but I think my general
22 response to that, sir --

23 JUSTICE WILTON-SIEGEL: Okay.

24 We'll take a look. Okay.

25 MS. CONTRACTOR: The general

1 response would be that the annual collision
2 report, the 2017 one or the 2018 one, whatever you
3 want to call it, but the one that's giving you the
4 numbers from 2013 to 2017, and to the extent that
5 it identified segments of the Red Hill, those were
6 addressed through the roadside assessment and the
7 imminent paving.

8 JUSTICE WILTON-SIEGEL: Right.
9 Yeah. Just looking at the first of your points
10 here, the Mud Street off-ramp or ramp 6, ramp
11 number 64, that's back in 2010, I think, but I'm
12 not --

13 MS. CONTRACTOR: It is. And
14 we don't have to -- it's in the closing
15 submissions. We don't have to go through it. It
16 just was an example of showing that the program
17 worked then and, for the reason that I just shared
18 with you, I think continues to work going forward,
19 as well.

20 JUSTICE WILTON-SIEGEL: Okay.

21 MS. CONTRACTOR: I'll just
22 make a quick note on this point because it does
23 become relevant a bit later on when we talk about
24 the 2013 CIMA report, and so all I'll say about
25 this is this ramp is ramp 6, as is identified in

1 the 2013 CIMA report, and as a result of this
2 collision countermeasure program, a number of
3 countermeasures were implemented between 2010 and
4 2013, which included left-hand signs, curve
5 warning signs, and you'll see the list there up on
6 the screen, speed advisory signs as well. And so,
7 that becomes relevant when considering whether
8 ramp 6 needs further recommendations at the time
9 of the 2013 CIMA report, and we'll chat about that
10 then.

11 And then the last program that
12 I wanted to just touch on briefly is the Hamilton
13 Strategic Road Safety Committee. It's composed of
14 representatives from a number of stakeholder
15 groups, including the Hamilton Police and
16 different departments of public works, including
17 traffic operations and engineering. And the
18 objective really is to have regular meetings to
19 find ways to reduce collisions on all roads, but
20 specifically with respect to the Red Hill as well.
21 And it was through their initiative, for example,
22 that, in 2016, the committee worked to have the
23 Hamilton Police Services establish an aggressive
24 driving enforcement campaign on the Red Hill. So,
25 just an example of some collaboration between City

1 groups and external City groups as well.

2 JUSTICE WILTON-SIEGEL:

3 Mm-hmm.

4 MS. CONTRACTOR: All right.

5 So, those are the few internal programs that I
6 wanted to raise with you.

7 I would like to move now on to
8 the external work that the City arranged,
9 particularly the 2013/2015 CIMA reports.

10 So, we've heard evidence a few
11 times, I think, that there really is no road like
12 the Red Hill in Hamilton. It's a high-speed
13 parkway and it's unlike the LINC, which, of
14 course, is quite linear. So, given the
15 particularities of the Red Hill, the first thing
16 that the City did right is it went out and sought
17 consultation from an independent third-party
18 expert to conduct the safety assessment. And
19 there's a quote here from Martin White, who, of
20 course, was then the manager of traffic operations
21 and engineering, and he says:

22 "You know, one of the
23 things I'll say is that
24 traffic staff, we're
25 experts in local

1 residential roadways,
2 arterial roadways, but
3 operating essentially a
4 parkway halfway between
5 an arterial road and a
6 freeway or a highway, we
7 didn't have a lot of
8 experience with that and
9 I think it was prudent to
10 hire a consultant who
11 would have a lot of
12 experience with that, who
13 could assess those things
14 from a much higher
15 perspective and had more
16 knowledge and expertise
17 than that."

18 And, similarly, if we go to
19 the next slide, please, Mr. Geoff Lupton, the
20 director of energy, made similar comments, noting
21 the importance of engaging a consultant, an
22 outside party that has an unbiased review of what
23 needs to be done with the appropriate expertise.
24 So, again, this shows that the traffic group
25 particularly understood their own limitations here

1 and appropriately sought out and relied on the
2 independent expert advice in assessing the safety
3 of the roadway.

4 We can skip. Thank you. So,
5 before we jump into the nitty-gritties of the 2013
6 CIMA report and, you know, really take a look at
7 what steps did the City take and what steps didn't
8 they take, in my view, it's going to be very
9 important that we consider the context in which
10 CIMA made their recommendations and the context in
11 which city staff understood those recommendations.

12 And, specifically, there's, if
13 we can skip the -- thank you. And, specifically,
14 there's what I'm calling four foundational
15 principles or factors or however you want to call
16 it. But the four things we really need to look at
17 in detail -- sorry. We've looked at that and
18 provided you the evidence for it in detail, so I'm
19 not going to go too much in detail here because,
20 frankly, I think a lot of this stuff is common
21 sense, but we did get a lot of evidence from folks
22 from CIMA, from the City, about their expectations
23 in working with consultants and the type of
24 recommendations they expect, and so we provided
25 that to you in the closing submissions, but I do

1 want to touch on a few of these here.

2 So, first is that consultants
3 ought to identify any actual or potential safety
4 issues immediately. I don't think that's a
5 controversial statement. Certainly, it is
6 consistent with the express agreement with CIMA.
7 I think in their 2013 request for proposal, that
8 language is found there. And certainly city
9 staff, in their evidence, have also stated that,
10 yes, of course I would expect the consultant to
11 advise me of any actual or potential safety issues
12 and not to wait for the report but to let me know
13 as soon as possible.

14 And we can go to the next
15 slide. I wonder if we could move -- I'm not able
16 to see the full PowerPoint screen, so I wonder if
17 we could just move the top pane aside. Thank you.
18 Apologies, Mr. Commissioner. Yes, that's better.
19 Move it up.

20 And the next factor or
21 principle, and it's certainly an important one, is
22 that recommendations ought to be identified as
23 mandatory or optional. And we heard from, again,
24 Ms. Baker, from the CIMA witnesses and the City
25 witnesses on the importance of distinguishing

1 that, then we'll try that in the future.

2 And, speaking of low-hanging
3 fruit, the third factor here is recommendations
4 need to have appropriate timelines and be
5 prioritized to allow for a staged approach. And
6 the staged approach or the prioritization of
7 countermeasures is really an important factor here
8 and it continues to be as we assess what staff did
9 and didn't do in 2013 and 2015. And based on my
10 understanding of Ms. Baker's evidence, you know,
11 it is actually a good way to make sure that you
12 are making the best use of municipal resources and
13 time, and so that's an important factor with
14 certainty.

15 JUSTICE WILTON-SIEGEL: Could
16 you help me out on this? I think that that's at a
17 level of generality of which you've pitched it
18 unimpeachable, but I read Ms. Baker's evidence to
19 be that that's an appropriate responsibility of
20 staff rather than the consultant.

21 MS. CONTRACTOR: Sorry, just
22 so I understand your question, your view is that
23 Ms. Baker says that staff are responsible for
24 prioritizing their counter --

25 JUSTICE WILTON-SIEGEL:

1 Correct.

2 MS. CONTRACTOR: Right. And I
3 don't disagree with you and I think that's what
4 we've seen, in fact, with the city staff. And I
5 think what I'm attempting to say here is that
6 recommendations from a consultant should have
7 timelines to allow for this type of
8 prioritization.

9 JUSTICE WILTON-SIEGEL: Yes.

10 MS. CONTRACTOR: Where
11 possible, of course. Right?

12 JUSTICE WILTON-SIEGEL:
13 Timelines in the sense of what it would take in
14 order to implement something, yes. Timelines in
15 the sense that they incorporate the priorities of
16 the staff, I thought that was something that
17 Ms. Baker thought was inappropriate.

18 MS. CONTRACTOR: Give me one
19 second. I'm just going to go back to my Baker
20 quote, make sure I have that right.

21 So, the quote that I had
22 previously put up, I take it that that's not what
23 you're referring to, though?

24 JUSTICE WILTON-SIEGEL: No. I
25 think you would really have to read the report

1 more in its entirety, I think.

2 MS. CONTRACTOR: Right. And
3 maybe you can give me a better sense, I'm sorry
4 I'm not following, of what your question is. Is
5 it about the appropriateness of the staged
6 approach?

7 JUSTICE WILTON-SIEGEL: No.
8 But to give an example, if something is not -- if
9 the staff is of the view that a particular
10 countermeasure is not budgeted for and, therefore,
11 can't be done in the short term, let's say, it's
12 for staff to say that, not for staff to advise the
13 consultant and have the consultant, in effect,
14 determine the proposed recommended timeline by
15 reference to staff's view of the budgetary
16 feasibility of something.

17 MS. CONTRACTOR: Right. And I
18 think you might be referring to -- I'm just trying
19 to find it because I think I have a screenshot of
20 it in one of my PowerPoints. Otherwise, I'll --
21 yeah. Why don't we go to slide 70, up ahead a
22 little bit. And it might be smaller than I was
23 hoping, but this is the page from the 2013 CIMA
24 report where CIMA states:

25 "The City has indicated

1 but a portion of it. The conclusion, the overall
2 conclusion, was that they did not identify any
3 urgent or significant safety issues in that study
4 area, but they did identify countermeasures that
5 would improve the safety performance of some of
6 the other study areas and identified segments in
7 the mainline and the ramps that could benefit from
8 improvement.

9 I want to start by looking at
10 the collision analysis in the -- sorry. Sorry,
11 you can go one step back. All right. Thank you.
12 So, continuing with the key findings, as I said,
13 they conclude that the study area was performing
14 well overall, but they also conclude that there
15 are some segments of the Red Hill that have a
16 higher proportion of certain collision traits,
17 such as wet weather or non-daylight conditions.
18 But, as we note in our written submissions, there
19 are some significant limitations to this analysis
20 that would undermine that conclusion. And,
21 Mr. Malone, on his examination, agreed with many
22 of these limitations, and so I would like to take
23 you through that now, because the collision
24 analysis is essential to their finding that there
25 was a high proportion of wet weather collisions,

1 which, of course, underpins the recommendations
2 ultimately made in the report.

3 So, we know that CIMA did two
4 types of collision analysis. We can go to the
5 next one, please. Thanks. Without going into too
6 much detail about this one, the ISATe tool,
7 essentially it's an analytical model that is
8 calibrated across a number of other facilities,
9 which allows it to assess the expected number of
10 collisions on segments and compared to the
11 observed numbers to try to have some sort of
12 apples-to-apples comparison between different
13 facilities.

14 The CIMA report itself notes
15 that there are significant limitations to using
16 this tool on the Red Hill, because the ISATe was
17 not calibrated for Hamilton roads and the report
18 goes on to state that calibration is important
19 because it ensures that the evaluation results are
20 meaningful and accurate. And so, what does this
21 mean? It means that we can't use this tool to
22 compare it to other facilities that might be
23 similar to the Red Hill, but we may be able to use
24 it to compare it to parts of the Red Hill against
25 each other.

1 And, on examination,
2 Mr. Malone agreed that there are limitations to
3 this approach as well, because comparing segments
4 of the study area of the Red Hill against others
5 when assessing collisions, you're essentially,
6 again, doing a bit of an apples-to-oranges
7 comparison because segments with different
8 characteristics are going to have different
9 expectation of collisions. So, based upon the
10 ISATe, that's not going to tell us whether or not
11 a segment of the Red Hill or certainly the entire
12 Red Hill or the study area in this case, I should
13 say, has a high proportion of wet weather
14 conditions or non-daylight collisions.

15 We can go back to the other
16 one. And the second type of collision analysis
17 that CIMA performed in the 2013 CIMA report was
18 simply to look at the proportion of wet weather
19 collisions or non-daylight conditions, sorry,
20 non-daylight collisions just to compare those to
21 the proportion, to the municipal and provincial
22 average. And, you know, I think we can all see
23 the flaw in that comparison.

24 I see Heather has come on the
25 screen. I want to make sure she's not -- okay.

1 MS. MCIVOR: So sorry for the
2 interruption.

3 MS. CONTRACTOR: That's fine.
4 So, I think we can all see why that would not be
5 an adequate comparison. But I wanted to show you
6 one example that I do think really brings this
7 home. And if we could go to the next page,
8 please. Thank you.

9 During his examination,
10 Mr. Malone was asked to compare the proportion of
11 wet weather collisions in the study area to a
12 similar location 400-series as noted in CIMA's
13 PowerPoint delivered to the City on June 6 as part
14 of one of their progress meetings, so that's the
15 table you're seeing on your left-hand side. And
16 you'll see a similar location 400-series is at the
17 very top, study area is in the middle and ramp 6
18 is at the bottom.

19 Commission counsel notes that
20 the proportion of wet weather collisions on the
21 similar location 400-series is about 20 percent,
22 which is higher than the proportion of wet weather
23 collisions in the study area. And counsel asked
24 Mr. Malone for his views based on the comparison
25 he saw in 2013. And in response -- and a part of

1 Mr. Malone's quote is provided on the right-hand
2 side of the screen. I thought it was helpful.
3 But in his response, Mr. Malone cautioned against
4 concluding that the Red Hill was, quote, worse,
5 because the 400-series facilities have a lower
6 percentage of wet weather collisions. In fact,
7 the quote isn't here, but he goes on to say, and
8 that is excerpted in our closing submissions, he
9 goes on to say that the proportion of wet weather
10 and SMV, single motor vehicle, collisions did not
11 cause him any concern, noting that roadways or
12 ramps with horizontal alignment or tight curves,
13 you're just going to have more -- a higher
14 proportion of wet road collisions. That's just
15 how it goes unfortunately with those
16 characteristics. And he also notes that it's
17 fairly common for single metre vehicle collisions
18 to be the primary type and for the proportion to
19 be that high on a roadway such as the Red Hill.

20 And, again, I think,
21 Mr. Commissioner, that Mr. Malone's evidence on
22 this issue is quite significant. It really speaks
23 to how city staff would have understood the safety
24 performance of the study area, including the
25 incidence of wet weather, as well as the incidence

1 of single motor vehicle collisions and the urgency
2 with which any countermeasure investigations would
3 need to be conducted.

4 And, indeed, during their
5 examinations, Mr. Martin White and Mr. Ferguson,
6 again, the manager and superintendant of traffic
7 at the time, gave similar evidence regarding their
8 understanding of the limitations to CIMA's
9 collision analysis, particularly with respect to
10 the notion that there was a high number of wet
11 weather collisions in the study area, when what
12 you're comparing to is oranges, not other apples.

13 All right. We can go to the
14 next.

15 JUSTICE WILTON-SIEGEL: And
16 what is the currency of the data that was used for
17 the CIMA 2013 study?

18 MS. CONTRACTOR: What was the
19 currency of the data?

20 JUSTICE WILTON-SIEGEL: Yes.
21 How current was it?

22 MS. CONTRACTOR: That is a
23 good question and let me find that for you in one
24 moment. I don't have that at the top of my head,
25 although I ought to. I expect the last five

1 years, but -- if any of my colleagues are able to
2 help me out, feel free to. So, it's a five-year
3 period from October 10, 2008 to October 9, 2013,
4 and that's at page 4 of the 2013 CIMA report, if
5 that's useful to you, sir.

6 JUSTICE WILTON-SIEGEL: Okay.

7 MS. CONTRACTOR: Okay. And
8 so, we're back at the staged approach and in terms
9 of the way that the City, and particularly the
10 folks in traffic, implemented the recommendations
11 coming out of the 2013 CIMA report. And so, what
12 I propose to do is quickly take you through the
13 work that was completed and then focus on the two
14 optional items, recommendations, that were not
15 implemented, being friction testing and the high
16 surface friction recommendation for ramp 6.

17 And so, here, consistent with
18 that staged approach, the evidence indicates that
19 the City implemented the following countermeasures
20 within the timeframes recommended by CIMA, which,
21 again, were between zero and five. And so, you
22 have it up on your screen as well. And they
23 included slippery when wet signs, oversized
24 chevrons, left and right-hand signs, curve and
25 warning signs and specific signs were installed

1 and upgraded to high intense sheeting for ramp 6.
2 Eventually installing recessed reflective markers
3 were also put in between Greenhill and Dartnall
4 Road.

5 I'll just make a note here
6 about the slippery when wet signs. I note that
7 there was a lot of interest about when and whether
8 they were done. And we know, apart from the
9 e-mails and reports to council that show the signs
10 were implemented, we know as well from the 2015
11 CIMA report, when they're doing their signs
12 review, that they observed the slippery when wet
13 signs that were previously recommended installed.
14 So, I'll just add that for you as well.

15 Okay. And so, I want to chat
16 now about the two recommendations that, in our
17 view, were reasonably not implemented and, again,
18 keeping in mind the nature of the recommendation,
19 the should, the could, the timeline, as well as
20 a -- sorry, my computer is trying to make me
21 update. It's given me 60 minutes. Hopefully that
22 will be all we need. So, when you're looking at,
23 again, the nature of the recommendation, you know,
24 the fact that the friction testing is a could
25 consider, not a should consider, the fact that

1 it's a zero to five-year range and, you know,
2 they're not able to even -- CIMA is not even able
3 to provide them with a cost-benefit analysis to
4 it, and I think all of that, fairly, as you've
5 heard from the City witnesses, all of that is
6 interpreted by them to mean that this is not
7 something that needs to be prioritized based on
8 the guidance they're getting from their
9 consultants.

10 JUSTICE WILTON-SIEGEL: So,
11 that's a good example. Why is the consultant even
12 weighting into this? Isn't that really something
13 for the city staff to decide? And a little bit
14 more directly, one suspects that maybe the city
15 staff is looking for cover and they should be
16 straightforward with the council as to whether or
17 not they think this is useful at all.

18 MS. CONTRACTOR: So, again,
19 you're talking about the staged approach?

20 JUSTICE WILTON-SIEGEL: No.
21 I'm talking about considering the friction testing
22 as a very good example, yes, of the staged
23 approach.

24 MS. CONTRACTOR: I see. Well,
25 I think that there's a couple of reasons here.

1 And, one, I see the benefit to the City of getting
2 sign-off by the consultant. You know, they have
3 made a bunch of recommendations and some of them
4 are all at the kind of same calibre, if you will.
5 They're all could consider, they're all zero to
6 five, and so now the City says, okay, it looks
7 like we have some room to play here. Here is how
8 we think we're going to do it, and they present it
9 to their consultant to say, is this okay? Do you
10 agree with this? Is there a different way to do
11 that?

12 And the evidence that we've
13 heard from both the consultants as well as the
14 city staff is that oftentimes this is a
15 collaborative process. Right? The consultants
16 don't know what's feasible. They don't
17 necessarily know maybe some of the political
18 entanglements. And, vice versa, city staff may
19 not have the best technical sense in some fields
20 to know what's the best order to do this. We're
21 thinking of doing it that way. Is that going to
22 cause a problem? And, if the consultants do agree
23 with that, I think that, yeah, that probably adds
24 a greater level of comfort for the City to say,
25 okay, well, not only have we decided this because

1 we think it will be efficient, but we've also just
2 double checked it with our consultant and make
3 sure that they're okay with it. And that's the
4 way that I look at it as opposed to, you know,
5 pushing the consultants into agreeing to something
6 that they want to do. And we know for sure, we've
7 heard from Mr. Malone particularly, that, you
8 know, if it's not something CIMA agreed with, they
9 wouldn't agree to it.

10 We've seen examples from them.
11 In the context of the 2015 staff report, and
12 you'll recall that there was a draft staff report
13 that Mr. Ferguson sends to CIMA and where, under a
14 different definition of medium term, friction
15 testing is put in as medium term, whereas for
16 CIMA, it was a short term and they refused -- you
17 know, there was a comment that said, I disagree
18 with this, let's chat, and ultimately CIMA did not
19 agree with that recommendation.

20 So, I think that the fact that
21 the consultants themselves obviously have the
22 ability and obligation to refuse to agree to
23 something if they don't think that it's necessary
24 or safe or whatever it may be, but I don't see the
25 harm of the City getting a second check from their

1 consultant to say, this is how we're going to
2 execute it. Is there a better way? Would that
3 work? What are your thoughts? Because it is a
4 collaborative process.

5 JUSTICE WILTON-SIEGEL: Okay.

6 MS. CONTRACTOR: Sorry, just
7 give me one second. Could you put up 72? I'm
8 sorry? We're on 72. Sorry. Okay.

9 And so, we were about to speak
10 more specifically about the friction testing
11 recommendation in 2014, from the 2013 CIMA report,
12 I should say. And, again, you know, the nature of
13 the recommendation and it being optional and there
14 being no cost-benefit analysis, and there really
15 being no understanding of friction or it's not a
16 common thing that that's done, and in our view,
17 it's not unreasonable for the City to try some of
18 the other recommendations that CIMA has made, many
19 of which also address wet weather collisions,
20 including slippery when wet signs, and give it the
21 appropriate amount of time to observe its
22 efficacy, and then if that doesn't work, try your
23 optional countermeasures, in this case, friction
24 testing. But, you know, in 2013, in our view,
25 it's not an unreasonable way to go to start with

1 the low-hanging fruit, if you will, and monitor
2 its effectiveness.

3 Mr. Ferguson, in his
4 testimony, provided some insight on this as well,
5 and that quote is before you as well. So, he
6 first talks about his understanding of the
7 friction testing recommendation, again noting that
8 consultants will clearly identify things that are
9 necessary and ones that are optional and could be
10 implemented as a followup after the low-hanging
11 fruit and after investigations are completed. He
12 says:

13 "Again, in our industry
14 we look at the wording
15 that's associated with
16 those reports. So we're
17 going back to the railway
18 stake."

19 This is an example he gave
20 about working at a railroad industry:

21 "Where it's very clear,
22 it's very upfront. Then
23 they provide the
24 additional information
25 that says the

1 municipality, you can
2 look at these items; it's
3 not a requirement; you
4 could do that if you want
5 to supplement the
6 location, but it's not an
7 actual requirement. When
8 you go back and you use
9 that as a comparison to
10 here -- "

11 This is in reference to the
12 friction report, the friction testing
13 recommendation:

14 " -- a number of the
15 items are identified as
16 could or the follow-up,
17 if your
18 pre-countermeasure, if
19 you find that they are
20 not addressed in the
21 situation, then upgrade
22 to these new
23 installations or these
24 additional
25 countermeasures. "

1 Have I answered your questions
2 on that point, Mr. Commissioner?

3 JUSTICE WILTON-SIEGEL: I
4 think you've addressed from your perspective, yes.

5 MS. CONTRACTOR: Okay. And
6 I'll touch briefly the ramp 6 recommendation,
7 which, again, was not -- was an optional
8 recommendation that was not implemented. There's
9 compelling evidence about why that wasn't taken
10 and, again, kind of goes back to this staged
11 approach.

12 And so, the evidence that I
13 took you to earlier about a countermeasures
14 program from 2010 through which ramp 6 was
15 identified as a potential area where there was an
16 overrepresentation of collisions and, as a result
17 of that, there was a number of work that was done,
18 in light of that and in light of the fact that
19 they didn't have sufficient time from when the
20 work was installed to the date of the CIMA review
21 to really assess the efficacy of the work, and the
22 decision was made just to hold off, see how the
23 work that they have already put in place had fared
24 before looking at additional measures.

25 And Mr. Applebee from CIMA was

1 asked about that and he stated that the signage
2 improvements implemented by the City were
3 reasonable and that CIMA's additional
4 countermeasures were just an option to augment the
5 work that the City had already completed.

6 JUSTICE WILTON-SIEGEL:

7 Mm-hmm.

8 MS. CONTRACTOR: Okay. I know
9 we spent a lot of time in the inquiry itself on
10 the 2013 CIMA report. There's nothing else that I
11 intend to take you to, but I'm happy to answer any
12 questions on that report specifically that I
13 haven't addressed for you.

14 JUSTICE WILTON-SIEGEL: Well,
15 you can address the propriety of someone calling
16 up the consultant and saying, remove from the
17 report the principal focus, without that being
18 explained to the city council, who had originally
19 requested the report. And I'm going back now to
20 the Baker evidence. That seems to me to be the
21 significance of that.

22 MS. CONTRACTOR: Sir, you're
23 speaking to the illumination --

24 JUSTICE WILTON-SIEGEL:

25 Correct.

1 MS. CONTRACTOR: -- scope
2 issue? I understand.
3 So, as I recall, the evidence
4 on that is a bit murky. And it was clear that
5 that illumination was in scope. And that was
6 provided to CIMA and, as of one of the last
7 progress meetings that they had before a draft was
8 provided to the City, that that continued to be
9 there. Mr. Applebee had -- you'll recall the
10 exchange Mr. Applebee had with Mr. Malone. And I
11 think that's where the first hand grenade comment
12 had come up. And he had asked Mr. Applebee
13 whether, in his view, full illumination was still
14 in scope and at that point he had confirmed that
15 no one at the City had told him otherwise.

16 Mr. Moore's evidence on that
17 is, as I recall, that he didn't have standing. He
18 wasn't able to tell Brian Malone what is in and
19 what's not in a report, but that he may have had a
20 discussion with him, as he had with many others,
21 about his understanding of the limitations, the
22 environmental limitations, that would preclude the
23 environmental process. And I believe Mr. Malone's
24 evidence on that is that he understood from
25 Mr. Moore that he was telling him that lighting

1 think in the meeting that was had between
2 Councillor Collins at the time, who I believe made
3 the request for the motion, and Mr. Ferguson and
4 Mr. Martin ahead of the PWC, which, you know, I
5 understand now, with the City's new policies
6 coming, in that type of sharing of information
7 would be frowned upon or not permissible, and I
8 think that was, again, an opportunity to make sure
9 the motion, the report was responsible, was
10 responsive, to the motion and frankly it took a
11 similar kind of staged approach. Right? Put in
12 the measure as to increase visibility, try some of
13 this signage work and then put it back on the OBL.
14 If it's working, great. If not, let's take the
15 next step.

16 JUSTICE WILTON-SIEGEL: Okay.

17 MS. CONTRACTOR: Okay. So,
18 I'm going to move on to the 2015 CIMA report. And
19 before we get to the report itself, I'll note that
20 the documents show that the traffic group was
21 doing some monitoring of the collisions on the Red
22 Hill in 2013 and again in 2014 and, by the end of
23 2014, had determined that a review of the entire
24 Red Hill would be prudent, and subsequently CIMA
25 was engaged to do a detailed safety review of the

1 entire Red Hill in the spring of 2015.

2 And I think one of the key
3 issues, of course, that I'm going to focus on
4 coming out of the 2015 report is CIMA's conclusion
5 that a combination of high speeds and wet surface
6 may be the primary contributing factors to
7 collisions on the Red Hill, and particularly where
8 small radius horizontal curves are present.

9 Sorry, Mr. Commissioner, I
10 can't tell if you're writing or you're gone.

11 JUSTICE WILTON-SIEGEL: I'm
12 listening. Go ahead. I'm doing both. I'm
13 listening, Ms. Contractor.

14 MS. CONTRACTOR: Okay. So, I
15 think, you know, one of the key issues coming out
16 of this report and certainly the inquiry has
17 received a significant amount of evidence on that
18 point. And the City, for the reasons that I'll go
19 through, submits that, again, we acted in a
20 reasonable way when you consider, again, the
21 staged approach, the best information available at
22 the time, the expert evidence from Dr. Flintsch
23 and Mr. Hein and, lastly, the additional friction
24 testing or additional friction information would
25 not have resulted in an alternative course of

1 action, as was subsequently confirmed by CIMA.

2 So, I'm going to go through each of those with you
3 and, of course, if you have any questions, let me
4 know.

5 So, following CIMA's
6 conclusion that a combination of wet surface and
7 speeding may have been contributing to collisions
8 on the Red Hill, the City took immediate steps to
9 combat high speeds. And, again, that's the
10 traffic group that's largely running with that.
11 And at the same time, the engineering services
12 group, by April of 2016, had begun to consider
13 pavement rehab and resurfacing.

14 And I'll just focus a moment
15 on the work that the City did to immediately
16 combat excessive speeding that they observed on
17 the Red Hill following CIMA's report. And, for
18 example, city staff within traffic operations
19 worked with Hamilton Police Services to implement
20 a comprehensive speed enforcement. You'll recall
21 that CIMA had found that 70 percent of the
22 vehicles on the Red Hill were travelling up to ten
23 kilometres above the speed limit, with an average
24 of 500 vehicles travelling over 140 kilometres a
25 day. The enforcement campaign included regular

1 patrolling on the Red Hill and the LINC, during
2 which significant speeding violations were
3 observed. For example, I think they found -- they
4 issued, rather, 16,000 violations within the first
5 four months.

6 In addition to enforcement
7 and, of course, oversized speed limit signs and
8 slippery when wet signs were installed, and the
9 City was also investigating the implementation of
10 variable speed message boards and queue-end
11 warning systems and had engaged CIMA to prepare
12 and develop a plan along those lines as well.

13 When Mr. Ferguson was asked
14 about why the City was focused more on speed as
15 opposed to the wet surface side of things in that
16 combination conclusion that CIMA made, he said
17 once again that the practice is, when you're
18 looking at competing priorities and limited
19 resources, you're looking for the easy wins or the
20 low-hanging fruit. Now, that doesn't mean that
21 mechanisms that you're employing aren't going to
22 be effective, but rather that they're faster,
23 easier to implement and more cost efficient.
24 Mr. Ferguson further noted that based on industry
25 standard, it takes three to five years to observe

1 more, Mr. Commissioner, about why the City's focus
2 on combatting excessive speeding was a reasonable
3 pursuit in the circumstances at the time. And,
4 you know, Mr. Ferguson, for example, in his
5 evidence indicated that, you know, based on his
6 training and experience and expertise, he
7 understood that there are a number of contributing
8 factors to any one collision and primary tended to
9 be driver behaviour and that was particularly the
10 case in wet weather conditions. And when asked if
11 his focus on driver behaviour would have changed
12 if he was advised that, in their report, Tradewind
13 recommended further investigation of the friction
14 values of the Red Hill, and Mr. Ferguson confirmed
15 that, you know, in the absence of a specific
16 recommendation, i.e., pass, fail, thumbs up,
17 thumbs down, and for him it would have been
18 prudent to continue to minimize excessive speeding
19 observed on the Red Hill.

20 He further noted that the
21 countermeasures that CIMA had implemented assumed
22 to some extent that there was low friction values,
23 so that included the slippery when wet signs and
24 other signage. And so, all of that had been put
25 into place and there was a targeted speed

1 enforcement campaign as well while engineering
2 services in the background was looking at rehab.

3 JUSTICE WILTON-SIEGEL: I
4 think the real question for me --

5 MS. CONTRACTOR: Please.

6 JUSTICE WILTON-SIEGEL: -- is
7 to ask what would they have done if they had all
8 the information that Mr. Soldo had when he put it
9 together in 2018, and that's not just the friction
10 numbers, which he got out of the Tradewind report,
11 but CIMA's analysis of the collision history and
12 the correct design speed, which Mr. Moore chose
13 not to correct in the 2015 CIMA report, all of
14 that information was actually available in 2015,
15 and the question is: What would CIMA have done if
16 it had had that information?

17 Now, we know Mr. Soldo would
18 immediately have reduced the posted speed, so it's
19 not so much that the focus on speed is wrong as
20 that perhaps they failed to do a more
21 comprehensive report with further information and
22 perhaps failed to recommend as vigorous a response
23 as they would have if they had had that
24 information. And I bear in mind that even CIMA,
25 in 2019, although they called it a slight

1 modification, recommended more aggressive --

2 MS. CONTRACTOR: Enforcement.

3 JUSTICE WILTON-SIEGEL: --

4 enforcement.

5 MS. CONTRACTOR: That's right.

6 JUSTICE WILTON-SIEGEL: So,
7 it's not that you pick apart one particular piece.
8 From my perspective, I try to understand, given
9 that all of that information really was available
10 in 2015, what properly should have been done as
11 part of the CIMA review and what, if any,
12 different recommendations might have come out of
13 that?

14 MS. CONTRACTOR: So, I take
15 your question, sir, and I want to -- I'm just
16 trying to find the right reference. Because you
17 asked Mr. Malone that question. I don't know if
18 you recall that. There were many days of the
19 hearing. But you asked Mr. Malone that question
20 precisely and, if you bear with me, and so we know
21 that Mr. Malone confirmed that friction testing
22 results would not have changed the countermeasures
23 recommended in the 2015 CIMA report, partially
24 because CIMA had already intended to deal with any
25 potential low friction issues such that further

1 friction results would not have warranted
2 additional countermeasures, so similar to what
3 Mr. Ferguson had said. And then in the February 4
4 memo, he concludes that even if he had a copy of
5 the draft Golder and the Tradewind report, he
6 would not have implemented any additional
7 countermeasures in the '15 or '18.

8 And when examined on this -- I
9 just want to find the right -- pardon me. I'm
10 going to turn to my trusted marked-up transcript.
11 So, when asked about whether he would have, he
12 being Mr. Malone, would have changed the way that
13 CIMA approached the assessment of friction as a
14 contributing factor to collisions if CIMA had the
15 Tradewind and Golder report -- so, the question
16 is: You would not have changed? He says, "Yes, I
17 think that's right." And he goes on to state:

18 "The problem with the
19 Tradewind results is that
20 they indicate, in my
21 interpretation, friction
22 levels that are in excess
23 of the values that are
24 utilized in road design.
25 So, theoretically, that

1 should mean that friction
2 is not an issue because
3 the friction levels are
4 provided. We have a
5 preponderance of -- "

6 He goes on to say:

7 "We have a preponderance
8 of wet road crashes. I
9 don't think it would be a
10 smoking gun of
11 confirmation that
12 pavement surface was the
13 key factor and problem in
14 the resulting consequence
15 of these collisions."

16 And the smoking gun there he's
17 referring to is the Tradewind report. He's saying
18 that it's not the smoking gun. But you go on to
19 and if -- I know there was an objection here, so
20 let me just go past that. You phrase the question
21 in this term:

22 "If I understand the
23 question correctly, bear
24 in mind that in 2015 CIMA
25 was not provided with the

1 right design speed for
2 the road and it wasn't
3 provided with the
4 Tradewind report. Had it
5 had those effectively the
6 memo should respond to
7 both and had Mr. Malone
8 had both of those, would
9 the answer or the
10 recommendations been any
11 different?"

12 And Mr. Malone responds and
13 says:

14 "So, to clarify, if
15 the -- "

16 And, spoiler alert, he's going
17 to say that it won't make a difference, but it's a
18 bit of a long answer. He says:

19 "To clarify, if the
20 design speed is
21 different, then the
22 friction threshold value
23 that I would be comparing
24 to from the geometric
25 design guide also moves.

1 They move in conjunction
2 with each other. And in
3 preparation for this
4 testimony, I had a closer
5 look at the Tradewind
6 report, which had I would
7 have done at the time
8 presumably. It consists
9 of a range of data
10 points. I think that
11 there's something like
12 280 individual numbers
13 that are provided through
14 the run through the
15 roadway. I took a closer
16 look and I see only a
17 change of one data point
18 that would move in
19 relation to a revised
20 threshold of the design
21 speed difference is nil.
22 So, it's not irrelevant,
23 but it's not overly
24 relevant to my conclusion
25 today, and again it's in

1 hindsight, is I still
2 don't think it would
3 change our
4 recommendation. I think
5 it's a valid question to
6 ask and obviously in
7 hindsight we would have
8 preferred to have it all,
9 but I don't think it
10 changes anything because
11 the change between the
12 two design speeds and the
13 corresponding change
14 between the friction
15 levels provided in the
16 design guidance is
17 extremely small, only by
18 one data point out of
19 283."

20 JUSTICE WILTON-SIEGEL: On the
21 other hand and just to fill in the evidence,
22 that's Mr. Malone's evidence?

23 MS. CONTRACTOR: Yes.

24 JUSTICE WILTON-SIEGEL: He's
25 in, one might observe, a somewhat difficult

1 situation. But even on his own evidence, they
2 would have recommended a more aggressive approach
3 to speed enforcement. Correct?

4 MS. CONTRACTOR: That's right.

5 JUSTICE WILTON-SIEGEL: So,
6 his answer isn't exactly complete. But the
7 experts, and on this point there really wasn't
8 much disagreement, had a different view of what
9 they would have done had they been in CIMA's
10 position in 2015.

11 MS. CONTRACTOR: So, I'm glad
12 you brought up the experts because I actually
13 think both Dr. Flintsch and Mr. Hein agree on a
14 really crucial point, which is where you have a
15 circumstance where the demand for friction exceeds
16 what is available, and Mr. Chen cross-examined
17 Dr. Flintsch on this point and I believe we have
18 an excerpt in our closing submissions, but
19 essentially Dr. Flintsch agrees that where
20 friction is exceeded what's available, and one way
21 to reduce the severity of collisions or avoid
22 collisions all together is, of course, to increase
23 the friction value.

24 The other way that you can go
25 is to decrease the demand for friction, and

1 Dr. Flintsch agreed that it would, in the same
2 way, reduce the severity of collisions or avoid
3 them altogether. And I think that that is an
4 extremely important point, and particularly given
5 what both experts agree on about the cause of
6 collisions. Right? Both agree that friction is
7 seldom the cause of collisions, but when there are
8 other factors, it can contribute to collisions.

9 So, is it reasonable, then,
10 to, where friction is unlikely the cause of the
11 collision, where friction demand is being exceeded
12 by what's available, to take steps to decrease the
13 demand through speeding, for example, through
14 speed enforcement, as opposed to increasing
15 friction, which is far more costly and it's
16 unclear whether or not increasing friction would
17 actually reduce collisions?

18 JUSTICE WILTON-SIEGEL: Okay.

19 MS. CONTRACTOR: And not to be
20 repetitive, but I do think that the fact that both
21 experts agree on this, the evidence is
22 unchallenged, when you're in that situation,
23 there's two ways to proceed. And, you know, Brian
24 Malone made a really excellent point at something.
25 He made many excellent points, but at one point,

1 and I can't find the quote, but said, you know,
2 our understanding of friction in the role of
3 collisions in 2013, 2015, really wasn't that
4 great. And we've seen that from a number of
5 traffic engineers, safety professionals, who don't
6 have any training or expertise, and I expect
7 that's rapidly changing, if it hasn't already.

8 But I think, you know, this is
9 an inquiry, and so looking at hindsight is still
10 important. We want to know, you know, roads can
11 always be safer, we can always be better and, of
12 course, the City is interested in that, but in
13 terms of assessing the reasonableness of
14 particularly City staff's decisions about pursuing
15 speeding versus trying to increase friction, you
16 know, again, in our respectful submission,
17 particularly given what the experts tell us now,
18 that trying to reduce speeding would have been or
19 was an appropriate way to proceed.

20 And three years after, around
21 three years after that, the roadside safety
22 assessment is completed, I don't know whether it's
23 in the roadside or one of the other studies, but
24 we know that the percentage of wet weather
25 collisions gets higher. Right? And at that point

1 we have the resurfacing. So, in a way, the staged
2 approach, if you will, worked exactly the way
3 that, you know, it could have. And there were two
4 options. One seemed likely --

5 JUSTICE WILTON-SIEGEL: Sure.

6 MS. CONTRACTOR: I'm sorry?

7 JUSTICE WILTON-SIEGEL: I
8 don't think this is about increasing the friction.
9 And I'll only ask this last question and then let
10 you get on because I'm mindful of timing. But
11 isn't it at least conceivable that, with fuller
12 information, CIMA would have adopted or at least
13 somebody in CIMA's position should have adopted
14 the approach that the City's own director adopted
15 in 2018, which is drop the speed? At least
16 conduct a full speed assessment? And one of those
17 things. That's not so much related to friction,
18 although friction becomes a component, as we say,
19 all the time. It's the fact that CIMA was misled
20 as to what the design criteria were.

21 MS. CONTRACTOR: Right. And
22 if I'm understanding your question correctly, sir,
23 is it whether the speed study that was done,
24 whether it should have been done earlier and
25 whether CIMA should have concluded that the speed

1 ought not to be or should be reduced?

2 JUSTICE WILTON-SIEGEL: Well,
3 I'm trying to assess what a reasonable consultant
4 would have done in 2015 if the City had provided
5 them full information, bearing in mind that when
6 that full information was available in 2018, the
7 City's own director of transportation operations
8 recommended, among other things, a reduction in
9 the speed limit.

10 MS. CONTRACTOR: Well, we're
11 in a bit of a unique position here because we have
12 the answer to both those things. We know what
13 CIMA would have done, because they have told us
14 exactly that. They told us, other than, you're
15 right, that correction of a slightly more
16 aggressive enforcement, they would not have
17 recommended anything else.

18 And you'll recall that there
19 were two versions of that February 4 memo from
20 CIMA and initially Brian, Mr. Malone, excuse me,
21 wished to include paragraphs where he advocated
22 for maintaining the speed limit while
23 acknowledging Mr. Soldo's point, but ultimately I
24 think, and I could be mistaken, but I thought it
25 was because of the speed differentials that he had

1 some concerns about. Of course, ultimately the
2 speed was reduced, but Mr. Malone, even after
3 knowing everything, in February of 2019, continued
4 to maintain the speed limit at the time.

5 JUSTICE WILTON-SIEGEL: Okay.
6 I don't want to slow this down any more.

7 MS. CONTRACTOR: Sure. Okay.

8 MS. LAWRENCE:
9 Mr. Commissioner, I apologize for popping in. I
10 just wanted to be your guardrails on time. It's
11 2:35 and we've been going for about an hour and
12 close to 40 minutes. I'm certainly -- I just
13 wanted to note that Dufferin is also going to be
14 making submissions today and we have not yet taken
15 our afternoon break. So, I just wanted to give
16 you a sense after the spirited discussion between
17 you and Ms. Contractor.

18 JUSTICE WILTON-SIEGEL: Yes.
19 Okay. Thank you.

20 MS. CONTRACTOR: Sorry about
21 that.

22 JUSTICE WILTON-SIEGEL:
23 Ms. Contractor, if we went to 2:45 and then we
24 took a bit of a break to allow you and whoever
25 else is speaking to organize their time, would

1 that be reasonable?

2 MS. CONTRACTOR: Sorry, sir,
3 so you're suggesting that we continue to 2:45 and
4 then take a break?

5 JUSTICE WILTON-SIEGEL:
6 Correct.

7 MS. CONTRACTOR: I can
8 certainly finish in five minutes, if that's what
9 you're asking.

10 JUSTICE WILTON-SIEGEL: Yes.
11 That would be good. Okay?

12 MS. CONTRACTOR: Okay. So,
13 what I'll do is give you a few references to the
14 part of the written submissions that I'm about to
15 speak to, because I do think that this is an
16 important issue. They're all important issues,
17 but I do think that this is one.

18 The period of time after
19 Mr. McGuire found the Tradewind report, frankly,
20 whether it's August 2018 or September, regardless,
21 within that period of time and, let's say,
22 January 30, 2019, I understand that there's a
23 question about whether and who was responsible for
24 considering whether any interim measures were
25 necessary for the roadway and, in addition to

1 that, whether legal services played a role in
2 that. And so, I'm going to give you a very
3 high-level submission on that point. I would give
4 you the following references in our closing
5 submissions: At page 74 to 87.

6 And, essentially, our
7 submission on this is -- sorry, I'm in the wrong
8 spot. It's three, maybe fourfold. Now I'm making
9 it up as I go. So, first, the evidence is very
10 clear that public works staff and particularly
11 Mr. Soldo, who you'll recall by this point had
12 joined the City as the director of transportation
13 operation, the group that's responsible for the
14 maintenance and safety of the road, and he had
15 reviewed the Tradewind report and the draft Golder
16 report around October of 2018, I believe. I don't
17 have the exact date in front of me. But he was
18 very clear in his evidence that he did not have
19 any immediate safety concerns for the roadway, and
20 that was in part based on the collision data that
21 was found in the annual 2017 collision report.
22 And, again, you'll recall that that went from 2013
23 to 2017.

24 Some of the things that
25 Mr. Soldo had observed was, you know, yes, when

1 you look at those pie charts where, you know, it
2 shows high wet weather on the Red Hill, low wet
3 weather on the LINC, one can, you know, a
4 layperson can take from that that there is a big
5 wet weather issue and maybe it is related to
6 friction. And he provided us with more of a
7 holistic assessment of all of these collisions
8 factors.

9 So, for example, he pointed to
10 the fact that the Red Hill has a lower fatal and
11 non-fatal injury percentage than the LINC and,
12 from a vision-zero perspective, which, again,
13 looks at not the number of collisions but the
14 seriousness of injury collisions, that the Red
15 Hill could be seen as performing better than the
16 LINC in that case. He also looked at the
17 excessive number of speeding on the Red Hill when
18 compared to the LINC and he goes through a number
19 of these factors to say, here is why I thought
20 that the road was safe.

21 And then he talks about or his
22 evidence provides us with his explanation as to
23 why the Tradewind report did not change that
24 conclusion. And there were three or four reasons
25 for that. One was simply the nature of the

1 Mm-hmm.

2 MS. CONTRACTOR: And that's
3 important because there is a narrative that legal
4 services and perhaps particularly Ms. Auty engaged
5 Mr. Boghosian, the external counsel, in order to
6 obtain advice from CIMA about interim measures on
7 the Red Hill and to do it in a privileged way.

8 Now, it is unfortunate that
9 the language of the retainer and the e-mail says
10 something very similar to that; however, Ms. Auty
11 has been clear that, you know, of course there is
12 some overlap between those two measures, but that
13 her area of expertise was to look at liability and
14 to look at mitigation. And when you actually look
15 at the report, not the preamble but David
16 Boghosian's actual report, the section is entitled
17 Mitigation Measures, and that's what he focuses
18 on.

19 And when Ms. Auty was asked
20 whether it would have been prudent to coordinate
21 contact between CIMA and the public works team,
22 she was clear again in her evidence that it could
23 have been, but nobody from public works came to
24 her to say, we need to talk to Brian. And
25 Mr. McKinnon added to that to say, if anyone from

1 his time came to him and said, anyone from legal
2 was stopping me from trying to get who I need to
3 talk to, particularly about roadside safety,
4 there's no way that would have happened.

5 So, I do think that this is a
6 really important point and we have two separate
7 groups doing two things that have some overlap,
8 but what is important to note, that Mr. Soldo has
9 satisfied himself. He's an engineer and is a
10 celebrated traffic professional engineer, is in
11 all kinds of committees that I don't have in front
12 of me but, again, is in our closings and he was
13 able to satisfy himself and advise Mr. McGuire and
14 Mr. McKinnon of that as well.

15 So, although, you know, there
16 are a few e-mails between Mr. McGuire and Justice
17 MacNeil, who was then the City solicitor, where
18 Mr. McGuire is asking to speak with CIMA, is
19 asking to think, he says at one point, a
20 confidential conversation with CIMA, but both
21 Mr. McGuire and Justice MacNeil is clear in their
22 evidence that they did not understand that
23 Mr. McGuire was trying to talk to CIMA for
24 anything related to the safety of the roadway. I
25 believe his evidence on that point was he was

1 trying to understand whether the scope of the
2 budget, whether there would be additional items
3 added to the scope of the roadside review such
4 that it would impact his budget.

5 And so, I'm two minutes over
6 and I'm sure I rambled quite a bit, but if there's
7 any questions, I'm happy to answer it. Otherwise,
8 I'll pass it on to my colleague.

9 JUSTICE WILTON-SIEGEL: Okay.
10 Let's take a 15-minute break. We'll return --
11 we're just a little past, but we'll return at
12 3:00.

13 --- Recess taken at 2:48 p.m.

14 --- Upon resuming at 3:00 p.m.

15 JUSTICE WILTON-SIEGEL: So,
16 Ms. Contractor, I have a few questions before we
17 pass on to the next person.

18 One of the central questions I
19 have to address is what, if any, explanation one
20 can give for the fact that Mr. Moore never
21 provided the Tradewind report to anyone internal
22 to the City. He seems to have immediately flipped
23 the summary information that he received by way of
24 an e-mail from Dr. Uzarowski to Mr. Deseco [ph],
25 but no one in the City ever got it. The MTO and

1 Golder have given me their explanation. I wonder
2 if you'd care to comment either on their
3 explanation or how you put the various factors,
4 factor or factors together, that explain the
5 non-disclosure.

6 MS. CONTRACTOR: Thank you,
7 Mr. Commissioner. I'm happy to speak to that. I
8 can take a look at my friend's submissions a bit
9 closer and provide you with a follow-up response
10 if necessary, but my initial response is that the
11 non-disclosure would not have had any significant
12 impact on the work that would have been done on
13 the Red Hill. And we know that --

14 JUSTICE WILTON-SIEGEL: Let me
15 just ask, is that your explanation for why
16 Mr. Moore didn't do it?

17 MS. CONTRACTOR: I see. No.

18 JUSTICE WILTON-SIEGEL: I'm
19 really asking why Mr. Moore never disclosed this
20 internally.

21 MS. CONTRACTOR: I see. And,
22 as I understand Mr. Moore's evidence on this, and
23 it's been consistent throughout, which is that he
24 didn't have any questions about the data, the
25 friction testing data, but he had questions about

1 April of 2016 perhaps, but the e-mail not long
2 after the Lakewood Community Centre makes a
3 request for friction testing and Mr. Moore writes
4 to Mr. Ferguson and I believe Mr. Mater and then
5 it's forwarded to Mr. White saying, FYI, I have
6 some skid testing done, I'm still trying to
7 figure this out. And when you look at the
8 evidence from Mr. Ferguson, Mr. White, they say
9 that they didn't get a copy of the report, but
10 they also say, yeah, Gary said something about it
11 being a UK standard and not being applicable.

12 It also appears from their
13 evidence, their being, again, Mr. Ferguson and
14 Mr. White, that what they were looking for was a
15 yes or a no a thumbs-up or a thumbs-down. I think
16 both of them said that at some point. And so,
17 without Mr. Moore having that information from his
18 consultants, I expect that he didn't have anything
19 to share that he thought was worthwhile,
20 particularly given that CIMA and traffic are
21 looking at the safety of the roadway and given
22 that the road is in the process of being repaved.

23 Does that answer your
24 question?

25 JUSTICE WILTON-SIEGEL: It's

1 an answer.

2 MS. CONTRACTOR: All right.

3 JUSTICE WILTON-SIEGEL: Is
4 that your answer as well for why he gave the
5 answers he did to the public works department and
6 the media?

7 MS. CONTRACTOR: So, let me be
8 clear, Mr. Commissioner. I don't have an answer
9 on behalf of Mr. Moore. I know what --

10 JUSTICE WILTON-SIEGEL: And
11 I'm not really asking you for that. In a way, I'm
12 asking a more general question, if it strikes you
13 as appropriate, which is: Are there factors
14 beyond Mr. Moore or Mr. Moore's assessment of the
15 report that also explain why others in the public
16 works department didn't get the document?

17 MS. CONTRACTOR: Can you give
18 that to me again, please, sir?

19 JUSTICE WILTON-SIEGEL: Well,
20 Mr. Moore's assessment of the Tradewind report may
21 be one thing. There may be other factors in terms
22 of how the department interacted that explain why
23 the report was not disseminated within engineering
24 services, for example, and then between
25 engineering services and traffic operations. And

1 I'm wondering if you want to address those
2 factors.

3 MS. CONTRACTOR: Sure. I have
4 not heard any evidence to indicate that Mr. Moore
5 deliberately withheld the documents for any
6 reason, other than based on his interpretation
7 perhaps. I have heard -- I cannot recall any
8 evidence in the last two phases about why he would
9 have withheld that. Sorry, I'm not answering the
10 question, but I don't think I'm fully
11 understanding it. He was candid about why he
12 didn't find the Tradewind report valuable
13 repeatedly. He also, you know, being in a
14 management position, was mindful of protecting the
15 City. And, you know, did he do that rightfully or
16 wrongfully? That's, of course, something, sir,
17 you're going to have to opine on. And I think
18 because he was also in a directorial position, he
19 was trying to think about the liability to the
20 City, having assured himself that the report
21 didn't actually raise any concerns.

22 JUSTICE WILTON-SIEGEL: Well,
23 let me just give a for instance. He clearly
24 didn't -- it's not clear that the report was, the
25 friction testing, was commissioned in order to

1 address traffic safety because he didn't seem to
2 regard traffic safety as part of his mandate. He
3 got it in order to have something that would be in
4 the file for future purposes, I think, if there
5 was some sort of lawsuit.

6 MS. CONTRACTOR: Exactly.

7 JUSTICE WILTON-SIEGEL: Would
8 you agree with that?

9 MS. CONTRACTOR: I'll add to
10 that, if I may. So, Mr. Capostagno raises this
11 initially at the roads level. It moves up the
12 chain and now you have folks from the leadership
13 positions in public works talking about this
14 issue. And before Mr. Moore says, look, I'm going
15 to go -- I think we can go get friction testing
16 done, I'm going to do it, a couple of things
17 happen. Right? One, Mr. White, whose group is in
18 charge of, kind of, collision tracking and all of
19 that says, I've never heard of this issue coming
20 up before. And then the risk folks say, yeah, I
21 don't have any risk claims. And so, from that, I
22 think we can take not only have they identified to
23 that date any significant collision pattern of
24 that regard or they haven't been receiving calls
25 from folks about the slippery conditions. We know

1 that comes a bit later, but, you know, at least,
2 based on what Mr. White could recall at the time,
3 he had not heard of that.

4 So, I think that's an
5 important part of it. If it's not something that
6 everybody had a safety concern over, but it seemed
7 like it had, kind of, settled, although Mr. White
8 did say he was going to do a thorough collision
9 analysis, but certainly Gary was getting it, as he
10 said, for asset management purposes in case a
11 lawyer raises an issue in the future.

12 JUSTICE WILTON-SIEGEL: Yeah.
13 It was more, as I read it, it was in case a lawyer
14 raised it in the future. It was a defence to
15 demonstrate that this highway was well built and
16 performing just fine.

17 So, insofar as it had any
18 significance for him in the immediate future, it
19 was, as I understand it, in terms of assessing the
20 quality of the pavement at that time as part of
21 the six-year report that Dr. Uzarowski was doing,
22 which made a lot of sense. So, he was not looking
23 at it from a point of view of friction for traffic
24 safety purposes but rather for pavement
25 preservation purposes or at least assessment

1 purposes. So, I understand that.

2 But then one would think that
3 Mr. Andoga, who is in charge of asset management
4 and the capital renovation of the project, would
5 be a natural recipient of the report, but he never
6 got it.

7 MS. CONTRACTOR: There's no
8 evidence to indicate that he received it. I
9 believe -- I thought Mr. Moore, and I would want
10 to double check this, but I'm fairly certain
11 Mr. Moore, in his evidence, stated that he would
12 have expected that he would have given it to Rick,
13 I think is what he might have said.

14 JUSTICE WILTON-SIEGEL: But
15 Mr. Andoga says he never got it.

16 MS. CONTRACTOR: I understand
17 that, but I would have to go back and look at
18 whether it was an "I don't remember" or "I for
19 certain didn't get it." But I agree with you and
20 I think so does Mr. Moore that he likely would
21 have given it to Mr. Andoga and he can't see why
22 he wouldn't have.

23 JUSTICE WILTON-SIEGEL: Well,
24 I'm not sure what agreement we've just come to,
25 but I'm not sure we're on the same page on that.

1 But I also -- the evidence seems to be that
2 Mr. Oddi never got it within engineering services.

3 MS. CONTRACTOR: Right. I'm
4 just trying to -- given his role, I know that he
5 had familiarity with the project because he worked
6 with Mr. Moore on it, but given his role in
7 construction, I don't know if the report would
8 have been relevant to him.

9 JUSTICE WILTON-SIEGEL: Okay.
10 The other thing that I wrestle with is the fact
11 that the communication with Mr. Malone in August
12 of 2015, I'm not suggesting there was intentional
13 misrepresentation, but it is certainly not
14 reflective of an accurate comprehension of the
15 report or the context in which the report was
16 delivered. Do you have any comments on that?

17 MS. CONTRACTOR: I do, sir. I
18 think, you know, Mr. Moore would tell you that
19 he -- and I hope this doesn't sound like I'm
20 making excuses for him or that he is, but his
21 position was very busy, that he got a call from an
22 old colleague asking for something, he sent it.
23 If he intended to mislead in any way, surely he
24 would have looked down the e-mail where it says
25 Tradewind. I think --

1 JUSTICE WILTON-SIEGEL: I'm
2 not suggesting that there was intentional
3 deception by any means.

4 MS. CONTRACTOR: It might have
5 been, you know, a quick e-mail where Mr. Malone
6 said, is that MTO, too? Because he read it. And
7 I can't remember exactly what the question was,
8 but as I understood it, that Mr. Malone said, did
9 MTO do both testing? And that Mr. Moore
10 responded. But I could be wrong about that.

11 I think, though, whether he,
12 you know, responded to that e-mail with sufficient
13 time and care, probably not. But Mr. Brian
14 Malone's evidence on that consistently has been we
15 wouldn't have wanted the Tradewind results. We
16 wouldn't want anything to do with it. We would
17 have sent it back to the City for the City to --

18 JUSTICE WILTON-SIEGEL: That's
19 a different question.

20 MS. CONTRACTOR: Fair enough.

21 JUSTICE WILTON-SIEGEL: I have
22 to address the question of why did it not see the
23 light of day, and that's what I'm inviting you to
24 comment on.

25 The MTO says that around about

1 2010, Ms. Lane, they believe, contacted Mr. Moore,
2 after speaking to Dr. Uzarowski, I suppose I
3 should say more specifically believes that she
4 would have contacted Mr. Moore. Do you have any
5 comment on the MTO's position on that?

6 MS. CONTRACTOR: I don't
7 believe the evidence is clear, even on the MTO's
8 end, on that. Certainly Mr. Moore does not recall
9 receiving anything along those lines and, at the
10 very least, you know, I expect there would have
11 been a followup or something to suggest. But I
12 don't believe the evidence is clear on either side
13 in that regard.

14 JUSTICE WILTON-SIEGEL: Okay.
15 In the period after Mr. McGuire discovers the
16 report, I know that nothing was done. I know
17 there were serious constraints on doing anything
18 immediate, given that they were getting into the
19 winter period fairly quickly. I know that efforts
20 were made to try to establish that, while there
21 was a failure of communication, let's put it that
22 way, with respect to the report, the significance
23 should be assessed as nil. But the City goes on
24 and effectively says decisions were made
25 internally that there were no additional interim

1 measures that were required to be made. I hope
2 I'm characterizing the situation, the City's
3 position. I think that's what you said
4 immediately before the break. And I'm trying to
5 understand who exactly you think made that
6 decision and where, if at all, is it actually
7 evidenced?

8 MS. CONTRACTOR: I believe
9 that the primary decision maker was Edward Soldo,
10 but the evidence, you know, indicates that, given
11 the time, the pressure, you know, how new he was
12 at the City, a lot of decisions were being made
13 together, but, you know, I understand that
14 Mr. Soldo had the expertise and runs the division
15 that looks after roadway safety, including that of
16 the Red Hill. And so, naturally it would fall to
17 him.

18 Now, in light of the unique
19 circumstances, there were a lot of other people
20 involved, but I think that a lot of them sought
21 assurances but ultimately that decision, when you
22 really listen to the evidence and it comes down to
23 Mr. Soldo with Mr. McGuire, you know, raising some
24 concerns on the pavement side, saying there's not
25 much that they could do, and Mr. McKinnon, who,

1 you know, does not have the same technical
2 knowledge but has the leadership side of things.

3 JUSTICE WILTON-SIEGEL: It
4 would seem to be Mr. McGuire was struggling to
5 understand what to make of all this and what to do
6 about it, and one of the indicia of that is that
7 he never even started drafting the material for
8 the City until the end of the first week in
9 January, after he was prompted by Mr. McKinnon to
10 get on with it. All the interchange with various
11 people seemed to demonstrate that he's trying to
12 find someone who could tell him something whenever
13 the matter comes up.

14 I can see by your reaction
15 that you don't profoundly disagree with that.

16 MS. CONTRACTOR: Yeah.

17 JUSTICE WILTON-SIEGEL: And
18 the problem I have with Mr. Soldo being the
19 decision maker is he really wasn't brought into
20 the loop in any significant way until about
21 certainly the early part, if not the midpart, of
22 December when he suddenly realized that there was
23 a serious problem here and he felt that in fact
24 perhaps he was a newcomer or other reasons, he had
25 effectively been kept out of the loop.

1 So, that's why I asked the
2 question of whether Mr. Soldo can really be
3 regarded as someone who turned his mind to this
4 and made a decision on behalf of the City as
5 opposed to whether that decision was effectively
6 made by default.

7 MS. CONTRACTOR: Right. And,
8 sorry, I just want to find something from
9 Mr. Soldo that I think might be able to assist.
10 But I think one of the earliest things that
11 Mr. Soldo did, which was in August, was to review
12 the 2017 annual collision, which is a PowerPoint
13 initially and then it turned into a report. He
14 also looked at the memo from Mr. Ferguson and
15 there was that back and forth about removing the
16 summary that Mr. Ferguson had put in about the
17 claims.

18 And, at least the way that
19 commission counsel took him through his evidence,
20 it was his first impression of the road is that he
21 didn't have any safety concerns. Right? I think
22 there question that was put to him was: When
23 you're looking at this pie chart with the high
24 percentage of wet weather collisions, do you have
25 concerns? He says no, because of all these other

1 factors. So, he's already established that he
2 doesn't have a safety concern. And after that, he
3 gets a copy of the Tradewind report, it doesn't
4 change it and it doesn't change it because he's
5 been looking at the data in the last three years
6 since the report and because he knows a number of
7 things have been done on the road since then and,
8 again, just based on the wording of the report
9 itself, not raising any significant concerns.

10 JUSTICE WILTON-SIEGEL: I
11 think, if I may offer the observation, that you've
12 overstated it a bit when you say he didn't have
13 any concerns for the road, because he looked at
14 not the roadside safety assessment but the speed
15 assessment report or the speed study and said,
16 based on what he could see, he didn't agree with
17 that report. They should be reducing the speed
18 limit. So, he had a concern on that side, did he
19 not?

20 MS. CONTRACTOR: So, I think
21 that -- I mean, I would go back to one of the main
22 points that I raised, which is roads can always be
23 safer and, you know, there's no such thing as a
24 safe road, and certainly that's what Mr. Soldo's
25 job was. He's coming in, he's finding ways to

1 make it safer, but the question is: Did he have
2 any concerns about the performance of the road?
3 No. Were there ways he thought he could make it
4 better? Yes. Did the Tradewind report, you know,
5 impact that assessment? His evidence is no and
6 he's clear in that regard.

7 JUSTICE WILTON-SIEGEL: Okay.
8 Now, the last question I have is the other
9 different one. You've seen the MTO's submissions
10 on jurisdiction?

11 MS. CONTRACTOR: I have.

12 JUSTICE WILTON-SIEGEL: If
13 you're the right person to answer this question, I
14 invite that. If you're not --

15 MS. CONTRACTOR: Well, I'm
16 happy to --

17 JUSTICE WILTON-SIEGEL: What I
18 would like to know is whether the City has any
19 views with respect to the MTO's views on
20 jurisdiction?

21 MS. CONTRACTOR: In terms of
22 the --

23 JUSTICE WILTON-SIEGEL: The
24 jurisdiction.

25 MS. CONTRACTOR: Your

1 jurisdiction to opine on their processes and
2 policies?

3 JUSTICE WILTON-SIEGEL:

4 Correct, where you draw the line.

5 MS. CONTRACTOR: Let me speak

6 to my colleagues about that and get back to you.

7 I have some thoughts, but I don't know if

8 that's --

9 JUSTICE WILTON-SIEGEL: Okay.

10 Whether they represent the consensus view?

11 MS. CONTRACTOR: That's right,

12 yeah.

13 JUSTICE WILTON-SIEGEL: Okay.

14 Well, that's fine. Well, if we could have that

15 addressed at the end.

16 MS. CONTRACTOR: Sure.

17 JUSTICE WILTON-SIEGEL: I mean

18 at the end today of the City's presentation.

19 MS. CONTRACTOR: Certainly.

20 We'll get back to you shortly after Ms. Talebi

21 finishes.

22 JUSTICE WILTON-SIEGEL: Yes,

23 exactly. So, if Ms. Talebi, then, can be slotted

24 in for her presentation, that would be great.

25 CLOSING SUBMISSIONS BY MS. TALEBI:

1 Good afternoon,

2 Mr. Commissioner. Can you hear me?

3 JUSTICE WILTON-SIEGEL: Yes, I
4 can.

5 MS. TALEBI: Okay. Great.

6 Thank you. I'm going to be providing the inquiry
7 today with a summary of some of the steps that the
8 City has taken since the start of this inquiry to
9 date to review and revise existing policies and
10 procedures and to implement new policies that
11 really are meant to enhance the structural
12 organization around information management. I'm
13 aware of our time here, Mr. Commissioner, so I'm
14 going to try my best to be brief. A lot of this
15 information is, of course, available to you.

16 JUSTICE WILTON-SIEGEL: Yes.
17 Thank you.

18 MS. TALEBI: I will first
19 begin by highlighting some of the overall
20 objectives of the changes that have been made and
21 will then highlight some of the key policies and
22 procedures that we believe are relevant to the
23 mandate of the inquiry that may be of assistance
24 to you. And some of those policies include
25 sharing of consultant reports with identified

1 imminent risk to help in human safety, the
2 council-staff relationship policy, the public
3 works quality management system and, within that,
4 the project management manual, and the parkway
5 management committee.

6 And so, thinking through some
7 of the, sort of, objectives that a lot of these
8 changes have achieved, the improvements have
9 mostly been made by the City to reflect best
10 practices in municipal governance, many of which
11 I'm sure, as you're aware, were highlighted by
12 Ms. Baker in her report and throughout her
13 testimony.

14 And so, in making some of
15 these changes, the City has also been able to
16 achieve a number of specific objectives that are
17 important to any large organization, including the
18 City, but, again, are also specific and relevant
19 to this inquiry.

20 And so, those objectives can
21 really be categorized in three general categories.
22 The first being implementing reliable and
23 accessible document management systems. And what
24 is really meant by that is creating consistent
25 record and document management practices that

1 enhance the sharing of information across multiple
2 divisions and departments, because, of course,
3 that is the organization of the City. And these
4 policies effectively do this through establishing
5 tracking and retention policies for a consultant
6 and staff reports, as well as other documents, and
7 they're designed to ensure a certain level of
8 consistency and transparency, which, as you know,
9 are big parts of what this inquiry is looking at.

10 The second, sort of, objective
11 that has been achieved as a result of some of
12 these changes is about facilitating consistent and
13 transparent communication, and so we're talking
14 about creating effective communication between
15 city staff, city council and the public. And this
16 really is done through identifying clear processes
17 for sharing consultant reports which identify
18 imminent risks to human health or safety with
19 senior leaders or council, and, again, that is of
20 course critical, but really also sharing other
21 types of information across the board in an
22 accessible and consistent way.

23 The third objective that some
24 of these policies really achieve is ensuring that
25 there is better coordination between groups for

1 efficient project delivery and accountability, and
2 what we're talking about here is really
3 coordinating the work that is being done across
4 the City, across various departments and
5 divisions, and doing that through improving
6 project management processes and really
7 introducing tools that provide leadership with
8 ways to ensure that there is safe and efficient
9 operation and maintenance of various assets.

10 It's really also specifically
11 designed to address any fragmentation of the
12 various structures or systems that may happen in
13 large organizations, as these things usually do,
14 where you have so many different structures in
15 place, and it really allows various departments
16 and people that are working within these
17 departments to coordinate consistent efforts and
18 provide oversight of roles and responsibilities
19 across the boards and that, of course, includes
20 within public works.

21 And so, now just moving on to
22 highlighting some of these key policies that I
23 mentioned, the inquiry has certainly received a
24 ton of evidence with respect to the improvements
25 which are relevant to the work of the inquiry from

1 the affidavit of Ms. Smith, the current city
2 manager of the City of Hamilton, and through a
3 number of City witnesses. I won't go through all
4 of these various policies and procedures which
5 have been updated, but I will highlight just a few
6 key policies here that have been revised or
7 implemented that are particularly relevant to the
8 work of the inquiry. And some of these policies
9 have actually been implemented on a City-wide
10 level and some of them have been implemented
11 within the public works department specifically,
12 and I will identify those as we go through them.

13 So, the first policy that I
14 wanted to highlight for you, Mr. Commissioner,
15 this afternoon is sharing of consultant reports
16 with identified imminent risks to health or human
17 safety. In January 2020, council approved an
18 amendment to the City's Code of Conduct to include
19 a new schedule, that it has the same title as this
20 policy, and this applies City wide. And the
21 purpose of this policy as a whole is effectively
22 twofold. One really is to ensure that council
23 receives notification of imminent risk to human
24 health or safety when they're identified by
25 consultants working with the City, and the second

1 report, where a consultant is providing a
2 recommendation that might include how public
3 safety might be improved.

4 The next policy,
5 Mr. Commissioner, that we wanted to highlight is
6 with respect to the council-staff relationship.
7 In 2021, council approved this policy, which
8 really provides some guidelines on the working
9 relationship between members of council and
10 municipal city staff. One of these particular
11 principles that are highlighted within this policy
12 are particularly important, I think, for us to
13 highlight, and that is the policy that is
14 effectively meant to ensure that council and city
15 staff are committed to accountability and
16 transparency. And so, this policy discusses the
17 helpful context for those relying on this policy
18 to understand specifically how the policy can be
19 applied to some of the every day situations that
20 may come up for staff in relation to their
21 communication and their working relationship with
22 city council.

23 And so, the policy
24 specifically states that staff need to ensure that
25 all council members are provided with the same

1 information on matters of general concern and/or
2 matters that will be discussed at a meeting of
3 council or a committee of council. And so, it's
4 really meant to emphasize the importance of
5 recognizing the shared responsibility that exists
6 between council members and city staff to serve
7 the community and work together to build a certain
8 level of confidence in the City government, but
9 also really achieve some strategic objectives that
10 the City has identified.

11 And in order to do that, it's
12 important, as Ms. Baker identified, to have best
13 practices with respect to sharing draft staff or
14 consultant reports with individual councillors,
15 and this is consistent with common practice, you
16 know, in relation to the policies around these
17 issues.

18 The Baker report itself also,
19 as you know, talks about really the importance of
20 ensuring that all members of council and committee
21 have equal access to information provided to them
22 and this policy is really designed to ensure that
23 that is implemented consistently across the board.

24 The next policy that I wanted
25 to highlight quickly, Mr. Commissioner, is with

1 are undertaken in a manner that's consistent, it
2 meets all regulatory and corporate standards and
3 really improves and enhances outcome. And this,
4 of course, includes really putting in place
5 initiatives that deal with program deliverables.

6 And so, in order to support
7 the implementation of this system, as I mentioned,
8 it has a lot of -- it does a lot of different
9 things, the public works department has come up
10 with a number of different functional processes
11 and policies that help achieve some of the
12 objectives that I've highlighted. I won't, again,
13 go through all of those things, but the one thing
14 that I wanted to highlight for you is with respect
15 to the project management manual.

16 And if we can just go to the
17 next slide here, this project management manual
18 was put into place in 2020 across the public works
19 department and it's meant to detail the standard
20 processes and the tools that need to be used by
21 project managers in public works to plan, deliver
22 and close projects. So, what does this actually
23 mean in terms of the practical implications of it?
24 It means that this manual actually outlines the
25 project management process in a detailed how-to

1 scheduling, cost and quality assurance factors
2 and, finally, closing out the project. And this
3 includes a closing of the project phase, which
4 talks about financial summaries and council
5 reports, really just highlighting and summarizing
6 what the outcome of it given project would be.

7 Now, I mentioned that this
8 manual includes a project charter and we know that
9 Ms. Baker, in her report, really highlighted the
10 importance of having a project charter in place
11 for any project of any real magnitude and size,
12 similar to some of the things that we've heard
13 some evidence about in this inquiry.

14 And so, in her testimony,
15 Ms. Baker confirmed that a project charter,
16 consistent with the one that we see in this
17 manual, is a key communication tool in dealing
18 with project management. It's a necessary
19 component of ensuring that there is a clear
20 facilitation and identification of roles and
21 responsibilities for all of the different people
22 that are involved, but also more than that really
23 the completion of the various tasks that are at
24 hand for each of those people. The idea is to
25 make sure that we don't end up in a situation

1 where different divisions and different groups are
2 working in silos without really having any
3 visibility into what's actually happening and each
4 different member of different divisions are
5 actually doing with respect to a given project.

6 And so, finally, the last
7 thing that I will be highlighting,
8 Mr. Commissioner, is the parkway management
9 committee. And you heard evidence as a part of
10 this inquiry from Mr. McKinnon that this type of
11 committee, and it was initially named the parkway
12 coordination committee, it wasn't formalized in
13 the way that we're about to talk about today, but
14 it really was initially some version of this
15 initiated back in 2017.

16 And Mr. McKinnon gave some
17 evidence about the nature and evolution and the
18 impetus of having this type of committee in place,
19 really designed to ensure that any important City
20 infrastructure, such as the parkway, involving,
21 again, so many different divisions that do
22 different things with respect to its maintenance
23 and operation, are all, sort of, getting together
24 and have some level of visibility into what's
25 going on to make sure that effectively nothing

1 to be a constant need for adapting, evolving and
2 improving. And so, the policy and procedures that
3 we're talking about, the enhancements that have
4 been made, really reflect the City's commitment to
5 continuous quality improvement and the integration
6 of some of these best practices to achieve the
7 ultimate vision and mission that the City has.

8 And so, with that, if you
9 don't have any more questions for me, if you do,
10 I'm happy to answer them, if you don't, I'm happy
11 to turn it over back to my colleagues because I
12 know you had some follow-up questions.

13 JUSTICE WILTON-SIEGEL: I have
14 one question for you, Ms. Talebi.

15 MS. TALEBI: Sure.

16 JUSTICE WILTON-SIEGEL: Going
17 a little beyond the ones that you've described,
18 there was reference to the chief roads officer and
19 some uncertainty as to where that was headed. At
20 the risk of asking you to give some evidence, is
21 there any update from the City as to what they're
22 planning on that score?

23 MS. TALEBI: So, I want to be
24 careful about what I say because I obviously want
25 to be able to confirm that with the City. From

1 what I understand, they were reviewing that and
2 there was a possibility of merging that role, and
3 I think that they -- just give me one moment here.
4 I'm just going to pull this up. In Ms. Smith's
5 affidavit I think specifically, when we discussed
6 that, we talk about a possibility of merging that
7 role with one of the other roles that already --

8 JUSTICE WILTON-SIEGEL: The
9 director of transportation?

10 MS. TALEBI: With the director
11 of transportation, that's the one. And so, I
12 don't have any further updates on that, but I know
13 that that's likely going to be what's being
14 assessed and evaluated and the direction that
15 they're going and just because of the temporary
16 nature of that particular role when it was first,
17 sort of, conceived.

18 With that said, the idea isn't
19 necessarily to, sort of, let go of the tasks and
20 responsibilities that have been highlighted with
21 respect to that position, but really about how to
22 absorb some of those things under some of these
23 other positions and just have one person
24 effectively deal with those issues.

25 JUSTICE WILTON-SIEGEL: And

1 just perhaps for my own interest as much as
2 anything, but that was a director -- the chief
3 road officer was at a director level?

4 MS. TALEBI: That's correct.
5 That is what it was at the time.

6 JUSTICE WILTON-SIEGEL: And
7 the director of transportation, operations and
8 maintenance is obviously a director?

9 MS. TALEBI: It is a director.
10 That's right. So, the chief, obviously that
11 particular role in itself was a specific role
12 carved out, but it was at that leadership
13 directorial, sort of, level, if that's helpful. I
14 don't know if that's answering the question,
15 but --

16 JUSTICE WILTON-SIEGEL: So,
17 now one director is going to perform both roles?
18 Is that --

19 MS. TALEBI: So, that's what's
20 being looked into, so I don't want to say that
21 that decision has already been made, but the idea
22 is exactly that, merging that role into another
23 directorial role that already exists.

24 JUSTICE WILTON-SIEGEL: Okay.
25 Thank you. That's the one question I had that

1 remained.

2 MS. TALEBI: Okay. Great.

3 Thank you so much. So, with that, I'm just going
4 to pass this over to Mr. Lederman. Just give me
5 one moment here while we switch over.

6 JUSTICE WILTON-SIEGEL: Okay.

7 MR. LEDERMAN:

8 Mr. Commissioner, I just wanted to address that
9 question you had asked earlier to jurisdiction
10 that has been raised by the MTO.

11 JUSTICE WILTON-SIEGEL:

12 Jurisdiction, yes.

13 MR. LEDERMAN: It's the
14 position of the City that, looking at the MTO's
15 submission, the MTO at paragraph 190 of their
16 written submissions, says that Ontario
17 acknowledges that the terms of reference task the
18 Commissioner with making factual findings about
19 the friction standards in place in Ontario during
20 the relevant periods and whether they were
21 publicly available.

22 And then this seems to be
23 where MTO takes issue with your jurisdiction. It
24 says:

25 "However, any at large

1 analyses of Ontario's
2 policies, procedures or
3 guidelines would be
4 beyond the scope of the
5 inquiry, as would
6 remedial recommendations
7 concerning general
8 provincial matters."

9 And they provide an example,
10 the implementation of a province-wide FN
11 threshold. And then it goes on to talk about how
12 evidence has not been introduced about how
13 Ontario's policies, practices and guidelines apply
14 province wide or how and why they may be
15 appropriate given the various makeup of the
16 province.

17 So, I just wanted to address
18 that, Mr. Commissioner, in light of your question.
19 You obviously do have jurisdiction to answer the
20 questions that have been framed in the terms of
21 reference. The terms of reference do specifically
22 refer to and ask for you to consider the role of
23 friction standards in the province and about the
24 MTO friction testing that was performed.

25 Although I'm mindful that,

1 obviously, that an inquiry can't go beyond the
2 jurisdiction of the municipality or the affairs of
3 the municipality, in this case, you've heard a
4 great deal of evidence about the uncertainty
5 around the use of FN30 and the lack of a friction
6 standard in Ontario or in this country for that
7 matter.

8 And so, in that context, it's
9 the position of the City that you would and do
10 indeed have jurisdiction to consider, certainly
11 insofar as the MTO, how they have certain policies
12 or procedures or what friction standards they may
13 apply. In our view, that is something that is
14 within your jurisdiction and can address in this
15 inquiry.

16 JUSTICE WILTON-SIEGEL: Are
17 you urging the City to make such -- sorry, the
18 inquiry to make such a finding?

19 MR. LEDERMAN: No, nothing
20 beyond what the terms of reference provide. And
21 so, I'm simply saying that to the extent you need
22 to consider or address Ontario policies as a way
23 of answering the questions, then in my view, that
24 is something that you are permitted to address and
25 have jurisdiction to do so. But I'm not asking you

1 to and don't think that and I'm not suggesting
2 that your jurisdiction goes beyond what you need
3 to do to consider how best to answer the specific
4 terms of reference that have been identified in
5 this inquiry.

6 JUSTICE WILTON-SIEGEL: Well,
7 just as a for instance, then, do you think I have
8 the jurisdiction to recommend implementation of a
9 province-wide FN threshold, if I thought that was
10 appropriate?

11 MR. LEDERMAN: I don't see why
12 you would be precluded from making that
13 recommendation if you thought that was a
14 recommendation that naturally flows from your
15 consideration of the existing terms of reference.

16 JUSTICE WILTON-SIEGEL: Can I
17 draw a distinction, which may be a distinction
18 without a difference, and draw a distinction
19 between recommending a threshold for municipal
20 expressways as opposed to a threshold for
21 province-wide application, for the provincial
22 roads as well as for municipal roads?

23 MR. LEDERMAN: Sorry, are you
24 asking whether --

25 JUSTICE WILTON-SIEGEL: Is

1 there a distinction to be drawn there between a
2 recommendation with respect to a threshold that
3 would apply only to municipal roads as opposed to
4 a recommendation that would apply to municipal
5 plus provincial roads?

6 MR. LEDERMAN: To me, there
7 would seem to be a degree of arbitrariness, I
8 would think, to have a recommended friction
9 standard for a municipal road that is comparable
10 to a provincial road. And so, I think that, to my
11 mind, would be some difficulty associated with
12 making a recommendation that was limited to
13 municipal roads, given the evidence that this
14 inquiry has heard with respect to the similarity
15 of particularly the Red Hill to other 400-series
16 highways.

17 JUSTICE WILTON-SIEGEL: Okay.
18 Anything further?

19 MR. LEDERMAN: Nothing from
20 us. Thank you, Mr. Commissioner. Those are the
21 City's oral closing submissions.

22 JUSTICE WILTON-SIEGEL: Okay.
23 Thank you very much.

24 MR. LEDERMAN: Thank you.

25 JUSTICE WILTON-SIEGEL: I

1 think we're going to hear from Mr. Buck next. Is
2 that correct?

3 MS. MCALEER: Good afternoon,
4 Mr. Commissioner. It's actually Jennifer McAleer.
5 I'm aware of the time. It's 4 o'clock. We
6 estimated we would be 20 to 30 minutes, which is
7 still accurate. I'm assuming, sir, that you would
8 like me to proceed?

9 JUSTICE WILTON-SIEGEL: That
10 would be my preference, yes.

11 CLOSING SUBMISSIONS BY MS. MCALEER:

12 Okay. That's fine. So, as
13 you know, my name is Jennifer McAleer and,
14 together with my colleague, Rachel Laurion, we are
15 external legal counsel to Dufferin Construction
16 Company. We are joined also by Chris Buck, senior
17 legal counsel at Dufferin.

18 I would like to start by
19 stating that Dufferin recognizes that public
20 inquiries are unique proceedings that examine
21 issues of significant public importance and we
22 value the opportunity to participate in this
23 inquiry.

24 As you know, Mr. Commissioner,
25 the terms of reference set out 24 questions which

1 form the subject matter and scope of the inquiry.
2 Dufferin's interests, however, and concurrent
3 ability to assist the work of the Commission is
4 much more limited than that of other participants,
5 and accordingly we have only participated in
6 certain aspects of the inquiry. Our involvement
7 is really limited to the examination of the facts
8 surrounding the construction of the Red Hill
9 Valley Parkway in 2006 and 2007 and, in
10 particular, the aspects of the inquiry that relate
11 to the selection of the aggregate for and the
12 paving of the Red Hill Valley Parkway.

13 Now, I'll just briefly address
14 the evidence. As you're aware, sir, Dufferin
15 produced over 2,500 records to the Commission.
16 After conducting interviews of several Dufferin
17 past and current employees, the commission counsel
18 called three witnesses, who had each been employed
19 at one point by Dufferin and who had worked on the
20 Red Hill. Those witnesses, as you know, were
21 Peter Gamble, Dave Hainer and Paul Janicas. We
22 submit that each of these witnesses testified in a
23 forthright manner and did his best to recall facts
24 from many years ago, and we've made further
25 submissions in that regard in our written

1 materials to you.

2 Let me move on then to address
3 Dufferin's involvement in the project. Dufferin
4 was awarded the contract for paving of the
5 mainline in July of 2006 and the actual paving of
6 the Red Hill Valley Parkway took place, as you
7 know, from August 1 to 13 of 2007, so less than
8 two weeks. Now, the mainline paving contract that
9 was awarded to Dufferin was strictly for the
10 paving of the Red Hill Valley Parkway. Dufferin
11 did not design the parkway and Dufferin did not
12 establish the specifications of the SMA mix
13 design. Those paving specifications were
14 determined by others and they were set out in the
15 tender.

16 Now, as you've heard, the
17 mainline paving contract did not require Dufferin
18 to use aggregate from the Ministry of
19 Transportation's designated sources for materials.
20 It was not a mandatory requirement of the OPSS
21 1003 or OPSS 1151 for the aggregates to be on the
22 DSM list, and, as such, Dufferin sought and
23 obtained approval to use an externally-sourced
24 crushed trap rock in the Superpave and SMA mixes
25 in respect of both the coarse and fine aggregates,

1 and it sought approval to use aggregates from the
2 Demix-Varenes quarry in Quebec.

3 Now, it's important to note
4 that Dr. Baaj, an expert retained by Golder,
5 explained that there would be no reason to reject
6 the Demix aggregates simply because they were not
7 on the DSM. And we submit, sir, there's no
8 evidence to support a conclusion that the
9 aggregates should have been rejected on that
10 basis. And from reviewing the submissions of the
11 parties, I don't see anyone suggesting that that
12 should in fact --

13 JUSTICE WILTON-SIEGEL: That's
14 right.

15 MS. MCALEER: Right. Rather,
16 the aggregates simply needed to be evaluated to
17 ensure it met the contract specifications, and
18 that was done in this case. The uncontested
19 evidence of Dr. Baaj was that the technical review
20 of the Demix aggregates was done properly. And,
21 as Golder has stated in its submissions, Dufferin
22 was obliged to supply aggregate that met the
23 contractual specifications and it did so by
24 submitting the testing data for the aggregate to
25 verify that the aggregate was compliant.

1 And as you've heard from
2 counsel for the City this morning, and as I expect
3 you'll hear from counsel for Golder tomorrow, the
4 evidence is clear that the Demix aggregates were
5 suitable and appropriate for application with the
6 SMA mix. The evidence concerning the aggregate
7 that was supplied by Demix is clear and I submit,
8 sir, it's uncontested. Again, we've set it out in
9 our written submissions, but you've heard
10 Dr. Uzarowski, the principal pavement and
11 materials engineer at Golder. He gave evidence
12 that the results from the testing of the aggregate
13 were, in his words, excellent, that the aggregate
14 obtained results that, again, in his words, you
15 rarely see and that it was a good quality
16 aggregate and that he was impressed by how good
17 the results were.

18 The Commission's own expert,
19 Dr. Gerardo Flintsch, he opined that the Demix
20 aggregates used in the SMA met the requirements at
21 the time, specifically with respect to the
22 requirements in 2007. And then, again, going back
23 to Golder's expert, Dr. Baaj, his evidence was
24 that the polished stone value of the Demix
25 aggregates was higher than the minimum

1 number required in Ontario and many other places
2 and that the Demix aggregates were good for
3 looking at skid resistance and when that may be
4 required or needed. He also testified that the
5 Micro-Deval abrasion tests confirm that the
6 aggregates had good resistance to abrasion and
7 attrition and that the PN number, that's the
8 petrographic number, confirmed that the Demix's
9 aggregates were of high quality.

10 So, our submission to you,
11 sir, is that the evidence is overwhelming that the
12 aggregate that was put forth by Dufferin and
13 approved by Golder was in fact appropriate for
14 this project and there's no evidence to the
15 contrary. Now, the uncontested evidence from the
16 Commission's expert, Dr. Flintsch, is also that
17 the mix design was appropriate and, again, there's
18 no evidence to suggest that it wasn't.

19 So, turning from the choice of
20 the aggregate and the mix design to the placing of
21 the pavement, again, you've heard that Dufferin
22 began paving on August 1, 2007 and concluded less
23 than two weeks later, on August 13.

24 Let me address the test strip,
25 because there was a lot of evidence and the

1 Dufferin witnesses testified about the test strip.
2 And while the initial test strip failed,
3 Dr. Uzarowski testified that it's not uncommon for
4 a test strip to fail. And he explained that the
5 objective of the test strip was to check whether
6 the contractor could produce the mix, place and
7 compact it and meet the requirements of the
8 specifications in the contract. He also testified
9 that Dufferin made the requisite adjustments while
10 paving Red Hill Valley Parkway to improve
11 compaction and to deal with the issues that were
12 identified from the test strip. In fact, he
13 testified that Dufferin made all of the required
14 adjustments to meet the specifications in the
15 mainline paving contract. And I'll simply point
16 out as well that Dufferin was paid without
17 reduction, pursuant to the terms of the mainline
18 paving contract.

19 You will also recall, sir,
20 that there were issues raised with respect to the
21 compaction, and that those issues were explored
22 thoroughly during the evidence. My caution to
23 you, sir, is that there is no evidence linking
24 compaction with friction. The uncontested
25 evidence of the Commission's expert Dr. Flintsch

1 was that neither low compaction nor over
2 compaction of the aggregates would have negatively
3 impacted the frictional qualities of the SMA
4 pavement. So, there's no connection between
5 compaction and friction.

6 Sorry, sir, did you --

7 JUSTICE WILTON-SIEGEL: No.

8 Go ahead.

9 MS. MCALEER: Okay. So, then
10 with respect to the performance of the aggregate
11 over time, this is one area where there is some
12 slight difference of opinion among the experts.
13 While Dr. Flintsch opined that a drop in friction
14 of 20 percent over the course of six years is a
15 significant drop, I believe he admitted that he
16 does not have experience with other aggregates in
17 Canada and, as a result, he could not comment on
18 whether the drop of 20 percent over the course of
19 six years was average or higher or lower than
20 average in the Canadian context.

21 Conversely, David Hein, the
22 expert retained by the City with expertise and
23 experience as a consulting engineer specializing
24 in pavement design and material engineering, had
25 extensive experience with aggregates in Ontario

1 Parkway. That link simply isn't established in
2 the evidence. And my understanding from my review
3 of the written submissions of the other
4 participants is that this is a position that's
5 shared by all.

6 So, sir, I told you I would be
7 brief. Those are my submissions. On behalf of
8 myself, Ms. Laurion and Mr. Buck, I thank you for
9 your time and attention and allowing Dufferin to
10 participate in these proceedings.

11 JUSTICE WILTON-SIEGEL: Okay.
12 Thank you very much. Thank you. I do not have
13 any questions for you. I thought your submissions
14 as written were thorough and addressed the issues
15 that had to be addressed.

16 Ms. Lawrence, I think that,
17 then, completes the day. Would that be correct?

18 MS. LAWRENCE: That is
19 correct.

20 JUSTICE WILTON-SIEGEL: And
21 so, the first submission tomorrow will be by
22 Golder?

23 MS. LAWRENCE: That's correct.

24 JUSTICE WILTON-SIEGEL: On
25 behalf of Golder, Ms. Roberts. So, then we will

1 stand adjourned until 9:30 tomorrow morning.

2 Thank you.

3 --- Whereupon the proceedings adjourned at

4 4:11 p.m. until Thursday, March 23, 2023 at

5 9:30 a.m.

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