

THE ALBERTA ENERGY REGULATOR

IN THE MATTER OF Application No. 432
to the Alberta Energy Regulator

AER PROCEEDING

VOLUME 3

Calgary, Alberta

March 7, 2024

1	TABLE OF CONTENTS		
2			
3	Description		Page
4	March 7, 2024	Morning Session	297
5	Opening Remarks		299
6	GREG FILIPCHUK, ARTHUR TORR, NIGEL TRIM,		301
7	JARET SPROTT, IAN BALFOUR, JEFF MAKHOLM,		
8	LAURA OLIVE, BRYAN ROMANESKY, ROBERT TELFORD,		
9	Affirmed		
10	Direct Evidence of Pembina/Plains/SECURE		301
11	Witness Panel		
12	G. Fitch Cross-examines Pembina/Plains/SECURE		339
13	Witness Panel		
14	Submissions by D. Naffin		396
15	Submissions by G. Fitch		397
16	Submissions by D. Naffin		398
17			
18	March 7, 2024	Afternoon Session	401
19	Ruling		402
20	GREG FILIPCHUK, ARTHUR TORR, NIGEL TRIM,		403
21	JARET SPROTT, IAN BALFOUR, JEFF MAKHOLM,		
22	LAURA OLIVE, BRYAN ROMANESKY, ROBERT TELFORD,		
23	Previously Affirmed		
24	G. Fitch Cross-examines Pembina/Plains/SECURE		404
25	Witness Panel		
26	Submissions by T. Myers		418

1	Submissions by G. Fitch	418
2	Submissions by T. Myers	419
3	Ruling	420
4	G. Fitch Cross-examines Pembina/Plains/SECURE	420
5	Witness Panel	
6	Discussion	427
7	G. Fitch Cross-examines Pembina/Plains/SECURE	432
8	Witness Panel	
9	A. Huxley Cross-examines Pembina/Plains/SECURE	499
10	Witness Panel	
11	The Panel Questions Pembina/Plains/SECURE	505
12	Witness Panel	
13	Certificate of Transcript	525
14		
15	EXHIBITS	
16		
17	Description	Page
18	EXHIBIT 88.01 - 2024-03-07 Qualico Aid to	369
19	Cross #10 - Pembina Interim Support Agreement	
20	for Meridian St 167 Ave. Crossing	
21	EXHIBIT 89.01 - 2024-03-07 Qualico Aid to	373
22	Cross #11 - Pembina Interim Support Agreement	
23	for Marquis Blvd Crossing	
24	EXHIBIT 90.01 - 2024-03-07 Qualico Aid to	392
25	Cross #1 - Letter dated Dec 1, 2023 to D. Naffin	
26	re Qualico IRs to Plains (Nos. 1 to 6)	

1	EXHIBIT 91.01 - 2024-03-07 Qualico Aid to	392
2	Cross #3 - Plains to Qualico re IRs (Jan 9 2024)	
3	EXHIBIT 92.01 - 2024-03-07 Qualico Aid to	392
4	Cross #2 - Letter dated Dec 1, 2023 to S. Munro	
5	re Qualico IRs to Pembina (Nos. 1 to 5)	
6	EXHIBIT 93.01 - 2024-03-07 Qualico Aid to	392
7	Cross #4 - Pembina to Qualico re IRs	
8	(Jan 9, 2024)	
9	EXHIBIT 94.01 - 2024-03-07 Qualico Aid	407
10	to Cross #5 - Pipeline Licence Amendment	
11	for Plains Midstream NPS 24 'CO' Pipeline	
12	EXHIBIT 95.01 - 2024-03-07 Qualico Aid to	422
13	Cross #6 - Pembina 2023 Annual Report	
14	EXHIBIT 96.01 - 2024-03-07 Qualico Aid to	422
15	Cross #7 - Plains Investor Presentation First	
16	Quarter 2024	

UNDERTAKINGS

20	Description	Page
21		
22	UNDERTAKING 1 - To provide the emergency	407
23	planning zone for the 24-inch rainbow pipeline	
24	that runs below the intersection of 167 Avenue	
25	and Meridian Street (Fulfilled at Page 498)	
26		

1 Proceedings taken at Govier Hall, Calgary, Alberta

2

3 March 7, 2024

Morning Session

4

5 P. Meysami

The Chair

6 H. Robinson

Hearing Commissioner

7 E. McNaughtan

Hearing Commissioner

8

9 D. Brezina

AER Counsel

10 A. Huxley

AER Counsel

11 E. Arruda

AER Staff

12 D. Grzyb

AER Staff

13 A. Stanislawski

AER Staff

14 F. Hamdan

AER Staff

15

16 G. Fitch

For Qualico Developments West Ltd.

17

18 E. Appelt

For the Developers Group

19

20 E. Dixon

For Brookfield Residential

21

Alberta Limited

22 M. Cherkawsky

For Brookfield Residential

23

Alberta Limited

24

25

26

1	D. Naffin	For Pembina Pipeline Corporation,
2		Plains Midstream Canada ULC,
3		and SECURE Energy Services
4	T. Myers	For Pembina Pipeline Corporation,
5		Plains Midstream Canada ULC,
6		and SECURE Energy Services
7	T. Machell	For Pembina Pipeline Corporation,
8		Plains Midstream Canada ULC,
9		and SECURE Energy Services
10		
11	S. Duncanson	For Keyera Corp.
12	J. Baker	For Keyera Corp.
13		
14	A. Porco, CSR(A)	Official Court Reporter
15	<hr/>	
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		

1 (PROCEEDINGS COMMENCED AT 9:00 AM)

2 Opening Remarks

3 THE CHAIR: Good morning, everyone.

4 Please be seated.

5 So for the ones who are new, welcome to
6 Govier Hall. And the ones of you who have been here,
7 welcome back.

8 If you have a difficult time hearing me, just wave
9 at me. And for the purpose of court reporting, please
10 speak softly -- or not softly. That's my job --
11 smoothly or slowly.

12 And just one reminder about the video cast. So
13 the proceeding is being live-streamed through a link on
14 AER's website. We do not keep a record of the video
15 cast, and the video is not an official transcript. The
16 court reporters will produce the only official
17 transcript of the hearing. So to anyone who is
18 watching online or in the room, we advise that the
19 recording or rebroadcasting of the hearing audio or
20 video is strictly prohibited and appreciate your
21 observance of this request.

22 Is there any preliminaries that the parties would
23 like to bring to our attention? Hearing none.

24 Okay. So today we have Pembina, Plains, and
25 SECURE.

26 And, Mr. Myers, you may proceed.

1 T. MYERS: Good morning, Madam Chair and
2 Panel Members. I'd like to start by thanking the AER
3 for accommodating our scheduling this week. It's my
4 pleasure to introduce the joint witness panel for
5 Pembina, Plains, and SECURE which I'll collectively
6 refer to as "the pipeline companies".

7 The members of the pipelines companies' witness
8 panel are as follows -- and I'll start closest to the
9 Panel -- Mr. Greg Filipchuk, vice president waste
10 management facilities, industrial landfills, and
11 pipeline operations with SECURE; Mr. Arthur Torr,
12 manager capital projects with Plains; Mr. Nigel Trim,
13 vice president operations north region, also with
14 Plains; Mr. Jaret Sprott, senior vice president and
15 chief operating officer with Pembina; Mr. Ian Balfour,
16 vice president NGL business unit, also with Pembina.

17 And then moving to the back row, Mr. Bryan
18 Romanesky, chief executive officer with CITYTREND.
19 Next to him is Robert Telford, president with Telford
20 Land & Valuation. Seated next to him is
21 Dr. Laura Olive, director with national economic
22 research associates or NERA; and, final ly, Jeff
23 Makholm, senior managing director with NERA.

24 The CVs for Mr. Sprott, Mr. Balfour, Mr. Torr,
25 Mr. Trim, and Mr. Filipchuk are each located at Tab 1
26 of the pipeline companies' written submission which is

1 Exhibit 71.02.

2 The CVs for Dr. Makholm and Dr. Olive are attached
3 to their expert report, which is located at Tab 2 of
4 the pipeline companies' written submission, which is
5 Exhibit 71.03.

6 The CVs for Mr. Romanesky and Mr. Telford are
7 located at PDF pages 312 to 315 and 322 to 323,
8 respectively, of Exhibit 6.01.

9 At this time, I might ask Madam Court Reporter to
10 swear or affirm the witnesses as they indicate.

11 GREG FILIPCHUK, ARTHUR TORR, NIGEL TRIM, JARET SPROTT,
12 IAN BALFOUR, JEFF MAKHOLM, LAURA OLIVE, BRYAN
13 ROMANESKY, ROBERT TELFORD, Affirmed

14 T. MYERS: Thank you, Madam Court
15 Reporter.

16 Madam Chair, I'll now ask each member of the
17 pipeline companies' witness panel to provide a brief
18 description of their background, position, and role
19 with respect to the subject matter of this proceeding.
20 Direct Evidence of Pembina/Plains/SECURE Witness Panel

21 Q T. MYERS: Mr. Balfour, I'm going to
22 start with you.

23 Can you please describe your background, position,
24 and role with respect to this proceeding.

25 A I. BALFOUR: Good morning. My name is
26 Ian Balfour. I'm the vice president of the NGL

1 business unit at Pembina. I've been with Pembina since
2 2010. I'm here today to speak to -- about Pembina
3 policy and approach and pipeline operations.

4 Q Thank you, sir.

5 Mr. Sprott, can you please describe your
6 background, position, and role with respect to this
7 proceeding.

8 A J. SPOTT: Good morning. My name is
9 Jaret Sprott, senior vice president and chief operating
10 officer at Pembina Pipeline group. I've been in the
11 oil and gas industry in Alberta for roughly 25 years.
12 I'm a petroleum engineer by trade, and I'm a member of
13 APEGA.

14 My role here today will be to talk about general
15 energy industry in -- in Alberta and policies and
16 general pipeline operations at Pembina Pipeline
17 Corporation. Thank you.

18 Q Thank you, sir.

19 And, Mr. Trim, can you please describe your
20 background, position, and role with respect to this
21 proceeding.

22 A N. TRIM: Yes, good morning. My name is
23 Nigel Trim. I'm the vice president of operations for
24 the North Region with Plains Midstream Canada. I've
25 worked in the industrial industry for approximately 23
26 years. About 15 of those years have been operating and

1 maintaining pipeline assets in BC and Alberta.

2 I'm responsible for all the operation and
3 maintenance activities for Plains Midstream Canada's
4 pipelines in Alberta. My education is bachelor of
5 arts, major in political science, and I have a
6 certificate in power engineering.

7 I'm here today to speak to the Board regarding
8 Plains Midstream Canada's policies, programs, and
9 practices related to operation and maintenance
10 activities of our pipelines in Alberta.

11 Q Thank you, Mr. Trim.

12 Mr. Torr, can you please describe your background,
13 position, and role with respect to this proceeding.

14 A A. TORR: Good morning. My name is
15 Arthur Torr. I'm a manager of Capital Projects with
16 Plains. I've been with Plains since 2016. I'm a
17 mechanical engineer by trade and registered with APEGA.
18 I've been in the industry for 20 years in various
19 roles. I currently oversee a group of project managers
20 who are responsible for the execution of a portfolio of
21 capital and maintenance projects for Plains. Since
22 2021, my portfolio has also included cost-reimbursable
23 projects associated the third-party crossings such as
24 the ones in discussion. Thank you.

25 Q Thank you, sir.

26 And to round out the front row, Mr. Filipchuk, can

1 you please describe your background, position, and role
2 with respect to this proceeding.

3 A G. FILIPCHUK: Good morning. My educational
4 background is in business administration, and I've been
5 in the oil and gas industry for over 20 years. In my
6 20-plus years in the oil and gas industry, I have
7 experience in land acquisition, stakeholder engagement,
8 emergency preparedness and response, pipeline and
9 facility operations, and related technical services
10 such as engineering, construction, damage prevention,
11 and asset integrity of pipelines.

12 As previously mentioned, I'm the vice president of
13 waste management facilities, industrial landfills, and
14 pipeline operations for SECURE Energy Services. I have
15 oversight of all waste processing recover -- recovery,
16 recycling, and disposal of waste streams for SECURE's
17 waste processing facilities as long as -- as well as
18 pipeline and facility operations within our energy
19 infrastructure business segment.

20 My role today as SECURE is a AER licence holder
21 for our water disposal pipelines and oil pipelines, and
22 I'm here to speak to SECURE policy and operations.
23 Additionally, as an organization, SECURE processes
24 hundreds of crossing agreements on an annual basis as
25 normal course of business. Thank you.

26 Q Thank you, Mr. Filipchuk.

1 T. MYERS: Madam Chair, cognizant of the
2 Panel's direction that we won't be formally qualifying
3 experts in this proceeding, I'd still propose to
4 outline the areas in which the pipeline companies are
5 putting Dr. Makholm, Dr. Olive, Mr. Romanesky, and
6 Mr. Telford forward as experts in this proceeding.

7 Dr. Makholm is being put forward as an expert in
8 the areas of public interest assessment and energy
9 economics. And the same goes for Dr. Olive.

10 Mr. Telford is being put forward as an expert in
11 the area of surface rights acquisition and
12 compensation, crossing agreements, and real estate
13 appraisal and valuation.

14 Mr. Romanesky is being put forward as an expert in
15 the areas of land use planning and pipeline routing
16 considerations.

17 With that overview, in addition to describing
18 their role on the witness panel, I'll ask each of these
19 experts to provide a brief summary of their
20 qualifications and experience in the areas that I --
21 that I just outlined.

22 Q T. MYERS: So, Dr. Makholm, starting with
23 you, can you please summarize your relevant
24 qualifications and expertise as it relates to the areas
25 of public interest assessment and energy economics.

26 A Yes. Greetings, Commissioners. My name is Jeff

1 Makholm. I am a senior managing director with NERA.
2 NERA is the oldest and largest firm of consulting
3 economists in the world. I've been with NERA since
4 1984. I list a number of the last two dozen
5 appearances that I have made in Canada, including in
6 Alberta, including the last time in Calgary about a
7 year ago when I was retained by the AUC as an
8 independent expert with my own counsel reporting to
9 no one dealing with issues on incentive regulation.
10 That was about a year ago, my last appearance in
11 Calgary.

12 I have a PhD in economics from the University of
13 Wisconsin at Madison. I publish widely on matters
14 related to public interest, social control of regulated
15 industries, and, particularly, pipelines. My latest
16 monograph, my latest book, entitled The Political
17 Economy of Pipelines, published by The University of
18 Chicago Press, is the only scholarly treatment of
19 pipeline economics as such among the -- the scholarly
20 academic community in, perhaps, the last 40 years.
21 That's it. Thank you.

22 Q Thank you, sir.

23 And, Dr. Olive, can you please summarize your
24 relevant qualifications and expertise as it relates to
25 the areas of public interest assessment and energy
26 economics.

1 A L. OLIVE: Yes. Good morning. My name
2 is Laura Olive. I'm a director at NERA, and I've
3 worked in the energy practice at NERA for the last
4 ten years. I hold a PhD in economics from Northeastern
5 University in Boston, where my graduate work focused on
6 the economics of regulated industries, like energy --
7 energy and transport.

8 I've been engaged in a variety of regulatory
9 matters involving the economics of energy markets and
10 oil and gas pipelines in North America. I've been
11 accepted as an expert by federal courts and regulators,
12 and my last appearance in Alberta was before the AUC in
13 support of an application by the Alberta Electric
14 System Operator, the AESO -- AESO.

15 Public interest arises often as an issue in energy
16 markets when regulators evaluate the public interest
17 related to the applications before them according to
18 their legislated mandate. For example, I have
19 considered the issue of public interest as it relates
20 to reasonable pipeline tolls in Canada, appropriate
21 damages for an alleged trespass of Enbridge Line 5 in
22 Wisconsin, and the expansion and continued operation of
23 the Dakota Access Pipeline.

24 I'm here today as a co-author of the NERA report,
25 in which we respond to the issues raised by
26 Mr. Morrison. Thank you.

1 Q Thank you, Dr. Olive.

2 Dr. Makholm and Dr. Olive, are you both willing
3 and able to fulfill the duty of an independent expert
4 by providing fair, objective, and nonpartisan evidence
5 in this proceedings?

6 A L. OLIVE: Yes.

7 A J. MAKHOLM: Yes.

8 Q Thank you.

9 Mr. Romanesky, I'm going to move over to you. Can
10 you please summarize your relevant qualifications and
11 expertise as it relates to the areas of land-use
12 planning and related pipeline routing considerations.

13 A B. ROMANESKY: Yes. My name is
14 Bryan Romanesky. I have a degree in urban planning
15 from the University of Québec in Montréal and have
16 specialized in urban design at the School of
17 Architecture of Saint-Etienne in France. I graduated
18 in 1996 and have been practicing since that time.

19 The first part of my career was in the public
20 sector. My first role was for the City of
21 Drummondville where I worked as an urban planner
22 developing policies and land-use bylaw for the City of
23 Drummondville and then started in the current planning
24 side of my role, providing approvals for rezoning,
25 subdivision, and also managing decisions made by the
26 planning board.

1 I moved to Alberta in 1999 where I started working
2 with the City of Calgary as an urban planner. My role
3 at the City of Calgary was as a development officer, so
4 I reviewed development permits, land-use redesignation
5 and planning application and provided decisions on the
6 applications and development in the city of Calgary.

7 I then moved in the private sector. I started in
8 the private sector with Brown & Associates, B&A, which
9 is a large planning firm here in Calgary. I played a
10 very similar role assisting landowners and developers
11 and builders in obtaining approvals. So I worked on
12 residential -- residential design and conceptual scheme
13 land-use amendments, development permits; the whole
14 spectrum of planning approval required for development
15 to occur.

16 I then started my practice in 2007, and I have
17 been practicing with CITYTREND since. My role at the
18 company is to do very similar work, so I did some
19 policy work, municipal development plans, area
20 structure plans, sustainable plans, and so on; and also
21 focused on a lot of current plannings or approvals and
22 redevelopment in the inner city, and -- and I've been
23 practicing since.

24 I've been accepted by this Board, the AER, as an
25 expert witness and also its predecessor, the ERCB.
26 I've been accepted as an expert by the AUC, the LPRT,

1 Court of King's Bench, the municipal governing board,
2 and I've also appeared on numerous subdivision and
3 development appeal board.

4 For this hearing I've prepared an initial report
5 and a reply report. My comments are a response and in
6 consideration to the comments that were made in their
7 submission, especially made by Mr. Morrison.

8 Q Thank you, sir.

9 And are you willing and able to fulfill the duty
10 of an independent expert by providing fair, objective,
11 and nonpartisan evidence in this proceeding?

12 A Yes, I am.

13 Q Thank you.

14 And, finally, Mr. Telford, can you please
15 summarize your relevant qualifications and expertise as
16 it relates to the areas of surface rights acquisition
17 and compensation, crossing agreements, and real estate
18 appraisal and valuation.

19 A R. TELFORD: Good morning. My name is Rob
20 Telford. I have a number of consulting companies that
21 I've been involved with since 1965. Our companies were
22 started back then, and we were involved in all aspects
23 of appraisal, real estate land services, including
24 planning, routing, and acquisition, and regulatory
25 compliance, property rights for numerous dispositions,
26 many of which are linear in nature.

1 Our clients include individuals, corporations,
2 nonprofit organizations, First Nations, and municipal,
3 provincial, and federal governments.

4 My qualifications include more than 35 years of
5 experience in this area. My education and background
6 is I have a science degree from the University of
7 Alberta, a appraisal designation from the Appraisal
8 Institute of Canada, and an international appraisal
9 designation from the Royal Institute of Chartered
10 Surveyors, a senior designation for the International
11 Right of Way that deals specifically with linear
12 dispositions, a professional designation from the
13 Canadian association of land agents -- or landmen. I
14 am a licensed land agent and real estate broker for the
15 Province of Alberta.

16 I have appeared as an expert in a number of
17 tribunals, boards, and courts, some of which include
18 the Municipal Government Board; the surface rights
19 boards of Alberta, BC and Saskatchewan, Manitoba; Land
20 and Property Rights Tribunal; Métis Settlement Appeal
21 Tribunal, the Alberta energy and utilities, the AUC; as
22 well as the AER and its predecessors, Natural Resources
23 Conservation Board, Nova Scotia Utility Review Board,
24 and Court of King's Bench in both Alberta and
25 Saskatchewan.

26 I've given evidence in the areas of property

1 valuation, adverse effect, loss of use, nuisance,
2 inconvenience, right-of-way easement valuations and
3 routing of linear properties above and belowground,
4 value of partial acquisitions and registered interests,
5 surface rights compensation, planning and development
6 issues, property assessments, industrial and
7 environmental impacts, surface contract evaluation, and
8 injurious affection.

9 We were retained to prepare an -- initial and
10 reply reports which consider and respond to various
11 statements made by -- regarding land and valuation
12 process relative to subject pipelines as well as real
13 estate and public interest matters contained in the
14 evidence of Mr. Morrison.

15 Q Thank you, Mr. Telford.

16 And similar to your colleagues on the panel, are
17 you willing and able to fulfill the duty of an
18 independent expert by providing fair, objective, and
19 nonpartisan evidence in this proceeding?

20 A Yes, I am.

21 Q Thank you, sir.

22 T. MYERS: So, Madam Chair, if you'll
23 bear with me, I'm going to run through the evidence of
24 the pipeline companies in this proceeding before I ask
25 the witnesses to adopt that evidence.

26 The pipeline companies' written evidence in this

1 proceeding consists of the following: Pembina's
2 request dated December 9th, 2022, for the AER to
3 reconsider its decision to convene the current
4 reconsideration proceeding which is located at PDF
5 pages 218 to 242 of Exhibit 6.01; Plains' request of
6 the same date for the AER to reconsider its decision to
7 convene the current reconsideration proceeding which is
8 located at PDF pages 243 to 263 of Exhibit 6.01;
9 Pembina's February 14th, 2023, submission and
10 attachments provided in response to the Panel's notice
11 of reconsideration which is located at PDF pages 299 to
12 348 of Exhibit 6.01; Plains' submission and attachments
13 of the same date provided in response to the Panel's
14 notice of reconsideration which is located at PDF pages
15 349 to 415 of Exhibit 6.01; Pembina's and Plains' reply
16 submissions in respect of the notice of reconsideration
17 dated March 3rd, 2023, and located at PDF pages 423 to
18 425 of Exhibit 6.01; SECURE's request to participate
19 dated August 9th, 2023, and marked as Exhibit 21.01;
20 SECURE's statement of concern also dated August 9th,
21 2023, and marked as Exhibit 21.02; Plains' and
22 Pembina's letters confirming their intent to
23 participate in this proceeding dated August 10th of
24 2023 and marked as Exhibits 22.01 and 23.01,
25 respectively, and, finally, the pipeline companies'
26 joint written submission and attachments dated

1 January 4th -- 24th, 2024, and marked as Exhibits 71.01
2 through 71.05.

3 Q T. MYERS: Mr. Sprott, as these materials
4 relate to Pembina, have you either reviewed them, or
5 were these materials prepared by you or under your
6 direction?

7 A J. SPROTT: Yes.

8 Q And are there any corrections that you'd like to make
9 at this time?

10 A No.

11 Q Are these materials accurate to the best of your
12 knowledge and belief?

13 A Yes, they are.

14 Q And do you adopt these materials as the written
15 evidence of Pembina in this proceeding?

16 A Yes.

17 Q Thank you, sir.

18 Mr. Trim, as these materials relate to Plains,
19 have you either reviewed them, or were these materials
20 prepared by you or under your direction?

21 A N. TRIM: Yes.

22 Q And do you have any corrections that you'd like to make
23 at this time?

24 A No.

25 Q Are these materials accurate to the best of your
26 knowledge and belief?

1 A Yes.

2 Q And do you adopt these materials as the written
3 evidence of Plains in this proceeding?

4 A Yes, I do.

5 Q And, lastly, Mr. Filipchuk, were these materials as
6 they relate to SECURE prepared by you or under your
7 direction?

8 A G. FILIPCHUK: Yes.

9 Q Are there any corrections that you'd like to make at
10 this time?

11 A No.

12 Q Are these materials accurate to the best of your
13 knowledge and belief?

14 A Yes.

15 Q And do you adopt these materials as the written
16 evidence of SECURE in this proceeding?

17 A Yes.

18 Q Thank you.

19 Dr. Makholm and Dr. Olive, the written evidence of
20 NERA in this proceeding consists of the NERA report
21 dated January 24th, 2024, and marked as Exhibit 71.03.
22 I'll ask you both to respond. Was this report prepared
23 by you or under your direction?

24 A L. OLIVE: Yes.

25 A J. MAKHOLM: Yes.

26 Q And are there any corrections that you'd like to make

1 at this time?

2 A L. OLIVE: No.

3 A J. MAKHOLM: No.

4 Q Is the NERA report accurate to the best of your
5 knowledge and belief?

6 A L. OLIVE: Yes.

7 A J. MAKHOLM: Yes.

8 Q And do you adopt the NERA report as your evidence in
9 this proceeding?

10 A L. OLIVE: Yes.

11 A J. MAKHOLM: Yes.

12 Q Mr. Romanesky, the written evidence of CITYTREND in
13 this proceeding consists of your initial report which
14 is attached as Tab 2 to Pembina's and Plains'
15 submissions dated February 14th, 2023. Those documents
16 are located at PDF pages 317 to 323 and 368 to 374 of
17 Exhibit 6.01 and your reply report which is marked as
18 Exhibit 71.05. Were these materials prepared by you or
19 under your direction?

20 A B. ROMANESKY: Yes.

21 Q Are there any corrections that you'd like to make at
22 this time?

23 A No.

24 Q Are these materials accurate to the best of your
25 knowledge and belief?

26 A Yes.

1 Q And do you adopt these materials as your evidence in
2 this proceeding?

3 A Yes.

4 Q And, finally, Mr. Telford, the written evidence of
5 Telford Land & Valuation consists of your initial
6 report which is attached as Tab 1 to Pembina and
7 Plains' submissions dated February 14th, 2023. That's
8 PDF pages 308 to 315 and 359 to 366 of Exhibit 6.01 and
9 your reply report marked as Exhibit 71.04. Were these
10 materials prepared by you or under your direction?

11 A R. TELFORD: Yes.

12 Q Are there any corrections that you'd like to make at
13 this time?

14 A No, there are not.

15 Q Are these materials accurate to the best of your
16 knowledge and belief?

17 A Yes, they are.

18 Q And do you adopt these materials as your evidence in
19 this proceeding?

20 A Yes, I do.

21 Q Thank you.

22 Mr. Sprott, I understand that you've prepared a
23 brief opening statement on behalf of Pembina. I'd ask
24 you to go ahead and deliver those remarks now.

25 A J. SPROTT: Good morning, Madam --

26 Madam Chair and Panel Members.

1 I am pleased to be here today, along with my
2 colleague Mr. Balfour, on behalf of Pembina Pipeline
3 Corporation to provide our views on why the AER should
4 not grant Qualico's cost sharing application. If
5 granted, these cost sharing orders would represent a
6 significant departure from the long-standing industry
7 practices in Alberta.

8 Pembina's headquartered in Calgary, Alberta, and
9 owns and operates a significant network of liquid
10 hydrocarbon and natural gas pipelines in Alberta and
11 across North America. Pembina also owns and operates a
12 large number of gas gathering and processing facilities
13 and offers a variety of other services within the
14 broader oil and gas industry such as terminalling,
15 logistics and marketing.

16 The widely accepted practice across various
17 industries, including the pipeline industry, is that
18 the second-in-time party or the party who was carrying
19 out new development across an existing pipeline is
20 responsible for the costs of the alteration work.

21 This makes sense. Without a new development
22 occurring across an existing pipeline, there would be
23 no need for alteration work. In this case, Qualico's
24 development alone has created the need for the
25 alteration work. It is responsible to expect --
26 reasonable to expect that Qualico would pay for the

1 costs of this work.

2 As the licensee of this pipeline and the party
3 ultimately responsible for its safe operation, it is
4 also reasonable for Pembina alone to determine the
5 scope of the work that is necessary to satisfy AER
6 requirements and other technical standards such as
7 CSA Z662.

8 While a residential property developer such as
9 Qualico may have expertise in certain areas, Pembina
10 does not rely on input from third parties like Qualico
11 when it comes to complying with applicable technical
12 and regulatory requirements or when it comes to safely
13 operating pipelines.

14 Pembina has established processes for addressing
15 the needs of third parties who wish to carry out
16 further development across an existing pipeline.
17 Pembina regularly cooperates with developers such as
18 Qualico in planning and executing pipeline alteration
19 work; however, this is always done with the
20 understanding that the developer is fully responsible
21 for the associated cost of alteration work necessary to
22 facilitate their crossing.

23 Qualico is an outlier in that it does not want to
24 take full responsibility for the costs associated with
25 their activities despite being the reason the pipeline
26 alteration work is required.

1 Pembina opposes the cost-sharing orders requested
2 by Qualico. There is absolutely no need for the AER to
3 issue a direction for the alteration work where Pembina
4 is fully prepared to carry out the necessary work,
5 provided that Qualico agrees to pay for that work.

6 In contrast to the position taken by Qualico in
7 this proceeding, Pembina's -- Pembina's position is
8 that there is nothing unfair or unreasonable about the
9 established industry practice for pipeline crossings.

10 It is a two-way street. The second-in-time party
11 properly pays for the cost of the alteration work it is
12 causing. Pembina is frequently the second-in-time
13 party when it needs to cross other linear
14 infrastructure in the province. In those cases Pembina
15 pays for the cost of the alteration work because we are
16 the party causing the alteration work. In Pembina's
17 view, Qualico's application was not made in the public
18 interest or for reasons of fairness. It was made to
19 shift the cost it is required to pay under municipal
20 bylaws to Plains and Pembina.

21 Qualico's application is fundamentally flawed,
22 given that it has attempted to manufacture a dispute
23 around the need for alteration work to bring the
24 application within the scope of Section 33 of the
25 Pipeline Act. That is blatantly clear based on the
26 blackline version of Qualico's amended application

1 which shows that Qualico's original position was the
2 only dispute between the parties is respect to costs.
3 Pembina maintains that the only matter at issue between
4 the parties is who should pay for the alteration work.

5 Pembina's pipeline was approved and constructed
6 more than 50 years ago. It sits on lands which were
7 acquired through a legitimate process and for fair
8 market value. These lands were purchased by Qualico
9 with full knowledge of the presence of Pembina's
10 pipeline. There is no basis for the AER to interfere
11 with Pembina's right to operate its pipeline on lands
12 by approving Qualico's cost-sharing application.

13 If the requested cost-sharing orders are granted,
14 it would create a significant amount of -- of
15 uncertainty in the province. Because of the
16 well-established industry practice of "second-in-time",
17 who is responsible for alteration cost would be
18 unclear. An outcome like this would be unfair and
19 one-sided as it would result in a significant cost for
20 pipeline companies for the sole benefit of
21 for-profit -- for-profit enterprises like Qualico.
22 Pembina's position is that the AER was correct in
23 dismissing Qualico's cost-sharing application under
24 Section 33 of the Pipeline Act.

25 In conclusion, Pembina respectfully asks the Panel
26 confirm the AER's decision to deny Qualico's

1 cost-sharing application.

2 Mr. Balfour and I look forward to the opportunity
3 to elaborate on the positions I have just discussed and
4 respond to any questions the AER may have during this
5 hearing. Thank you.

6 Q Thank you, Mr. Sprott.

7 Mr. Trim, I understand that you've also prepared a
8 brief opening statement on behalf of Plains. I'd ask
9 you to go ahead and deliver those remarks now.

10 A N. TRIM: Good morning, Madam Chair and
11 Panel Members.

12 It is my pleasure to be here today, along with my
13 colleague Mr. Torr, on behalf of Plains to share our
14 views on why the cost-sharing orders requested by
15 Qualico are not appropriate and should not be granted
16 by the AER.

17 In general, Plains' position is that if these
18 cost-sharing orders are granted, they would introduce
19 significant uncertainty and inefficiencies to -- to
20 situations where development encroaches on existing
21 pipeline infrastructure, would violate Plains' surface
22 rights for its pipeline, and would represent a
23 significant departure from long-standing industry
24 practices in Alberta.

25 Plains Midstream Canada is headquartered in
26 Calgary and provides transportation, gathering,

1 marketing, storage, and terminalling services to a
2 variety of customers in the crude oil and liquified
3 petroleum gas business.

4 Plains owns and operates more than
5 5,000 kilometres of crude oil pipelines and over
6 3,000 kilometres of natural gas liquids pipelines.
7 Plains also owns and operates numerous highway trucks,
8 railcars, storage tanks, and other assets. Many of
9 Plains' pipelines interact with residential
10 neighbourhoods, commercial developments, highways, and
11 other private and public infrastructure in the
12 province.

13 I fully agree with the remarks just provided by
14 Mr. Sprott, and Plains has similar concerns with the
15 cost-sharing orders that Qualico has applied for.

16 Further to the comments made by Mr. Sprott, the
17 accepted practice in Alberta is for developers and
18 other second-in-time parties to cover the full cost of
19 pipeline alteration work that is required to
20 accommodate their projects.

21 Plains has a straightforward and transparent
22 process for third parties, such as Qualico, to submit
23 crossing requests that result in the need for pipeline
24 alteration work, such as when a road is constructed
25 across a pipeline. Plains does its best to address
26 these needs of the third parties in a fair and

1 efficient manner.

2 In the vast majority of cases, once the need for
3 alteration work has been identified, Plains provides
4 third parties with detailed information regarding
5 the -- excuse me -- regarding the required alteration
6 work and the associated costs, provided those third
7 parties agree to cover the cost of the pipeline
8 alteration work they are causing.

9 Plains' practice of allocating costs responsibly
10 in this manner is consistent across the -- several
11 other industries. This practice is also sound from a
12 risk allocation perspective, as the party seeking to
13 cross a pipeline has control over when the crossing
14 request is made and the type of crossing. The pipeline
15 company does not control these factors.

16 This practice was followed for the alteration work
17 that has already been carried out on Plains' pipeline
18 at the 172 Avenue crossing. For that crossing,
19 Marquis JV Limited has agreed to pay for this work
20 under a cost recovery agreement with Plains. There are
21 numerous other examples of this practice having been
22 followed in similar circumstances.

23 As I mentioned earlier, Plains owns and operates
24 thousands of kilometres of pipelines within the
25 province of Alberta. Given the unknown number of
26 locations where a development might occur across one of

1 Plains' pipelines, a shift in the way that costs are
2 allocated would introduce a considerable amount of
3 unpredictability to the costs associated with the
4 operation and maintenance of Plains' existing pipeline
5 network. If Plains has no knowledge of a potential
6 development before being approached by a third party,
7 Plains is unable to plan for the associated costs.
8 From this perspective, Qualico's cost-sharing
9 application would be extremely unfair to Plains.

10 In contrast, a developer such as Qualico is in a
11 much more advantageous position with respect to the
12 ability to plan for pipeline crossing work and the
13 associated costs. That is particularly the case here,
14 given that Qualico purchased the lands with full
15 knowledge of the presence of Plains' pipeline.

16 The Plains pipeline at issue in this proceeding
17 has been in place for more than 50 years. This
18 pipeline was approved by the Regulator as being in the
19 public interest and is located on lands acquired by
20 Plains' predecessor for fair market value. Plains has
21 a right to occupy these lands for the purpose of
22 operating its pipeline without an interruption.

23 Aside from the significant concerns that Plains
24 has with Qualico's cost-sharing application, Plains is
25 also of the view that cost-sharing orders are not
26 necessary in the present case because, one, Plains

1 takes no issues with the need for the pipeline
2 alteration work; two, an AER order directing work that
3 Plains is prepared to undertake is not necessary and
4 would not be in the public interest; and, finally, as I
5 just mentioned, one of the crossings of Plains'
6 pipeline that is included in Qualico's cost-sharing
7 application has already been completed, with Marquis
8 having agreed to pay for the costs of that work.

9 Plains' position is that the AER was correct in
10 initially refusing to accept Qualico's cost-sharing
11 application and, again, in dismissing the cost-sharing
12 application. Plains respectfully asks that the Panel
13 confirm the AER's decision to deny Qualico's
14 cost-sharing application in the first instance.

15 Mr. Torr and I look forward to the opportunity to
16 elaborate on the points I have just discussed and to
17 respond to any questions the AER may have during this
18 hearing.

19 Thank you.

20 Q Thank you, Mr. Trim.

21 And, finally, Mr. Filipchuk, I understand that
22 you've prepared a brief opening statement on behalf of
23 SECURE, so I'd ask you to go ahead and deliver that
24 now.

25 A G. FILIPCHUK: Thank you.

26 Good morning, Madam Chair and Panel Members. I'm

1 pleased to be here today on behalf of SECURE to present
2 our case on why Qualico's requested cost-sharing orders
3 are not appropriate and should not be granted by the
4 AER.

5 SECURE supports the positions advanced by both
6 Pembina and Plains and shares the same concerns with
7 respect to cost-sharing orders that Qualico has applied
8 for.

9 SECURE is a leading waste management and energy
10 infrastructure company headquartered in Calgary and has
11 an extensive network of assets comprised of waste
12 processing and transfer facilities, industrial
13 landfills, metals recycling facilities, crude oil and
14 water gathering pipelines, crude oil terminals and
15 storage facilities. SECURE is participating in this
16 proceeding because of its concern for the broader
17 impacts that approval of Qualico's cost-sharing
18 application may have on SECURE's waste management and
19 energy infrastructure business segments.

20 SECURE's view is that Qualico's cost-sharing
21 application, if approved, would benefit Qualico alone
22 and would negatively impact the efficient operation of
23 Alberta's pipeline industry as a whole.

24 As noted previously by Mr. Sprott and Mr. Trim,
25 Qualico's cost-sharing application is problematic
26 because pipeline companies have no control over when or

1 where development might occur across their pipelines.
2 Pipeline companies will derive absolutely no benefit
3 from alteration costs incurred for the purpose of
4 facilitating another party's development. A departure
5 from the current practice of the developer having full
6 responsibility for pipeline alteration costs would
7 require time-consuming negotiations in each case and
8 would lead to other inefficiencies. Granting the
9 requested cost-sharing orders would encourage other
10 parties to pursue similar relief whenever a
11 disagreement arises in the context of a pipeline
12 crossing, and ordering cost sharing in these
13 circumstances would expose pipeline companies to
14 significant potential costs, the amount and timing of
15 which are nearly impossible to predict.

16 SECURE is of the view the AER was correct in
17 initially declining to accept Qualico's application and
18 subsequently dismissing Qualico's application for cost
19 sharing under Section 33 of the Pipeline Act.

20 Consistent with the positions taken by Pembina and
21 Plains, SECURE respectfully asks that the Panel confirm
22 the AER's decision to deny Qualico's cost-sharing
23 application.

24 Thank you.

25 Q Thank you, Mr. Filipchuk.

26 Mr. Telford, on Tuesday, we heard Mr. Morrison's

1 views as to how pipelines are compensated for in the
2 province of Alberta. I'm wondering if, as an
3 accredited appraiser and a surface rights compensation
4 expert, you can explain how surface rights compensation
5 is actually determined for provincially regulated
6 pipelines in the province of Alberta.

7 A R. TELFORD: Thank you.

8 On review of it, the easiest explanation is
9 pipelines pay an initial payment that reflects the full
10 fee simple fair market value of the land, and it's a
11 onetime payment, and there is no annual compensation
12 associated with the ongoing rights. There are also
13 damages that -- paid during construction for crop
14 damage, but it's the onetime payment based on the
15 market value of the highest and best use.

16 Q Thank you, sir.

17 And as a realtor and accredited appraiser, can you
18 provide your comments on how, if at all, the price of a
19 home in Qualico's Horse Hill development would be
20 impacted by Qualico incurring 100 percent of the
21 pipeline alteration costs arising from its crossings of
22 Pembina and Plains' pipelines?

23 A It would be my opinion that there would be no impact
24 because once the lots are up for sale and the houses
25 are up for sale, the prices are determined by the real
26 estate market, and that's based on the actions of both

1 the sellers and the purchasers. So once it's available
2 on the market, they have little or no control of what
3 happens based on those sales.

4 Q Thank you, sir.

5 And, Mr. Romanesky, can you elaborate on how, if
6 at all, the levy collected pursuant to the ARA bylaw is
7 charged to homebuyers?

8 A B. ROMANESKY: Thank you.

9 The -- the way that the levy process works is
10 it's -- once work is done that has a benefit for the
11 overall area structure plan is calculated, that overall
12 costs is divided per hectare of land that is
13 developable in that basin in that area. The payment of
14 the levy, so the payment per hectares that is required
15 for development to occur is paid at the subdivision
16 stage or the development permit stage. So the payment
17 is done by the developer at the outset of the design of
18 the community when they start designing the lots for --
19 for selling.

20 So it's not a tax that is add on or direct invoice
21 passed on to the homeowner. It's a cost that's
22 incurred by the developer when they complete the
23 subdivision of land.

24 Q Thank you, Mr. Romanesky.

25 On Tuesday morning, you heard Mr. Fjeldheim
26 testify that if each of the 45 arterial road pipeline

1 crossings in the overall Horse Hill area structure plan
2 area is expected to average a cost of \$800,000, this
3 would increase the ARA levy by approximately 10 percent
4 or the equivalent of \$1,000 per housing unit.

5 Can you please provide your comments on the
6 calculation that was performed by Mr. Fjeldheim on the
7 stand?

8 A I'll start by saying that any sort of additional cost
9 that would incur with the arterial road system will
10 increase the size of the levy, so the portion that
11 Qualico presented in their evidence and in the material
12 is for a section of the arterial that they are -- they
13 have to build for that phase of development.

14 If we look at the ARA bylaw and the catchment area
15 and the amount of roads that will be ultimately
16 developed on the site, it got -- it goes -- it's much
17 greater than the section that is being built right now
18 at this -- at this outset. So I don't know what the
19 overall arterial costs for the overall plan will be,
20 and I don't know necessarily what the costs of all the
21 crossing would be, so it would be difficult to say that
22 it's going to be 10 percent or 8 percent.

23 But looking at the numbers that we have and
24 referring to my report, my initial report -- and maybe
25 I can take the Panel to my report. It's on
26 Exhibit 6.01 at page 320. So in these two paragraphs,

1 I present the exercise of how much the costs of the
2 crossing would represent on the overall dwelling units
3 in the area structure plan, and using the same formula
4 and using the same assumptions, we can come with some
5 numbers as well based on the assumptions of what the
6 crossing would be ultimately.

7 But I'll -- I'll start by saying, first of all,
8 that the -- the cost of the levy is not necessarily per
9 dwelling unit. So there's a whole basin that will be
10 responsible for the overall payment of the arterial
11 work, which include residential and nonresidential
12 uses. So the commercial uses, the industrial uses,
13 when those tracts of land are subdivided, they will
14 also pay their fair share of per hectare.

15 So what we're trying to do here is simply
16 conceptually what does it look like per dwelling unit.
17 So the calculation simply is to use the area structure
18 plan numbers which indicate that about 55 percent of
19 the overall area will be residential and the other
20 45 percent of the area will be nonresidential, so
21 industrial, commercial, public, and then apply -- apply
22 that share to the residential, and then divide that by
23 the number of units that are assumed in the area
24 structure plan.

25 So in my report, I -- I did the calculation for
26 the \$1.75 million for the crossing that are discussed

1 for this hearing, which is approximately \$35 per homes.

2 If we make some further assumptions and assume
3 that, as it is in the material that was provided by
4 Mr. Morrison and Qualico, that the overall crossing are
5 going to be \$800,000 for a total of \$34 million and we
6 apply -- apply the same formula, I come to about \$670
7 per homes. That is assuming that the dwelling units
8 count is at 28,771, as per the area structure plan.
9 That would be assuming that the cost of the crossing
10 would actually be 34 million, which I don't think we
11 have really evidence or clear estimation of what it
12 would be. And so all these things are moving targets,
13 obviously.

14 To give you an example, the 2020 area structure
15 plan is now expecting 29,000 residential units, so the
16 density's increased slightly. So if we're starting to
17 look at the -- the exact details and the numbers, I
18 think we -- there's too many assumptions that are being
19 made here, but it gives us an idea of scope. So about
20 \$35 for the pipelines that are at stake here today and
21 about 670 or \$700 per door if we look at the
22 \$34 million overall crossing cost.

23 Q Thank you, Mr. Romanesky.

24 Mr. Trim, I'm going to move to you. Can you
25 please explain Plains' rationale for requiring up-front
26 payment from a third party seeking to cross one of

1 Plains' pipelines under a cost recovery agreement?

2 A N. TRIM: Yes. So Plains' position on
3 this cost recovery agreement payment up front has
4 recently changed in the last couple of years, largely
5 due to our experience with Marquis on the 172 Avenue
6 crossing where we entered into a cost recovery
7 agreement to execute the pipeline crossing work and,
8 subsequently, Marquis had refused to reimburse us when
9 they were back-invoiced.

10 So moving forward to minimize, you know, the risk
11 and the burden on Plains, we've -- we request up-front
12 payment when we enter into cost recovery agreements.
13 It also gives us assurance that the party wishing to
14 cross our pipelines is actually committed to the work
15 and -- and the undertaking required to do that.

16 Q Thank you, sir.

17 And, Mr. Torr, along the same lines, with
18 reference to the cost recovery agreement between Plains
19 and Marquis JV dated May 15th, 2022, related to the
20 crossing of Plains' pipeline at 172nd Avenue and
21 Meridian street, can you please explain what the
22 \$540,600 estimated cost of the work represents.

23 A A. TORR: Yes. The estimate on file
24 represents a Class 5 estimate which typically has an
25 accuracy range of minus 20 percent to plus 30 percent.
26 It's an estimate only and is intended to provide the

1 user with enough information to decide whether or not
2 to proceed with the certain work that is shown.

3 The estimate is typically shown in the cost
4 recovery agreement broken out into some key components,
5 for example, construction, survey, NDE, and owner's
6 cost. For this particular crossing, the original
7 estimated amount was \$540,600 which included 20 percent
8 contingency. The final actual cost invoiced to the
9 developer was \$417,487.13.

10 In the example of 172 Ave and Meridian, the
11 developer was only asked to authorize the cost through
12 a cost recovery agreement. The developer was then
13 invoiced at the end of the project for the actual work
14 performed. The developer invoice included all of the
15 invoices paid by Plains as backup. Thank you.

16 Q Thank you, sir.

17 Mr. Balfour, with reference to the backstopping
18 agreement between Pembina and Qualico dated April 21st,
19 2021, related to the crossing of Pembina's 12-inch
20 pipeline which was marked as Exhibit 85.01, can you
21 please explain what the authorized amount of \$974,000
22 represents.

23 A I. BALFOUR: Yes. That amount represents
24 an estimate only and is intended to backstop the work
25 under the backstopping agreement. The developer only
26 pays for any amount that is actually incurred under the

1 agreement. And similar to the situation Mr. Torr just
2 explained, the amount that we invoiced under that
3 agreement was less than the authorized amount.

4 Q Thank you, sir.

5 Mr. Sprott, on Tuesday, it was suggested by one of
6 the Qualico witnesses during their testimony that
7 Pembina was prepared to share a portion of the costs
8 for the crossing of its pipeline at 167th Avenue and
9 Meridian street. Can you please outline Pembina's
10 position with respect to the cost of that work.

11 A J. SPROTT: To be clear, at no point was
12 Pembina prepared to pay for any cost -- alteration cost
13 from the second-in-time party, in this case, Qualico,
14 for alteration work that was required for safe
15 operation of our asset. And I believe those are the
16 same costs that Qualico and other developers over
17 the -- the past couple days of this hearing have
18 acknowledged that are their accountability.

19 Costs that Pembina is willing to pay for and
20 required to pay for is for integrity and preventive
21 maintenance work that's required for safe operation
22 that is not caused by the second-in-time party, in
23 which case is Qualico. There are efficiencies for
24 operators like Pembina to complete work that we want to
25 do at the same time for cost efficiencies and also for
26 access 'cause once the -- the road is in -- in place,

1 it is extremely hard and more -- more costly to access
2 this asset to continue safe operations.

3 Q Thank you, sir.

4 Mr. Balfour, back to you. Members of the
5 Developers Group panel suggested yesterday that there
6 is a lack of transparency and responsiveness from
7 pipeline companies when developers, as part of their
8 due diligence process related to land acquisition, are
9 seeking information about pipeline crossing work and
10 pipelines' crossing costs.

11 I'd ask you to discuss Pembina's experience with
12 respect to those type of information requests that are
13 received from developers when they're undertaking their
14 due diligence prior to purchasing lands for
15 development.

16 A I. BALFOUR: You know, typically at that
17 stage of the process, we're provided with very little
18 information from the developer in terms of scope of --
19 of -- of the proposed crossing given that they haven't
20 even purchased the land yet. So there's, you know, not
21 often very detailed drawings; there's not often
22 detailed scope of work on their end. So it makes it
23 very difficult for Pembina to undertake a detailed
24 assessment of what work needs to be required, given
25 their proposed crossing. And, you know, without being
26 able to do the detailed work, it's very tough to give a

1 detailed estimate.

2 Q And, Mr. Torr, can you please discuss Plains'
3 experience with respect to the same type of information
4 requests that's received from a developer at the point
5 where they're undertaking due diligence prior to
6 purchasing land for development purposes.

7 A A. TORR: Yes. Our -- Plains'
8 experience has been similar to that of Pembina's.
9 Thank you.

10 Q Thank you, sir.

11 T. MYERS: Madam Chair, that concludes
12 the pipeline companies' direct examination. The
13 pipeline companies' witness panel is now available for
14 questioning.

15 THE CHAIR: Thank you very much,
16 Mr. Myers.

17 We are at 10:00, so I would like to check with
18 counsel and the witnesses if you wish to have a break
19 before you start your crossing or ...

20 G. FITCH: Thank you, Madam Chair.

21 Yeah, I could benefit from a short break. It
22 doesn't have to be long. Five minutes would be
23 acceptable. Unless we just want to take our regular
24 morning break now.

25 THE CHAIR: I would suggest so --

26 G. FITCH: Okay.

1 THE CHAIR: -- so we don't interrupt your
2 flow of cross-examination.

3 G. FITCH: Thank you.

4 THE CHAIR: Okay. So quarter past.

5 (ADJOURNMENT)

6 THE CHAIR: Please be seated.

7 We are ready if you are, Mr. Fitch.

8 G. Fitch Cross-examines Pembina/Plains/SECURE Witness
9 Panel

10 G. FITCH: Thank you, Madam Chair.

11 Q G. FITCH: And good morning to the
12 members of the pipeline operators' witness panel. My
13 name is Gavin Fitch. I am legal counsel for Qualico
14 and the Developers Group, and I will have some
15 questions for you this morning.

16 And I'm going to begin with you, Mr. Sprott. Can
17 you confirm at no time were you involved in the
18 discussions with Qualico about the pipeline crossings
19 that are at issue in this application?

20 A J. SPROTT: That is correct.

21 Q Okay. And, similarly, Mr. Balfour, you were not
22 involved in the discussions with Qualico about the
23 pipeline crossings at issue in this application, were
24 you?

25 A I. BALFOUR: I was -- I was not involved
26 in the direct discussions with Qualico. But from

1 January 2020 to September 2003 [sic], I was the vice
2 president of the conventional pipeline business unit
3 which was responsible for the -- the Peace 20-inch
4 pipeline, so the people that were talking to them. I
5 got updates on and was provided -- and provided input.

6 Q So the people that spoke to Qualico reported to you.
7 That's basically what you're telling me?

8 A Some of them.

9 Q Yeah. Okay. Similarly, Mr. Trim, you can confirm that
10 you were not involved in discussions with Qualico about
11 the pipeline crossings at issue in this application,
12 were you?

13 A N. TRIM: I was not personally involved.
14 Similar to Mr. Balfour, the people that reported up to
15 me were involved in the discussions with Qualico.

16 Q Thank you.

17 What about you, Mr. Torr? Were you personally
18 involved in discussions with Qualico about pipeline
19 crossings at -- at issue in this application?

20 A A. TORR: Not personally. A project
21 manager would have been responsible for direct
22 communication that reported to me.

23 Q Okay. So has anyone on this witness panel ever
24 actually spoken with anyone at Qualico in connection
25 with these pipeline crossings?

26 A J. SPROTT: No.

1 Q Okay. I'm going to take it that that answer speaks for
2 everybody?

3 A N. TRIM: That's correct, yes.

4 Q Thank you.

5 G. FITCH: Ms. Arruda, could you please
6 bring up on the screens Qualico's Aid to
7 Cross-examination Number 8, which should just be a --
8 the Pipeline Rules. And if we could go to the next
9 page and down to the bottom, please.

10 Q G. FITCH: So before I start, some of my
11 questions aren't specifically for Plains or Pembina, so
12 I'm just going to ask the question, and whoever wants
13 to answer, please feel free to do so. If someone from
14 Plains answers, it would be helpful, though, if the
15 person from Pembina or vice versa confirms that they
16 agree. It's just a bit tricky having two different
17 companies on the witness stand at the same time.

18 So, with that, I'm going to begin by -- I'm -- I'm
19 just going to read into the record subsection (2) of
20 Section 28 of the Pipeline Rules which states:
21 (as read)

22 Prior to the initiation of any construction
23 related to the building, improving, or
24 widening of a road or highway over an
25 existing pipeline or extending a road or
26 highway right-of-way over an existing

1 pipeline, the pipeline at such locations must
2 either be upgraded or otherwise meet the
3 requirements of CSA Z662 respecting crossings
4 of existing pipelines.

5 So I -- I take it that the members of this witness
6 panel as senior representatives from two major pipeline
7 companies would be familiar with at least the concept,
8 if not the actual wording, of Section 28(2)?

9 A N. TRIM: Yes, we are.

10 Q Okay. Thank you.

11 And so in order to determine whether the existing
12 pipeline will meet the requirements of CSA Z662 or will
13 need to be upgraded, do I understand that an integrity
14 assessment has to be carried out? I'm just trying to
15 understand how it works.

16 A A. TORR: Could you repeat that, please.

17 Q Yeah. So you have a pipeline in the ground; it's an
18 existing pipeline. And as per the section I just read
19 to you, someone wants to initiate construction of a
20 road, either a new road or widening an existing road
21 over your pipeline. Are you -- are you with me,
22 Mr. Torr?

23 A (NO VERBAL RESPONSE)

24 Q Okay. So what the regulation says is that at that
25 location the pipeline must either be upgraded or
26 otherwise meet the requirements of CSA Z662?

1 A Yes, I agree with that.

2 Q Okay. So how do you do that? That's the question.

3 So you're approached; someone wants to -- let's
4 just take the case that we're dealing with here, which
5 is someone wants to take a kind of low-grade two-lane
6 roadway, expand it into a four-lane roadway. The
7 pipeline operator is under an obligation under the
8 Pipeline Rules to determine whether it needs to be
9 upgraded or whether it will meet -- whether it will
10 otherwise meet the requirements of CSA Z662; correct?

11 A Yes, that's correct. What's important to understand is
12 there's two parts to -- to a road crossing, and -- and
13 please stop me if I -- if I get off on a tangent,
14 but -- 'cause I am an engineer. The -- there's the
15 pipeline itself that is -- that Z662 applies to, and
16 then there's the second part, which is building a road
17 or a railway or any other form of crossing across the
18 pipeline. And I think we're referring here to the
19 pipeline itself.

20 Is that what your question is about?

21 Q Well, may -- maybe I -- my wording of the question
22 wasn't -- wasn't very elegant. Let me -- let me try
23 again.

24 The way I read Subsection (2) of Section 28 of the
25 Pipeline Rules, that where roadwork is proposed over an
26 existing pipeline, something has to be done to

1 determine whether the pipeline at that location needs
2 to be upgraded or whether it will otherwise meet the
3 requirements of CSA Z662. Isn't that true?

4 A That is correct.

5 Q Okay.

6 A Yeah. And that can be done as a desk -- desktop study.
7 Because if you -- if you put a pipeline in the ground
8 in -- in -- for example, in a farmer's field, then, you
9 know, certain -- you look -- you look at it differently
10 than when you would have a road crossing the pipeline,
11 because, obviously, there's not expected to be --
12 there -- there are different types of traffic crossing
13 your pipeline. There's different -- the calculation is
14 somewhat different. But, yes, you would have to
15 consider upgrading your pipeline to meet Z662. I think
16 we're saying the same thing.

17 Q Okay. Okay.

18 A I. BALFOUR: I think -- I might just add
19 on: It really depends on the circumstances of the
20 particular crossing, the particular pipeline, so
21 it's -- you know, what work needs to be done depends on
22 what we're dealing with in a particular circumstance.

23 Q All right. And is it -- is it fair to say that until
24 the integrity assessment is done, nobody knows what
25 work may or may not be required? Is that fair?

26 A A. TORR: Yes, that is fair.

1 Q Thank you.

2 And the obligation to comply with the requirements
3 of CSA Z662 is on the pipeline operator; right?

4 A That's correct.

5 Q Okay.

6 G. FITCH: So, Ms. Arruda, could we turn
7 up Exhibit 6.01, PDF page 299, which is Pembina's
8 February 14, 2023, submission -- written submission.
9 And if we could go to the next page, PDF 300, please.
10 That's good right there.

11 Q G. FITCH: So under Part 3, Section A in
12 paragraph 5, Pembina states -- I'm just going to
13 paraphrase -- that: (as read)

14 The pipeline needs to be strengthened and
15 reinforced to accommodate the arterial
16 roadway at the upgraded intersection of
17 Meridian street and 167th Avenue. These
18 alterations are necessary to ensure the
19 safety and integrity of the pipeline due to
20 the increased volume and weight of traffic
21 that will cross the pipeline.

22 Do you see that? Somebody? I -- someone from Pembina.

23 A J. SPROTT: Yes, we do.

24 Q Okay. And then in the next paragraph, paragraph 6, you
25 state: (as read)

26 In summary, the pipeline alterations required

1 were determined in accordance with applicable
2 requirements in CSA Z662 and the Pipeline
3 Rules.

4 Correct?

5 A I. BALFOUR: That's what it says.

6 Q Yeah. And -- and, Mr. Trim, in -- in terms of Plains,
7 does -- would Plains, in general, agree, in relation to
8 the Meridian street and 167th Avenue, that the pipeline
9 alterations required were determined in accordance with
10 applicable requirements in CSA Z662 and the Pipeline
11 Rules?

12 A N. TRIM: Yes, we would.

13 Q Okay. So I'm going to start, then, by asking you some
14 questions about that particular intersection and
15 crossing.

16 G. FITCH: And if we can go, Ms. Arruda,
17 to Exhibit 5.01 -- so this is the amended
18 application -- and turn to PDF page 1082, please.

19 Q G. FITCH: So this -- so I'm going to
20 start with the Plains pipelines -- sorry. I'm just
21 waiting for everyone to pay -- okay.

22 So, Mr. Trim and Mr. Torr, I'm going to start with
23 the Plains pipeline crossing at 167th Avenue and
24 Meridian Street. So what we're looking at now is
25 Appendix K to the CIMA+ report, and it -- the evidence
26 indicates that that -- CIMA+ was an engineering

1 consultant retained by the original developer, Walton,
2 to prepare a plan for the construction of Meridian
3 Street, and -- and, in particular, we're now looking at
4 Appendix K, which is the correspondence between Plains
5 Midstream and CIMA+, and if -- with that kind of
6 context --

7 G. FITCH: Ms. Arruda, can we go to the
8 next page, please.

9 Q G. FITCH: So the correspondence that we
10 see on PDF page 1083 of Exhibit 5.01 consists of two
11 emails, one from CIMA+ to Plains and then a response
12 email from Plains to CIMA+. Do you see that?

13 A N. TRIM: Yes.

14 Q Okay. And, basically, you'll agree that in the email
15 from CIMA+, Plains was being advised that CIMA+ was
16 working with the developer on a project in Northeast
17 Edmonton, and they had a question for you about whether
18 certain portions of the roadway, sidewalk, and
19 boulevard could be located on Plains' right-of-way;
20 correct?

21 A That is correct.

22 Q Okay. And then if you look at the response, which is
23 the email at the top, Plains says that it reviews all
24 applications on a case-by-case basis, effectively
25 saying, If you have any questions, please contact us;
26 correct?

1 A I -- I can see that it says "applications on a -- are
2 reviewed on a case-by-case basis", correct.

3 G. FITCH: If we, Ms. Arruda, can just go
4 down to the next page, please. And then the next.
5 So -- that's good.

6 Q G. FITCH: So that's the extent of the
7 correspondence, according to CIMA+, that took place
8 between CIMA+ and Plains in 2014. Does Plains agree,
9 or do you have information that there was other
10 correspondence, other contact that occurred at that
11 time?

12 A A. TORR: Yes, we agree.

13 Q Okay. Thank you.

14 G. FITCH: So, Ms. Arruda, can we now
15 turn to Exhibit 86.01.

16 Q G. FITCH: So this is the March 11, 2019,
17 cost recovery agreement entered into by Qualico --
18 or -- well, by Plains and Horse Hill land development
19 company -- Land Company Limited in March 2019; correct?

20 A A. TORR: Correct.

21 Q Okay. And if we just go down the page -- thank you --
22 you'll agree that at that time, the work, being the
23 work required for the crossing, was estimated at
24 \$858,000?

25 A Correct.

26 Q Okay.

1 G. FITCH: If we could go down,
2 Ms. Arruda, to PDF page 6, please.

3 Q G. FITCH: Okay. So I note -- so we're
4 looking at Schedule A to the cost recovery agreement,
5 which is titled "Scope of Work Project Schedule and
6 Drawings". And -- and I note that in the -- I guess
7 you'd say the third paragraph -- they're all very
8 short, but there -- there's a statement that:
9 (as read)

10 The pipeline inspection will be carried out
11 in two phases.

12 Do you see that?

13 G. FITCH: Thank you.

14 A A. TORR: Yeah, I can see that.

15 Q G. FITCH: Okay. And then if we go down
16 to -- just a little bit down the page, "Plains' Scope"
17 talks about inspection -- or -- sorry: (as read)

18 Excavation above the pipeline, removal of
19 casing, inspection of pipeline, and
20 construction of the concrete slab
21 [et cetera].

22 Correct?

23 A Yes, I can see that.

24 Q Okay. So what I take from that -- and I'm just seeking
25 your confirmation -- is that as of the date of this
26 agreement, the pipeline had not yet been inspected at

1 that crossing location?

2 A Yes, that's correct.

3 Q Okay.

4 A Because it's not been exposed yet.

5 Q Right. Thank you.

6 A I'd like to add to that: The inspection -- just for
7 clarity for everybody's sake, the inspection that we're
8 talking about here is external inspection only, not
9 internal inspection, which is done on a regular
10 frequency, based on the company's maintenance plans.

11 Q Sure. So you -- you have a maintenance plan for this
12 pipeline and -- and your other pipelines, and at least,
13 probably, for the majority of your pipelines, it
14 includes inline inspection?

15 A Yes, we do.

16 Q Okay. But you haven't done any inline inspection
17 specific to this crossing location, have you?

18 A Yes, we have. The -- the pipeline gets inspected as a
19 whole, and so we have an inspection profile for
20 every -- essentially every metre of the pipeline, so we
21 can narrow it down to this particular crossing, if
22 needed.

23 Q Right. But inline -- my point simply is: Inline
24 inspection of the crossing location is not part of the
25 scope of work outlined in the cost recovery agreement,
26 is it?

1 A No, it's not part of this agreement. This -- the
2 inspection noted up here on -- on all of these
3 agreements that -- that are shown are specific to
4 external inspection once the pipeline is actually
5 exposed.

6 Q Right. Thank you.

7 And I am told that Plains has not done any
8 excavation work at the 167th Avenue intersection since
9 it was first approached by CIMA+ in 2014. Can you
10 confirm that?

11 A Yes, I can.

12 Q Okay. So would you agree with me, Mr. Torr, that as of
13 today, there has been no final determination made as to
14 what alteration work will, in fact, have to be carried
15 out at that crossing location?

16 A Yes, that's correct. Because there has been no
17 agreement between us and, in this case, Horse Hills or
18 Qualico.

19 Q And still focusing on the scope of the work, one thing
20 we see there is "construction of concrete slab";
21 correct?

22 A Correct.

23 Q But you would agree with me that, presumably, when this
24 work proceeds and you do your excavation and the
25 pipeline is exposed and you do your inspection, it's
26 possible that some different methodology might be

1 settled on in terms of the work that needs to be done
2 to ensure the pipeline is properly protected? In other
3 words, it may not end up being a concrete slab?

4 A Yes, that is a correct statement, but unlikely.

5 Q Okay. Well, I -- I'm told that at the 172nd Avenue and
6 Marquis -- sorry -- Meridian Street crossing that --
7 that Pembina carried out for Qualico, a material called
8 Fillcrete was used; is -- is that correct, Mr. Balfour?

9 A I. BALFOUR: Yes.

10 Q Okay. So in that case, a concrete slab was not used.
11 Something different was used; right?

12 A That's right. And that's --

13 Q Yeah.

14 A -- you know, again, an example of unique circumstances
15 for different pipelines and different crossings
16 creating different types of work as a result of the
17 crossing wanting to happen.

18 A J. SPOTT: I would additionally add that
19 not only are they different assets with potentially
20 different products, different sizes, different physical
21 location, geo -- different geotechnical aspects, you
22 know, we're two different organizations, and we may
23 have a different approach.

24 Q And, Mr. Trim or Mr. Torr, you can confirm that Qualico
25 terminated the cost recovery agreement that's been
26 marked as Exhibit 86.01 in December 2019?

1 A A. TORR: Yes, I can confirm that.

2 Q Thank you.

3 So I'm now going to turn to the Pembina crossing,
4 the Pembina Pipeline that crosses below the
5 intersection of 167th Avenue and Meridian Street,
6 and -- and kind of walk -- do the same process.

7 G. FITCH: So let's start in
8 Exhibit 5.01, and we're right where I want us to be,
9 which is PDF page 1094. And if we please go down to
10 the next page now.

11 Q G. FITCH: So, Mr. Balfour or Mr. Sprott,
12 what we're looking at here are emails between CIMA+ and
13 Pembina from September 2014; correct?

14 A I. BALFOUR: That's correct.

15 Q Okay. And just so we're all clear, there's reference
16 to the Peace 20-inch pipeline. Can you confirm that's
17 the pipeline that crosses diagonally below 167th Avenue
18 and Meridian Street intersection?

19 A Yes, that's correct.

20 Q Okay. So at that time Pembina advised CIMA+ that the
21 developer's cost for -- for that pipeline for that
22 crossing would be \$1,135,200; correct?

23 A That's correct. That's based on the information at the
24 time.

25 Q Okay. And -- and -- and so that's what the developer
26 was told they would have to pay, but there were also

1 costs that Pembina said it would cover in the amount of
2 \$186,720; correct?

3 A Yes, that's the information we had at the time.

4 Q And I -- I think I understood from Pembina's direct
5 evidence that the \$186,720 would be basically work that
6 you would have to do anyways as part of your
7 maintenance and integrity program, so that's why it's
8 to your account. Is that fair?

9 A That would have been our estimate of the work that was
10 not caused directly by the Qualico crossing.

11 Q Okay. And, to your knowledge, did anyone at Pembina
12 ever explain to CIMA+ how it -- how Pembina derived
13 this split between the costs that you say would be
14 caused by the pipeline -- by the road versus those that
15 would not be caused by the road? Was that ever
16 explained to anybody?

17 A I think that's correct with respect to CIMA+, but over
18 the -- over the course of the years after, we've had
19 several conversations with them about scope. And, you
20 know, it's an iterative process; we get more
21 information and -- and learn more.

22 Q Okay. But at least with regard to the conversation
23 that took place in 2014 between Pembina and CIMA+, no
24 one at Pembina ever explained to anyone at CIMA+ how
25 that split, if I can call it that, was derived?

26 A J. SPROTT: Based -- based on what we're

1 seeing on the monitor here, I can't confirm or deny any
2 further conversations with respect to these -- these
3 rough estimates as they're --

4 Q Okay.

5 A -- described.

6 Q Because you have no personal knowledge; correct?

7 A Well, that would be correct. I wasn't actually
8 employed at Pembina then.

9 Q Okay. Okay.

10 G. FITCH: So now, Ms. Arruda, I'd like
11 to turn up -- or have you turn up Qualico Aid to Cross
12 Number 10, please. So ...

13 THE CHAIR: Mr. Fitch, may I?

14 G. FITCH: Yes.

15 THE CHAIR: Did you prepare hard copies of
16 this by any chance? If not, that's okay.

17 G. FITCH: I -- I did not. Well, I -- I
18 have one.

19 THE CHAIR: That's --

20 G. FITCH: So that's not going to help.
21 But if --

22 THE CHAIR: No worries.

23 G. FITCH: If it is of assistance to the
24 Panel, at lunch I can have hard copies made.

25 THE CHAIR: Or we can have them made.

26 That's all right. Thank you.

1 G. FITCH: Okay.

2 E. ARRUDA: Madam Chair, we could just
3 print them for you now, if you want.

4 THE CHAIR: Thank you.

5 Q G. FITCH: All right. So, Mr. Sprott or
6 Mr. Balfour, you'd confirm what we're looking at on the
7 screen is a -- a document dated April 11, 2019. I
8 think you could describe it as a letter -- it takes the
9 form of a letter agreement addressed to Horse Hill Land
10 Company Limited from Pembina, and it's titled "Interim
11 Support Agreement" or "Backstopping Agreement";
12 correct?

13 A I. BALFOUR: Correct.

14 Q And if we just skip down to the -- the second
15 highlighted passage in the first paragraph, you can
16 confirm that this is the -- the 20-inch pipeline that
17 crosses under 167th Avenue and Meridian street;
18 correct?

19 A That's correct.

20 Q Okay. And then if we look at the highlighted number in
21 the next paragraph, we see the figure of \$60,000?

22 A Yes, I can see that.

23 Q Okay.

24 G. FITCH: And then if we can turn,
25 Ms. Arruda, to PDF page 6.

26 Q G. FITCH: So, basically, as I understand

1 it, the -- what this agreement was intending to provide
2 for was -- was described as a "fit for service
3 engineering assessment by a third-party engineering
4 company and -- and a Pembina integrity review";
5 correct?

6 A I. BALFOUR: Yeah, it's listed there.
7 That's part of the review.

8 Q Okay. So -- so was this scope of work basically to
9 conduct the integrity assessment at that location?

10 A This scope of work is to come up with a -- with a
11 detailed scope of work and -- or -- sorry. It was to
12 come up with a -- with a scope of work based on the
13 information that we had at the time. It would have
14 included us looking at our, you know, integrity records
15 that we had run in the normal course as well as the
16 impacts of the crossing itself and sort of bringing all
17 those things together to -- you know, it's -- bringing
18 all those things together to help provide information
19 to Qualico on the crossing.

20 Q Okay.

21 A J. SPOTT: And just to further add to
22 that, if you think about it, it's really -- you know,
23 it's -- it's \$60,000 to commission. You know, there's
24 going to be work that Pembina has to do, Pembina has to
25 engage with a third party, these folks go out, they
26 evaluate the situation, you know, and they come up with

1 a better cost estimate so the counterparty can make --
2 make, you know, a sound judgment on -- on proceeding or
3 not. So it's really just early works.

4 Q Okay. But what I'm -- what I'm trying to understand
5 is -- you know, to return to the beginning of my
6 questioning, is this -- this concept of the pipeline
7 operator having to do an integrity assessment to meet
8 the requirements of CSA Z662. So can you just say --
9 was the intent of the work covered by this agreement to
10 carry out that integrity assessment?

11 A I. BALFOUR: No. The -- well, so the
12 intent of this agreement is to assess some of the
13 information we already had from integrity results and
14 our integrity programs as well as apply a new set of
15 circumstances to the crossing which is the additional
16 load and vibration and everything else in there to help
17 come up with a cost estimate scope of work.

18 Q Okay.

19 A And it's an iterative process. Like, we get some
20 information, you know, we do some more work.

21 A J. SPROTT: But -- but to be very clear,
22 our obligations of safe pipeline operators -- we're
23 continuously monitoring our pipelines with respect to
24 external, internal challenges, geotechnical -- like I
25 said before, that's where -- the pipeline potentially
26 sliding down a hill -- we're continually monitoring all

1 the time. So this work is specific potentially
2 incremental work that's associated with the alteration
3 cost of potentially a new piece of infrastructure going
4 across that asset.

5 Q Sure. So I -- I am told by my client that Pembina,
6 like Plains, has, as of today, never done any
7 excavation at 167th Avenue and Meridian Street; is that
8 correct?

9 A I. BALFOUR: That's correct.

10 Q Okay.

11 A We've never entered -- they've never agreed to pay for
12 the costs that we need to undertake to do the work.

13 Q So there's been no physical or external inspection of
14 the pipeline carried out at that crossing location, has
15 there?

16 A Not -- no, there hasn't, associated with this project.

17 Q Okay. And you may have heard Mr. Gerein testify to the
18 fact that Qualico had asked on at least one occasion to
19 receive a copy of the integrity assessment carried out
20 by Pembina but that it never received one. I take it
21 that's because there really hasn't been any integrity
22 assessment done yet, has there?

23 A No, I would disagree with that.

24 Q Why?

25 A Because we undertook the work underneath the interim
26 backstop agreement.

1 Q Can you -- yeah. Well, I understand that some work was
2 undertaken not to the full contract value of \$60,000.

3 So what did you do under this agreement?

4 A We undertook the work listed in the project scope of
5 work in Schedule A.

6 Q So you -- you issued a purchase order to a third-party
7 engineering company?

8 A And they completed an -- an -- a study.

9 Q You undertook project management; correct?

10 A Yes.

11 Q Okay. So let me ask you this: The third item in your
12 scope of work is a Pembina integrity review. So you're
13 saying you did that?

14 A That's correct.

15 Q Yeah. Was that ever provided to Qualico?

16 A We did not provide that to Qualico. And we typically
17 don't provide that information to crossing parties.
18 The results of the -- the engineering assessment
19 contain proprietary information related to our
20 operational philosophy, our risk management. It can
21 contain customer information that's confidential. But
22 we -- we do want to work with parties, and we provide
23 what the scope of work is, what the estimated costs
24 are, what the schedule would be. It's our practice.

25 Q And the developer just has to take it on faith?

26 A J. SPROTT: I would -- I would say that

1 the developer doesn't have to take it on faith. I'm
2 here as a professional engineer. I work at a -- a
3 public company that is required by, you know,
4 significant regulation to be a safe pipeline operator.
5 My -- my role is to, you know, work with these
6 second-in-time counterparties to make sure that -- that
7 I understand what they're going to be overtop of our
8 asset so we can properly complete the work required so
9 we can stay in compliance with -- with these
10 operations.

11 Q Mr. Sprott, would you agree with me that it would be a
12 very simple thing to ask the developer to enter into a
13 nondisclosure agreement, and then you can provide the
14 information in the integrity review without fear that
15 somehow it would be misused or made public?

16 A I. BALFOUR: Ian Balfour can answer that
17 question.

18 That it -- you know, hypothetically we could enter
19 into one of those agreements. I just note on page 3 of
20 the same agreement Qualico agreed that -- yeah. If you
21 want to just -- page 3 of that PDF at the top.

22 You know, the counterparty agreed at the time they
23 signed this backstopping agreement that they, you know,
24 wouldn't receive or have any interest in the
25 information we generated as a result of it.

26 Q Right. That -- that's -- that's your requirement that

1 you basically put in the agreement, and then it was up
2 to Qualico whether they were going to -- were prepared
3 to live with it or not. But if they didn't live with
4 it, you wouldn't do any of the work; correct?

5 A I'm not sure I agree with that. I think that this is
6 our standard form agreement, and the information
7 generated out of the work product is proprietary and
8 confidential, and -- and that's why it's in there. We
9 also didn't choose for them to cross our pipeline at
10 this location. We are not opposed to it. We want to
11 facilitate it, and this is an instrument to do so.

12 Q Okay.

13 A J. SPROTT: I would just add that I
14 believe in my opening statement I mentioned that there
15 are certain aspects of -- of design engineering that
16 developers might be suitable to opine on. There are
17 certain aspects under our requirements as a safe
18 pipeline operator that, you know, we don't allow people
19 to opine on due to the regulation.

20 Q Mr. Sprott, has anyone from Qualico ever told Pembina
21 how to operate its pipeline?

22 A Not that I'm aware of.

23 Q No.

24 G. FITCH: All right. Can we turn,
25 Ms. Arruda, to Exhibit 5.01, PDF 28.

26 Q G. FITCH: So to orient the witnesses,

1 we're looking at Qualico's amended application, and
2 we're describing these agreements that had been entered
3 into. And in paragraph 50 we've discussed the interim
4 backstopping agreement which is the document we just
5 looked at, and now we're talking about the fact that
6 the interim agreement contemplated the parties entering
7 into a final support agreement. You'd agree with that?

8 A I. BALFOUR: I can read those words on the
9 page, yeah.

10 Q Yeah. And -- and although we don't say it in
11 paragraph 50, you would agree that the -- what Pembina
12 described as the definitive agreement for the pipeline
13 crossing contained a cost estimate of \$559,000?

14 A I apologize. Can you please repeat the question.

15 Q Sure. So the definitive agreement that Pembina told
16 Qualico it would have to enter into after the work had
17 been done under the interim agreement contained a cost
18 estimate of \$559,000?

19 A The amount "\$559,000" is correct.

20 Q Yeah.

21 A I think we told them if they wanted to proceed with the
22 work that that's the instrument we would require to
23 proceed with.

24 Q Yeah. So you'd agree with me that that cost estimate
25 of \$559,000 is almost exactly half the cost estimate of
26 \$1.135 million that was provided to CIMA+ in 2014.

1 Are you able to explain why there was such a
2 dramatic difference between these two cost estimates?

3 A Yes. Those numbers are quite different and -- and the
4 reason that they're quite different is we got more
5 information over time which meant we could do more
6 analysis which narrowed the scope of work that Qualico
7 was responsible for. The -- the work that we had to
8 do -- sorry -- that Qualico was responsible for given
9 that they -- they wanted to execute the crossing.

10 Q And --

11 A J. SPROTT: Just -- just further to that,
12 I might add that I believe the -- the email from the
13 24th said rough cost estimates or -- or something like
14 that, and then this is exactly how the process should
15 work. We provide a rough cost estimate, we enter into
16 the \$60,000 agreement which will allow, you know, the
17 smart engineers to go out and do incremental work to
18 refine that -- that cost estimate for the -- the
19 second-end party -- counterparty to decide if they want
20 to proceed or not with -- with crossing the asset. The
21 process actually works extremely well.

22 Q Well, I mean, the -- the first estimate was double the
23 second estimate. Is that common?

24 A It's -- it's -- Mr. Torr spoke about a Class 5
25 estimate. So when we're referring to Class 5
26 estimates, you have a range of potential outcomes,

1 positive and/or negative.

2 When you're talking about a gross estimate where a
3 Class 5 estimate has actual engineering work completed,
4 it is actually -- it is actually an acceptable outcome
5 in engineering practices.

6 Q To be out by 50 percent?

7 A I -- I just stated that a Class 5 estimate could be,
8 you know, plus or minus 30 percent. So with no
9 engineering work completed at all, absolutely.

10 Q Okay.

11 A And --

12 A N. TRIM: And that would be similar
13 experience to Plains as -- as well, sir. Your rough
14 cost estimate is really only as good as the information
15 that whatever third party would like to cross provides
16 you at the time.

17 Q And, Mr. Balfour or Mr. Sprott, you can confirm that
18 Qualico never executed the definitive agreement related
19 to the 167th Avenue and Meridian Street crossing;
20 correct?

21 A I. BALFOUR: Sorry. Could you repeat that
22 one more time.

23 Q The agreement that you provided, the so-called
24 definitive agreement for the 167th Avenue and Meridian
25 Street crossing, was never executed by Qualico;
26 correct?

1 A It was never executed by Qualico, but Pembina was, and
2 remains today, ready to move forward with the work once
3 they agree to pay for the -- the costs that they are
4 creating by upgrading this crossing.

5 Q Okay. So it's fair, is it not, to conclude that as of
6 today, there has not been a determination made of what
7 alteration work will, in fact, have to be carried out
8 at that crossing location, has there?

9 A What -- what alteration work are you referring to?

10 Q Well, exactly. What alteration work? It hasn't been
11 determined yet, has it?

12 A J. SPROTT: No. We -- we would definitely
13 need to go out and -- and re-evaluate the situation.

14 Q Thank you.

15 A I. BALFOUR: Sorry. I think we need to
16 clarify that question. We just need a chance to talk,
17 please.

18 Q Go ahead.

19 A J. SPROTT: Yes. Just for clarity, you
20 know, there's no disagreement that -- that Pembina's
21 willing to do the work. I think what we want to be
22 clear on is that I think your question asked, and I
23 might have it repeated, but I do believe that you will
24 need to re-evaluate the situation prior to actually
25 executing the work if you're asking -- if -- if the
26 dollar amount's going to change by 50 percent again.

1 I'm not sure.

2 A I. BALFOUR: Maybe I'll -- maybe I'll state
3 it a different way. Based on the information that we
4 had at the date of the agreement, the work that added
5 up to fifty-nine -- or -- sorry -- 559,000 was an
6 accurate reflection of the work we needed to do based
7 on the information we had at that time.

8 Q Right. But you might end up excavating and inspecting
9 the pipeline and -- and end up doing different work?
10 It may not turn out to be a concrete slab, just as I
11 was discussing with Plains; it could be different,
12 couldn't it?

13 A I mean, in the execution of any project, there are
14 uncertainties, which is why you have contingency. I
15 feel -- you know, when we get down and inspect the
16 pipe, were there little things that we would have to,
17 you know, potentially do that are not -- you know, or
18 change -- like, I think the scope here is, you know,
19 based on the best information we had, you know,
20 that's -- that's the scope. When any project goes
21 live, there are things that are impacted, but -- but
22 the best of -- of what we had and based on the
23 information and our assumptions around execution,
24 that's the work we would have done.

25 Q But because you basically knew so little at the time
26 you drafted the definitive agreement, what actually

1 ends up happening could be different; right? The work
2 could be different? The solution could be different?
3 It could be Fillcrete instead of a concrete slab?

4 A Well, I think in this case it was a Fillcrete solution
5 that we were looking at, to answer the last question.

6 So I think there's -- there's two parts to your
7 first question that I want to answer. The first one is
8 what little information we had. And the information we
9 had was given to us by Qualico, and then we generated
10 information off that. So the information that we had
11 was better than we had in 2014, better than we had
12 throughout the back-and-forth between the parties, you
13 know, and I think up until execution, that's the best
14 estimate we had.

15 Q That's fine. Thank you.

16 So I'd now like to discuss the crossing at --
17 sorry. Before I do that --

18 G. FITCH: Ms. Arruda or Madam Chair, I'd
19 like to enter into -- mark as the next exhibit Qualico
20 Aid to Cross Number 10, which is the April 2019 interim
21 support agreement that we just looked at.

22 THE CHAIR: Mr. Myers, Counsel, any
23 objection?

24 T. MYERS: No objection, Madam Chair.

25 THE CHAIR: Thank you.

26 Thanks, Mr. Fitch.

1 E. ARRUDA: So that will be Exhibit 88.01.

2 THE CHAIR: Thanks, Ms. Arruda.

3 EXHIBIT 88.01 - 2024-03-07 Qualico Aid to
4 Cross #10 - Pembina Interim Support Agreement
5 for Meridian St 167 Ave. Crossing

6 Q G. FITCH: So I'd now like to turn to the
7 Pembina crossing at Marquis Boulevard. And, of course,
8 this is the one that Marquis JV Limited ended up asking
9 Pembina -- Pembina to carry out, and it has, in fact,
10 been carried out; correct?

11 A I. BALFOUR: Can you be more specific?
12 Sorry.

13 Q Oh, I -- I just -- I want to -- I just want to talk
14 about the Pembina Marquis Boulevard crossing. And I'm
15 just -- for the record, this is the one that ended up
16 being constructed by MLC -- well, by Marquis JV
17 Limited.

18 And so the agreement that -- that -- the
19 backstopping agreement, or whatever you want to call
20 it, was entered into between Pembina and Marquis JV,
21 not Pembina and Qualico?

22 A You're referring to the crossing at 172nd Street?

23 Q Sorry. 172 Avenue. Sorry. My apologies.

24 A Yeah. No. Thank you.

25 Q Yeah. So -- so, again, I'd like to just sort of start
26 at the beginning. So I'm going to ask that we pull up

1 Exhibit 5.01, PDF page 1094.

2 So, again, this September 24, 2014, email from
3 Mr. McIntosh at Pembina refers to a Swan Hills 12-inch
4 pipeline. Can you confirm that's -- that's the
5 pipeline we're talking about?

6 A Yes, that's the pipeline we're talking about.

7 Q Okay. And in 2014 what Pembina was telling CIMA+ was
8 that the pipeline would actually have to be rerouted;
9 correct?

10 A Yeah, that looks like what's in the email.

11 Q Okay. You don't know anything more than what's in the
12 email, I take it?

13 A In what particular way?

14 Q Well, I asked you whether pipe -- whether Pembina was
15 telling CIMA+ in 2014 that the pipeline would have to
16 be rerouted, and you said, Well, that's what it says,
17 which I took to mean you have no personal knowledge.
18 Isn't that fair?

19 A I don't know that I have no personal knowledge, but I
20 was just clarifying over what time period. So based at
21 this time, that looks like our assessment --

22 Q Okay.

23 A -- was it needed to be rerouted.

24 Q Okay. Thank you.

25 And -- and why? Why did Pembina believe in 2014
26 the pipeline would have to be rerouted?

1 A I don't know.

2 Q Do you know, was it based on the results of some
3 integrity assessment?

4 A I -- I don't -- I don't know.

5 Q Okay. That's fine.

6 A Could have been -- could have been based on a number of
7 factors.

8 G. FITCH: Ms. Arruda, can we please turn
9 up now Qualico Aid to Cross Number 11.

10 Q G. FITCH: So we're now looking at a
11 March 4, 2019, letter agreement addressed to Horse Hill
12 Land Company Limited from Pembina, again, titled to be
13 an interim support agreement or a backstopping
14 agreement; correct?

15 A I. BALFOUR: Yeah, I'm with you. That's
16 correct.

17 Q Okay. And this is for the pipeline that crosses at
18 172nd Avenue, the -- the 12-inch line?

19 A That's correct.

20 Q Okay. And the cost for that was \$50,000; right?

21 A That was the maximum limit of what we thought we needed
22 to estimate, yeah. That --

23 Q Okay.

24 A -- we estimated to complete the project work.

25 Q And to move things along, basically this -- the purpose
26 of this agreement and the scope of work contemplated in

1 this agreement is the same as that last interim support
2 agreement we looked at; correct, basically?

3 A I think the -- you know, every pipeline crossing and --
4 and analysis is different, so I think that's a bit of
5 an overstatement in terms of -- like, basically we're
6 doing the same thing. We're analyzing two different
7 pipelines in two different locations, but the -- the
8 purpose of this agreement was to help, you know, this
9 company make a good decision on what types of work
10 would need to be done for the crossing at 172nd.

11 G. FITCH: Okay. I see we've lost
12 Ms. Arruda. Can we -- I was going to say -- or I was
13 going to ask if we could go down to PDF page 6.

14 Q G. FITCH: So there's reference to a
15 Pembina integrity review -- correct -- as being part of
16 the scope of work?

17 A That's correct.

18 Q Okay. And I -- I take it, based on the answers you
19 previously gave me, that that integrity review has
20 never been shared with Qualico for the reasons that you
21 stated?

22 A The specific output of the report itself wouldn't have
23 been shared.

24 Q Right. Qualico did ask for it; correct?

25 A (NO VERBAL RESPONSE)

26 Q Well, that -- that's Mr. Gerein's evidence. Let me

1 just ask you: Do you have any information to
2 contradict that evidence?

3 A I -- I don't.

4 Q Okay.

5 G. FITCH: Can we please mark, Madam
6 Chair, Qualico Aid to Cross Number 11 as the next
7 exhibit?

8 THE CHAIR: Mr. Myers?

9 T. MYERS: No objection, Madam Chair.

10 THE CHAIR: Thank you, Mr. Fitch.

11 Thank you, Mr. Myers.

12 Please, Ms. Arruda --

13 E. ARRUDA: So that will be Exhibit 89.01.

14 EXHIBIT 89.01 - 2024-03-07 Qualico Aid to
15 Cross #11 - Pembina Interim Support Agreement
16 for Marquis Blvd Crossing

17 Q G. FITCH: All right. Now I'd like us to
18 turn to Exhibit 85.01. You can confirm that this
19 document we're looking at right now, which is dated
20 April 21, 2021, addressed to Horse Hill Land Company
21 from Pembina and entitled "Final Support Agreement" is
22 a backstopping agreement provided by Pembina to Qualico
23 in connection with the 172nd Avenue crossing?

24 A I. BALFOUR: That's correct.

25 Q Okay. So if we can turn to PDF page 6, please, and
26 just go down to the "scope of work", I note that the

1 first item is titled "Pembina Internal Funding Approval
2 Process". So I -- I take it it is Pembina's
3 expectation that the party asking for the work to be
4 done has to pay for your internal funding approval;
5 correct?

6 A It is our expectation that the third party will pay for
7 internal funding approval related to the project they
8 would like us to execute.

9 Q Okay. And if we -- if we carry on a few points down in
10 that list of bullets, we see that the scope of work
11 includes excavation, sandblasting, nondestructive
12 examination on the pipeline; correct?

13 A Yes, I can see that.

14 Q So basically, then, as of the date of this agreement,
15 no inspection -- no external or physical inspection of
16 the pipeline had occurred; correct?

17 A It was buried until we excavated --

18 Q All right.

19 A -- so that's correct.

20 Q Yeah. And it still hasn't occurred, has it? Or --
21 actually, no. Of course it has. My apologies.

22 So Qualico never executed this agreement; correct?
23 Or did they? So many agreements. I don't think they
24 did.

25 A Yeah, they executed this agreement.

26 Q Okay. They terminated it. It never -- the work was

1 never done for Pembina or for Qualico by Pembina;
2 correct?

3 A J. SPROTT: Could -- could you just ask
4 your question again? There -- there was a lot of --

5 Q Yeah. I -- I'm sorry. I keep --

6 A We need to be clear.

7 Q I got to admit, I keep getting crossings mixed up, so
8 my apologies. Let me start over again.

9 So this is, in fact, the intersection that did end
10 up getting constructed. My apologies.

11 I am told that the work was completed on or about
12 August 3rd, 2021. Does that sound more or less right,
13 Mr. Balfour?

14 A I. BALFOUR: I -- I don't know what
15 particular date the work was finished at was, but I
16 know it was completed.

17 Q Okay. Would you take that subject to check?

18 A I take that subject to check.

19 Can you confirm the date you'd like me to check
20 again?

21 Q August 3rd, 2021.

22 And, sir, can you confirm that the actual cost of
23 the work was around \$436,000? You may have -- you may
24 have testified to this in your direct, but is that --
25 is that correct?

26 A I have something closer to \$482,000 --

1 Q Okay.

2 A -- but, you know ...

3 Q Okay. 482.

4 So that ended up being, again, about half of the
5 estimate contained in the agreement that Qualico
6 signed; correct?

7 A Yeah, roughly.

8 Q Okay. And so I -- I take it your explanation for,
9 again, the significant difference in the estimated
10 costs and the actual cost is that the estimated cost
11 was just an estimate, and you didn't know a lot at that
12 time, and until you did more work, you didn't really
13 know how much it was actually going to cost; right?

14 A I -- I don't know that we would say we didn't know a
15 lot. We knew -- you know, we had a project scope, and
16 then when you get out in the ground and execute the
17 work, sometimes things go -- go better than expected,
18 and there's a lot of different circumstances that can
19 impact that.

20 Q Okay. Okay. I'm going to move on to a slightly
21 different area -- well, a related area, but I'm going
22 to move away from the specific cross ings.

23 I take it both Pembina and Plains would agree that
24 in -- pipeline integrity is a key concern?

25 A N. TRIM: Yes, we would.

26 A I. BALFOUR: I -- I'm not sure we'd call it

1 a concern as something like -- that we actively manage
2 and put a lot of energy into to make sure it's done
3 correctly.

4 A N. TRIM: Right. Key focus area.

5 Q And, again, the pipeline companies are ultimately
6 responsible for ensuring the integrity of their
7 pipelines; correct?

8 A I. BALFOUR: It's our responsibility as
9 licensee to make sure the pipelines are in safe
10 operating condition.

11 Q Okay.

12 A I just want to clarify something around Section 28 that
13 I think is important. Is it -- it doesn't say anything
14 about who should pay for the work. It says that we
15 should undertake it, and I just thought it was, you
16 know, important that we -- that we called that out.

17 Q Yeah. And I -- I assure you that's going to be
18 addressed in argument, so ...

19 So one or more of Pembina and Plains have already
20 talked about the fact that as part of ensuring the
21 integrity of your pipeline assets, you carry out
22 regular inspection and maintenance work; correct?

23 A Absolutely. A -- very sophisticated programs that we
24 undertake for our normal operations.

25 Q Okay. So getting back to the -- I guess, the question
26 of what -- what actually happens when a developer

1 approaches a pipeline company and says, We -- we need
2 to widen an existing road that crosses your pipeline.

3 Does the pipeline company check, for example, to
4 see when the last maintenance work was done on the
5 pipeline just to see what the condition of the pipeline
6 is at that location?

7 A A. TORR: In answer to your question,
8 yes, we -- we would -- we would have looked at -- we
9 would look at that area of the crossing. I think
10 that's what you asked; right?

11 Q Yeah. Okay. And would you -- would you, as part of
12 looking at -- at the area in terms of the -- your
13 regular maintenance program, would you try to determine
14 whether the location where the crossing is is scheduled
15 for regular upgrading or maintenance work?

16 A Yes, that would be a consideration.

17 Q Okay. And I think, Mr. Sprott, the evidence is that
18 Pembina -- and I'm -- I'm sure Plains is the same, but
19 Pembina, when it was approached by Qualico in relation
20 to 167th Avenue and Meridian Street, was able to
21 determine that some regular maintenance work would have
22 to be required -- would have to be done at that
23 location, and that's why some of that cost was to your
24 account?

25 A J. SPROTT: I believe what I said was the
26 costs that were associated with the second-in-time

1 to -- to maintain, you know, safe, reliable operations
2 was well-defined. And what Pembina did -- because
3 there is a cost benefit -- 'cause remember that once
4 this -- once this road upgrade has -- has been
5 completed, these pipelines are very inaccessible. So
6 what Pembina had identified is maintenance and
7 integrity work that we would do for cost efficiencies
8 to be completed at the same time as the second-in-time,
9 which is Qualico, as their desired work.

10 Q Okay.

11 A I. BALFOUR: And maybe just to clarify, I
12 think, you know, there is the scope of work that --
13 that we think Qualico is -- is responsible for.
14 That's -- you know, as a result of the crossing.

15 And the second category of work that we're
16 responsible for based on, you know, if no crossing had
17 occurred, what work would we want to do. And I also
18 think "efficiency" might not be the right word because
19 we don't know exactly what the scope of work -- sorry.
20 I'm not speaking into the mic. My apologies.

21 Q Sorry. You're done?

22 A I'm done now.

23 Q All right.

24 A Thank you.

25 Q So let's assume that the pipeline company is approached
26 by a developer like Qualico. Qualico says, Here's the

1 location of our roadwork that we want to do over your
2 pipeline. You then check your records of your
3 maintenance and inspection programs, and you discover
4 that work is scheduled to be done on that piece of the
5 pipe anyways just as part of your normal integrity
6 maintenance program. You wouldn't ask the developer to
7 pay for that, would you?

8 A N. TRIM: For -- for any work that would
9 be required through normal day-to-day operation and
10 maintenance -- maintenance activities that would --
11 would exist without a crossing in place, we would not
12 require the developer to do that work.

13 Q Okay.

14 A Any work that we would uncover through the course of --
15 of executing the crossing work that would have to be
16 executed either because of timing, future access issue
17 requirements, you know, reinforcing because of the load
18 stress calculation that we have on the pipe, that would
19 be, in our opinion, part of the crossing.

20 A A. TORR: Mr. Fitch, I would like to add
21 to Mr. Trim's comment there.

22 Again, it's important -- I think I've mentioned
23 this before or earlier today. It's important that we
24 distinguish between the two parts of work that's
25 getting done. The work for a road to cross a pipeline,
26 which is civil work related to the stresses, the

1 different types of stresses that are put on the
2 pipeline, and then the integrity work itself, those are
3 two different components that we look at when we --
4 when we look at these different crossings.

5 Q Okay. Thank you.

6 Would -- this is for either Pembina or Plains.
7 Would you agree that it would be reasonable for the
8 developer who has approached you as part of its, sort
9 of, due diligence to inquire about your integrity and
10 maintenance plans for the location in question?

11 A N. TRIM: No.

12 Q Okay. The developer doesn't want to end up paying for
13 work you have to do anyways, but you don't think it
14 would be reasonable for the developer to try to inquire
15 into that?

16 A That's correct. That information, as Mr. Balfour
17 alluded to, is internal information not typically
18 shared on public record, and -- and, I would say,
19 doesn't necessarily distinguish the -- the true costs
20 of crossings that the developer would be looking to
21 undertake.

22 So I -- I would say it's -- it would be premature
23 to share any type of that information when -- when
24 we're -- when, say, CIMA+ or -- or another group is
25 looking at a fairly high-level development plan.

26 Q And --

1 A There's --

2 Q Sorry.

3 A Yeah. I was going to say there's -- typically there's
4 not a lot of information to provide to the pipeline
5 company around, you know, size of roadway, load stress,
6 number of crossings. It -- it's pretty high-level at
7 that time, so we give them a pretty high-level
8 estimate, typically.

9 Q Well, I wasn't asking you about estimates. I was
10 asking about the developer, who, of course, doesn't
11 want to pay for work you have to do anyways, to ask for
12 proof that they won't be paying for work you have to do
13 anyway.

14 A Yeah. And -- and I'll let Mr. Torr elaborate a bit
15 more on, you know, once we get a -- a cost recovery
16 agreement in place and start executing the work. We're
17 very transparent in showing the cost, the breakdown of
18 the cost. I'm happy to discuss the costs as we work
19 through it. It's a -- it's a flow-through. You know,
20 the pipeline company or Plains in this instance
21 would -- would take charge of the project, procure the
22 services, administer payment, and -- and invoice back
23 to the developer whatever costs associated. They --
24 they would have full transparency of all those costs to
25 review and -- and scrutinize at that time.

26 Mr. Torr.

1 A J. SPROTT: Just before Mr. Torr speaks, I
2 do want to clarify.

3 I think your first question was the pipelines
4 company not wanting to share the integrity work of --
5 of -- of our operation which Mr. Balfour, and I think
6 now Mr. Torr is going to, which we would -- Pembina
7 would agree to and, I believe, Plains.

8 And now Mr. Torr will talk to the information that
9 we do share with the second-in-time party.

10 A A. TORR: Yeah, that's correct. I'm in
11 agreement with what Mr. Trim has said.

12 In terms of the -- the -- the -- the integrity
13 information, we do not share that. That is considered
14 proprietary information. But outside of that, I think
15 maybe it'll -- it'll be -- it'll be -- it'll be helpful
16 if I give a -- I'll try and keep this as brief as
17 possible just to give you an idea of how we approach
18 these -- these crossings, sir.

19 You know, we receive lots of crossings. Not every
20 one is -- is as unique as this one; some of them are
21 very standard. But we receive those crossings, and we
22 would -- we -- we look at them, we consider the new
23 loads on the pipeline as a result of the -- the road
24 traffic, and then we -- we look at determining a method
25 of reinforcing the road, the -- the substructure to the
26 road in order to allow a -- a road to -- to -- to -- to

1 cross the pipeline.

2 These calculations are driven by CSA. Any civil
3 engineer can -- can do them. That's -- there's no
4 proprietary information in it. It's a fairly simple
5 calculation to do. And -- and that -- that really
6 covers the bulk of the work that needs to be done.

7 I know I've said this before, and I'll -- I'll
8 continue to say it, but the bulk of the work that is
9 done on these crossing projects relate to the -- the --
10 the road itself and the structure and the foundation of
11 the road in order to allow ultimately a blacktop to
12 safely cross your pipeline.

13 And a very small amount -- I know we keep -- we
14 keep hammering on the integrity information that --
15 that the companies don't want to share, but the
16 integrity work that is done on these pipelines is
17 really fractional in the grand scheme of things when it
18 comes to the cost of the work that is executed. I hope
19 that helps.

20 G. FITCH: I'd like -- I'd like if,
21 Ms. Arruda, we could go back to Exhibit 5.01, PDF 1094.
22 Oh, there we are.

23 Q G. FITCH: So I guess the question that
24 my client struggles with is: If we look at the Peace
25 20-inch pipeline -- so this is the pipeline that
26 crosses below Meridian Street and 167th Avenue -- and

1 forgetting about the actual numbers themselves, but
2 Pembina advises Qualico's -- or -- sorry -- Walton's
3 consultant at the time and says, 1.1 million is to your
4 account, and \$186,000 is to our account.

5 My client thinks it's reasonable for the developer
6 to be able to inquire into that split. Like, why --
7 why are we getting tagged for \$1.1 million and you only
8 \$186,000?

9 A J. SPROTT: Maybe Mr. Sprott will address
10 that.

11 Once again, consistent with my opening statement,
12 although this is a rough estimate from 2014, the -- the
13 practice is the second-in-time party, in this case,
14 Qualico, who's crossing and -- and causing the
15 alteration work, they're required to pay 100 percent of
16 those costs.

17 Pembina, through its integrity plans and -- and
18 preventative maintenance, is deciding to do work that's
19 not caused by the second party crossing our pipeline,
20 and those are the costs that Pembina is -- is -- well,
21 would absorb, and we would not make the second-in-time
22 party, in this case Qualico, pay for those.

23 Q The question my client has and the developers have is:
24 How can they satisfy themselves, being commercially
25 reasonable entities, that the costs that you provide
26 don't include costs you would be incurring anyways to

1 do your normal maintenance and integrity work? How can
2 they satisfy themselves? You are asking them to take
3 it on faith, aren't you?

4 A Could you repeat your question, please.

5 Q Sure. I -- I was pointing to Exhibit 5.01, PDF
6 page 1094 just as -- as an example to help try to make
7 it clearer. But -- so, keeping that in mind, the
8 question is: Given that the pipeline operators have
9 been very clear that they will not provide the
10 developers the integrity -- the results of the
11 integrity assessment because you consider it
12 proprietary, how can the developers satisfy themselves
13 that they're not paying for work that really should be
14 to your account because it's just regular maintenance
15 or upgrading work required, for example, on a
16 50-year-old pipeline?

17 A I think if we -- if we take a step back to how the
18 process works, 2014 there is -- there is, obviously,
19 information request to -- to crossing some pipelines in
20 the future from the second-in-time party. You can see
21 they have rough estimates that are provided.

22 The next step in the process is where you enter
23 into what we've seen both times here, the backstopping
24 agreements for, you know, sums of 50, \$60,000 in the
25 two examples that we just saw. That is an agreement to
26 proceed to the next step to do some incremental work to

1 truly understand what the overall cost and the scope of
2 work might be for the second-in-time party.

3 Subject to that, you get a refined cost estimate.
4 You present that to the counterparty, you enter into an
5 execution agreement for a sum that is, you know, that
6 we've -- we've seen here before. The execution and
7 agreement is well-defined with respect to scope of
8 work, what's expected, how much contingency is in
9 there, and, you know, when the work will be completed,
10 over what time frame, et cetera. And then once the
11 work is completed, then the counterparty, the
12 second-in-time, Qualico in this case, will be presented
13 with -- with the invoices, you know, detailed invoices
14 for the total amount of the cost.

15 So, like I said before, it's -- it's a
16 well-established process on how we do this. We do
17 this, you know, often enough, and we enter into
18 agreements that define which party the second-in-time
19 party will be responsible for.

20 Q Well, that's very interesting, sir, but it didn't
21 answer my question at all. So I'll just try to ask it
22 one more time, and then if -- I'll -- I'll move along.

23 The question is not on the process relating to
24 entering into agreements. The question is: Given the
25 pipeline company will not provide its integrity and
26 maintenance information to the company, just for the

1 location in question, how on earth can the developer
2 ever know that they're not paying for work to repair or
3 upgrade a pipeline that you would have to undertake in
4 any event?

5 A In this particular crossing, it -- it's defined, the
6 work that they will be accountable for, and then I
7 think your question is how do they know that we're not,
8 you know, just executing work that -- that they're not
9 accountable for -- because we've actually defined in
10 the agreement the work that we're going to be executing
11 for our safe operation of our pipeline. I think if
12 Pembina wasn't defining up front the scope of work that
13 we were accountable for and the work that they were
14 accountable for, potentially their -- you could think
15 that, but in this case, we've actually well defined it.

16 Q I will move on.

17 G. FITCH: Ms. Arruda, can you please
18 turn up Qualico Aid to Cross Number 1, please.

19 Q G. FITCH: So I guess this was -- this
20 one's for Plains. This -- what we're looking at is a
21 letter from me dated December 1, 2023, to Plains' legal
22 counsel Mr. Naffin, and the letter talks about the fact
23 that the Regulator, when establishing the process for
24 this proceeding, decided there would be no formal
25 information request processed but stated that the
26 parties were free to exchange informal information

1 requests. So if you carry on down to page 2, basically
2 what I did on behalf of my client, Qualico, was submit
3 informal information requests, and you will see that
4 Requests Number 2 and 3 ask for an integrity assessment
5 and maintenance records for the portion of the pipeline
6 sort of on either side of Meridian Street and
7 167th Avenue.

8 So, Mr. Trim or Mr. Torr, I take it your lawyer
9 would have forwarded this letter to you? You've seen
10 it before?

11 A N. TRIM: Yes, I have.

12 Q Okay. And if we can go now to Aid to Cross Number 3,
13 please, this is the response from Plains through your
14 legal counsel Mr. Naffin, and the long and the short of
15 it is Plains declined to respond to our questions,
16 including the ones asking for integrity and maintenance
17 records: (as read)

18 On the basis that they are not relevant to
19 the issues in this proceeding.

20 So I take it, Mr. Trim, you would have authorized
21 Mr. Naffin to send this letter?

22 A Yes. Through consultation with our legal counsel, I
23 did authorize sending this letter.

24 Q So it fairly reflects the position of Plains?

25 A Yes, sir.

26 Q Okay.

1 G. FITCH: And, Ms. Arruda, if we can go
2 to Qualico aids to -- Aid to Cross Number 2, please.

3 Q G. FITCH: So, again, a letter from me to
4 Mr. Munro at Bennett Jones who I mistakenly thought was
5 still your counsel.

6 And -- and if we can scroll down to the next page,
7 please, again, we are asking informal information
8 requests, including for integrity assessment and
9 maintenance records for the past ten years for the
10 portion of the pipeline starting from a point south of
11 the crossing to a point north of Marquis Boulevard,
12 and -- and then in Point 3, we asked for additional
13 assessment and maintenance schedule information for the
14 next five years. Do you see that?

15 A I. BALFOUR: Yeah, I see that.

16 Q Okay. And I take it, again, your counsel would have
17 forwarded this letter to you for you to review?

18 A Yes, they did.

19 Q Okay. And so if we can turn now to Aid to Cross
20 Number 4, please. So now we're looking at a letter
21 from Mr. Myers to me dated January 9, 2024, and, among
22 other things, this letter states that: (as read)

23 Pembina declines to respond to IR Numbers 1
24 through 3 on the basis they are not relevant
25 to the issues in this proceeding.

26 Correct?

1 A That's correct.

2 Q Okay. And I take it that Mr. Myers was accurately
3 conveying the position of Pembina in this statement?

4 A Yeah. We consulted with our legal counsel, and they
5 didn't think it was relevant, so that's how we
6 responded.

7 Q Got it. Thank you.

8 G. FITCH: Madam Chair, I'd like to mark
9 Aids to Cross 1, 2, 3, and 4 as the next four exhibits,
10 please.

11 THE CHAIR: Mr. Myers?

12 T. MYERS: No objection, Madam Chair.

13 THE CHAIR: Thank you.

14 Ms. Arruda, would you ...

15 E. ARRUDA: They will be entered as
16 Exhibits 90.01 through 93.01.

17 G. FITCH: Thank you.

18 T. MYERS: And, Madam Chair, just so I'm
19 clear, are we marking them in chronological order in
20 terms of the numbering of the aid to cross or in terms
21 of the order they were put to the witnesses? Because I
22 think we went 1, 3, 2, 4, so I just wanted to make sure
23 I'm clear on the exhibit numbers.

24 E. ARRUDA: I have them in the order that
25 they were presented, 1, 3, 2, 4, so I guess for
26 clarity, Number 1 would be 90.01, Number 3 would be

1 91.01, Number 2 would be 92.01, and Number 4 would be
2 93.01.

3 G. FITCH: Thank you.

4 EXHIBIT 90.01 - 2024-03-07 Qualico Aid to
5 Cross #1 - Letter dated Dec 1, 2023 to D.
6 Naffin re Qualico IRs to Plains (Nos. 1 to 6)
7 EXHIBIT 91.01 - 2024-03-07 Qualico Aid to
8 Cross #3 - Plains to Qualico re IRs (Jan 9
9 2024)
10 EXHIBIT 92.01 - 2024-03-07 Qualico Aid to
11 Cross #2 - Letter dated Dec 1, 2023 to S.
12 Munro re Qualico IRs to Pembina (Nos. 1 to 5)
13 EXHIBIT 93.01 - 2024-03-07 Qualico Aid to
14 Cross #4 - Pembina to Qualico re IRs (Jan 9,
15 2024)

16 G. FITCH: If we could please return to
17 Exhibit 5.01, the amended application, and turn to PDF
18 page 1072, please.

19 Q G. FITCH: Mr. Trim or Mr. Torr, this, as
20 you can see, is information from the AER about
21 Licence 6001-1 in the name of Plains Midstream
22 Canada ULC, and you will confirm for me that this is
23 the licence for the pipeline that crosses under
24 167th Avenue and Meridian Street?

25 A A. TORR: Yes. But I note the date on
26 that, November 2013.

1 Q Right. And then -- and it's -- it's -- the date is old
2 because this was in the CIMA+ report in 2014, but
3 you -- you sort of anticipated where I'm going. I'd
4 like now to have us look at Qualico Aid to Cross
5 Number 5.

6 So, Mr. Torr, it appears to us that on June 3rd,
7 2021, Plains received a licence amendment from the AER
8 for this pipeline; correct?

9 A Based on this piece of evidence, yes, that is correct.

10 Q Okay. Do you have any reason to disbelieve this piece
11 of evidence?

12 A No. I just -- I think context is important when it
13 comes to these pipeline licence amendments, and I am
14 not a hundred percent sure what the content of -- or
15 what the context of this amendment was.

16 Q Okay. So I -- I sent this over to your lawyer
17 yesterday morning as a potential aid to cross. You
18 have had a chance to review it since then, have you?

19 A Yes, I did.

20 Q Okay. Did you make any inquiries as to what the
21 context was for this licence amendment?

22 A I did. But more specifically to understand what the
23 meaning of this page and page number 2 was.

24 Q Well, and what did you find out?

25 A So I will -- so -- so page 1 -- so I'll -- I'm going to
26 read a -- just a paragraph here that I got from our

1 specialist: (as read)

2 To amend a pipeline licence, the licensees
3 apply per Directive 56 to the AER for
4 approval. The AER -- AER reviews and
5 provides a decision to approve or deny the
6 amendment. When an amendment is approved,
7 the AER issues companies with a pipeline
8 licence amendment that includes the
9 following.

10 So page 1, for example, would be the amended licence
11 with the approved operating parameters. And then if
12 you scroll to page 2 of this PDF, that would be the
13 markup of the previous licence showing which parameters
14 were amended.

15 Q Okay. And that's -- that's consistent with our
16 understanding as well.

17 G. FITCH: Ms. Arruda, if we can go back
18 up to the first page of the document.

19 Q G. FITCH: So what caught Qualico's
20 attention about this licence amendment, which otherwise
21 would seem fairly routine, is the -- the amendment made
22 to the column titled "Partial Pressure". Do you see
23 that?

24 A Yes, I do.

25 Q Okay. So, firstly, unlike the other pipelines we're
26 dealing with here, you'd agree that this Plains

1 pipeline is licenced to carry crude oil with a maximum
2 hydrogen sulphide content of 8 moles per kilomole;
3 correct?

4 A Yes, I agree.

5 Q Okay. So what -- what I am told -- and I just really
6 am looking more for clarification than anything -- is
7 that the -- the -- the number that we see in the column
8 titled "Partial Pressure", and that number is 43.04 --
9 that that relates somehow -- I don't really
10 understand -- to hydrogen sulphide. Is that the case?

11 A That is correct.

12 Q Okay. So you'll see -- and I should explain the red
13 box in the top right-hand corner of the document that
14 was -- that was superimposed on the licence amendment
15 by -- by Stantec. And you'll see a reference to
16 "CSA Z662-23, Clause 16". And I'll just read what the
17 note says, which is: (as read)

18 That clause stipulates a criterion for
19 sour service requirements to mean effective
20 H₂S partial pressure which exceeds
21 0.3 kilopascal. For pipeline systems not
22 containing a gas phase, i.e., gas-free liquid
23 pipeline systems, service in which the
24 effective hydrogen sulphide partial pressure
25 exceeds 0.3 kilopascals at the bubble point
26 absolute pressure.

1 I'm a lawyer, not an engineer, so I really don't know
2 what that means, but what I'm told it means is that if
3 there is an H2S partial pressure of 43.04 kilopascals,
4 this pipeline is a sour-service pipeline and that there
5 would be an emergency planning zone associated with it
6 that potentially would be greater than the
7 right-of-way.

8 And all -- I -- I -- I anticipated my friends were
9 going to object here. I freely acknowledge this
10 doesn't relate to cost sharing, but we just discovered
11 this --

12 D. NAFFIN: Keep on going.

13 G. FITCH: Yeah, keep on going.

14 Q G. FITCH: We discovered this preparing
15 for the hearing. It causes us concern. We might just
16 be misunderstanding it. And, really, I'm just seeking
17 your clarity that we shouldn't be concerned about this.
18 Submissions by D. Naffin

19 D. NAFFIN: So, Madam Chair, as Mr. Fitch
20 accurately forecasted, I do think this is beyond the
21 scope of this proceeding, which is dealing with
22 crossings and the apportionment of costs associated
23 with crossings.

24 And certainly there is a robust regulatory
25 framework that deals with sour gas facilities and
26 licensing requirements and so on and so forth that,

1 obviously, the Regulator oversees routinely, but I
2 don't think it's an appropriate discussion for this
3 proceeding particularly when it was provided to us as
4 an aid to cross 24 hours ago with very minimal
5 explanation and so on.

6 So I think it's both irrelevant to this proceeding
7 and unfair to these witnesses here today 'cause it's --
8 for those reasons, and it's addressed by a separate
9 regulatory process through the Alberta Energy
10 Regulator.

11 THE CHAIR: Mr. Fitch.

12 Submissions by G. Fitch

13 G. FITCH: Yes. I -- I -- as I said
14 before, I acknowledge that this issue is not related to
15 the specific question of cost sharing in particular.

16 My friend referred to -- well, there are other AER
17 processes. There -- I suppose our client could make
18 some kind of inquiry with the AER to try to ascertain
19 the meaning of this amendment and -- and whether, in
20 fact, it affects the size of the emergency planning
21 zone associated with this pipeline.

22 If my friends don't want their witnesses to speak
23 to it in this public hearing, I guess that's what we'll
24 have to do. Our view was, Here we all are. I thought
25 that my -- you know, the fact that we provided it
26 24 hours in advance would give them time to inquire

1 into it, and I thought that as a responsible pipeline
2 operator, Plains would be more than willing to talk
3 about it in this proceeding. But if they're not,
4 that's fine.

5 Submissions by D. Naffin

6 D. NAFFIN: Madam Chair, I don't have a
7 great deal further to say, but any suggestion or
8 ability to leave an impression that it's somehow
9 inappropriate not to answer an irrelevant question in a
10 forum on a limited notice I don't think is fair. I
11 would say, again, there are other avenues to pursue
12 these discussions with Plains, and -- and, indeed, not
13 as part of this proceeding, certainly Mr. Fitch can
14 avail himself of those opportunities, but, again, I
15 don't think it's appropriate in this proceeding; it's
16 not relevant to this proceeding, and, certainly, I just
17 don't want to leave the record with that last statement
18 or suggestion that somehow Plains is not a good
19 corporate citizen because it doesn't want to answer an
20 irrelevant question that it's had a limited ability to
21 consider in advance of today.

22 THE CHAIR: Thank you very much,
23 Mr. Naffin.

24 Mr. Fitch, so you're going --

25 G. FITCH: Sorry. I --

26 THE CHAIR: Sorry. I am trying my best.

1 Honestly, I am.

2 So you're going to switch your line of
3 questioning?

4 G. FITCH: Well, I -- I -- I'm -- I was
5 hoping you would say that you would like the witness to
6 answer the question. So if your ruling is you're not
7 going to require the witness to answer the question,
8 then I will move along.

9 THE CHAIR: Just -- just give me a couple
10 minutes so I also discuss it, not --

11 G. FITCH: Thank you.

12 THE CHAIR: -- make a ruling on my own.

13 G. FITCH: Thank you.

14 THE CHAIR: We'll be back.

15 (ADJOURNMENT)

16 THE CHAIR: Please be seated.

17 So we had a discussion. In the interest of
18 time -- I'm noticing that it's past noon -- I would
19 suggest we take the lunch break and we carry on our
20 conversations, discussions amongst the Panel, and then
21 we make -- we'll make the ruling after lunch if that's
22 satisfactory for parties. Yes? Nodding. Nodding.

23 Okay. So we -- in my schedule I had an hour
24 planned, and we'll try to come back quarter past 1.
25 No?

26 A. HUXLEY: And we'll just remind the

1 panel that's seated right now that they're under cross.

2 So I'll let Madam Chair speak to that.

3 THE CHAIR: Oh, thank you very much. Yes.

4 I'm pretty sure your counsel have spoken to you,

5 but when under cross, you shall not speak or consult

6 with your counsel. Thank you.

7 We'll see everybody after -- quarter after. Thank

8 you.

9

10 PROCEEDINGS ADJOURNED UNTIL 1:15 PM

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

1 Proceedings taken at Govier Hall, Calgary, Alberta

2

3 March 7, 2024

Afternoon Session

4

5 P. Meysami

The Chair

6 H. Robinson

Hearing Commissioner

7 E. McNaughtan

Hearing Commissioner

8

9 D. Brezina

AER Counsel

10 A. Huxley

AER Counsel

11 E. Arruda

AER Staff

12 D. Grzyb

AER Staff

13 A. Stanislawski

AER Staff

14 F. Hamdan

AER Staff

15

16 G. Fitch

For Qualico Developments West Ltd.

17

18 E. Appelt

For the Developers Group

19

20 E. Dixon

For Brookfield Residential

21

Alberta Limited

22 M. Cherkawsky

For Brookfield Residential

23

Alberta Limited

24

25

26

1 D. Naffin For Pembina Pipeline Corporation,
2 Plains Midstream Canada ULC,
3 and SECURE Energy Services
4 T. Myers For Pembina Pipeline Corporation,
5 Plains Midstream Canada ULC,
6 and SECURE Energy Services
7 T. Machell For Pembina Pipeline Corporation,
8 Plains Midstream Canada ULC,
9 and SECURE Energy Services
10
11 S. Duncanson For Keyera Corp.
12 J. Baker For Keyera Corp.
13
14 D. Lopez, CSR(A), RPR Official Court Reporter
15
16 (PROCEEDINGS COMMENCED AT 1:20 PM)
17 THE CHAIR: Please be seated.
18 Welcome back, everyone.
19 Ruling
20 THE CHAIR: So, just by way of context,
21 the application has been made under both
22 subsections (1) and (2) of Section 33 of the Pipeline
23 Act, not just the cost of alterations, but also the
24 nature of alterations, and the public interest
25 determination.
26 So we also note that -- Mr. Naffin's objection

1 on the relevance; however, in the process of
2 decision-making, we will be assessing if -- if -- any
3 evidence, how to weigh it, if it's relevant or not.
4 We will deal with that when we are going to decide.

5 And while these aids to cross was provided to
6 witnesses only 24 hours ago, it is the Plains licence,
7 so it's reasonable to assume that they have some degree
8 of familiarity with the -- with the licence.

9 And, lastly, Mr. Naffin, you have a chance -- you
10 have an opportunity for re-direct, if you choose to,
11 later on.

12 So, with all that, we are going to allow the
13 question.

14 But I'm going to ask you, Mr. Fitch, to please
15 rephrase or restate your question.

16 G. FITCH: Thank you, Madam Chair.

17 GREG FILIPCHUK, ARTHUR TORR, NIGEL TRIM, JARET SPROTT,
18 IAN BALFOUR, JEFF MAKHOLM, LAURA OLIVE, BRYAN
19 ROMANESKY, ROBERT TELFORD, Previously Affirmed

20 T. MYERS: Yeah. Sorry to interrupt.

21 Before the break, Mr. Balfour and Mr. Fitch were
22 discussing an August 2021 cost recovery agreement in
23 relation to Plains' -- or Pembina's 12-inch pipeline.
24 Mr. Balfour took some information related to the -- the
25 completion date of the work under that agreement,
26 subject to check, and he's got a clarification that he

1 would like to make, so before Mr. Fitch gets going, I'd
2 ask Mr. Balfour to provide that clarification.

3 THE CHAIR: Okay. For sure.

4 A I. BALFOUR: Thanks.

5 Yeah. So we confirm that the work was finished
6 for the 172nd crossing on August 3rd, 2021.

7 Q G. FITCH: Thank you.

8 G. Fitch Cross-examines Pembina/Plains/SECURE
9 Witness Panel

10 Q G. FITCH: All right. Well -- so I think
11 to backtrack to where we were, we should call up,
12 again, Qualico Aid to Cross Number 5.

13 So my question for the Plains witnesses is simply
14 could they please explain the amendment to the partial
15 pressure -- the H2S partial pressure which had not been
16 included in the original licence, and in the amended
17 licence it is indicated to be 43.04 kilopascals; and,
18 as a follow-up, can they provide Plains' position
19 with -- with respect to whether that has any impact on
20 the emergency planning zone for the pipeline.

21 A N. TRIM: So there's a business
22 opportunity available afforded to us on the pipeline
23 that required a licence amendment for the higher
24 partial pressure licencing. We do, obviously, comply
25 with all aspects of pipeline regulations in regards to
26 emergency response in public consultation, damage

1 prevention, so we do have a -- a robust emergency
2 response plan for this asset.

3 Q Okay. So I -- if I understand the way pipeline
4 licences work, a number like 43.04 would be a maximum;
5 that would be the maximum partial pressure -- H2S
6 partial pressure you could have on a pipeline.

7 So am I hearing your answer to be that, in fact,
8 that's not the actual partial pressure, or do you know?

9 A I don't have, off the top of my head, what it is today.
10 You are correct, though, in your assumption that
11 partial pressure could range from zero to 43.04 on any
12 given second of any given day, and we operate within
13 those parameters -- those operating parameters on the
14 line.

15 Q Okay. So then -- just last question. I take it from
16 what you've told me that there is no impact from this
17 amendment to the emergency planning zone or the
18 emergency response plan for this pipeline?

19 A So I'll try and answer your question to the best of my
20 ability here, sir. So our emergency planning zone
21 contained within our current emergency response plan
22 would accommodate this licence requirement or this
23 licence of 43.04.

24 Q Okay.

25 A Yes.

26 Q And that is -- is the -- our understanding is the

1 emergency planning zone for this pipeline is the
2 right-of-way; is that correct?

3 A Sir, I don't have the emergency response plan at my
4 fingertips here. I don't know off the top of my head.

5 Q Okay. Can you undertake to check and provide an answer
6 in due course?

7 A Yes, sir.

8 Q Thank you.

9 A Sorry. One quick clarification point. Your -- you
10 would like the emergency planning zone.

11 Q Yeah.

12 A I see. Okay.

13 Q Thank you.

14 G. Fitch: Ms. Arruda, can we please
15 have --

16 E. ARRUDA: Sorry to interrupt. Can we
17 just, for the record, document the undertaking. So
18 Undertaking Number 1 is to provide the emergency
19 planning zone for ...

20 G. FITCH: The Plains pipeline that runs
21 below the intersection of 167th Avenue and Meridian
22 Street.

23 A N. TRIM: The 24-inch rainbow pipeline.

24 G. FITCH: The 24-inch rainbow pipeline.
25 That's right.

26 E. ARRUDA: Okay. Thank you.

1 UNDERTAKING 1 - To provide the emergency
2 planning zone for the 24-inch rainbow
3 pipeline that runs below the intersection of
4 167 Avenue and Meridian Street (Fulfilled at
5 Page 498)

6 G. FITCH: Okay. Can we please have
7 Qualico Aid to Cross Number 5 marked as the next
8 exhibit, please.

9 T. MYERS: Sorry, Madam Chair. No
10 objection.

11 E. ARRUDA: So the exhibit number for that
12 will be 94.01.

13 G. FITCH: Thank you.

14 EXHIBIT 94.01 - 2024-03-07 Qualico Aid to
15 Cross #5 - Pipeline Licence Amendment for
16 Plains Midstream NPS 24 'CO' Pipeline

17 Q G. FITCH: So I -- I want to return
18 briefly to a conversation I was having with, I think,
19 both Mr. Sprott and -- I'm sorry. I keep -- I can't
20 see, sir, your name tag, and I keep forgetting, and I
21 don't -- I want to call you by your name.

22 A N. TRIM: Nigel Trim.

23 Q Trim. Thank you. My apologies.

24 So I was having a conversation before lunch with,
25 I think, both Mr. Sprott and Mr. Trim about, you know,
26 whether developers -- whether it's reasonable for

1 developers to have a concern that they might be paying
2 for repairs or upgrades that the operator really has to
3 do anyways to maintain the integrity of the pipe.

4 So that's -- that's the -- I just want to return
5 to that briefly. Sir, you're probably aware that so
6 far during this proceeding, some of the Qualico and
7 Developer Group witnesses have testified that one
8 reason this whole thing confuses them is that sometimes
9 they can obtain crossings for no cost. You've --
10 you've heard that?

11 A Yes, I did.

12 Q And, in particular, I just want to read to you some
13 testimony given by Mr. Nicholas of MLC Group yesterday.
14 And for the record, this is transcript page 229,
15 beginning at line 3, and the question was: (as read)

16 Q And can you describe for the Hearing
17 Commissioners, Mr. Nicholas, MLC's
18 experience in dealing with those
19 particular operators on pipeline
20 crossings in your Edmonton development?

21 A Yeah. It seems to our organization that
22 there has been a market change in the
23 past three to four years on the
24 operators' approach to these crossing
25 agreements. Previously, for example,
26 the neighbourhood of Quarry Ridge, which

1 is immediately south of the Horse Hills
2 neighbourhood -- which was constructed
3 about 2008 -- that's when the
4 neighbourhood was built -- and this is
5 the exact pipeline in question that you
6 heard about yesterday -- there are no
7 fees nor agreements nor anything needed
8 to construct that neighbourhood.

9 So to -- to -- to sort of put it more succinctly, what
10 Mr. Nicholson [sic] was saying was that, Gee, 15 or so
11 years ago, we were developing Quarry Ridge. The same
12 two pipelines run through Quarry Ridge, and we were
13 able to cross those pipelines with our new roads, and
14 it cost us nothing.

15 So I guess my question is: Can you please provide
16 some explanation for why that might be -- why that was
17 the case then and why it's so different now.

18 A I. BALFOUR: This is Ian Balfour.

19 So, on average, Pembina deals with 3,500 inbound
20 requests every year for people trying to cross our
21 pipeline. Of those 3,500, only 30 to 40 of them every
22 year, on average, end up with a scope of work that's
23 complex and -- and leading to, you know, where costs
24 may be higher, depending on the circumstance.

25 So I think it's really about, again, the unique
26 circumstances of the particular crossing, and an

1 experience in a community itself could be different
2 than an experience that they're having on this
3 pipeline.

4 Again, you know, we're -- we're processing 3,500
5 of these requests every year, people asking to cross
6 our assets, and -- and only 30 to 40 of them require
7 incremental assessment.

8 A N. TRIM: And not being familiar with
9 the exact geographic location of where they allegedly
10 would have crossed our pipelines, I -- I couldn't
11 comment on the nature of the crossing. It could be a
12 close proximity. I really couldn't comment on that, so
13 I'd need a little more information to -- to sort of
14 understand maybe some of the different technical
15 aspects of it between now and 2008.

16 A J. SPROTT: Yeah. Definitely --

17 A N. TRIM: But I think in a -- in a
18 cursory glance, you know, my colleague Mr. Torr had a
19 quick look, and it -- it doesn't look like we have any
20 crossings in that neighbourhood.

21 A J. SPROTT: We would definitely need to
22 understand the type of work that was crossing, if
23 it's -- if it's equal -- of substantive magnitude of
24 the ones that we're talking about.

25 I'd also -- I would direct, like, 2008 regulations
26 with respect to safe pipeline operations, you know,

1 they change fairly regularly, so I can't speak to
2 exactly the amount of change that happened since 2008
3 to 2023 that would require different types of work,
4 assuming that it was the -- a similar type of road or
5 infrastructure being built across the pipeline.

6 Q Right. So just to -- to give you some of the
7 information you were seeking, Mr. Trim. Quarry Ridge
8 is south of 167th Avenue and east of Meridian Street.
9 I see that Mr. Torr is shaking its head.

10 You would agree with that, sir? Shaking his head.
11 I'm sorry.

12 A A. TORR: Yes, I do. We had just a
13 quick Google search to look at that neighbourhood.

14 Q Right.

15 A That's correct.

16 Q And you're saying, actually, there are no crossings of
17 arterial roads over your pipelines in that
18 neighbourhood?

19 A Again, looking at the Google Map, which is, no doubt,
20 out of date, it doesn't appear as if there are any
21 major road crossings across our pipelines. I could be
22 wrong. We didn't do a detailed study of the -- of
23 the -- of the neighbourhood, but, again, just a cursory
24 review did not indicate any major roads crossing our
25 lines.

26 Q And -- sorry -- when did you do that cursory review?

1 Like, in the past two minutes?

2 A No. Two days ago when the testimony was -- was being
3 produced.

4 Q Okay. Thank you.

5 So let me ask you this: Let's say that the
6 developer is seeking to construct a new arterial road
7 over a brand-new pipeline, state of the art, whatever
8 you want to describe it, in one case, and in the other
9 case, they're building the arterial road over a
10 50-year-old pipeline. Are you with me? Is it the case
11 that there's a greater likelihood there's going to be
12 crossing costs associated with crossing the 50-year-old
13 pipeline versus the brand-new pipeline?

14 A I. BALFOUR: I think the answer to that is
15 not necessarily -- because there's a lot of assumptions
16 that we'd have to make in terms of, you know, again,
17 what -- what the surrounding circumstances are to each
18 of those. I think until the work's done -- and it's
19 very difficult to determine what work -- you know, what
20 the impact will be of either of those scenarios.
21 There's a lot of hypotheticals there, so ...

22 Q All right. Well, let's --

23 A N. TRIM: And I would add also that --
24 you know, just to sort of put some context around the
25 hypotheticals -- things like load of traffic crossing
26 the asset, depth of cover of the asset, you know,

1 product contained, these are all aspects of every
2 individual crossing, and -- and -- and like my -- my
3 friends at Pembina have described, we do thousands of
4 these across our assets every year, and some result in
5 little to no cost, very simple, sort of light --
6 light-duty crossings, like fibre optic cable, that --
7 that type of thing, to, you know, six-lane, eight-lane
8 freeways, which require some extensive load reinforcing
9 and -- and evaluation, not to mention that, you know,
10 the encroachment of the road overtop of our
11 right-of-way, which was established to operate and
12 maintain the asset unencumbered through its life cycle,
13 you know, is impeded upon for future use. So we have
14 to also consider those type of -- of things as we don't
15 want to disrupt the public, you know, five to ten years
16 later, you know, doing different maintenance
17 activities. So these are all -- all things that we
18 consider in every crossing that get supplied for within
19 our -- within our process.

20 Q Sure. Okay. Sorry. I didn't mean to interrupt.

21 So let's assume -- let's just carry forward in the
22 hypothetical -- that all those variables are constant.
23 So it's the same depth of cover, same volume of traffic
24 on top, and all of those other kind of variables that
25 could -- could affect the -- the question are the same,
26 but one pipeline is 50 years old, and the other is

1 brand new.

2 Isn't it the case -- you tell me if I'm wrong --
3 that there would be a greater chance that the pipeline
4 operator is going to come to the developer and say,
5 There are costs associated with crossing a 50-year-old
6 pipeline as opposed to a brand-new pipeline?

7 A A. TORR: Sir, no. The cost for those
8 two crossings would be very close to the same. Again,
9 back to the statement that I made earlier about the
10 civil component and the actual structure that carries
11 the road over the pipeline, those things have nothing
12 to do with the pipeline itself. I mean, the pipeline
13 is -- is there, but the -- the structure -- the
14 foundation on which the road is built is not a function
15 of the pipeline but a function of the area.

16 A I. BALFOUR: And I might add, I'm not sure
17 that the costs would be the same because I think your
18 assumption in that hypothetical is that the 50-year-old
19 pipeline's in worse shape than the brand-new pipeline,
20 and that's not the case. You know, it's -- it's
21 specific. Some pipelines have work to be done based on
22 inspection, and some pipelines, you know, that -- are
23 older and are in great shape. Both of them are safe.
24 And so I -- I just would go back to it really depends
25 on the individual circumstances in each case, and it's
26 really tough with hypotheticals to say, you know, one

1 is more likely than the other, in my opinion.

2 Q Okay. That's fine.

3 A J. SPROTT: I would just add the one
4 constant that -- that would still exist is that the
5 second-in-time crossing the right-of-way would bear a
6 hundred percent of the alteration cost, even if there
7 was a delta in those costs.

8 Q Yeah. I think, Mr. Sprott, I have heard you say that
9 several times, and I do understand that that's your
10 position.

11 So let me ask you one final hypothetical. Let's
12 change one variable and say that the 50-year-old
13 pipeline, just because it's of the design standards of
14 the day, or for whatever reason is a thinner wall pipe
15 than the -- than the brand-new pipeline. Would that
16 likely mean that upgrading or repair or replacement
17 work would have to be done on that pipe that would not
18 have to be done on the brand-new thicker walled pipe?

19 A I. BALFOUR: Not necessarily. I think,
20 again, you know, we -- we run pipelines of all
21 different size of wall thickness, and the -- the
22 thickness of the wall is not an indication that more
23 repairs are necessarily needed, just like the ages.
24 And, unfortunately, every crossing is unique, and all
25 the variables lead to a specific conclusion, so ...

26 Q So what would be the most important variable? If it's

1 not wall thickness, is it just purely the condition of
2 the pipe? Like, is it in pristine condition, or is
3 [sic] it actually got pits, or, you know, like, what --
4 what would cause -- you've told me that there wouldn't
5 necessarily be a difference. Okay. Fine. But what
6 could cause a difference?

7 A A. TORR: Mr. Fitch, I'll take this one.
8 Again, back to something -- I think I've said this
9 before. The cost is driven by the foundation of the
10 road. If you build a regular farmer's gravel road
11 across the pipeline versus a -- you know, a four-lane
12 highway, of course the cost of the crossing will be
13 different over the exact same pipeline, whether it's,
14 you know, ten years or a hundred years old at that
15 point that the -- the cost is driven in that case by
16 the type of foundation that you have to put in place to
17 carry the road across the pipeline.

18 A I. BALFOUR: Said another way, it's
19 really -- really subject to the -- what the -- the
20 person who's proposing to cross is proposing to do.

21 Q Well, I'll -- I'll -- the -- the one thing that hasn't
22 changed in any of my scenarios is that it's a -- it's
23 like a four-lane arterial road, like what's happening
24 with Meridian Street. And, I mean, correct me if I'm
25 wrong, but I think what I'm hearing you say is it
26 doesn't matter what thickness pipe it is, doesn't

1 matter how old it is, makes no difference; is that
2 correct?

3 A J. SPROTT: Just to be clear, you asked
4 us, what was the Number 1 contributing item factor that
5 would cause a 50-year-old pipeline to be different than
6 a new pipeline, but then we're going to hold some
7 variables constant, and we're going to have a wide
8 range of other -- so the road's now constant.

9 So I think there's so many variables in this --
10 this equation -- and -- sorry -- I'm an engineer, but
11 there's a lot of variables in this, and we're being
12 asked to hold some constant. It is -- it's an
13 extremely hard -- sorry -- question to answer because
14 of which are static and which are variables in this --
15 in -- in your question.

16 Q That is an excellent engineer's answer. I think I'll
17 just move along.

18 So I provided your counsel yesterday with a couple
19 of aid to cross-examinations, one being Pembina's 2023
20 annual report, and the other being a Plains investor
21 presentation for Q1 2024. I assume you've had an
22 opportunity to look at those documents and would likely
23 have been very familiar with them anyways?

24 A J. SPROTT: Yes for Pembina.

25 A N. TRIM: Yes for Plains.

26 Q Okay. And -- so I'm just going to throw some numbers

1 at you, and I'm a lawyer, not -- not an engineer, and
2 not a financial guy, so maybe I'm interpreting these
3 things wrong, but I just wanted to -- to explore it
4 with you.

5 So when I reviewed Mr. Stoll [sic] of the -- or --
6 sorry -- Stott [sic] -- the Pembina 2023 annual report,
7 I read that Pembina's gross revenues for 2023 were
8 \$9.1 billion; is that correct?

9 A J. SPROTT: Could you point me to the page
10 you're referencing, please.

11 Q Okay. Well, I was hoping we wouldn't have to do this,
12 but that's fine.

13 So if we can call up Aid to Cross Number 6,
14 please.

15 Submissions by T. Myers

16 T. MYERS: Madam Chair, perhaps before we
17 start going through Pembina's 2023 annual report, we
18 could understand from my friend what the relevance of
19 Pembina's earnings in that year might be to the need
20 for the alteration work that we're talking about at --
21 at one crossing in Pembina's case and how that is at
22 all relevant to that question as well as to the
23 question of whether or not the cost of that work should
24 be allocated.

25 Submissions by G. Fitch

26 G. FITCH: Certainly. The relevance is

1 I'm -- I want to explore what the true impact on
2 Pembina and Plains would be if a cost sharing order
3 were issued. That's it. In other words, these are --
4 I think you can figure out where I'm going with all of
5 this. These are major profitable corporations who are
6 saying, Oh, we can't possibly be made to pay for
7 pipeline crossings; it'll harm our -- I don't know.
8 Maybe they're not saying, It'll harm our business, but
9 that's what I'm trying to explore with them, is whether
10 a cost sharing order would actually have any impact on
11 them financially.

12 Submissions by T. Myers

13 T. MYERS: And, Madam Chair, I -- I
14 think, to be clear, what we've heard today from the
15 witnesses and what we've heard throughout the pipeline
16 companies' submissions is that they ought not be borne
17 with those costs on the basis that their pipelines are
18 existing, they've been in the ground for 50 or
19 60 years, and it should be and it typically is the
20 second-in-time party that would pay for the cost of
21 crossing work that they're causing.

22 My friend seems to -- to, I guess, think that this
23 might be some sort of utility rate proceeding where the
24 earnings of a company or other financial information
25 about the company might be relevant on the basis that
26 those costs are going to be flowed through customers,

1 i.e., members of the public, but that's not the nature
2 of the proceeding that we're here in today.

3 So, again, I don't think any of this information,
4 whether it's in Pembina's annual report or Plains', is
5 at all relevant to the two primary questions that the
6 Panel is being asked to -- to determine.

7 THE CHAIR: Thank you very much, Mr. Myers
8 and Mr. Fitch. We'll take a couple minutes.

9 (ADJOURNMENT)

10 THE CHAIR: Please be seated.

11 Thanks for everyone's patience, and I apologize
12 for the delay.

13 Ruling

14 THE CHAIR: We will allow the line of
15 questioning and decide the relevance in our
16 deliberations during decision-making.

17 G. FITCH: Thank you, Madam Chair.

18 I would ask Ms. Arruda, then, to take us to PDF
19 page 7 in the document, the annual report of Pembina
20 Pipeline Corporation for 2023.

21 G. Fitch Cross-examines Pembina/Plains/SECURE
22 Witness Panel

23 Q G. FITCH: So, Mr. Sprott, maybe, because
24 time has been passing, I'll just ask you -- I'll just
25 try to cut to the chase, so to speak.

26 I take it the numbers that we see in the table at

1 the top of this page for things like revenue, profit,
2 EBITDA -- that's earnings before interest, taxes,
3 depreciation, and -- I always forget what 'A' is.
4 Anyways, you know what I -- amortization. That's
5 right. I -- I take it those are all correct and
6 accurate, to the best of your knowledge?

7 A J. SPROTT: Yes, they are.

8 Q Okay. And if we could then go to the next Aid to Cross
9 Number 7, this next set of questions will be for you,
10 Mr. Trim.

11 Now, I have to admit, I found this document a
12 little harder to understand than the last one, but if
13 we can go to PDF page 32. Am I correct in
14 understanding that this is a projection -- so this is
15 an investor presentation. You're -- Plains is telling
16 investors what they think 2024 will look like from a
17 financial perspective, and the -- the message --
18 top-line message, so to speak, is projected adjusted
19 EBITDA of 2.625 to 2.75 billion; is that right?

20 A That is correct, 2.625 to 2.725.

21 Q Okay. Thank you.

22 G. FITCH: Ms. Arruda, if we can have the
23 Aid to Cross Number 6, the 2023 annual report of
24 Pembina, and Aid to Cross Number 7, the investor
25 presentation first quarter 2024 for Plains, marked as
26 the next two exhibits, please.

1 T. MYERS: I apologize. No objection.

2 THE CHAIR: Thank you.

3 I should have asked.

4 E. ARRUDA: So Aid to Cross Number 6 will
5 be Exhibit 95.01, and Aid to Cross Number 7 will be
6 96.01.

7 EXHIBIT 95.01 - 2024-03-07 Qualico Aid to
8 Cross #6 - Pembina 2023 Annual Report

9 EXHIBIT 96.01 - 2024-03-07 Qualico Aid to
10 Cross #7 - Plains Investor Presentation First
11 Quarter 2024

12 Q G. FITCH: So I'll -- I'll ask this
13 question not specifically to either Plains or Pembina
14 but both. Mr. Sprott and Mr. Trim, I expect you might
15 want to respond in whatever order you decide to do.

16 But basically, gentlemen, would you agree that
17 cost sharing pipeline crossings outside the
18 City of Edmonton are not going to break the bank for
19 Pembina and Plains?

20 A J. SPROTT: What I would say is that, you
21 know, if this order is issued and there was, you
22 know -- the -- the impact to Pembina and Plains and
23 others in the pipeline industry is going to be a
24 significant amount of uncertainty and a significant
25 amount of chaos, and the reason for that is that today
26 we have a well-established process on how the

1 second-in-time who's causing work to -- to take place
2 for it to allow us to -- to maintain safe, reliable
3 operations, that will become extremely uncertain.

4 Today, as I mentioned earlier, this crossing in
5 our province, it's a two-way street. We very commonly
6 are crossing other people's assets. We, being pipeline
7 operators, are crossing other people's assets, and we
8 do that solely, 100 percent to -- to our cost
9 structure.

10 So if an order was made -- what -- the -- the
11 challenge -- and I'll get to the point. The challenge
12 I'm having is -- is the impact, 'cause if an order was
13 made, I'm assuming that the order would be made in --
14 in some sort of fairness, so although there -- if the
15 order was made 50 percent, for example, there would be
16 a negative to pipeline operators, but on the -- on the
17 inverse side, there could be a significant benefit,
18 'cause I'm assuming that -- that -- that order would
19 be -- in some sort of fairness apply to it.

20 So, all in all, I can't really answer your
21 question on what the financial impact would be, but I
22 do know for sure that all industries who have
23 right-of-ways with assets in them, linear
24 right-of-ways, be it fibre optics, utilities,
25 waterlines, et cetera, there would be a significant
26 amount of uncertainty in the province.

1 Now I'll hand it over to Mr. Trim if he wants to
2 add anything.

3 A N. TRIM: Yeah. I -- I would agree with
4 the -- with the comments from Mr. Sprott. I would just
5 add that, you know, in the -- in the case of cost
6 sharing, there is no real benefit to a pipeline
7 operator to any second-in-time party coming to cross
8 their asset.

9 So I -- I don't know that we would find that as an
10 equitable treatment to our -- you know, our -- our
11 being there in the first place and having been
12 approached by a third party to cross.

13 So it's really a one-way street in our mind to
14 allocate cost sharing in this type of -- of
15 arrangement. It -- it's really -- benefits one side
16 only.

17 Q So, Mr. Sprott, you say there will be uncertainty, and
18 you go so far as to say there will be chaos, but, sir,
19 you would agree with me that a cost sharing order would
20 have negligible, if any, impact on Pembina's bottom
21 line?

22 A J. SPOTT: Cost-sharing orders -- one
23 cost sharing order or multiple numbers of cost-sharing
24 orders over multiple numbers of time?

25 Q The cost sharing -- cost-sharing orders sought by
26 Qualico in this case.

1 A I -- my personal -- it's not relevant, in my opinion,
2 if it would make or break. It doesn't adhere to the
3 current industry's practice of how this is completed.

4 Q Yeah.

5 A It would be -- although it would be a deduct to -- to
6 our bottom line, it's an adder to -- to the
7 second-in -- in-time who's causing the work.

8 Q And when Mr. Myers was objecting to this line of
9 questioning at the outset, he suggested that I was in
10 some confusion about the nature of this proceeding,
11 thinking that perhaps it had to do with setting rates
12 and -- and -- and -- you know. So I'm not -- but I am
13 going to ask: Couldn't you and, likely, wouldn't you
14 pass on added costs associated with cost sharing
15 pipeline crossings to your shippers?

16 A I. BALFOUR: I can answer that.

17 So the costs that would be caused are being caused
18 by Qualico -- Qualico's decision, are not being caused
19 by Pembina or its customers or anything else. And, you
20 know, while our agreements are confidential, they don't
21 currently have -- it's not currently contemplated in
22 the agreements that we have. So the answer is not --
23 not now.

24 Q So presumably, then, you would --

25 A N. TRIM: I -- I would --

26 Q Sorry.

1 A I would like to sort of add -- elaborate --

2 Q Go ahead.

3 A -- on that as well from a -- from Plains' position.

4 It's Nigel Trim.

5 You know, I agree with Mr. Balfour. A lot of our
6 customer contracts are different timelines, different
7 rates. The fundamental common theme, though, is -- is
8 it's market driven. And you'll notice that, you know,
9 Plains and -- and Pembina are here today representing,
10 you know, a common interest in -- in crossings, but we
11 are direct competitors in this space, and it's not
12 necessarily -- you know, similar to the housing market,
13 you know, demand sets -- sets the price in a lot of
14 ways. It's no different from how we offer service. So
15 I wouldn't describe it as a flow-through cost; it's an
16 impact to the bottom line.

17 A J. SPOTT: And just further to that, I
18 guess, regardless of who's paying for it, if we can
19 flow that through to our customers or not or it goes to
20 our bottom line, we are not causing this work to
21 happen. Our customers are not causing this work to
22 happen. Therefore, neither party should be obligated
23 to pay for the costs that we're not causing regardless
24 who I can flow it through to, even if I could flow it
25 through to -- to the Province. They're not the ones
26 causing the work to happen.

1 Q Suppose with me that you had a contract coming up to be
2 renewed, renegotiated in the next year or so and there
3 were an order issued by the AER which, in your view,
4 results in kind of a resetting of the landscape in that
5 now operators are going to be responsible for a lot
6 more pipeline crossing costs than they currently are,
7 wouldn't you negotiate that in your renewal
8 negotiations with your shipper?

9 A I. BALFOUR: Yeah. I -- I think our
10 customers would -- you know, would oppose us. You
11 know, would we -- would we try to negotiate it in this
12 hypothetical situation? Yes. Would we be successful?
13 I think that's a low likelihood. Like, once again, the
14 customers are not causing this; we are not causing
15 this.

16 The costs that we're looking to recover are those
17 as a result of the decision of a developer, which we're
18 not opposing the developer here. We're -- we're happy
19 to accommodate the work. We've always been happy to
20 accommodate the work. But we're just not -- you know,
21 it's -- again, the -- the costs that we're looking to
22 recover are those made by the decision of Qualico.

23 Q I understand that that is your position, and I'm happy
24 to move along.

25 Discussion

26 G. FITCH: Madam Chair, I'm -- I'm going

1 to advise that it's 2:30. Things have moved slower
2 today than I had anticipated, in part because of the --
3 the time that the commissioners had to make on the --
4 on the two procedural issues. I -- I say this because
5 I'm -- I'm done with the corporate witnesses, and I
6 know that somebody -- I don't know if it's Mr. Sprott
7 or Mr. Balfour -- I believe, from Pembina has a
8 conflict tomorrow.

9 I -- I don't know that I'm going to get done with
10 this witness panel today, and I know Mr. Myers had
11 stood up yesterday and said that it would be Plains or
12 Pembina's -- I -- I think, both -- strong preference to
13 finish today because they wouldn't want to seat the
14 panel less one or two people tomorrow.

15 I -- I'll give you my position on that. I've been
16 in lots of AER and AUC hearings in the past where,
17 because of witness constraints, the -- the hearing
18 panel has basically said, Look, if Witness 'X' has to
19 be done in an hour, we'll just -- we can sort of
20 interrupt the cross-examination. If counsel for the
21 AER and the Hearing Commissioners have questions for
22 Witness 'X', they can ask those questions. Once that's
23 done, Witness 'X' can be excused, and then the
24 cross-examination just carries on of the rest of the
25 panel.

26 So I think there's a pretty easy solution to the

1 problem identified -- or the concern identified by
2 Mr. Myers yesterday, but I did just want to -- to
3 advise you that I don't think I will be done today --
4 at where -- given where we're at.

5 Do you want to ...

6 THE CHAIR: Mr. Myers.

7 T. MYERS: Yeah. Thank you, Madam Chair.

8 And thank you to Mr. Fitch for -- for raising the
9 timing issue now.

10 As I had indicated yesterday, it would be our
11 preference to -- to have our entire panel here when it
12 comes time for you folks, the AER Panel and any
13 questions from counsel and staff, to -- to have the
14 full panel here to be available to answer those
15 questions. We had raised that prior to the hearing,
16 and our understanding was that we might sit late today
17 in order to accomplish that.

18 That being said, I -- I don't need to -- to
19 dictate your process. We want to be as helpful as we
20 can, and we think the best way to do that is with the
21 entire panel here.

22 I also note that there, I think, is other
23 cross-examinations scheduled following Mr. Fitch, so I
24 don't know to what extent the other parties have
25 questions for the Pembina witnesses, but, again, it
26 would be our preference for -- for any questions to be

1 responded to by the full -- the full complement to be
2 as helpful as we can to the AER.

3 THE CHAIR: Mr. Fitch, how much more? Do
4 you have an estimation of time?

5 And then I'll ask Mr. Dixon if he has any ...

6 E. DIXON: Good afternoon. I believe
7 that in our prior estimate we had estimated that we
8 would have one to one-and-a-half hours of cross for
9 this panel. I suspect, based on the able
10 cross-examination by my friend, that it will be
11 substantively less, and there remains the possibility
12 that there may be none at all. So depending on how the
13 questioning by my friend goes, we're in your hands in
14 terms of what your determination is based on the
15 Panel's preference on how to proceed.

16 THE CHAIR: Okay. Thank you.

17 So, Mr. Fitch, if I understood you correctly,
18 you're finished with the corporate representatives, but
19 you still have further cross-examine -- and you're
20 suggesting AER staff and the Panel ask their questions
21 from this panel?

22 G. FITCH: I think what would make sense
23 is I'll -- I'll just proceed, and we'll see how far we
24 get. I know we're supposed to be going until 4:30, and
25 we did talk about staying late, but if it appear --
26 I -- I guess what I'm thinking is if it appears by 4:30

1 that, like, I've got at least another couple of hours,
2 I'm not going to want to be cross-examining at 6:30.

3 So my thought was we -- we could pause the -- the
4 cross, and any questions of the corporate witnesses
5 could be put to them so that they could be done today,
6 and the experts can come back tomorrow.

7 THE CHAIR: Right.

8 T. MYERS: And, Madam Chair, it would be
9 our strong preference not to have only the experts
10 return again. The panel is being seated as a full
11 panel. We're ready and willing to sit as long as the
12 Panel -- the AER is willing to sit. If that's 6:30, if
13 that's 10:30, we're -- we're here to be as helpful as
14 we can. So, like I said, we're in your hands, but
15 that's our preference, and we certainly don't intend to
16 sit just the experts on their own if we can't get it
17 all done tonight.

18 THE CHAIR: Understood. I just have to
19 check timing that -- how -- from our side, how long can
20 we sit. I think we can sit late. We said we could.
21 Just -- should we confer -- yeah -- okay -- to see
22 what's people's -- because people have other
23 restrictions outside here, so -- I don't know --
24 childcare. I had one hearing that somebody had to go
25 because of childcare, so we'll see, and then we'll get
26 back to you.

1 (ADJOURNMENT)

2 THE CHAIR: Please be seated.

3 So upon checking, we are good to stay in this room
4 till 6. We don't have clearance from security yet to
5 stay beyond 6, so let's see how far the -- but breaking
6 the witness panel, we'll keep you -- we'll try to
7 finish as much as we can today so we don't break the
8 witness panel.

9 G. FITCH: Thank you, Madam Chair.

10 I'm now going to turn to questions for
11 Mr. Telford.

12 G. Fitch Cross-examines Pembina/Plains/SECURE Witness
13 Panel

14 Q G. FITCH: Mr. Telford, good afternoon.

15 A R. TELFORD: Good afternoon.

16 Q I'd like to ask that we turn up Exhibit 6.01, PDF 308.
17 Thank you.

18 So, Mr. Telford, this is the first report that you
19 prepared for Plains and Pembina; correct?

20 A That is correct.

21 Q And could we turn to PDF page 314, please. So you list
22 on PDF page 314 at the top there all the type of expert
23 witness testimony you've given.

24 Sir, my question for you is: Have you ever
25 represented a client in an application brought pursuant
26 to Section 33 of the Pipeline Act?

1 A I have been involved with a -- over the years as a
2 landman in that vicinity, yes, in Section 33.

3 Q So -- sorry -- you're saying you have been an expert
4 witness in a Section 33 Pipeline Act application before
5 the ERCB or the AER?

6 A No, I have not appeared before as an expert with
7 Section 33.

8 Q I see. Thank you.

9 But I take it from what you just told me, prior
10 to being retained by Plains and Pembina in this
11 proceeding, you were certainly aware of Section 33 of
12 the Pipeline Act?

13 A Yes, I am. I've worked for several pipeline companies
14 and developers over the years where pipelines have been
15 required to be moved.

16 Q Okay. So you know, then, that it is possible for a
17 party to bring an application before the AER to seek an
18 order that a pipeline be altered or relocated and to
19 have the costs associated with doing that apportioned
20 by the Regulator; correct?

21 A I'm aware of that section of the Act, but in all of the
22 instances I've been involved with, the two parties have
23 ultimately come to an agreement on whether the pipeline
24 had to be moved and the costs involved.

25 Q Okay. So if we can go back to PDF page 309, please.
26 Under Section 2, "Acquisition of Crossings". And then

1 go down to the next page, 310. There.

2 So you -- I'm just going to quote from your
3 report. You say: (as read)

4 It is important to note that the initiating
5 party, Party A, is responsible for all
6 crossing costs associated with this project.

7 In some cases, Party B will also charge a
8 nominal fee for administration services.

9 So what do you mean when you use the word "is
10 responsible"?

11 A It is my experience over the last 35 years, seeing we
12 are involved in a lot of crossings, that the person
13 initiating the crossing or asking for the request is
14 responsible for all of the requirements of the crossing
15 and paying for the costs if it needs to be matted, if
16 it needs to be -- there's other stuff that, I guess,
17 we've heard from a civil area from the construction.
18 They're responsible for all of the construction costs.

19 Q Okay. Is it written down anywhere, sir, in
20 legislation, regulations, policies, directives that the
21 initiating party must pay? Can you point me to any
22 such ...

23 A I cannot point you to any such legislation; however,
24 that is my experience. Like I said, in the last
25 35 years, I have never seen that varied.

26 Q All right. So when you say it's responsible, that's

1 your opinion based on your experience?

2 A That would be my experience.

3 Q Got it.

4 Sir, you'd mentioned a moment ago that you've
5 represented both pipeline companies and developers in
6 disputes about relocating pipelines. Did I hear that
7 right?

8 A That is correct.

9 Q Yeah. Isn't it, sir, a matter of negotiation who pays?

10 A In those cases, the main aspect was the actual
11 relocation moving to accommodate the new development
12 proposal. There was never any issue about who was
13 paying. It was the developer that was paying to have
14 that work done.

15 Q Okay. So you -- you have never, in your 35 years'
16 experience, been involved in a dispute where the
17 developer was questioning the cost of the relocation?

18 A No. The costs were pretty straightforward, identified
19 by what was to be done, and it was transparent on all
20 of the dirt work, the construction, the engineering.
21 So that was taken into consideration, and, like I said,
22 there has never been any indication that the developers
23 weren't going to pay.

24 Q Okay. Well, let's -- let's do a hypothetical. Assume
25 you are representing a developer about -- in a dispute
26 about altering or relocating a pipeline, and assume

1 your client objects to the cost of the crossing being
2 put forward by the pipeline operator. What would your
3 advice to your clients be?

4 A You'd have to go identify what the route of the
5 objection is on the cost and how it came about, and
6 then I'd advise to get legal counsel to go forward and
7 make any issues that they may choose to to move it
8 forward. But, like I said, in all the stuff I've been
9 involved with, that has never been the case. The case
10 usually is a relocation and who and when is going to be
11 doing the reconstruction.

12 Q Would your advice to the developer be, You just have to
13 suck it up and pay?

14 A With my experience of the developers and working with
15 it from a valuation point of view, those costs are
16 already inherently put in when they make the purchase
17 of the property. So as -- I have a long list of what
18 they look at in terms of purchasing a property, all of
19 the possible issues that might be involved, and they
20 consider that before going forward. That's just the
21 developers I've worked with.

22 Q Would you advise your client to file an application
23 under Section 33 of the Pipeline Act, or would you tell
24 them to talk to a lawyer about that?

25 T. MYERS: Madam Chair, Mr. Telford is
26 appearing here as an independent expert witness. We've

1 outlined his experience as a realtor, an accredited
2 appraiser, a landman, a surface rights compensation
3 expert. He's not here as a lawyer. He's not advising
4 clients on anything. If there's a question about how
5 he would deal with a situation that relates to his area
6 of expertise, I think that's fairly put to the witness,
7 but he's not purporting to be here as a lawyer as I
8 think the questions are trying to suggest.

9 G. FITCH: No. I think it was pretty
10 obvious from my last question I wasn't suggesting that.

11 Q G. FITCH: Sir, you -- you have
12 expertise, you have told me you have been involved in
13 lots of disputes about relocating pipelines, and I'm
14 trying to understand what you -- I -- I won't use the
15 word "advise" -- what kinds of discussions you have
16 with your clients when you're in that kind of a
17 situation. And the -- the -- the hypothetical I put to
18 you is: You're representing a developer, and the
19 developer objects to the cost of the relocation or
20 alteration. What would you tell him?

21 A R. TELFORD: In my cases, I am usually one
22 of the negotiators or dealing with the issue, so that
23 is my part of that.

24 In dealing with developers and working for them,
25 they're very sophisticated. They have their own
26 experts internally on how they've dealt with these

1 things in the past. They have lawyers, engineers, cost
2 people, and so that would go back into their purview.
3 I wouldn't get into that agreement or that argument
4 with them.

5 Q Okay. If we could go down to PDF page 310, please.

6 And I'm just interested in your discussion of the
7 public interest. And in the first paragraph, you quote
8 from the amended application filed by Qualico, and --
9 and the -- the passage that you quote says: (as read)

10 The reality that these neighbourhoods face is
11 high sensitivity to the price point of
12 housing. Developers are forced to offer
13 properties at a substantial discount compared
14 to established neighbourhoods in order to
15 compete. Adding costs in price-sensitive
16 areas exacerbates the erosion of
17 affordability. Therefore, developers face
18 added stress and risk that inhibits their
19 ability to provide necessary housing and
20 ultimately deters investment.

21 So that's -- that's the quote from Qualico's
22 application.

23 The sentence that follows is then a comment from
24 you addressing that; right?

25 A That is correct.

26 Q Okay. And so what you say then, is: (as read)

1 The one aspect that this submission did not
2 consider was the purchase price of the land.
3 Based on the experience of Qualico, it would
4 be expected that costs associated with the
5 pipeline crossings would have been taken into
6 consideration in the purchase price.

7 So I'm interested, sir, in the introductory words of
8 that sentence where you say: (as read)

9 The one aspect that this submission did not
10 consider.

11 So I just simply would like you to tell me, apart from
12 the failure to consider the purchase price of the land,
13 I -- I take it you agree with the rest of the
14 statement, do you?

15 A The statement, I think, speaks for itself and is based
16 on what they've identified dealing with costs. It's my
17 opinion that they would have looked at all this
18 information and used a purchase price in which they
19 would meet their expectations. So that's where I'm
20 getting at. In order to obtain their long-term goals,
21 a lot of this information was known prior to the
22 purchase that they would consider that so they would be
23 able to meet their investment goals.

24 Q Well, let's break it down, then, sir. Let's start
25 with: (as read)

26 The reality is that these neighbourhoods have

1 a high sensitivity to the price point of
2 housing.

3 Do you agree with that?

4 A I think that -- excuse me. I think that any
5 neighbourhood has a price point depending on what
6 you're going to build. This neighbourhood is unique in
7 itself, is it has a significant variation in
8 development. So I think they would take that into
9 consideration and see where those price points end up
10 when they get down to the lot prices and the house
11 prices.

12 Q So I wasn't able to understand if you agreed with that
13 or not. Do you agree that: (as read)

14 The reality that these neighbourhoods face is
15 high sensitivity to the price point of
16 housing.

17 Do you agree with that, sir?

18 A Neighbourhoods, they do -- they're all price point.
19 Different neighbourhoods have different price points.

20 Q Right. The sentence, though, says that: (as read)

21 These neighbourhoods have a high sensitivity
22 to price point of housing.

23 Do you agree with that? Last time I'll ask.

24 A They may, but we're at the preliminary phase of
25 development right now, so we don't know what the exact
26 price points are.

1 Q Do you agree that developers are forced to offer
2 properties at a substantial discount compared to
3 established neighbourhoods in order to compete?

4 A That I haven't found. Most of the time, new homes are
5 actually worth more than existing neighbourhoods, so
6 that I don't totally dis -- or I don't agree with.

7 Q Do you agree with adding costs in price sensitive areas
8 exacerbates the erosion of affordability?

9 A I believe if you have additional unexpected costs that
10 you couldn't plan in, maybe regulation changes and
11 things, that that could impact.

12 Q So that's a qualified "yes", is it?

13 A It is a qualified "depends on the situation".

14 Q All right. So then the next paragraph you say:
15 (as read)

16 Although the road crossings are a cost of
17 development, the probability of them being a
18 significant cost to the purchaser is
19 extremely low.

20 Right? That's what you say?

21 A That is correct.

22 Q Okay. So would you agree with me that the developer
23 would be in the best position to know whether the
24 addition of these costs will become significant and an
25 impediment? Would you agree with that?

26 A I believe the due diligence should be done in the

1 review of information out there so they can have
2 realistic values, and I believe there was some
3 significant values of the potential costs crossing this
4 in the previous ASP, so that should have been taken
5 into consideration when they were purchasing the land.

6 Q So what if -- you -- you say that the probability of
7 crossing costs being significant is extremely low, but
8 what if the developer considers that they're actually
9 significant? What happens then?

10 A They may have to decide whether they want to purchase
11 this property or if they've already purchased it, there
12 may have to be adjustments in the development of the
13 neighbourhood, maybe changing density, maybe changing
14 different types of developments, having more houses to
15 sell. We've seen this has gone up by several hundred
16 houses or dwellings since the first ASP, so some of
17 that can be calculated in during the planning phase.

18 Q Right. And if -- if the developer considers that the
19 added costs have become significant enough that they
20 choose not to proceed with the development, so they
21 don't buy the land, and they don't choose to proceed
22 with the development, what impact will that have on
23 housing supply?

24 A It's likely they'll move on to another piece of
25 property and develop that, and it's also possible that
26 another developer will come along and purchase this and

1 develop it, depending on different investment criteria.

2 Q So it's as simple as, I think those -- that development
3 is getting a little bit pricey. I'll just move on and
4 do a different one? Is that the way developers work?

5 A Developers look at what's available. They plan a long
6 ways out, and they take a look at what lands feed --
7 are -- will fit their economic criteria for buying
8 land.

9 Q So still on page -- PDF page 310, the second-last
10 paragraph, you say: (as read)

11 It should be noted that the market sets the
12 price of residential lots. Although a
13 developer has input into the process by
14 determining size, style, and amenities, it is
15 ultimately the purchaser that will determine
16 what they are willing to pay for a property
17 regardless of the developer's input cost.

18 So, sir, again, would you agree with me like -- agree
19 with me that sophisticated developers like Qualico have
20 expertise and experience in determining the price of
21 lots?

22 A I would -- I believe that they have expert experience
23 in developing lots. When it comes to pricing,
24 depending on how long it takes to develop, that will be
25 up to the market. It may be a very tight market or a
26 very soft market by the time those come onto the

1 market, and at that point they're going to compete with
2 other product that's out there, and, in this case, just
3 looking at what is sold so far, there's a -- almost a
4 hundred-thousand-dollar variation between the different
5 types of lots, and depending on whether you're buying
6 bulk lots or not, you get a discount. So there is --
7 the market is working in this neighbourhood. There is
8 flexibility on pricing. It's just not that they set
9 one price, and that's what they're going to take,
10 nothing less, nothing more. It depends on the
11 purchasers.

12 Q Yeah. But the -- the purchasers don't bid a price.
13 The home builders in new neighbourhoods, like Marquis,
14 offer lots for sale at a certain price. I think what
15 you're saying is if the price is too high, then the
16 lots won't sell; if the price is too low, the lots will
17 sell, but the developer will earn less money. Isn't
18 that sort of how it would work, sir?

19 A I think what I was saying is that they usually start
20 off with some initial prices based on what they want to
21 get back on their economic return based on the actual
22 price of all the inputs that they've calculated and
23 also based on independent appraisals depending on
24 what's happening in the adjoining neighbourhoods.

25 In saying that, in some neighbourhoods, you'll
26 start off -- is -- with one price at one point, and

1 then if there's a real big rush on it, they will
2 increase prices as it goes along. It's also -- the
3 opposite is if you can't sell it, there may be
4 discounts, but, like I said, in this area, the values
5 have been going up over the last eight to ten months.

6 Q Are you yourself a developer?

7 A I am not, no.

8 Q Do you think you have more expertise in the development
9 of communities like Marquis than Qualico?

10 A I think I probably have a significant amount of
11 knowledge on the valuation of real estate, but I do not
12 have it in the development. I know expected returns,
13 what they like to see, because I work with them, but
14 when it comes down to it, the final market valuation
15 ends up being associated with appraisers 'cause without
16 appraisers you don't get financing, and if we don't put
17 the number on it, it doesn't sell.

18 Q Sir, would you agree that if input costs are too high
19 to be able to market the lots at a price that
20 purchasers are willing to pay, the result is that,
21 effectively, the development is not economic, and the
22 lots won't be developed?

23 A That is a possibility, and it depends on the economics
24 of the time. We've seen that happen through the
25 fluctuation, especially in Alberta over the years,
26 depending on the supply and demand.

1 Q Okay.

2 G. FITCH: Could we turn to PDF page 311,
3 please.

4 Q G. FITCH: So here you're addressing the
5 argument made by Mr. Morrison, in his first report,
6 that the amount paid for the rights-of-way in 1968 and
7 1971 were quite low, that this is the paragraph that
8 begins, "if the two examples are reviewed in more
9 detail"; correct?

10 A Correct.

11 Q Yeah. And you -- you indicate that the 1967 agreement
12 was \$8,500 or \$2,537.31 an acre, and the 1971
13 right-of-entry order was \$7,260 or \$1,680.55 an acre;
14 correct?

15 A Correct.

16 Q And you say: (as read)

17 This compensation far exceeds the average
18 agricultural value of \$74 per acre for the
19 Province of Alberta for the same period of
20 time.

21 Correct?

22 A That is correct.

23 Q Yeah. Could we please turn to Exhibit 64.05 and PDF
24 page 5.

25 So, firstly, you'll agree with me that the
26 document we're looking at is the decision of the Public

1 Utilities Board in 1971 in relation to compensation for
2 the -- I think it's the Plains right-of-way -- or --
3 sorry -- right-of-entry order. Maybe it's Pembina.

4 A Is this the Plains or the Pembina one? I just ...

5 Q Well, one -- one was right-of-way -- was a voluntarily
6 negotiated right-of-way. This one was -- I think it's
7 the Plains pipeline, and this one is a right of entry
8 order. Anyways, it doesn't matter.

9 A It -- this is actually the Pembina pipeline.

10 Q Is this the Pembina one?

11 A Yes.

12 Q Okay. So -- so you see there the paragraph beginning
13 "Evidence relating to the market value"? Do you see
14 that?

15 A Oh, I'm one page off on the -- I don't have a screen in
16 front of me, so I'm working off my computer.

17 Q It's -- it's hard copy--

18 A Okay.

19 Q -- page 4.

20 A There we go.

21 Q Yeah.

22 A Yeah. Yes, I --

23 Q So --

24 A -- see that.

25 Q Basically the applicant, who was the -- the pipeline
26 company, and an appraiser, Mr. Caithness, and his

1 evidence about market value is summarized -- if we can
2 just go down now in the quotation, the first paragraph
3 of which says: (as read)

4 The value of the subject property per acre of
5 one quarter section unit is \$600 per acre.

6 Do you see that?

7 A I see that.

8 Q Right. So what was the point of pointing out in your
9 report that the average agricultural value of land in
10 1971 was \$74 per acre?

11 A That was the average value of agricultural land on
12 'V' Day, December 31st, 1971, and it was a quick
13 indication that what they paid for the right-of-way was
14 significantly higher than the average agricultural
15 value.

16 Q Yeah, but who cares what the average agricultural value
17 was? The appraiser retained by the pipeline company
18 provided an opinion that the value was \$600 per acre,
19 so why do we care what the average agricultural value
20 was?

21 A It was just a ballpark identifying that the values were
22 higher than agricultural values.

23 Q Well, isn't your opinion expressed in your second
24 report that the highest and best use of the property in
25 1971 was agricultural?

26 A The immediately highest and best use would be

1 agricultural. There was some indication that there
2 could be some country residential, but it had not been
3 approved at that point in time, and that results in
4 some demand, and that's where Mr. Caithness went with
5 his report or part of his report.

6 Q Okay. Had you read this Public Utilities Board
7 decision when you wrote your first report?

8 A No, I had not.

9 Q There you go. Okay.

10 Okay. So I'd like now to look at your second
11 report, so that's Exhibit 71.04. So on the page that
12 we're looking at, PDF page 1 of Exhibit 71.04, you're
13 referring to -- I think you're responding in this
14 report to Mr. Morrison's second report; correct?

15 A That is correct.

16 Q Okay. And you say that the author of the Stantec
17 report -- this is the second paragraph -- specifically
18 states that the phrase restrictions to development and
19 the net developable acres as cited from the Telford
20 report is associated with the issue of highest and best
21 use.

22 And then you say, this statement has been taken
23 out of context, as the sentence in the Telford report
24 was associated with purchase negotiations, and then you
25 reproduce what you said in its entirety.

26 And so I just want to have you confirm that what

1 you're responding to here is a statement by
2 Mr. Morrison when he said: (as read)

3 What is absolutely clear in this case and
4 recognized by the statement in the Telford
5 letter that the pipeline's imposed
6 restrictions to development and net
7 developable acres is that the development of
8 the land to its highest and best use value is
9 impaired by the presence of pipelines.

10 So that's what you're responding to, right, that
11 statement that I just read?

12 A That is.

13 Q Sorry. That is true? That ...

14 A That is what I'm responding to.

15 Q Okay. Thank you.

16 So, sir, a pipeline running through a quarter
17 section is a restriction to development or it may be,
18 isn't that true?

19 A It is a potential restriction, depending on how it is
20 accommodated in the development.

21 Q Right. And -- and would you agree that, all things
22 being equal, a parcel of land without a pipeline
23 running across it is more attractive for development
24 than one with a pipeline running across it?

25 A It may take less planning, depending on what type of
26 development you're going to do.

1 Q Okay. So is that a qualified yes?

2 A In some cases, it would be; in other cases, it can be
3 accommodated into different neighbourhoods and to
4 actually increase some of the amenities, such as bike
5 paths, such as sports fields, playgrounds can all be
6 accommodated because there is a certain amount of
7 acreage in every quarter section that has to be green
8 space, so it really depends on the pipeline and the
9 area.

10 Q Thank you.

11 But you have confirmed for me that a pipeline
12 running through a quarter section may be a restriction
13 to development that would be less desirable for that
14 reason than a quarter section with no pipeline running
15 through it?

16 A It'll take more planning to accommodate the
17 right-of-way, yes.

18 Q Well -- and the right-of-way might actually impede
19 development?

20 A It may or may not impede the development. It can
21 actually add benefit, as I've just mentioned.

22 Q Okay. So as the expert on surface rights compensation,
23 I take it, sir, you would agree with me that the
24 compensation paid to Mr. Sheckter in 1971 was in no way
25 a prepayment of possible future pipeline crossing
26 costs?

1 A It was the fee simple value for the taking at that
2 time.

3 Q Right. So you agree with what I just said? It is --
4 it was in no way a prepayment of possible future
5 pipeline crossing costs?

6 A I don't believe it would be.

7 Q Okay. Thank you.

8 And you might have touched on this already in your
9 direct, but you would agree with me that under the
10 Surface Rights Act, the basic categories of
11 compensation are, firstly, market value; secondly, loss
12 of use; thirdly, adverse effect on the remaining land;
13 and, fourthly, damages?

14 A Since 1983, those are the categories, yes.

15 Q Thank you.

16 A It wasn't the categories at the time of taking.

17 Q And would you agree with me that -- I think you said
18 this earlier, but compensation for adverse effect is a
19 onetime payment, isn't it, sir?

20 A That is correct.

21 Q Yeah. Sorry. That is correct?

22 A That is correct.

23 Q Okay. Thank you.

24 A It's a onetime payment for possible impacts.

25 Q And you'd agree with me that the Land and Property
26 Rights Tribunal has no jurisdiction to deal with

1 compensation claims arising from a pipeline, that is,
2 adverse effect claims, once the pipeline is in
3 existence?

4 A On today's legislation, they just deal with damages, so
5 that would be correct.

6 Q Thank you.

7 Sir, would you agree that as time passes and the
8 land use of the parcel through which the pipeline runs
9 changes, the adverse effect on the land from the
10 pipeline may also change?

11 A The pipeline's there, so I'm not quite sure, but it is
12 a right-of-way. There may or may not be developer
13 restrictions and may or may not be accommodated in
14 future uses, so it really depends on the potential use
15 and planning whether it will have an adverse effect.

16 Q Right. So I think the easy thing to do is just to take
17 the facts of this case, which is that in 1971
18 Mr. Sheckter's land was basically a quarter section
19 undeveloped; now the southeast of 5, which I believe
20 was his quarter section, is part of a comprehensively
21 planned area. There's an area structure plan. There's
22 a neighbourhood structure plan, and part of the first
23 neighbourhood is actually under development.

24 So would you agree with me, sir, that in a case
25 like this, the adverse effect from the pipeline is
26 greater now than it was in 1971?

1 A Well, I think the -- looking at it is the -- well,
2 looking at the pipeline, it's been accommodated into
3 the planning and development. So there are some
4 impacts, but those have been dealt with in development.

5 In terms of adverse effect, I'm not sure what type
6 of impacts would be on the adjoining land. We're
7 talking about the fact that there's a right-of-way
8 green space. So I'm not sure exactly what you're
9 defining as "adverse effect". It's usually a loss of
10 value to the remaining land.

11 Q Yeah. No. I -- and I understand that.

12 What you -- Mr. Gerein, when he testified, talked
13 about -- and, Mr. Romanesky, if you want to jump in,
14 that's fine. But he talked about the challenge of what
15 he described as "planning in triangles". So you've got
16 a, you know, a -- a diagonally routed pipeline through
17 a piece of land, you're now creating a neighbourhood
18 structure plan, and you end up with a bunch of weird
19 triangular-shaped parcels. And Mr. Gerein's evidence
20 was that is an adverse effect. Would you agree with
21 that?

22 A I -- I wouldn't believe that that's an adverse effect
23 under the surface rights. It's not a drop in value of
24 the land or an impact on the land. I believe that is a
25 planning issue.

26 And I'd be happy to turn it over to Mr. Romanesky

1 for a minute to discuss that further.

2 A B. ROMANESKY: Thank you.

3 Mr. Fitch, I remember the testimony yesterday or
4 two days ago or yesterday about the designing in
5 triangle, and there was some discussion about
6 efficiency and the loss of efficiency in -- in their
7 design and their approach to it.

8 I -- I think my opinion on this has always been
9 the same, is of course it's going to require additional
10 design exercise, but there's -- especially in a
11 situation where we have a blank slate where we don't
12 have a community built, we don't have a community
13 completely designed, there's avenues to make sure we
14 can minimize those impact.

15 The neighbourhood structure plan that we have
16 that is approved also introduced some elements of
17 integrating the pipeline into the front yard of -- of
18 the properties and -- and pathways and so on. So I
19 think there's ways to integrate the pipelines most of
20 the time in large-scale development like this one.

21 Q Well, the -- the -- the fact that you have to make
22 design changes to accommodate for the pipelines means,
23 I would submit to you -- tell me what you think --
24 means that the development is less efficient. Isn't
25 that true, Mr. Romanesky?

26 A Well, there's some examples where the front-facing

1 homes to pipelines, for example, in the -- in the area
2 structure plan, where we go from a traditional design
3 of a street in front of the house and a lane in the
4 back of the house. Some of those design that are put
5 into the area structure plan show that we eliminate
6 the -- the street in front of the house, turn into open
7 space, and only have a lane access in the back. In a
8 situation like this one, Mr. Fitch, it would be a -- it
9 would be a gain for the developer to be able to use a
10 pipeline to justify the removal of a road altogether.
11 So there's element of design, that, yeah, it may
12 require a little bit more design work, but you can
13 finish with even a better design sometimes.

14 Q Well, if you have to convert land that would otherwise
15 be developed into green space, doesn't that adversely
16 affect the economics of the development? Because you
17 would have had 'X' number of lots that you could sell,
18 and now you have 'X' minus 'Y' lots.

19 A Well, in the example that I'm giving you here, if you
20 can visualize having a road being there or just having
21 an open space, there's no lost in -- in that example.

22 Q Well, you've given me one example, sir, but the -- the
23 mere fact you have to design around these pipelines
24 makes the whole exercise less efficient and less
25 economic, doesn't it?

26 A Okay. Mr. Fitch, the -- the word "efficiency" was used

1 in direct evidence yesterday as well. I think
2 there's -- has to be a bit of a definition around the
3 word "efficiency" or essentially using so -- some of
4 the elements that constitute efficiency.

5 If we look at density -- and you mentioned
6 "density" just -- just now -- I haven't seen any
7 indication that the objective of the 30 to 40 units
8 per acre in the area structure plan area is not being
9 met because of the presence of that -- that pipeline.
10 So efficiency when it comes to density, I think, can be
11 achieved with distributing densities in an area where
12 there wasn't any pipeline infrastructure.

13 Often we look at efficiencies with -- and
14 developers will -- will do this, look at efficiency
15 with the amount of linear road per units that they will
16 have in their development. I -- I haven't seen any
17 evidence that it would necessarily increase the amount
18 of road to be achieved, and there's some examples where
19 we can reduce it.

20 So I think when we talk about efficiency, if we
21 use certain elements of what we consider to be
22 efficient, I think a lot of them can be mitigated in
23 a situation like this, especially, like I say, when we
24 have a -- a blank slate and we can design a large tract
25 of land.

26 Q Thank you, sir.

1 I'm going to return to you, Mr. Telford. Would
2 you agree, sir -- and I -- I appreciate you're not a
3 lawyer, so if you don't feel comfortable answering the
4 question, that's fine. But would you agree with me
5 that under the Pipeline Act, once a pipeline is
6 abandoned, the fact that it's abandoned does not
7 relieve the licensee for further abandonment or other
8 work, nor does it relieve the licensee from the
9 responsibility for the costs of further abandonment or
10 other work?

11 A R. TELFORD: I'd have to look at that Act.
12 It seems familiar, but it also depends on how it's
13 abandoned.

14 Q Mr. Telford, do you -- would you agree with me that a
15 pipeline easement or right-of-way cannot be registered
16 in a land titles office in Alberta?

17 A I missed it. You're fading out a little bit or ...

18 Q Oh, sorry.

19 Would you agree with me that a pipeline easement
20 or a right-of-way cannot be registered in a land titles
21 office in Alberta?

22 A An easement agreement cannot be registered in a land
23 title?

24 Q Sorry. You're right. I've missed a key point in --

25 A An easement --

26 Q -- the question here.

1 A -- can be. We do it all the time.

2 Q Yeah. Not on a public road right-of-way. My
3 apologies.

4 A That -- on public lands?

5 Q Where a pipeline right-of-way crosses a public road,
6 you can't register the right-of-way because there's no
7 title to the road, is there?

8 A That is correct.

9 Q Okay. Thank you. And I apologize for the confusing
10 beginning there.

11 And would you agree with me that no pipeline can
12 be constructed across a public road without the
13 approval of the local authority?

14 A I -- I don't know if there's any appeal, but you do --
15 in all instances I've dealt with, we've always got a
16 approval.

17 Q Okay. So if you imagine a pipeline right-of-way that
18 runs through private land and then crosses a public
19 road allowance and then carries on running through
20 another parcel of private land, you have this situation
21 where the -- the -- the pipeline operator has a
22 right-of-way agreement over the private land on either
23 side of the pipeline, but its rights to cross the road
24 are by virtue of a crossing agreement with the local
25 authority; isn't that right?

26 A I am not sure if that's a hundred percent the case, but

1 I would say it's [sic] common is that you have a
2 crossing, whether it's Crown land, whether it's
3 municipality, provincial.

4 Q And, sir, would you agree with me that, in this case,
5 Meridian Street was already existing when these two
6 pipelines were constructed?

7 A I think we're starting to get into legal, but I believe
8 there's a road allowance surveyed there.

9 Q Yeah. And so the rights that Pembina and Plains have
10 to cross Meridian Street would have been originally
11 granted by -- what would it be -- Strathcona County in
12 1968 and 1971 presumably by way of a crossing
13 agreement; correct?

14 A I don't think this is -- is this in Strathcona County,
15 or is it in Sturgeon?

16 Q Whatever. It doesn't matter.

17 A I -- I believe it would be Sturgeon County.

18 Q Okay. Well, you've corrected me, but you haven't
19 answered my question. So I'll change it to Sturgeon
20 County for you.

21 The right that Plains and Pembina have to cross
22 Meridian Street would have originally been granted by
23 Sturgeon County in 1968 and 1971 presumably by way of a
24 crossing agreement; correct?

25 A There would have been a consent, yes.

26 Q Okay.

1 A A lot of times in the municipalities, it's not a
2 crossing agreement; it's actually a consent agreement.

3 Q So, sir, doesn't -- doesn't that mean that the
4 County's, now the City's, interest in the public road
5 right-of-way is first-in-time to Plains' and Pembina's
6 interest under the crossing agreement it had to enter
7 into with the County?

8 A I'm not sure if I understand that question. Is it to
9 do with rights on -- like, the County was there first?

10 Q The County was there first.

11 A I -- I'll agree with that.

12 Q Yeah. So now the land has been annexed into the
13 city of Edmonton, and the City, through the ARA
14 steering committee, has asked Qualico to bring an --
15 to -- to build this arterial road and has supported an
16 application to this Regulator to construct a new
17 arterial road in the City's right-of-way. So according
18 to the logic that it underpins your client's position,
19 shouldn't the operator as the second-in-time interest
20 pay?

21 A This is getting too -- above the appraiser in me. It's
22 heading down the legal -- so I don't -- I don't think I
23 can answer that.

24 Q Okay. But you understand what I'm saying? The road
25 was there first. The right-of-way agreement that
26 Pembina has and the right-of-way agreement that Plains

1 have doesn't give them a right to cross the road. The
2 right to cross the road was granted by the municipality
3 in a crossing agreement. You can --

4 A Probably --

5 Q -- agree -- you can agree that far; correct?

6 A Probably at that time by a consent.

7 Q Okay.

8 A Not an agreement.

9 Q Thank you.

10 So I'm going to return to you, Mr. Romanesky.

11 G. FITCH: But before I do, it's 3:30. I
12 know we've had several unscripted breaks, but I
13 wouldn't mind a scripted one, if that was okay.

14 THE CHAIR: Would ten minutes be
15 satisfactory?

16 G. FITCH: Sorry. Yeah, ten minutes is
17 fine.

18 THE CHAIR: Yeah.

19 G. FITCH: Okay.

20 THE CHAIR: 'Cause I am also cognizant of
21 all the different limitations we have today, so ...

22 G. FITCH: Yeah.

23 THE CHAIR: 3:35 we'll be back.

24 G. FITCH: Okay. By my watch, it's 3:30.
25 That's five minutes. I know that clock seems to be
26 about three minutes slow.

1 THE CHAIR: Is it slow? Okay. So 20 to.

2 G. FITCH: Thank you.

3 (ADJOURNMENT)

4 THE CHAIR: Please be seated.

5 Before we begin again with the cross-examination,
6 let's talk logistics. So we checked, and -- do we have
7 everyone? I suppose ...

8 A J. SPROTT: We're missing Mr. Trim.

9 THE CHAIR: Okay.

10 You didn't miss much. Logistics.

11 So we checked, and we can only stay till 7 because
12 court reporters won't be available, and I heard you
13 indicated you don't want to stay beyond 6:30, so noted.

14 Mr. Myers, you mentioned one of your witnesses
15 won't be available -- that was in a correspondence to
16 Ms. Arruda that one of your witnesses won't be
17 available tomorrow. So we'll see what -- how much we
18 can achieve till 6:30, and then if you can -- if it's
19 satisfactory for you to sit your whole panel minus one,
20 we may have to do the questioning from AER staff
21 tomorrow.

22 T. MYERS: Yeah. Thank you.

23 And -- and that was the plan all along. It was
24 only on -- on the potential that we could finish today
25 and have everybody here for the questions. That would
26 be fantastic. Everyone was planning to be here

1 tomorrow with the exception of one, so if that's how we
2 have to proceed, that -- that's just fine.

3 THE CHAIR: Okay.

4 T. MYERS: Thank you.

5 THE CHAIR: So, Mr. Fitch, we will go with
6 the flow of your cross-examination. When you feel that
7 we need a break, just let me know. If you think we are
8 done for the day, let me know. We are flexible here.

9 J. BAKER: Excuse me, Madam Chair. If I
10 may, this is Jesse Baker, one of the counsel for
11 Keyera. I just wanted to -- this will be a
12 hypothetical. Let's say that.

13 G. FITCH: Another one.

14 J. BAKER: In the event that we do finish
15 with the cross-examination of the Pembina panel today,
16 but I may not be here at that time, I anticipate that
17 the Panel may wonder about the possibility of
18 questioning of Keyera's witness happening tomorrow, so
19 I'd like to address that now, if I may, in case I'm not
20 here when you might want to ask that question later, if
21 that makes sense.

22 THE CHAIR: So let me see if I understood
23 you correctly. You're suggesting that you want --
24 instead of having Keyera come in on Monday, you -- no?

25 J. BAKER: No. Sorry. I'm saying that
26 if the Panel were to ask about the possibility of

1 Keyera doing tomorrow, I wanted to confirm that
2 Keyera's witness is not available tomorrow. So if --
3 if we are done with Pembina today somehow, Keyera's
4 witness is not going to be available tomorrow. I just
5 want to mention that now in case you ask that later and
6 I may have left by that point.

7 THE CHAIR: Oh, for sure. Yes. That
8 was -- that was, I think, communicated to us in a
9 letter.

10 J. BAKER: I -- I believe the letter
11 mentioned that Keyera's other counsel and main counsel,
12 Mr. Duncanson, would not be available tomorrow, but
13 I'm -- I guess I'm confirming now that the witness for
14 Keyera is also not available tomorrow.

15 THE CHAIR: Okay. So, for clarity, if we
16 finish today, which is not -- may not happen, we finish
17 tomorrow early, everybody has a Friday afternoon off.
18 Thank you.

19 J. BAKER: Thank you, Madam Chair.

20 G. FITCH: All right. I think I was
21 going to -- well, I know I was going to turn to
22 Mr. Romanesky next.

23 So if we could turn up Exhibit 6.01, PDF page 317,
24 please.

25 Q G. FITCH: So, Mr. Romanesky, you can
26 confirm this is the first report you prepared for your

1 clients, and this is a reply to Mr. Morrison's first
2 report, which was dated August 13, 2021?

3 A B. ROMANESKY: That's correct.

4 Q Okay. Could we go to PDF page 322, please. All right.
5 Just a couple of questions about your CV, sir, and your
6 qualifications. Are you a member of the Canadian
7 Institute of Planners?

8 A I am not.

9 Q Are you a member of the Alberta Professional Planners
10 Institute?

11 A I am not.

12 Q No. So given that you are not a member of the Alberta
13 Professional Planners Institute, you are, obviously,
14 not required to comply with the APPI's professional
15 code of practice; correct?

16 A I am not a member of the association, no.

17 Q Yeah. You're not required to comply with the APPI's
18 continuous professional learning program either;
19 correct?

20 A That's correct.

21 Q Okay. And my understanding is that only -- in Alberta,
22 only APPI-regulated members can refer to themselves as
23 a registered professional planner; correct?

24 A That's correct. The association has the rights on the
25 designation RPP, and so if you decide to become a
26 member, you can use the letters RPP after your name.

1 Q Right. And so you, sir, cannot and do not, to be fair
2 to you, use the registered professional planners
3 designation when you sign reports, do you?

4 A That's correct.

5 Q Okay. I'd like to take you -- if we can turn now to
6 Exhibit 5.01. So that should be our -- Qualico's
7 application. And turn to PDF page 10, please. And
8 just scroll down a little. That's good.

9 You would agree with me, sir, that the Edmonton
10 Metropolitan Region growth plan contemplates the
11 population of the Capital Region growing from
12 approximately a -- 1.1 million in 2008 to 1.7 million
13 in 2043? Or perhaps that was the old plan, the capital
14 regional plan.

15 A Sorry. You're a little -- it's a little quiet from
16 here. I -- I can't hear you very well.

17 Q Okay. That's fine because I garbled the question, so I
18 get a do-over.

19 A Something about the project -- projection of population
20 that is --

21 Q Something -- something about getting tired.

22 Okay. So I was asking whether you would agree
23 with me -- new question -- that the Edmonton
24 Metropolitan Region growth plan projects an increase in
25 population in the Edmonton Metropolitan Region from
26 1.2 million to 2.2 million by 2044.

1 A That -- that's what's there, and I -- I don't have
2 any -- anything to say anything otherwise, but that --
3 that's correct --

4 Q Okay.

5 A -- I would believe.

6 Q And if we can just scroll down to the top of the next
7 page. That's good.

8 And would you agree that the growth plan
9 identifies the Horse Hill area as a priority growth
10 area?

11 A That's correct.

12 Q Okay. And would you agree that the Horse Hills
13 district is shown in the planning documents as growing
14 from a current estimated population of 3,000 to a
15 population of 65,000 when Edmonton's population reaches
16 2 million?

17 A Yes. And that's based, I believe, on the area
18 structure plan from 2018. I think they're talking
19 about 70,000 at this stage right now.

20 Q And if we can just carry on down the document, please.
21 So you would agree that in 2013 the City of Edmonton
22 approved the Horse Hills area structure plan?

23 A That's correct.

24 Q Okay. And would you agree with me -- well, firstly,
25 ASPs are approved by municipal councils; correct?

26 A That's correct.

1 Q Okay. Would you agree with me that when a council
2 approves an area structure plan, it is expressing the
3 view that development as proposed in the ASP is in the
4 public interest?

5 A I -- I don't know that I would necessarily qualify with
6 public interest. It is the role and responsibility of
7 the local jurisdiction to implement these plans as
8 development occurs to ensure reasonable and sustainable
9 growth.

10 Q Sir, can you imagine city council approving an ASP if
11 it thought approval was not in the public interest?

12 A Yeah. I -- I think I would -- I would look at the
13 public interest as maintaining sustainable growth
14 and -- and so on, if that's -- if that's the public
15 interest that you're talking about.

16 Q That was a -- not a clear answer. Sir, can you --

17 A My point is from -- from an area structure plan, in the
18 instrument of land-use planning policies is an
19 expression of coordinating growth of the municipality.
20 And so if you want to use the word "public interest"
21 here to implement in -- in the land-use planning world,
22 I would say for -- from a planning standpoint is
23 looking at sustainable growth and maintaining a -- a
24 proper vision that will achieve the goals that the City
25 set themselves.

26 Q Okay. That's fine.

1 A If that's -- yeah.

2 Q Are you done?

3 A No. My point is if we define public interest in that
4 fashion, I think I would agree with you.

5 Q Okay. Okay. So you're agreeing that it would be
6 difficult to imagine a city council approving an ASP if
7 it thought the development described in the ASP was not
8 in the public interest? That's not conceivable, is it?

9 A Again, you're using the word "public interest". If
10 council felt that the area structure plan did not
11 fulfill the vision that they have set for themselves and
12 was not maintaining sustainable growth for the
13 municipality, then I would say, yeah, they would --
14 they would not approve this plan.

15 Q Okay. So, then, what you are agreeing with is that
16 approval by city council of the Horse Hills ASP can be
17 taken as an indication by city council that the ASP
18 accords with the City's vision of sustainable
19 development?

20 A That's correct.

21 Q Okay. That's fine. I'll take that.

22 If we could just go down to the next page, please.

23 I take it you're aware, sir, that development of
24 the first neighbourhood in Horse Hills, which was
25 Neighbourhood 2 in the neighbourhood structure plan but
26 is now called Marquis -- that that development is -- is

1 underway?

2 A That's correct.

3 Q Okay. All right. So let's go back to your report,
4 then, Exhibit 6.01. We should be on -- oh, so let's go
5 to PDF page 318.

6 A Six zero one, sir?

7 Q Yeah. Your report.

8 A Oh, thank you.

9 Q And I'm interested in the last paragraph, and, in fact,
10 the last sentence where you say: (as read)

11 As an experienced developer, Qualico should
12 have been cognizant of the well-known
13 practice that developers are responsible for
14 the expenses and labour involved in upgrading
15 roads, including the crossings in this case.

16 So I'm just going to ask you the same question I asked
17 Mr. Telford: Can you -- can you point to me anywhere
18 in legislation, regulations, policies, or directives
19 where it says that the developers are always
20 responsible for these costs?

21 A No, I can't, sir. It's just experience and -- and my
22 past experience with the responsibility of these cost,
23 and I wouldn't be able to point to you if it's in the
24 legislation, but I cannot either put -- or point to you
25 if there's legislation that say that this cost should
26 bear -- be beared by -- by the operator either.

1 Q All right. If we turn to page 320 -- PDF 320. So
2 you -- you talked about this in your direct evidence,
3 how you did these calculations, and it came up with \$35
4 per residential dwelling unit, and then you said, Well,
5 but I heard what Mr. Fjeldheim and others have said,
6 and -- and if it turned out that there was 45 crossings
7 at \$800,000 a crossing -- what was the number you came
8 up with, sir? \$678 per crossing?

9 A Yeah. Approximately 670 based on the assumptions that
10 were in my report.

11 Q Okay. Can we go back to Exhibit 5.01, the amended
12 application. And just give me one moment. Could we
13 please turn to PDF 32.

14 So in paragraph 65, sir, of Qualico's application,
15 you can see that we said: (as read)

16 As Horse Hill builds out, there will be
17 45 different locations where new arterial
18 roads will cross existing pipelines using an
19 estimated average cost of \$750,000 per
20 crossing, which Qualico believes to be
21 conservative. This will add approximately
22 \$34 million to the cost of constructing
23 public arterial roads to service new
24 residential development. This is a
25 substantial figure that will have a material
26 adverse effect on the ability of Qualico and

1 other developers to economically develop
2 Horse Hills.

3 So, sir, had you read paragraph 65 of our application
4 when you wrote your original report?

5 A Yes, I did.

6 Q Okay. So why -- if we turn back to your report, so
7 Exhibit 6.01, why in your original report did you
8 only -- when you did your calculations did you only
9 include the crossings -- the -- the -- the three
10 crossings that are the subject of this application if
11 you knew that there were going to be 45 in total?

12 A Because the exercise was to evaluate the impact of this
13 crossing.

14 Q The exercise ...

15 A Of looking at the financial impact of the three
16 crossings.

17 Q Okay. Okay. Fine. But you -- obviously, you
18 acknowledge that Qualico's position was that there's a
19 bigger issue here; there are more crossings than just
20 the ones that are at play in this proceeding; correct?

21 A No. I understand this, and -- and I think it was made
22 clear in the direct evidence, and I think this is why I
23 wanted to make sure I can provide the same calculation
24 for the Panel.

25 Q Thank you, sir.

26 G. FITCH: Well, the good news,

1 Madam Chair, is I'm actually moving along relatively
2 quickly now, so I'm going to -- I'm going to turn to
3 Mr. -- sorry -- Dr. Makholm of NERA.

4 Q G. Fitch: I've left you to the end. I'm
5 feeling tired, so I hope you are, sir. Are you?

6 A J. MAKHOLM: I'm fresh as a flower.

7 Q You're not a marathon runner, I hope.

8 G. FITCH: All right. So I would like,
9 Ms. Arruda, to ask you to turn up Exhibit 71.03, PDF
10 page 2.

11 Q G. FITCH: So, good afternoon, Mr. --
12 Dr. Makholm.

13 A J. MAKHOLM: Afternoon, Mr. Fitch.

14 Q In paragraph 2 of your report, you indicate that you
15 have over 40 years of experience, you have provided
16 evidence on all sorts of matters, you list some of
17 them, interstate and intrastate oil and gas pipelines,
18 on subjects including cost of service, cost of capital,
19 rate design, pipeline competition, bankruptcy,
20 secondary markets and pipeline capacity, and the
21 property accounting method for setting interstate oil
22 and gas pipeline tariffs.

23 When I reviewed, sir, this part of your report and
24 I looked at your very extensive CV, I was left with the
25 very distinct impression that your area of expertise is
26 tolls and tariffs and rates.

1 A I wouldn't limit it to that, no.

2 Q No? Okay.

3 What else do you consider yourself an expert in?

4 A As reflected in my wide writings, including my
5 monograph entitled The Political Economy of Pipelines,
6 it's about the institutions that grew up, especially in
7 North America but including around the world, to deal
8 with the industrializations of certain kinds of
9 competitive and/or public service activities, one among
10 them being the oil business and the pipelines that are
11 required to ship that oil over land.

12 More than simply a matter of tolls and tariffs,
13 it's a matter of the institutions of regulation and how
14 that kind of business can raise capital without endless
15 disputes between landowners or other oil companies or
16 governments to make that company business work,
17 something that Canada and the United States have done
18 with great success, partly by having agencies like the
19 AER deal with what otherwise would be endless land
20 disputes under English common law.

21 Q Are you a lawyer?

22 A No. But the legal foundations of capitalism are very
23 much part and parcel of my monograph and many of my
24 other writings.

25 Q Okay. In paragraphs 3 to 8 of your report, sir, you
26 list all your expert -- well, I don't know if I'd say

1 "all", but a lot of your expert witness experience in
2 Canada; correct?

3 A Yes. I had left out my last appearance here was for
4 the AUC about a year ago --

5 Q Right.

6 A -- as an independent expert on incentive regulation
7 matters.

8 Q Okay. When I looked at paragraphs 3 to 8, I thought
9 that either all or the majority of your experience as
10 an expert witness in Canada was on tolls and tariffs
11 matters. Did I read sections 3 to 8 incorrectly?

12 A I -- I think saying "tolls and tariffs" is excessively
13 limiting in any respect.

14 For instance, a matter I dealt with with respect
15 to the three eastern Canadian gas distributors against
16 TransCanada over the abandonment regulations for
17 abandoned TransCanada pipelines had nothing to do with
18 tolls or tariffs as such. It's just as an example.

19 Q All right. But it had to do with the economic
20 parameters of it. Fair? Is that fair?

21 A Broadly put.

22 Q Yeah. Okay. All right. Sir, you're aware that the
23 Plains and Pembina pipelines at issue in this
24 proceeding are not rate-regulated?

25 A Not yet. But to the extent that what you have
26 suggested in this proceeding, you and your witnesses,

1 that a new rule would be established to impose
2 half-and-half sharing of crossing costs, rather than
3 the traditional means of dealing with that in first and
4 second and in the field, then that would be a
5 characteristic of an imposed regulation imposing costs
6 that this -- this Panel has not done before, the AER.

7 So there would be something like a regulated
8 aspect different from the traditional way of dealing
9 with crossings that will be promulgated by this agency
10 to the extent that you won this case, in my opinion.

11 Q Okay. All right. Sir, have you ever given expert
12 evidence in a hearing before the Alberta Energy
13 Regulator in an application under Section 33 of the
14 Pipeline Act?

15 A No.

16 Q Okay. Have you ever given expert evidence at a
17 facilities hearing?

18 A No.

19 Q Okay. And by "facility hearing", I'm sure you know
20 that what I mean is a hearing held to consider whether
21 approval of construction and operation of a -- of a
22 facility, like an oil and gas well, a pipeline, or gas
23 plant, is in the public interest?

24 A Correct.

25 Q Yeah.

26 A Indeed. I listed on my Table 1 a number of different

1 agencies like the AER that deal with this kind of
2 question, and I have -- and I'm dealing with facilities
3 and citing as such like the matters under the AER's
4 jurisdiction. I haven't participated in any such
5 matters.

6 Q And, Ms. Olive, you are also -- sorry. Dr. Olive, you
7 are also an economist?

8 A L. OLIVE: Yes, I am.

9 Q And have you ever given expert evidence in an
10 application before the AER made pursuant to Section 33
11 of the Alberta Pipeline Act?

12 A No, I have not.

13 Q Okay.

14 A J. MAKHOLM: And yet here we are, and we
15 have you and your witness to thank, Mr. Fitch --

16 Q Well --

17 A -- for raising economic issues that had Plains and
18 Pembina invite us to be here in this singular
19 proceeding.

20 Q I'll take you out for a beer later.

21 Let's -- you seem very, very interested in talking
22 about public interest. I am too, so let's go to PDF
23 page 9 of your report and paragraph 27.

24 So this is the first paragraph of your report
25 under the title "Public Interest", and you say
26 Mr. Morrison grounds his recommendations on his

1 definition of public interest. He states that a
2 specifically defined public interest test has not been
3 established. That's true; correct? You would agree
4 with that?

5 A I -- I made that statement, yes.

6 Q Yeah. You're saying the same thing here; right?

7 A Yes.

8 Q Okay. But what -- what you don't like is what you
9 quote from his report where you're -- where
10 Mr. Morrison said, "In the application" -- well, I'm
11 not going to quote because you've used ellipses, but,
12 basically, you -- you quote from Mr. Morrison's report,
13 saying that: (as read)

14 The AER must assess whether cost sharing will
15 be more equitable because equity between the
16 parties will inherently be in the public
17 interest.

18 And then in response, you say: (as read)

19 This is the respect in which Mr. Morrison
20 combines his notion of equity between two
21 private parties with the public interest
22 stating that the AER must inherently become
23 involved in a matter between private parties.
24 This is the basic point of public interest
25 upon which we disagree with Mr. Morrison.

26 See that, sir?

1 A Yes. I -- I -- I don't know whether it was clear the
2 way you put it. His quote: (as read)

3 Because equity between the parties will
4 inherently be in the public interest,
5 is exactly why we said on paragraph 24 his definition
6 of "public interest" is inherently circular.

7 Q Yeah. I -- I -- I read that.

8 Sir, what I want you to do, though, is to point me
9 anywhere in Mr. Morrison's report where he says:
10 (as read)

11 The AER must inherently become involved in a
12 matter between private parties.

13 Where does he say that, sir?

14 A I used the word "stating". In fact, we used the word
15 "stating" in paragraph 24. Perhaps it would have been
16 a better choice of words to say "strongly implies" on a
17 way toward his ultimate recommendation.

18 Q Right.

19 A That would be better.

20 Q Yeah?

21 A He didn't state it as such. That was overstated.

22 Q Thank you.

23 You -- you inferred that?

24 A It was like an elephant in the living room. It was
25 impossible to ignore. That's why we're here.

26 Q Right. Well, we'll -- we'll -- we'll let the Hearing

1 Commissioners decide how large an elephant it is or is
2 not.

3 Let's carry on in your discussion of public
4 interest. If we can go down to the next page, please.

5 A If you have a paragraph, that will help.

6 Q Yeah.

7 A I'm using a paper copy.

8 Q Yeah. Paragraph 31. So in paragraph 31, you -- you
9 essentially repeat the same idea where you say:
10 (as read)

11 Disputes between such private parties as
12 Qualico and Plains/Pembina are not inherently
13 public interest matters for agencies like the
14 AER charged with regulating aspects of the
15 oil and gas industries.

16 Correct?

17 A Agencies like the AER, yes.

18 Q Yeah. Okay.

19 A That's our opinion.

20 Q All right. So let's go down, then, to paragraph 33,
21 which is on the next page, PDF 11. And you say -- or
22 you -- you basically express the opinion that you don't
23 believe that the private interests of Qualico or Plains
24 and Pembina in this matter rise to the level of the
25 public interest. And then you say: (as read)

26 Nothing to us indicates that Qualico is the

1 public or acts in the public interest.

2 Right?

3 A The first few words of that paragraph refer
4 to: (as read)

5 Neither of those two scholarly treatments of
6 public interest questions in Alberta or
7 Canada support Mr. Morrison's claim that the
8 private interests of Qualico or Plains and
9 Pembina in this matter [parenthetical
10 deleted] rise to the level of the public
11 interest.

12 You -- you'll agree with me that I -- we're referring
13 to the scholarship in Alberta with respect to the study
14 regarding the public interest of public interest
15 agencies in Canada. And I was saying that that
16 scholarship does not support Mr. Morrison's opinion.

17 Q Sir, you say: (as read)

18 Nothing to us indicates that Qualico is the
19 public or acts in the public interest.

20 That's your opinion, isn't it?

21 A Yes. I -- I -- I -- yes, and I -- I think that's
22 manifest.

23 Q Yeah. Okay. So my next question for you, sir, is:
24 Are you saying that the Alberta Energy Regulator only
25 has jurisdiction to consider an application under
26 Section 33 of the Pipeline Act if one or all of the

1 parties to the dispute are public, as in a government
2 agency or a municipality?

3 A No. I think that's too narrow. I'm not -- we are not
4 here to give direction to the AER on their
5 interpretation of their public interest mandate.
6 This agency and their predecessor agency has been
7 doing that, to our view, successfully for decades.

8 The question here is whether or not the agency
9 should promulgate a rule based on a circumstance,
10 which, to us, is basically money coming out of the
11 pockets of Plains and Pembina and going into the pocket
12 of Qualico. That, to us, seeing that neither of --
13 none of those parties have market powers such that they
14 can pass through such costs easily into the competitive
15 markets that they serve is a private matter. And --
16 and, to -- to us and our view of the various agencies
17 that deal with the public interest in regulating
18 commerce, that's a private matter.

19 Q So -- but I think at the beginning of that answer
20 you -- you acknowledged it -- it would make no sense to
21 interpret Section 33 to say that only if a party is
22 "public" is the Regulator's jurisdiction engaged under
23 that section. That would not make any sense, would it,
24 sir?

25 A If you'll pardon me. I don't want to engage in or
26 agree to a narrowing of how the AER interprets

1 Section 33. The only thing that we have done in our
2 evidence is to say that the three articles in
3 Section 33 seem to be ordered in a way that generally
4 makes sense to us. We're not lawyers, but they make
5 sense to us in that Section 1 is a public interest
6 hurdle that then perhaps invokes action under
7 Section 2.

8 And how the AER seizes the question of public
9 interest is something that they know well. That's what
10 they do. That's what agencies like the AER do. They
11 can interpret whether that public interest hurdle has
12 been jumped in order to invoke action under
13 Section 2 -- Part 2 of Section 33.

14 Q So, sir, I -- I -- you and I discussed briefly a moment
15 ago facilities applications. Sir, are -- are you aware
16 that in Alberta a private landowner who believes he has
17 legal rights that may be directly or adversely affected
18 by a proposed oil and gas facility can essentially
19 trigger a hearing before the AER in which the AER is
20 statutorily mandated to consider whether approval of
21 the facility is in the public interest? Are you aware
22 of that?

23 A I'm -- I'm assuming that can happen.

24 Q You're assuming it cannot?

25 A No. Can.

26 Q Can.

1 A Excuse me. I -- I'm assuming that that is able to
2 happen.

3 Q And are you aware that under the Responsible Energy
4 Development Act and the Responsible Energy Development
5 Act regulation, in assessing the public interest, the
6 Regulator is expressly mandated to take into account
7 the interest of landowners?

8 A Yes, of course. They -- that's -- that's -- the reason
9 why I listed the Table 1 agencies that have a mandate
10 that is generally similar to the AER is the need to
11 deal with oil-producing provinces and states with the
12 inevitable clash of interests, as we said, that come up
13 when you have a competitive industry, oil and gas,
14 dealing with landowners where the industry requires
15 overland transport somehow through pipelines. That can
16 cause disputes. This agency has a charge to make that
17 a orderly process under their statutory mandate.

18 Q Well, sir, just one last question on the point I've
19 been raising with you about landowner oil and gas
20 company disputes that lead to an AER hearing. You
21 would agree with me the landowner is a private party,
22 the oil and gas company is a private party, yet the
23 AER's public interest jurisdiction is nevertheless
24 engaged?

25 A The AER knows the public interest when they see it, and
26 they can engage their activities when they perceive the

1 public interest is at stake. They -- of course they
2 have that power, like any such agency would have. It
3 has nothing to do with this case, in our opinion, but
4 they have that power generally.

5 Q Okay. So let's go back to PDF page 5 of your report.
6 And I'll ask you to look at paragraph 19.

7 A Let me just have a second to look at the paragraph,
8 please. Okay. Thanks.

9 Q Okay. So in -- in the middle of the paragraph, you
10 characterize Mr. Morrison as urging the Regulator to
11 order that Plains and Pembina: (as read)

12 Share in one of Qualico's costs of its
13 residential development project, the cost of
14 reinforcing the pipelines' crossing Qualico
15 land for upgraded roads.

16 Do you see that?

17 A (NO VERBAL RESPONSE)

18 Q Sir?

19 A L. OLIVE: Yes.

20 Q Yes, Ms. Olive, you see it?

21 Dr. Olive. My apologies.

22 So, sir or -- or Dr. Olive -- whoever actually
23 wrote that sentence -- when you wrote it, were you
24 aware that it's not Qualico land the pipelines are
25 crossing; it's City of Edmonton land?

26 A J. MAKHOLM: Public land, public road. You

1 were right to bring that up with Mr. Telford and
2 Romanesky. I don't know.

3 Q Okay. That's fine.

4 And then in paragraph 20, you say: (as read)
5 Qualico's planned development spurred a local
6 authority requirement for the reinforcement
7 of pipeline crossings for the larger roads
8 necessitated by the increased local traffic
9 that Qualico's subdivision would create.

10 Maybe I -- yeah. Anyways, you wrote that; right? It's
11 in paragraph 20 somewhere?

12 A Yes, we did.

13 Q Okay. And, sir, when you wrote that, were you aware
14 that the requirement to reinforce the pipeline
15 crossings is not a local authority requirement but,
16 rather, a requirement of the Pipeline Rules, which are
17 a regulation made under the Pipeline Act?

18 A I don't really care. There's a -- there's -- there's
19 a -- a -- there's a need for reinforcement. That's
20 manifestly obvious. And it seemed the most to be a --
21 a phrase that was useful enough to use language in the
22 Alberta Act to use local authority for that.

23 Telford and Romanesky can be -- are better
24 prepared to answer those questions.

25 Q That's okay. But you yourself don't care whether the
26 crossing is on public land or private land in assessing

1 the public interest?

2 A In assessing the public interest in a matter having to
3 do with money that would be in Plains' and Pembina's
4 pocket, but a proposed rule that would put half of that
5 money in Qualico's pocket, yeah, that doesn't --
6 doesn't bear on that essential question, which is why
7 we're here.

8 Q Yeah. Let's carry on to paragraph 25, sir, of your
9 report.

10 And I apologize. I realize that it's a
11 co-authored report. I'm not meaning to diminish your
12 involvement, Dr. Olive.

13 A L. OLIVE: Understood.

14 Q So there, in paragraph 25, you state: (as read)
15 Mr. Morrison's discussion and recommendations
16 do not recognize in any respect the
17 importance of stable and reliable contractual
18 commitments to support the vast production
19 and pipeline infrastructure capital required
20 for a competitive petroleum market.

21 Correct?

22 A Right.

23 Q And so I take it, sir, when you're referring to "stable
24 and reliable contractual commitments", you're referring
25 to private right-of-way agreements, are you?

26 A No. I'm talking about the financial industry and the

1 contracts that allow the financial industry to
2 participate in the capital raising needed to make these
3 businesses work.

4 The reason why we in Canada and the United States
5 have such successful and vibrant oil and gas
6 businesses, which includes the reason why we're the
7 only two nations in the world that use unconventional
8 extraction techniques for both oil and gas -- nobody
9 else does that. We do that. And the reason why we as
10 two countries do that is that the financial industry is
11 deeply involved in raising capital for this kind of
12 industry in North America.

13 That capital raising deeply depends on stable
14 contractual relations so that those who raise money for
15 these enterprises know where the money is coming from
16 in those competitive markets. It's part and parcel of
17 the -- of the -- the way in which our uniquely vibrant
18 finance industry supports these uniquely competitive
19 oil and gas businesses and the transport arms that make
20 those businesses go.

21 Q So -- well, that -- that helped clear up something I
22 was quite confused about. So you're saying, then, that
23 the oil and gas industry won't be able to raise money
24 in financial markets anymore if cost sharing is
25 ordered?

26 A Mr. Sprott said something about that in your last

1 question to him. He talked about the difficulty of
2 dealing with his customers who would ask him -- We
3 didn't cause the crossing. Mr. Sprott would say, Well,
4 we didn't cause the crossing. Somebody else did, a
5 developer did, and you would get a dispute -- a dispute
6 with respect to who would bear the costs of something
7 that somebody else did among two parties who didn't
8 cause those costs.

9 That is a source of uncertainty. I think we used
10 the word "chaos". I think Mr. Sprott used the word
11 "chaos" in what otherwise is a predictable and orderly
12 way of dealing with land access for pipelines. That
13 would be a new rule that would upset contractual access
14 to land for the long term for pipelines upon which the
15 oils -- oil and gas industries in Canada and the US
16 depend. You would take those contracts for access to
17 land, and you'd make them contingent.

18 Not only would you be following a new rule by the
19 AER that ignored one of the principal foundations of
20 Canadian and US regulation, which is cost-based user
21 pay, where would cost-based user pay go if you're
22 making somebody else other than the developer bear the
23 costs that they're causing? Well, you would have to be
24 doing something that is so strong and -- and important
25 that you'd forget that codicil of Canadian and American
26 regulation.

1 Those kinds of alterations in formally stabilized
2 contractual regulations, including access to land,
3 would, in my opinion, disrupt the world's most vibrant
4 oil and gas businesses, and I don't think that you or
5 your client have given us the least bit of economic
6 justification for doing that.

7 Q So, Dr. Makholm, you keep saying the developer caused
8 it. Mr. Sprott kept saying that as well.

9 You are aware, I take it, that Qualico has to
10 upgrade this arterial road, which is a City of Edmonton
11 roadway, because it's a municipal requirement? It's
12 not that Qualico wants to build this road. It's been
13 told it has to build the road.

14 A For its planned development.

15 Q Well, for many planned developments that have been
16 found by the City of Edmonton to be necessitated to
17 accommodate the growth that's occurring. You don't see
18 any -- any shred of public interest here?

19 A You way overstated the --

20 Q No. You overstated --

21 A -- the application of --

22 Q -- sir.

23 A No. Sorry. Well, let me answer.

24 Q Well, go ahead.

25 A You can answer -- argue with me with your next
26 question.

1 Qualico was not the public interest. Qualico's
2 earnings are not the public interest. I don't believe,
3 unless Qualico wants to make the statement, that it has
4 market power to pass through costs associated with
5 crossings directly to its homeowners. I don't think --
6 I -- it's a reasonable presumption that they don't have
7 that market power. They're going to have to bear those
8 themselves, and if it scotches, in other words, the --
9 the -- the -- that planned development, it makes them
10 go elsewhere, they'll go elsewhere. Somebody else will
11 take their place. Mr. Telford talked about that.

12 But that private interest of the earnings of
13 Qualico cannot be confused reasonably by this agency or
14 any other that does this kind of agency's work with the
15 public interest. That's what Mr. Morrison conflates.
16 That's one of the reasons we're here, to try to make it
17 plain that the public interest is a larger matter, not
18 just Qualico's earnings.

19 Q Sir, you -- I've seen you sitting at the back of the
20 room during the entire hearing; right?

21 A Yes, I've been here the whole time.

22 Q Yeah. So you've heard the evidence of Qualico and the
23 Developers Group; correct?

24 A Yes, we have.

25 Q And so you know that every single developer has said
26 these costs will get passed on to homeowners. Do you

1 just not believe that evidence? Do you think it's
2 false?

3 A That's not why I'm here. I'm here because this is a
4 dispute --

5 Q Well, you just said --

6 A -- between Qualico --

7 Q -- Qualico doesn't have the market power, so I'm
8 just -- I just want to be clear. Are you saying that
9 the costs -- notwithstanding what the developers have
10 all said, are you saying those costs will not get
11 passed on to homebuyers, and, if so, what is the basis
12 for that statement?

13 A I'm -- I'm waiting 'cause there's a large lawyer behind
14 you that's about to object.

15 D. NAFFIN: Yeah. And, Madam Chair, I'd
16 appreciate it if Mr. Fitch would let Dr. Makholm
17 actually answer the question rather than speaking over
18 him. I think that'd be helpful for all of us.

19 Q G. FITCH: Go ahead, Dr. Makholm.

20 A J. MAKHOLM: It -- it -- it's not my
21 conclusion that any of those individual developers have
22 market power in this province. Someone else might be
23 able to prove me wrong and say that they do, which
24 would be another source of problems for them. And the
25 fact that they are all in here as a group looking for
26 an advantage as an interest group is also not

1 surprising. We live in a land where interest groups
2 come before agencies like the AER or the AUC or the CER
3 and make their case.

4 The idea that there would be a smaller charge for
5 them for land crossings and that they would all support
6 it is not an unsurprising thing. I think that doing so
7 would violate a number of principles, like cost-based
8 user pay, and also breach the difference between public
9 interest and private interest even if requested by a
10 collective group of private actors.

11 But I -- I don't think the fact that they were all
12 there breaches our definition of "public interest" and
13 how that's distinct from what Mr. Morrison has
14 concluded.

15 Q So, sir, I think you understand that -- and I know it's
16 not your area of expertise, but you've heard the
17 evidence that the way the ARA bylaw works is that when
18 a new -- they call it a "catchment" -- a new --
19 basically a new neighbourhood is being built, the
20 arterial roads required to service those new
21 neighbourhoods have to be built and paid for by
22 developers. Do you understand that?

23 A Yes.

24 Q Okay.

25 A As a -- in a -- I don't know the facts --

26 Q Yeah.

1 A -- but that makes sense as a general matter.

2 Q Yeah. But you also know that, at the end of the day,
3 the road is now and will be after it's widened -- be a
4 public road; correct?

5 A I presume so.

6 Q Yeah. So would your public interest analysis be any
7 different if the City said, We need this development;
8 we're going to build the road? So now it's the
9 City of Edmonton.

10 A Are you asking me --

11 Q Would that change your --

12 A -- would our opinion change if -- would our opinion
13 change if the City had taken down the responsibility of
14 building these roads?

15 Q Correct.

16 A That begs the question of where the City gets the
17 money, but let's leave that aside for the moment.

18 If there -- which if the City were paying, then
19 Qualico would not ask Plains and Pembina to pay half
20 the reinforcement, and I wouldn't be here. It would
21 moot my whole proceeding here. I wouldn't -- I
22 wouldn't -- we would not have come.

23 Q So I -- so I -- I take it, then, you're saying you
24 agree that if -- if it was the City that was building
25 the road, it would be entirely -- cost sharing would be
26 entirely appropriate?

1 A Wow. No. I said nothing about cost sharing. I just
2 said I wouldn't be here.

3 Q Well, I'm not asking where --

4 A Where did cost sharing come from?

5 Q Are you done?

6 We know why you're here, sir. You're an expert
7 witness for your clients.

8 What I'm asking you, sir, is: If the City were
9 the proponent of this road and, therefore, it was the
10 City that had to obtain the crossing and get the
11 crossing done by Plains or Pembina, would that affect
12 your public interest analysis?

13 A No.

14 Q No. Thank you.

15 A No.

16 G. FITCH: Those are all my questions for
17 Dr. Makholm.

18 A J. MAKHOLM: And Dr. Olive.

19 G. FITCH: And Dr. Olive.

20 A L. OLIVE: Thank you.

21 THE CHAIR: So just to confirm, your
22 cross-examination is concluded, Mr. Fitch?

23 G. FITCH: I guess I wasn't very clear
24 about that.

25 Can I have two minutes to just talk with my client
26 and see if there's anything else I want to do?

1 THE CHAIR: How about we give everybody
2 ten minutes?

3 G. FITCH: Wonderful. Thank you.

4 THE CHAIR: Based on this clock, ten to --
5 or -- sorry -- quarter to, then, on ...

6 D. NAFFIN: Madam Chair, Panel Members,
7 sorry. Just before you depart --

8 THE CHAIR: Sure.

9 D. NAFFIN: -- we do have an undertaking
10 response outstanding, so I'm going to endeavour,
11 hopefully, to get that answered and have an answer for
12 you after the break if I'm successful in doing so.

13 THE CHAIR: Thank you very much.

14 D. NAFFIN: Just wanted to make sure that
15 stayed on the logistical radar.

16 THE CHAIR: Thank you. Thank you.

17 (ADJOURNMENT)

18 THE CHAIR: Thank you very much, everyone.
19 Please be seated.

20 So no -- cross -- oh, you an answer for us. Thank
21 you.

22 D. NAFFIN: As promised, Madam Chair,
23 Mr. Trim does have an answer to the lone undertaking in
24 this proceeding, so I would propose that he provides
25 the answer now, and then we can get that out of the way
26 and proceed, if that meets with your approval.

1 THE CHAIR: Thank you very much. Yes,
2 please proceed.

3 A N. TRIM: So, Mr. Fitch, the answer to
4 the -- to your inquiry about the EPZ zone for the
5 pipeline is approximately 20 metres -- well, it is
6 exactly 20 metres, which falls within the existing
7 right-of-way. That's what we have defined as the EPZ.

8 Q G. FITCH: Excellent. Thank you.
9 (UNDERTAKING 1 FULFILLED)

10 G. FITCH: All right. Madam Chair, I am,
11 indeed, done with my cross-examination. My thanks to
12 the witness panel.

13 I apologize to Mr. Sprott and Mr. Trim for
14 butchering your names a couple of times, but these
15 things happen in the heat of the moment. So thank you.

16 And that completes the cross-examination. Thank
17 you.

18 THE CHAIR: Thank you very much,
19 Mr. Fitch. Just give me a second.

20 So next we have on the agenda to have Brookfield
21 cross-examining this witness panel.

22 E. DIXON: Given the hour of the day, I
23 am pleased to advise that in light of the cross by my
24 learned friend Mr. Fitch that Brookfield has no cross
25 for this panel. Thank you.

26 THE CHAIR: Thank you very much.

1 So next is AER counsel and subject matter expert.

2 A. HUXLEY: Thank you, Madam Chair. We
3 do have a few questions for this panel.

4 A. Huxley Cross-examines Pembina/Plains/SECURE Witness
5 Panel

6 Q A. HUXLEY: So we'll start with the
7 applicants, as we've heard, claim that they are being
8 asked to pay for upgrades without being told what type
9 of work is required and why and are not being provided
10 with a breakdown of costs, which we've discussed at
11 length today.

12 So if I could please ask Pembina and Plains
13 separately to explain the necessity for and type of
14 work required and the associated costs, specifically
15 with respect to the 167th Avenue crossing.

16 A I. BALFOUR: Good afternoon.

17 I can give a breakdown of the -- of the costs and
18 the type of work. So the -- the cost at the time that
19 we came up with was \$559,000, and that was composed of
20 just the following activities, so mobilizing into the
21 site, an access for the site for crews to move in and
22 out; it included excavation activities; it included
23 backfill and cleanup; it included then mobilizing out
24 of the area; and the category of miscellaneous, which
25 would include things like integrity, technicians and
26 supervisors, construction management, trailers, you

1 know, sort of little bits and pieces; and it also
2 included a 20 -- 20 percent contingency in that number.
3 And I just note that there's no integrity activities in
4 the scope of the work that is included in that
5 \$559,000.

6 Q Thank you.

7 Plains, go ahead.

8 A A. TORR: Yes. Good afternoon. Thank
9 you.

10 In the Plains' scope of work for the upgrade at
11 167th Avenue, we -- I'll -- I'll briefly read through
12 just the scope, just the bullet items. We mentioned
13 excavation from the elevation of 300 millimetres above
14 the proposed concrete slab to the rainbow pipeline,
15 removal of casing, inspection of pipeline, construction
16 of concrete slabs, backfill of 20-millimetre crushed
17 gravel to a height of 300 millimetres above the
18 concrete slabs. And then we reference a drawing that
19 gives a little bit more detail as to the crossing.

20 The cost of that estimate was \$858,000. I'll walk
21 through the line items here from the top. The first
22 line item is "third-party construction cost", which is
23 noted as "18 plus 18 days". That would have been at
24 the time our estimated construction window. That's
25 \$425,000.

26 Now, again, that is an estimated time frame for

1 the work to be done based on, essentially, a worst-case
2 scenario for being out on the field. Included in that
3 is our third-party general construction contractor
4 which will do excavation, backfill. Again, as
5 Mr. Balfour mentioned, you know, we're including things
6 like construction trailers, anything around the general
7 construction site. That's why that is the biggest
8 number.

9 The second item would be -- is the "concrete
10 slabs" to the amount of 152,000. That would be based
11 on number of slabs estimated for the installation.
12 That's a -- a unit price that goes into that.

13 Then there's the "pipeline inspection", which
14 we've mentioned before during the day's proceedings,
15 for \$53,000. That's a third-party contractor that once
16 the pipeline is -- is exposed would do the external
17 inspection of the pipeline that -- that we've mentioned
18 before.

19 The next line -- line item is the "construction
20 supervisor". You can see there, again, it -- it's
21 mentioned 40 days at a -- at a day rate of \$1,750 a
22 day. That's, again, driven by the 18 plus 18 days,
23 which is twenty -- is 40 minus 4. There's a little bit
24 of extra on the front and the back end to allow the
25 construction supervisor to -- to do some preparation
26 work and then some closeout work in the end. That

1 amounts to \$70,000.

2 And then the next line item is "Plains'
3 engineering and operations costs", which could also be
4 referenced as "owner's cost" -- "internal owner's
5 cost". That is -- is our project management, our
6 operations support out in the field for permitting,
7 et cetera, to the amount of \$15,000, which gives you a
8 subtotal of \$715,000.

9 On top of that, we had 20 percent contingency,
10 which amounts to \$143,000, which gives you a total
11 estimated cost of \$858,000.

12 Q Thank you very much.

13 We would also like to know from this panel what
14 specific factors require the upgrading or alterations
15 to the pipeline at this location. Is lowering required
16 or repair?

17 A I. BALFOUR: Maybe I can go first.

18 So what was required in this case was what was
19 called Fillcrete, and so we excavate down and then
20 backfill with Fillcrete and then put soil back on top.
21 The Fillcrete is what disperses the load over the
22 pipeline.

23 Q Thank you.

24 A A. TORR: Based on our estimate and
25 based on the information we have at the time, the only
26 additional work required for the crossing was the

1 installation of these concrete slabs which would allow
2 the road to be built over the pipeline.

3 Q And with respect to both answers that you provided,
4 were there any alternative solutions that could be
5 applied at this specific location?

6 A I. BALFOUR: You know, I think throughout
7 the various conversations and information exchanges
8 and -- and reviews that we did, there was several other
9 alternatives considered, but this was the one that was
10 considered the best case.

11 A A. TORR: Yeah. And I will echo what
12 Mr. Balfour said. Yes, there are other alternatives,
13 but this would be considered the least invasive and
14 ultimately what we would be -- consider one of the
15 lowest-cost options out there.

16 Q Thank you.

17 And just to confirm with both parties, there is no
18 integrity concerns with either of the pipelines;
19 correct? Is that your evidence today?

20 A I. BALFOUR: Our -- no, we don't have any
21 in -- integrity concerns. We have ongoing programs to
22 monitor these things, and -- and there are things that
23 we update through our regular programs that -- to make
24 sure that that's the case.

25 A A. TORR: There are no concerns on
26 our -- from Plains.

1 Q Okay. Thank you.

2 And I have a -- one last question specifically for
3 Mr. Trim. I suppose anyone could answer, but it was
4 based on what you said earlier.

5 You mentioned a change in Plains' process since
6 2021 due to the experience that you had with Marquis.
7 We heard yesterday that many developers in the Edmonton
8 region are reporting a quote/unquote "change" in
9 process that they're experiencing. We'd like you to
10 please provide any additional details as to whether
11 Plains' change in process is being applied to all
12 developers or if there -- it was just that one specific
13 scenario you were referring to earlier.

14 A N. TRIM: It -- it's a change in process
15 to all developers moving forward.

16 Q Thank you very much.

17 THE CHAIR: Does that conclude your
18 questions?

19 A. HUXLEY: Yes.

20 THE CHAIR: Okay. Thank you.

21 So if you were so kind to be patient with us once
22 more, give us ten minutes, the Panel has some
23 questions. We will confirm -- confer and come back.
24 So based on this slow clock, five past.

25 (ADJOURNMENT)

26 THE CHAIR: Thank you. Please be seated.

1 So we have some questions for the panel.

2 Thank you for coming here. We'll begin with
3 Commissioner McNaughtan.

4 E. MCNAUGHTAN: Thank you, Madam Chair. And
5 I'm trying to remember to speak up for the back of the
6 room. I'll get my questions in order.

7 The Panel Questions Pembina/Plains/SECURE Witness Panel

8 Q E. MCNAUGHTAN: For both Plains and Pembina
9 witnesses, we heard a developer say that sometimes the
10 timeline between requesting a crossing agreement and
11 receiving what, I believe, is referred to as a
12 definitive agreement or a proposal to do the work can
13 be lengthy, perhaps up to 18 months. Can you please,
14 each of you, talk me through the steps you take to
15 respond to a crossing request and -- sorry -- how that
16 fits into a timeline to actually getting there to do
17 the crossing?

18 A I. BALFOUR: Thanks, and thanks for having
19 us here today.

20 The -- the process that Pembina for processing
21 crossing requests starts when -- starts when the person
22 who wants to cross -- the "applicant", I'll call him --
23 submits an application to -- or submits information to
24 our land group.

25 At that point, our land group gets together with
26 our operations team and some technical support teams,

1 engineering and -- and other functions, and they get
2 together to assess whether this crossing will be
3 considered something we call "complex" or not. And,
4 you know, our -- our goal is to get back to the
5 counterparty that submitted that information within
6 21 days.

7 So within 21 days, we'll be able to tell them,
8 This is a simple crossing, and we can proceed with
9 negotiating crossing agreements or what other
10 instruments are required for -- for that simple
11 crossing because there's no work. And as I stated
12 before, we have 3,500 requests every year at Pembina,
13 and only 30 to 40 don't fall into a first category.

14 The second category is, you know, for simplicity,
15 we call "complex" ones. And means our ops and -- our
16 operations team, our engineering team and the land team
17 and -- and other stakeholders have said, There's
18 something else we need to do here. Either the
19 information that we have got submitted is incomplete
20 or, you know, there's other -- other work that we think
21 needs to be done to protect this pipeline other than
22 the information we've been given.

23 That's when we reach out to the counterparty, you
24 know, tell them that we can't approve it in this simple
25 process, but we're -- we're willing to work with them
26 to -- to -- to, you know, make the crossing happen.

1 At -- at that point, we'll -- you know, we'll -- we'll
2 ask for some backstopping of costs so that we can do
3 the analysis to figure out what exactly needs to be
4 done. And -- and as I said before, it's an iterative
5 process where, you know, we'll -- we'll enter into a --
6 a backstopping agreement, and -- and then we'll --
7 we'll ask for an -- information, and there will be
8 information produced.

9 And -- and based on that information, you know,
10 the -- the time frames for that are -- are really
11 difficult because it depends on the counterparty and
12 what their turnaround time is. We've -- we've had
13 situations in the past where after signing an interim
14 backstopping agreement, you know, the party decides not
15 to proceed or changes their plans fundamentally so that
16 we have to start the work over again.

17 You know, I think, you know, typically within
18 several months for -- for the -- for the complicated
19 crossings, as long as we've got a willing counterparty,
20 we're able to process information to get a high-level
21 plan together. We'll sit down with our counterparty,
22 discuss the scope of work, the schedule to the work,
23 and any estimated costs. And recall at this time those
24 estimated costs are -- are the -- based on the best
25 information we have and a whole bunch of assumptions,
26 including around when we're executing the work, how

1 many periods of time we have to execute the work. So
2 it is -- you know, you've heard me say this a couple
3 times today. It's very dependent on the circumstances.

4 But -- but what happens with, you know, I'll
5 suggest almost all of these is, you know, we work with
6 the counterparty, get them the information, then it's
7 up to them to decided whether to proceed or not. And
8 we'll proceed under a backstopping agreement so that
9 we're not out of pocket costs for the work that we're
10 doing to facilitate their crossing.

11 So from start to finish, you know, 99 percent of
12 them almost exactly, based on our experience with the
13 3,500 versus the 30 to 40, are completed within, you
14 know, 21 days, and then we're processing crossing
15 agreements and everything else, and that's -- you know,
16 that is consistent with some of the experiences that --
17 that we heard from the developers' team. So it's not
18 surprising they've experienced that, because that's
19 99 percent of that time what we do. It's just that 30
20 to 40 where there's something else going on in -- you
21 know, in the environment or with the -- the requested
22 crossing that we need to dig into a bit more.

23 Is that helpful?

24 Q Yes. Thank you.

25 And for Plains, Mr. -- Mr. Torr.

26 A A. TORR: Yes. I won't repeat

1 everything that Mr. Balfour said, but I -- I'll start
2 by saying our process is very similar to theirs. You
3 know, we -- we receive a request in -- from a third
4 party through one of the channels in the company,
5 whether it be our land department or damage prevention.
6 We look at the type of crossing, whether it's a simple
7 crossing or a more complex crossing. We -- simple
8 crossings can -- for an actual crossing agreement could
9 take as little as a month. It's -- it's a paperwork
10 exercise if it's a simple -- a simple crossing. A more
11 complex crossing, we go through the same process. We
12 assess the crossing, we put what Plains calls "cost
13 recovery agreements" in place to ensure that we get
14 refunded for work being done. We will then go through
15 an iterative process.

16 At Plains we do a Cost Recovery Agreement 1, which
17 allows us to just do a review of the more complex
18 crossing and provide the third party with a more
19 detailed cost estimate and schedule, and then we'll go
20 into a Cost Recovery Agreement Number 2, which then
21 allows us to do the work.

22 Again, the majority of the crossings that we deal
23 with are -- are -- as a company, are considered simple
24 and -- and pass through without any real issues. There
25 is a -- a small group of crossings that we consider
26 complex that we have to go through the process of

1 actually doing work at the crossing.

2 Does that help?

3 Q Thank you.

4 Second question, then, for Pembina's witnesses,
5 either Mr. Balfour or Mr. Sprott. Exhibit 85.01, which
6 Mr. Fitch provided as one of -- no. No.

7 THE CHAIR: Mr. Myers.

8 Q E. MCNAUGHTAN: Mr. Myers provided as one
9 of -- it's been a long day. Sorry.

10 On page A2, which is a cost estimate and work
11 scope, I think, for the 12-inch MPS crossing that, I
12 believe, was completed; is that correct? Horse Hills
13 Land Company did complete that crossing?

14 THE CHAIR: Should we have it on the
15 screen maybe?

16 E. MCNAUGHTAN: Sure.

17 Can we pull it up?

18 THE CHAIR: 85.01.

19 E. MCNAUGHTAN: 85.01 on page A2 of that,
20 which is the next one, I believe. That's the one.

21 Q E. MCNAUGHTAN: There's a line item there,
22 "NDT plus pipe repairs, sleeve repairs, and coating"
23 for \$394,847, which is the largest item on that cost
24 estimate.

25 Are those -- is that cost estimate for maintenance
26 of the pipeline or -- what is "NDT plus pipe repair"

1 referring to it in that? And given that, I think, in
2 the end, this invoiced amount came in quite a bit lower
3 than that, what didn't happen out of this cost
4 estimate?

5 A I. BALFOUR: So to answer your -- I think
6 your first question, what's "NDT", and that's
7 nondestructive testing, and so that's getting down into
8 the -- to the ditch and looking at -- you know, once
9 the pipe's exposed, you want to go down and -- and look
10 at the pipe to make sure that it's -- you don't need to
11 do anything else before you fill it up with Fillcrete.
12 And so in this case -- like every situation is unique.
13 This -- these costs were caused by our -- our -- our --
14 pardon me -- our -- you know, our -- our position is
15 that these costs were caused by the crossing in this
16 case, and in the case of what we're dealing with on
17 167th, they weren't; but in this case, these -- these
18 were required to -- to complete the crossing and
19 protect the pipeline as a result of the road crossing.

20 And, you know, I -- the -- the cost of \$974,000
21 was actually just the estimate again, and the actual
22 invoiced amount was \$482,000. I don't have the exact
23 breakdown of which components were lower or not,
24 but ...

25 Q Okay. Thank you.

26 So if I could just be sure, you're saying that

1 that was an estimate because you felt that the crossing
2 work required was going to create repair work?

3 A Yes.

4 Q Thank you.

5 I do have one other question for Mr. Telford. You
6 gave quite a number of examples of what's considered in
7 highest and best use considerations, and we have heard
8 that reasonable expectation of development is -- should
9 be considered at times. What, in highest and best use
10 calculations, is a reasonable time frame or has been
11 accepted in appraisal work as a reasonable time frame
12 to consider a future use as part of highest and best
13 use?

14 A R. TELFORD: In appraisal, we usually look
15 at three different horizons of development, and we have
16 immediate development, and that's one to three years;
17 then we have medium term development, between four and
18 seven years; and then we're looking at longer term,
19 between seven and onward. So if you can reasonably --
20 you know, if there's a higher probability of the next
21 ten years you're going to have development, then you're
22 going to be looking for those types of sales with a
23 similar horizon, so that would be the development.

24 Q Thank you very much. Those are my questions.

25 THE CHAIR: Thank you, Commissioner
26 McNaughtan.

1 Commissioner Robinson.

2 Q H. ROBINSON: I just have the one question
3 that's really just a -- sort of like a clarification,
4 and it's sort of been clarified already, and it relates
5 to backstop agreements.

6 And, Mr. Torr, if I heard you right, you talked
7 about cost recovery agreements. I'm wondering, is it
8 fair to say that those could also be called "backstop
9 agreements" or -- or no?

10 A A. TORR: Yes.

11 Q Okay. So yeah, it is fair.

12 So then there's two types, then. One is through
13 the review, which I think is sort of -- sort of the
14 engineering to assess, you know, what future work
15 likely is going to be. Is that fair?

16 A That is accurate. Yeah.

17 Q Okay. And then the second is an agreement that
18 actually allows the work to be done, and I think we
19 just weren't clear from this morning.

20 If there is a remainder -- or what happens at the
21 end of that? There's sort of a lifecycle question.
22 What we've heard is that the estimates tend to be
23 bigger, and then there is, I think, a credit that is --
24 is sort of paid back, if I can put it that way. Is
25 that the way it sort of usually works or has been
26 working?

1 A Yes, sir, that is the way it works. Any money that
2 is -- in -- in the event that we request an upfront
3 payment from a third party, all money that's not used
4 at the end is returned. And in the case of, for
5 example, 172nd Street that we executed for Marquis JV,
6 which was an estimated number, we simply invoiced them
7 up to the amount that we used, so the estimate was
8 higher -- ended up being higher than the actual, but in
9 that case, it was simply -- we -- we invoiced the third
10 party for the final amount.

11 Q Okay.

12 A Does that -- does that clarify?

13 Q I think so. I was just a little confused on the
14 word -- sort of the invoicing versus crediting at the
15 end.

16 A The difference is if -- if money is paid up front --
17 well, for example, if -- if we were to say that the
18 crossing is estimated at a million dollars -- we'll use
19 that for simple math -- and we request that the third
20 party pay us the million dollars up front, and the
21 final cost of the -- of the crossing is \$750,000, for
22 ease of math, then we would return the \$250,000 to the
23 third party.

24 Q And is there a -- a timeline in terms of, you know,
25 when that money is -- is returned? What's your
26 practice on that?

1 A Yeah. We typically try to do that as soon as possible
2 after completion of the work, understanding that the
3 way we invoice the third party is dependent on us
4 paying our contractors. So we would pay our
5 contractors to ensure that everybody is paid, we would
6 make up an invoice to show -- to the third party to
7 show them the actual cost, we would then determine the
8 remainder amount, and then we would return that. We do
9 that through electronic transfer, which is a pretty
10 quick process, or a cheque if the third party requests
11 that. But, yes, it can be done fairly quickly.

12 Q Those are my questions. Thank you.

13 THE CHAIR: Thank you very much.

14 Thank you, Commissioner Robinson.

15 Q THE CHAIR: I have a few questions for the
16 panel, please, if you are so kind to humour me.

17 So first question is: We -- in the evidence of
18 Qualico, there was a study on traffic, that traffic is
19 going to increase with the -- with the time and the
20 road is being used. And they had photographs that
21 majority of the road has been built.

22 So my question to you is: Do you perceive any
23 risk to both of your pipelines as the traffic increases
24 if the work doesn't get done? Integrity, safety,
25 environment, all the above.

26 A I. BALFOUR: So -- so I think we --

1 Pembina's been ready, willing, and able to execute the
2 work under the scope based on the scope we had from
3 Qualico at the time, and that would have made us
4 comfortable that -- that we could have proceeded with
5 that. We would continue to run our integrity programs
6 in the normal course at our cost afterwards and make --
7 make sure that, you know -- that that was put in place.
8 But the reason we're, you know, so picky about these
9 complex crossings is we need to ensure as licensee,
10 'cause we're on the hook, the public safety and the
11 safe operations of our pipelines.

12 Yeah. And right -- right now, there's, you know,
13 no incremental over -- traffic over our pipeline, but
14 as the -- you know, based on the information that we
15 had and the study that we produced, we wouldn't --
16 we -- we wouldn't have any concerns with respect to
17 that.

18 Q Thank you very much.

19 Please go ahead.

20 A N. TRIM: That would be very similar to
21 Plains' position as well. To facilitate the added
22 traffic requirement and the expansion of the road, this
23 crossing on -- on our pipeline would -- it must be
24 completed to meet code requirements, so I think it --
25 we don't really have any concerns at this time with the
26 current crossing and the current traffic load and --

1 and -- that -- that's there today. No real issues.

2 Q But for the road to get upgraded, it was in your
3 evidence that the -- the crossing needs to be -- the
4 pipeline protection needs to be --

5 A That is correct.

6 Q Yeah?

7 A Yeah.

8 Q Okay. Thank you very much.

9 Mr. Torr, you spoke of the civil work, that
10 majority of this work is civil work. I am also a -- I
11 wouldn't disrespect you, but I am a simple engineer, so
12 I understand those terminologies on project management.

13 So we heard from Qualico and other parties that
14 the costs they have seen is very varied. They have had
15 experiences from 30,000 by putting concrete slabs all
16 the way to now on this case collectively over a million
17 dollars.

18 So if it's just civil work, what makes it so
19 varied?

20 A A. TORR: Madam Chair, I'm not sure what
21 makes it varied. I can speak to the -- the case at
22 hand. I've got the specific example for 172 Avenue
23 with the -- with the final numbers. The -- the low end
24 of the scale that's been mentioned here today, I'm not
25 sure where -- where those numbers come from. I can
26 tell you that the concrete slabs themselves cost more

1 than the numbers that were mentioned for entire
2 crossings. So I cannot speak to the low end.

3 I can explain what we did and why we did it, but
4 as to the low end of the -- of the range that's been
5 mentioned, I am unclear where those numbers come from.

6 Q So is it fair to say that it's very, very specific to
7 each individual pipeline crossing, road, et cetera?

8 A Definitely. I think we've talked about that multiple
9 times, that every crossing is unique. I think -- I
10 think that would be -- if -- if we were to see an
11 example of a low-cost crossing, it would be easier to
12 explain the cost at that range. I -- I think we should
13 not discount the fact that these things are very
14 unique.

15 Q Thank you.

16 And I think you had something to add.

17 A J. SPROTT: Yeah. I was just going to
18 add: It's -- it's very unique. So very similar to
19 what our counterparts at Plains have just said, it's
20 really dependent on the asset itself. So if -- if in
21 that \$30,000 example that -- that maybe was provided,
22 if that happened to be a waterline or -- or, you know,
23 a -- a black waterline, a fibre optics, maybe it was
24 something in that nature; maybe it wasn't a energy
25 pipeline. So, really, it's not only the -- the
26 crossing; it's -- it's also the asset beneath and --

1 and what's in that asset, et cetera, that would also --
2 could change that 30,000 to -- you know, to a million
3 dollars.

4 Q Thank you very much.

5 I have one question, and please forgive my lack of
6 knowledge of the legal terms, but this first-in-time,
7 first-in-right has been mentioned many, many, many
8 times.

9 So if you were -- conversely, a pipeline company's
10 about -- and you mentioned it in your evidence, that --
11 the consequence of, if we not follow this rule or
12 practice, if we had a pipeline company crossing roads,
13 public roads, power lines, et cetera, what would be the
14 arrangement there?

15 A So how that works today, if -- if we're going to be
16 crossing a road, we're, obviously, required under the
17 Act to maintain the -- you know -- you know, not to,
18 obviously, disturb the road.

19 So typically when we cross a road, we need to
20 maintain our asset to the proper operating standards,
21 and we absorb 100 percent of those costs to cross a
22 road.

23 If Plains is crossing one of Pembina's pipelines,
24 Plains would be 100 percent accountable for that work
25 they have to do to make sure that my asset stayed
26 whole.

1 If I was crossing a Plains pipeline, we would be
2 doing the reciprocal, and that's -- and that's how it
3 works today amongst many industries.

4 Q Thank you very much for that answer.

5 A I. BALFOUR: May I ask -- may I add on too?

6 Q Please.

7 A It creates, like, a really good tension. Like, we
8 don't make any money on these crossings. We just
9 recover our costs. And so when we go to do work, we
10 take -- we -- we make a lot of effort to make sure that
11 our costs aren't just whatever's out there, because,
12 you know, a couple weeks later, a couple months later,
13 we might be crossing that party, and so, you know,
14 with -- you know, we might be proposing a new pipeline
15 or a new asset that -- that crosses the party that --
16 that just crossed us, and so there's this really good
17 natural tension in the existing industry practice
18 that -- that makes a lot of sense to us.

19 Q Thank you. That's helpful.

20 So I asked this question from Qualico previously,
21 and I'm going to ask you the same. What happens if
22 this Panel doesn't make this order -- and Pembina,
23 Plains, both of you -- SECURE, or if you want to
24 confer, give me one answer. What happens if we don't
25 make this order, noting that this application has been
26 brought to us a few years ago?

1 D. NAFFIN: Sorry, Madam Chair. It might
2 have just been me that was confused. I thought you
3 said first, What happens if we make the order? And
4 then I thought you said, What happens if we don't make
5 the order? It might have been the way I heard it. Or
6 is it two separate questions?

7 THE CHAIR: I have both questions. You
8 are reading my mind.

9 What happens if we don't make it? And then the
10 follow-up question is: What happens if we make it?

11 D. NAFFIN: Okay.

12 THE CHAIR: And then on what terms and
13 conditions you would perceive as fair, so ...

14 D. NAFFIN: I just wanted to make sure the
15 panel understood the question. Thank you.

16 A N. TRIM: Okay. So I will answer your
17 question, which is: What happens if you don't make the
18 order? So we would be prepared to execute the work on
19 behalf of Qualico's request as -- as soon as they
20 signed a cost recovery agreement, and we could get --
21 get started on the finer details and -- and
22 construction activities and planning.

23 Q THE CHAIR: And the question -- follow on
24 question: What happens if we make the order? What
25 would the pipeline companies that -- and -- just --
26 I'll explain my thinking.

1 So we are tasked to follow Section 33. It has two
2 subsections, and first subsection is not making an
3 order -- lawyers are going to be really mad at me --
4 directing the work to be done, and then subsection (2)
5 is about cost order.

6 So my question is specific to subsection (1).
7 What terms and conditions, if we were to make the
8 order, would you perceive as fair?

9 A J. SPROTT: I'll take that on behalf of
10 the panel and have the -- the rest of the group chime
11 in.

12 If you did make the -- if you did direct the work
13 to happen, which we are ready, willing, and able to
14 execute, we would expect that that would be done
15 100 percent to the accountability of the party that
16 is -- is causing the alteration work, i.e., it would be
17 a hundred percent to the developer to pay for the work
18 that we're ready to execute on their behalf.

19 Q So aside from the cost, there's no further terms and
20 conditions that you would perceive as ... And if there
21 isn't, that's fine -- perfectly fine too.

22 A I. BALFOUR: It would -- so we're just
23 consulting here with the panel, and -- and I think, you
24 know, the -- the one -- the AER directs the work and
25 directs Qualico to -- to pay for it. I think the one
26 request that we'd have is -- all of our cost estimates

1 are from, you know, years ago, and so, you know, we'd
2 like a chance to refresh those to make sure they're not
3 way out of whack, but ...

4 Anything else?

5 A N. TRIM: I think Plains would agree
6 with that as well.

7 Q So cost -- updated cost estimate?

8 A That's correct.

9 Q Thank you.

10 And any specific details? Class 5, 3? Doesn't
11 matter?

12 A I. BALFOUR: I think as long as the
13 information from the developer who wants to develop the
14 land hasn't changed, then we can go back and refresh
15 our estimate.

16 A A. TORR: Yeah, I would agree with that.

17 Q Okay. Thank you very much. That concludes my
18 questions.

19 THE CHAIR: Any follow-up? No? All good?

20 So that concludes today's -- any re-direct --
21 questioning part. But any re-direct?

22 T. MYERS: No re-direct, Madam Chair.

23 And, again, thank you for sitting a little longer.

24 And thank you to the court reporters for
25 accommodating our schedule.

26 And thank you to my friends for an efficient

1 cross-examination. Much appreciated.

2 THE CHAIR: Thanks to everyone's
3 accommodating this request. And today's part of
4 hearing is adjourned, and we are not sitting tomorrow.

5 So, to confirm, we are sitting on Monday morning,
6 9:00, to carry on with Keyera.

7 Okay. Have a good weekend, everyone.

8 (WITNESS PANEL STANDS DOWN)

9 _____
10 PROCEEDINGS ADJOURNED UNTIL 9:00 AM, MARCH 11, 2024

11 _____

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

1 CERTIFICATE OF TRANSCRIPT:

2

3 We, Angela Porco and Derek Lopez, certify that the
4 foregoing pages are a complete and accurate transcript
5 of the proceedings taken down by us in shorthand and
6 transcribed from our shorthand notes to the best of our
7 skill and ability.

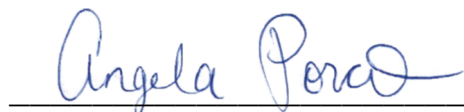
8 Dated at the City of Calgary, Province of Alberta,
9 this 7th day of March 2024.

10

11

12

13



14

A. Porco, CSR(A)

15

Official Court Reporter

16

17

18

19



20

D. Lopez, CSR(A), RPR

21

Official Court Reporter

22

23

24

25

26

<hr/> # <hr/> #1 392:5 #10 369:4 #11 373:15 #2 392:11 #3 392:8 #4 392:14 #5 407:15 #6 422:8 #7 422:10	\$50,000 371:20 \$53,000 501:15 \$540,600 334:22 335:7 \$559,000 363:13, 18,19,25 499:19 500:5 \$60,000 356:21 357:23 360:2 364:16 386:24 \$600 448:5,18 \$670 333:6 \$678 472:8 \$7,260 446:13 \$70,000 502:1 \$700 333:21 \$715,000 502:8 \$74 446:18 448:10 \$750,000 472:19 514:21 \$8,500 446:12 \$800,000 331:2 333:5 472:7 \$858,000 348:24 500:20 502:11 \$9.1 418:8 \$974,000 335:21 511:20	388:18,21 390:23 391:9,22,25,26 392:5,6,11,12 393:25 394:10 399:24 406:18 407:1 417:4 449:12 477:26 484:5 485:9 498:9 509:16 1.1 385:3 467:12 1.2 467:26 1.7 467:12 10 331:3,22 355:12 368:20 467:7 100 329:20 385:15 423:8 519:21,24 522:15 1072 392:18 1082 346:18 1083 347:10 1094 353:9 370:1 384:21 386:6 10:00 338:17 10:30 431:13 10th 313:23 11 348:16 356:7 371:9 373:6 481:21 524:10 12-inch 335:19 370:3 371:18 403:23 510:11 13 466:2 14 345:8 14th 313:9 316:15 317:7 15 302:26 409:10 152,000 501:10 15th 334:19 16 395:16 167 369:5 407:4 167th 336:8 345:17 346:8,23	351:8 353:5,17 356:17 359:7 365:19,24 378:20 384:26 389:7 392:24 406:21 411:8 499:15 500:11 511:17 172 324:18 334:5 335:10 369:23 517:22 172nd 334:20 352:5 369:22 371:18 372:10 373:23 404:6 514:5 18 500:23 501:22 505:13 19 486:6 1965 310:21 1967 446:11 1968 446:6 460:12,23 1971 446:7,12 447:1 448:10,12, 25 451:24 453:17,26 460:12,23 1983 452:14 1984 306:4 1996 308:18 1999 309:1 1:15 400:10 1:20 402:16	2.2 467:26 2.625 421:19,20 2.725 421:20 2.75 421:19 20 303:18 304:5 334:25 335:7 463:1 487:4,11 498:5,6 500:2 502:9 20-inch 340:3 353:16 356:16 384:25 20-millimetre 500:16 20-plus 304:6 2003 340:1 2007 309:16 2008 409:3 410:15,25 411:2 467:12 2010 302:2 2013 392:26 468:21 2014 348:8 351:9 353:13 354:23 363:26 368:11 370:2,7,15,25 385:12 386:18 393:2 2016 303:16 2018 468:18 2019 348:16,19 352:26 356:7 368:20 371:11 2020 333:14 340:1 2021 303:22 335:19 373:20 375:12,21 393:7 403:22 404:6 466:2 504:6 2022 313:2 334:19
<hr/> \$ <hr/> \$1,000 331:4 \$1,135,200 353:22 \$1,680.55 446:13 \$1,750 501:21 \$1.1 385:7 \$1.135 363:26 \$1.75 332:26 \$143,000 502:10 \$15,000 502:7 \$186,000 385:4,8 \$186,720 354:2,5 \$2,537.31 446:12 \$250,000 514:22 \$30,000 518:21 \$34 333:5,22 472:22 \$35 333:1,20 472:3 \$394,847 510:23 \$417,487.13 335:9 \$425,000 500:25 \$436,000 375:23 \$482,000 375:26 511:22	<hr/> \$ <hr/> \$1,000 331:4 \$1,135,200 353:22 \$1,680.55 446:13 \$1,750 501:21 \$1.1 385:7 \$1.135 363:26 \$1.75 332:26 \$143,000 502:10 \$15,000 502:7 \$186,000 385:4,8 \$186,720 354:2,5 \$2,537.31 446:12 \$250,000 514:22 \$30,000 518:21 \$34 333:5,22 472:22 \$35 333:1,20 472:3 \$394,847 510:23 \$417,487.13 335:9 \$425,000 500:25 \$436,000 375:23 \$482,000 375:26 511:22	((1) 402:22 522:6 (2) 341:19 343:24 402:22 522:4 0 0.3 395:21,25 1 1 300:25 317:6	<hr/> 2 <hr/> 2 301:3 316:14 389:1,4 390:2 391:9,22,25 392:1 393:23 394:12 433:26 468:16 470:25 474:10,14 484:7, 13 509:20	

2023 313:9,17,19, 21,24 316:15 317:7 345:8 388:21 392:5,11 411:3 417:19 418:6,7,17 420:20 421:23 422:8 2024 314:1 315:21 390:21 392:9,15 401:3 417:21 421:16,25 422:11 524:10 525:9 2024-03-07 369:3 373:14 392:4,7,10,13 407:14 422:7,9 2043 467:13 2044 467:26 21 373:20 506:6,7 508:14 21.01 313:19 21.02 313:21 218 313:5 21st 335:18 22.01 313:24 229 408:14 23 302:25 23.01 313:24 24 370:2 397:4,26 403:6 407:16 480:5,15 24-inch 406:23, 24 407:2 242 313:5 243 313:8 24th 314:1 315:21 364:13 25 302:11 488:8, 14 263 313:8 27 478:23	28 341:20 343:24 362:25 377:12 28(2) 342:8 28,771 333:8 29,000 333:15 299 313:11 345:7 2:30 428:1 <hr/> 3 <hr/> 3 345:11 361:19, 21 389:4,12 390:12,24 391:9, 22,25,26 408:15 475:25 476:8,11 523:10 3,000 323:6 468:14 3,500 409:19,21 410:4 506:12 508:13 30 334:25 365:8 409:21 410:6 457:7 506:13 508:13,19 30,000 517:15 519:2 300 345:9 500:13, 17 308 317:8 432:16 309 433:25 31 481:8 310 434:1 438:5 443:9 311 446:2 312 301:7 314 432:21,22 315 301:7 317:8 317 316:16 465:23 318 471:5 31st 448:12	32 421:13 472:13 320 331:26 472:1 322 301:7 466:4 323 301:7 316:16 33 320:24 321:24 328:19 402:22 432:26 433:2,4,7, 11 436:23 477:13 478:10 481:20 482:26 483:21 484:1,3,13 522:1 34 333:10 348 313:12 349 313:15 35 311:4 434:11, 25 435:15 359 317:8 366 317:8 368 316:16 374 316:16 3:30 462:11,24 3:35 462:23 3rd 313:17 375:12,21 393:6 404:6 <hr/> 4 <hr/> 4 371:11 390:20 391:9,22,25 392:1 447:19 501:23 40 306:20 409:21 410:6 457:7 474:15 501:21,23 506:13 508:13,20 415 313:15 423 313:17 425 313:18 43.04 395:8 396:3 404:17 405:4,11, 23 45 330:26 332:20	472:6,17 473:11 482 376:3 498 407:5 4:30 430:24,26 4th 314:1 <hr/> 5 <hr/> 5 307:21 334:24 345:12 364:24,25 365:3,7 392:12 393:5 404:12 407:7 446:24 453:19 486:5 523:10 5,000 323:5 5.01 346:17 347:10 353:8 362:25 370:1 384:21 386:5 392:17 467:6 472:11 50 321:6 325:17 363:3,11 365:6 366:26 386:24 413:26 419:18 423:15 50-year-old 386:16 412:10,12 414:5,18 415:12 417:5 55 332:18 559,000 367:5 56 394:3 <hr/> 6 <hr/> 6 345:24 349:2 356:25 372:13 373:25 392:6 418:13 421:23 422:4 432:4,5 6.01 301:8 313:5, 8,12,15,18 316:17 317:8	331:26 345:7 432:16 465:23 471:4 473:7 60 419:19 6001-1 392:21 64.05 446:23 65 472:14 473:3 65,000 468:15 670 333:21 472:9 6:30 431:2,12 463:13,18 <hr/> 7 <hr/> 7 401:3 420:19 421:9,24 422:5 463:11 70,000 468:19 71.01 314:1 71.02 301:1 71.03 301:5 315:21 474:9 71.04 317:9 449:11,12 71.05 314:2 316:18 7th 525:9 <hr/> 8 <hr/> 8 331:22 341:7 395:2 475:25 476:8,11 85.01 335:20 373:18 510:5,18, 19 86.01 348:15 352:26 88.01 369:1,3 89.01 373:13,14
--	--	---	---	--

<hr/> <p style="text-align: center;">9</p> <hr/> <p>9 390:21 392:8,14 478:23</p> <p>90.01 391:16,26 392:4</p> <p>91.01 392:1,7</p> <p>92.01 392:1,10</p> <p>93.01 391:16 392:2,13</p> <p>94.01 407:12,14</p> <p>95.01 422:5,7</p> <p>96.01 422:6,9</p> <p>99 508:11,19</p> <p>9:00 299:1 524:6, 10</p> <p>9th 313:2,19,20</p>	<p>access 307:23 336:26 337:1 380:16 456:7 490:12,13,16 491:2 499:21</p> <p>accommodate 323:20 345:15 405:22 427:19,20 435:11 451:16 455:22 491:17</p> <p>accommodated 450:20 451:3,6 453:13 454:2</p> <p>accommodating 300:3 523:25 524:3</p> <p>accomplish 429:17</p> <p>accordance 346:1,9</p> <p>accords 470:18</p> <p>account 354:8 378:24 385:4 386:14 485:6</p> <p>accountability 336:18 522:15</p> <p>accountable 388:6,9,13,14 519:24</p> <p>accounting 474:21</p> <p>accredited 329:3,17 437:1</p> <p>accuracy 334:25</p> <p>accurate 314:11, 25 315:12 316:4, 24 317:15 367:6 421:6 513:16 525:4</p> <p>accurately 391:2 396:20</p> <p>achieve 463:18 469:24</p> <p>achieved 457:11, 18</p>	<p>acknowledge 396:9 397:14 473:18</p> <p>acknowledged 336:18 483:20</p> <p>acquired 321:7 325:19</p> <p>acquisition 304:7 305:11 310:16,24 337:8 433:26</p> <p>acquisitions 312:4</p> <p>acre 446:12,13,18 448:4,5,10,18 457:8</p> <p>acreage 451:7</p> <p>acres 449:19 450:7</p> <p>Act 320:25 321:24 328:19 402:23 432:26 433:4,12,21 436:23 452:10 458:5,11 477:14 478:11 482:26 485:4,5 487:17, 22 519:17</p> <p>action 484:6,12</p> <p>actions 329:26</p> <p>actively 377:1</p> <p>activities 303:3, 10 319:25 380:10 413:17 475:9 485:26 499:20,22 500:3 521:22</p> <p>actors 494:10</p> <p>acts 482:1,19</p> <p>actual 335:8,13 342:8 365:3 375:22 376:10 385:1 405:8 414:10 435:10 444:21 509:8 511:21 514:8</p>	<p>515:7</p> <p>add 330:20 344:18 350:6 352:18 357:21 362:13 364:12 380:20 412:23 414:16 415:3 424:2,5 426:1 451:21 472:21 518:16,18 520:5</p> <p>added 367:4 425:14 438:18 442:19 516:21</p> <p>adder 425:6</p> <p>adding 438:15 441:7</p> <p>addition 305:17 441:24</p> <p>additional 331:8 358:15 390:12 441:9 455:9 502:26 504:10</p> <p>additionally 304:23 352:18</p> <p>address 323:25 385:9 464:19</p> <p>addressed 356:9 371:11 373:20 377:18 397:8</p> <p>addressing 319:14 438:24 446:4</p> <p>adhere 425:2</p> <p>adjoining 444:24 454:6</p> <p>adjourned 400:10 524:4,10</p> <p>ADJOURNME NT 339:5 399:15 420:9 432:1 463:3 497:17 504:25</p> <p>adjusted 421:18</p> <p>adjustments 442:12</p>	<p>administer 382:22</p> <p>administration 304:4 434:8</p> <p>admit 375:7 421:11</p> <p>adopt 312:25 314:14 315:2,15 316:8 317:1,18</p> <p>advance 397:26 398:21</p> <p>advanced 327:5</p> <p>advantage 493:26</p> <p>advantageous 325:11</p> <p>adverse 312:1 452:12,18 453:2, 9,15,25 454:5,9, 20,22 472:26</p> <p>adversely 456:15 484:17</p> <p>advice 436:3,12</p> <p>advise 299:18 428:1 429:3 436:6,22 437:15 498:23</p> <p>advised 347:15 353:20</p> <p>advises 385:2</p> <p>advising 437:3</p> <p>AER 300:2 304:20 309:24 311:22 313:2,6 318:3 319:5 320:2 321:10,22 322:4,16 326:2,9, 17 327:4 328:16 392:20 393:7 394:3,4,7 397:16, 18 401:9,10,11, 12,13,14 427:3 428:16,21 429:12 430:2,20 431:12 433:5,17 463:20</p>
---	---	---	---	--

475:19 477:6 478:1,10 479:14, 22 480:11 481:14,17 483:4, 26 484:8,10,19 485:10,20,25 490:19 494:2 499:1 522:24 AER's 299:14 321:26 326:13 328:22 478:3 485:23 AESO 307:14 affect 413:25 456:16 496:11 affected 484:17 affection 312:8 affects 397:20 affirm 301:10 Affirmed 301:13 403:19 affordability 438:17 441:8 afforded 404:22 afternoon 401:3 430:6 432:14,15 465:17 474:11,13 499:16 500:8 agencies 475:18 478:1 481:13,17 482:15 483:16 484:10 485:9 494:2 agency 477:9 483:2,6,8 485:16 486:2 492:13 agency's 492:14 agenda 498:20 agent 311:14 agents 311:13 ages 415:23 agree 323:13 324:7 341:16 343:1 346:7	347:14 348:8,12, 22 351:12,23 361:11 362:5 363:7,11,24 366:3 376:23 381:7 383:7 394:26 395:4 411:10 422:16 424:3,19 426:5 439:13 440:3,13, 17,23 441:1,6,7, 22,25 443:18 445:18 446:25 450:21 451:23 452:3,9,17,25 453:7,24 454:20 458:2,4,14,19 459:11 460:4 461:11 462:5 467:9,22 468:8, 12,21,24 469:1 470:4 479:3 482:12 483:26 485:21 495:24 523:5,16 agreed 324:19 326:8 359:11 361:20,22 440:12 agreeing 470:5, 15 agreement 324:20 334:1,3,7, 18 335:4,12,18, 25 336:1,3 348:17 349:4,26 350:25 351:1,17 352:25 356:9,11 357:1 358:9,12 359:26 360:3 361:13,20,23 362:1,6 363:4,6, 7,12,15,17 364:16 365:18, 23,24 367:4,26 368:21 369:4,18, 19 371:11,13,14, 26 372:1,2,8	373:15,21,22 374:14,22,25 376:5 382:16 383:11 386:25 387:5,7 388:10 403:22,25 433:23 438:3 446:11 458:22 459:22,24 460:13,24 461:2, 6,25,26 462:3,8 505:10,12 507:6, 14 508:8 509:8, 16,20 513:17 521:20 agreements 304:24 305:12 310:17 334:12 351:3 361:19 363:2 374:23 386:24 387:18,24 408:25 409:7 425:20,22 488:25 506:9 508:15 509:13 513:5,7,9 agrees 320:5 agricultural 446:18 448:9,11, 14,16,19,22,25 449:1 ahead 317:24 322:9 326:23 366:18 426:2 491:24 493:19 500:7 516:19 aid 341:6 355:11 368:20 369:3 371:9 373:6,14 388:18 389:12 390:2,19 391:20 392:4,7,10,13 393:4,17 397:4 404:12 407:7,14 417:19 418:13 421:8,23,24 422:4,5,7,9 aids 390:2 391:9	403:5 Alberta 302:11, 15 303:1,4,10 306:6 307:12,13 309:1 311:7,15, 19,21,24 318:7,8, 10 322:24 323:17 324:25 329:2,6 397:9 401:1,21, 23 445:25 446:19 458:16,21 466:9, 12,21 477:12 478:11 482:6,13, 24 484:16 487:22 525:8 Alberta's 327:23 alleged 307:21 allegedly 410:9 allocate 424:14 allocated 325:2 418:24 allocating 324:9 allocation 324:12 allowance 459:19 460:8 alluded 381:17 alteration 318:20,23,25 319:18,21,26 320:3,11,15,16, 23 321:4,17 323:19,24 324:3, 5,8,16 326:2 328:3,6 329:21 336:12,14 351:14 359:2 366:7,9,10 385:15 415:6 418:20 437:20 522:16 alterations 345:18,26 346:9 402:23,24 491:1 502:14 altered 433:18	altering 435:26 alternative 503:4 alternatives 503:9,12 altogether 456:10 amend 394:2 amended 320:26 346:17 363:1 392:17 394:10,14 404:16 438:8 472:11 amendment 393:7,15,21 394:6,8,20,21 395:14 397:19 404:14,23 405:17 407:15 amendments 309:13 393:13 amenities 443:14 451:4 America 307:10 318:11 475:7 489:12 American 490:25 amortization 421:4 amount 321:14 325:2 328:14 331:15 335:7,21, 23,26 336:2,3 354:1 363:19 384:13 387:14 411:2 422:24,25 423:26 445:10 446:6 451:6 457:15,17 501:10 502:7 511:2,22 514:7,10 515:8 amount's 366:26 amounts 502:1, 10
---	---	--	--	--

analysis 364:6
372:4 495:6
496:12 507:3
analyzing 372:6
and/or 365:1
475:9
Angela 525:3
annexed 461:12
annual 304:24
329:11 417:20
418:6,17 420:4,
19 421:23 422:8
answering 458:3
answers 341:14
372:18 503:3
anticipate
464:16
anticipated
393:3 396:8
428:2
anymore 489:24
APEGA 302:13
303:17
apologies 369:23
374:21 375:8,10
379:20 407:23
459:3 486:21
apologize 363:14
420:11 422:1
459:9 488:10
498:13
appeal 310:3
311:20 459:14
appearance
306:10 307:12
476:3
appearances
306:5
appeared 310:2
311:16 433:6
appearing
436:26
appears 393:6
430:26

Appelt 401:18
Appendix 346:25
347:4
APPI's 466:14,
17
**APPI-
REGULATED**
466:22
applicable
319:11 346:1,10
applicant 447:25
505:22
applicants 499:7
application
307:13 309:5
318:4 320:17,21,
24,26 321:12,23
322:1 325:9,24
326:7,11,12,14
327:18,21,25
328:17,18,23
339:19,23
340:11,19 346:18
363:1 392:17
402:21 432:25
433:4,17 436:22
438:8,22 461:16
467:7 472:12,14
473:3,10 477:13
478:10 479:10
482:25 491:21
505:23 520:25
applications
307:17 309:6
347:24 348:1
484:15
applied 323:15
327:7 503:5
504:11
applies 343:15
apply 332:21
333:6 358:14
394:3 423:19
apportioned
433:19

apportionment
396:22
appraisal 305:13
310:18,23 311:7,
8 512:11,14
appraisals
444:23
appraiser 329:3,
17 437:2 447:26
448:17 461:21
appraisers
445:15,16
appreciated
524:1
approach 302:3
352:23 383:17
408:24 455:7
approached
325:6 343:3
351:9 378:19
379:25 381:8
424:12
approaches
378:1
approval 309:14
327:17 374:1,4,7
394:4 459:13,16
469:11 470:16
477:21 484:20
497:26
approvals
308:24 309:11,21
approve 394:5
470:14 506:24
approved 321:5
325:18 327:21
394:6,11 449:3
455:16 468:22,25
approves 469:2
approving
321:12 469:10
470:6
approximately
302:25 331:3
333:1 467:12

472:9,21 498:5
April 335:18
356:7 368:20
373:20
ARA 330:6
331:3,14 461:13
494:17
Architecture
308:17
area 305:11
309:19 311:5
330:11,13 331:1,
2,14 332:3,17,19,
20,23 333:8,14
376:21 377:4
378:9,12 414:15
434:17 437:5
445:4 451:9
453:21 456:1,5
457:8,11 468:9,
10,17,22 469:2,
17 470:10 474:25
494:16 499:24
areas 305:4,8,15,
20,24 306:25
308:11 310:16
311:26 319:9
438:16 441:7
argue 491:25
argument 377:18
438:3 446:5
arises 307:15
328:11
arising 329:21
453:1
arms 489:19
arrangement
424:15 519:14
Arruda 341:5
345:6 346:16
347:7 348:3,14
349:2 355:10
356:2,25 362:25
368:18 369:1,2
371:8 372:12

373:12,13 384:21
388:17 390:1
391:14,15,24
394:17 401:11
406:14,16,26
407:11 420:18
421:22 422:4
463:16 474:9
art 412:7
arterial 330:26
331:9,12,19
332:10 345:15
411:17 412:6,9
416:23 461:15,17
472:17,23 491:10
494:20
Arthur 300:11
301:11 303:15
403:17
articles 484:2
arts 303:5
ascertain 397:18
asks 321:25
326:12 328:21
ASP 442:4,16
469:3,10 470:6,7,
16,17
aspect 435:10
439:1,9 477:8
aspects 310:22
352:21 362:15,17
404:25 410:15
413:1 481:14
ASPS 468:25
assess 358:12
479:14 506:2
509:12 513:14
assessing 403:2
485:5 487:26
488:2
assessment
305:8,25 306:25
337:24 342:14
344:24 357:3,9
358:7,10 359:19,

22 360:18 370:21 371:3 386:11 389:4 390:8,13 410:7 assessments 312:6 asset 304:11 336:15 337:2 359:4 361:8 364:20 405:2 412:26 413:12 424:8 518:20,26 519:1,20,25 520:15 assets 303:1 323:8 327:11 352:19 377:21 410:6 413:4 423:6,7,23 assistance 355:23 assisting 309:10 associates 300:22 309:8 association 311:13 466:16,24 assume 333:2 379:25 403:7 413:21 417:21 435:24,26 assumed 332:23 assuming 333:7, 9 411:4 423:13, 18 484:23,24 485:1 assumption 405:10 414:18 assumptions 332:4,5 333:2,18 367:23 412:15 472:9 507:25 assurance 334:13 assure 377:17	attached 301:2 316:14 317:6 attachments 313:10,12,26 attempted 320:22 attention 299:23 394:20 attractive 450:23 AUC 306:7 307:12 309:26 311:21 428:16 476:4 494:2 audio 299:19 August 313:19, 20,23 375:12,21 403:22 404:6 466:2 author 449:16 authority 459:13,25 487:6, 15,22 authorize 335:11 389:23 authorized 335:21 336:3 389:20 avail 398:14 Ave 335:10 369:5 Avenue 324:18 334:5,20 336:8 345:17 346:8,23 351:8 352:5 353:5,17 356:17 359:7 365:19,24 369:23 371:18 373:23 378:20 384:26 389:7 392:24 406:21 407:4 411:8 499:15 500:11 517:22 avenues 398:11 455:13	average 331:2 409:19,22 446:17 448:9,11,14,16, 19 472:19 aware 362:22 408:5 433:11,21 470:23 476:22 484:15,21 485:3 486:24 487:13 491:9 <hr/> B <hr/> B&a 309:8 bachelor 303:4 back 299:7 300:17 310:22 337:4 377:25 382:22 384:21 386:17 394:17 399:14,24 402:18 414:9,24 416:8 431:6,26 433:25 438:2 444:21 456:4,7 462:23 471:3 472:11 473:6 486:5 492:19 501:24 502:20 504:23 505:5 506:4 513:24 523:14 back-and-forth 368:12 back-invoiced 334:9 backfill 499:23 500:16 501:4 502:20 background 301:18,23 302:6, 20 303:12 304:1, 4 311:5 backstop 335:24 359:26 513:5,8 backstopping 335:17,25 356:11	361:23 363:4 369:19 371:13 373:22 386:23 507:2,6,14 508:8 backtrack 404:11 backup 335:15 Baker 402:12 464:9,10,14,25 465:10,19 Balfour 300:15, 24 301:12,21,25, 26 318:2 322:2 335:17,23 337:4, 16 339:21,25 340:14 344:18 346:5 352:8,9 353:11,14 356:6, 13 357:6 358:11 359:9 361:16 363:8 365:17,21 366:15 367:2 369:11 371:15 373:24 375:13,14 376:26 377:8 379:11 381:16 383:5 390:15 403:18,21,24 404:2,4 409:18 412:14 414:16 415:19 416:18 425:16 426:5 427:9 428:7 499:16 501:5 502:17 503:6,12, 20 505:18 509:1 510:5 511:5 515:26 520:5 522:22 523:12 ballpark 448:21 bank 422:18 bankruptcy 474:19 based 320:25 329:14,26 330:3 332:5 350:10	353:23 354:26 357:12 367:3,6, 19,22 370:20 371:2,6 372:18 379:16 393:9 414:21 430:9,14 435:1 439:3,15 444:20,21,23 468:17 472:9 483:9 497:4 501:1,10 502:24, 25 504:4,24 507:9,24 508:12 516:2,14 basic 452:10 479:24 basically 340:7 347:14 354:5 356:26 357:8 362:1 367:25 371:25 372:2,5 374:14 389:1 422:16 428:18 447:25 453:18 479:12 481:22 483:10 494:19 basin 330:13 332:9 basis 304:24 321:10 347:24 348:2 389:18 390:24 419:17,25 493:11 BC 303:1 311:19 bear 312:23 415:5 471:26 488:6 490:6,22 492:7 beared 471:26 beer 478:20 begin 339:16 341:18 463:5 505:2 beginning 358:5 369:26 408:15 447:12 459:10
--	--	---	---	--

483:19	blacktop 384:11	bringing 357:16, 17	419:8 475:10,14, 16	392:22 402:2,5,8
begins 446:8	blank 455:11	broader 318:14	businesses 489:3, 6,19,20 491:4	475:17 476:2,10
begs 495:16	457:24	327:16	butchering	482:7,15 489:4
behalf 317:23	blatantly 320:25	Broadly 476:21	498:14	490:15
318:2 322:8,13	Blvd 373:16	broken 335:4	buy 442:21	Canada's 303:3, 8
326:22 327:1	board 303:7	broker 311:14	buying 443:7	Canadian 311:13
389:2 521:19	308:26 309:24	Brookfield	444:5	466:6 476:15
522:9,18	310:1,3 311:18,	401:20,22	bylaw 308:22	490:20,25
belief 314:12,26	23 447:1 449:6	498:20,24	330:6 331:14	capacity 474:20
315:13 316:5,25	boards 311:17,19	brought 432:25	494:17	capital 300:12
317:16	book 306:16	520:26	bylaws 320:20	303:15,21
believes 472:20	borne 419:16	Brown 309:8		467:11,13 474:18
484:16	Boston 307:5	Bryan 300:17	C	475:14 488:19
belowground	bottom 341:9	301:12 308:14		489:2,11,13
312:3	424:20 425:6	403:18		capitalism
Bench 310:1	426:16,20	bubble 395:25	cable 413:6	475:22
311:24	boulevard	build 331:13	Caithness 447:26	care 448:19
beneath 518:26	347:19 369:7,14	416:10 440:6	449:4	487:18,25
benefit 321:20	390:11	461:15 491:12,13	calculated	career 308:19
327:21 328:2	box 395:13	495:8	330:11 442:17	cares 448:16
330:10 338:21	brand 414:1	builders 309:11	444:22	carried 324:17
379:3 423:17	brand-new	444:13	calculation	342:14 349:10
424:6 451:21	412:7,13 414:6,	building 341:23	331:6 332:17,25	351:14 352:7
benefits 424:15	19 415:15,18	343:16 412:9	344:13 380:18	359:14,19 366:7
Bennett 390:4	breach 494:8	495:14,24	384:5 473:23	369:10
bid 444:12	breaches 494:12	builds 472:16	calculations	carries 414:10
big 445:1	break 338:18,21,	built 331:17	384:2 472:3	428:24 459:19
bigger 473:19	24 399:19 403:21	409:4 411:5	473:8 512:10	carry 319:15
513:23	422:18 425:2	414:14 455:12	Calgary 306:6,11	320:4 358:10
biggest 501:7	432:7 439:24	494:19,21 503:2	309:2,3,6,9 318:8	369:9 374:9
bike 451:4	464:7 497:12	515:21	322:26 327:10	377:21 389:1
billion 418:8	breakdown	bulk 384:6,8	401:1 525:8	395:1 399:19
421:19	382:17 499:10,17	444:6	call 354:25	413:21 416:17
bit 341:16 349:16	511:23	bullet 500:12	369:19 376:26	468:20 481:3
372:4 382:14	breaking 432:5	bullets 374:10	404:11 407:21	488:8 524:6
443:3 456:12	breaks 462:12	bunch 454:18	418:13 494:18	carrying 318:18
457:2 458:17	Brezina 401:9	507:25	505:22 506:3,15	case 318:23
491:5 500:19	briefly 407:18	burden 334:11	called 352:7	325:13,26 327:2
501:23 508:22	408:5 484:14	buried 374:17	377:16 470:26	328:7 336:13,23
511:2	500:11	business 300:16	502:19 513:8	343:4 351:17
bits 500:1	bring 299:23	302:1 304:4,19,	calls 509:12	352:10 368:4
black 518:23	320:23 341:6	25 323:3 327:19	Canada 302:24	385:13,22 387:12
blackline 320:26	433:17 461:14	340:2 404:21	306:5 307:20	388:15 395:10
	487:1		311:8 322:25	409:17 412:8,9,

10 414:2,20,25 416:15 418:21 424:5,26 436:9 444:2 450:3 453:17,24 459:26 460:4 464:19 465:5 471:15 477:10 486:3 494:3 502:18 503:10,24 511:12,16,17 514:4,9 517:16, 21 case-by-case 347:24 348:2 cases 320:14 324:2 434:7 435:10 437:21 451:2 casing 349:19 500:15 cast 299:12,15 catchment 331:14 494:18 categories 452:10,14,16 category 379:15 499:24 506:13,14 caught 394:19 caused 336:22 354:10,14,15 385:19 425:17,18 491:7 511:13,15 causing 320:12, 16 324:8 385:14 419:21 423:1 425:7 426:20,21, 23,26 427:14 490:23 522:16 CER 494:2 certificate 303:6 525:1 certify 525:3 cetera 349:21 387:10 423:25	502:7 518:7 519:1,13 Chair 299:3 300:1 301:16 305:1 312:22 317:26 322:10 326:26 338:11, 15,20,25 339:1,4, 6,10 355:13,15, 19,22,25 356:2,4 368:18,22,24,25 369:2 373:6,8,9, 10 391:8,11,12, 13,18 396:19 397:11 398:6,22, 26 399:9,12,14, 16 400:2,3 401:5 402:17,20 403:16 404:3 407:9 418:16 419:13 420:7,10,14,17 422:2 427:26 429:6,7 430:3,16 431:7,8,18 432:2, 9 436:25 462:14, 18,20,23 463:1,4, 9 464:3,5,9,22 465:7,15,19 474:1 493:15 496:21 497:1,4,6, 8,13,16,18,22 498:1,10,18,26 499:2 504:17,20, 26 505:4 510:7, 14,18 512:25 515:13,15 517:20 521:1,7,12,23 523:19,22 524:2 challenge 423:11 454:14 challenges 358:24 chance 355:16 366:16 393:18 403:9 414:3 523:2	change 366:26 367:18 408:22 411:1,2 415:12 453:10 460:19 495:11,12,13 504:5,8,11,14 519:2 changed 334:4 416:22 523:14 changing 442:13 channels 509:4 chaos 422:25 424:18 490:10,11 characteristic 477:5 characterize 486:10 charge 382:21 434:7 485:16 494:4 charged 330:7 481:14 Chartered 311:9 chase 420:25 check 338:17 375:17,18,19 378:3 380:2 403:26 406:5 431:19 checked 463:6,11 checking 432:3 cheque 515:10 Cherkawsky 401:22 Chicago 306:18 chief 300:15,18 302:9 childcare 431:24, 25 chime 522:10 choice 480:16 choose 362:9 403:10 436:7 442:20,21	chronological 391:19 CIMA+ 346:25, 26 347:5,11,12, 15 348:7,8 351:9 353:12,20 354:12,17,23,24 363:26 370:7,15 381:24 393:2 circular 480:6 circumstance 344:22 409:24 483:9 circumstances 324:22 328:13 344:19 352:14 358:15 376:18 409:26 412:17 414:25 508:3 cited 449:19 citing 478:3 citizen 398:19 city 308:20,22 309:2,3,6,22 422:18 461:13 468:21 469:10,24 470:6,16,17 486:25 491:10,16 495:7,9,13,16,18, 24 496:8,10 525:8 City's 461:4,17 470:18 CITYTREND 300:18 309:17 316:12 civil 380:26 384:2 414:10 434:17 517:9,10,18 claim 482:7 499:7 claims 453:1,2 clarification 395:6 403:26 404:2 406:9	513:3 clarified 513:4 clarify 366:16 377:12 379:11 383:2 514:12 clarifying 370:20 clarity 350:7 366:19 391:26 396:17 465:15 clash 485:12 Class 334:24 364:24,25 365:3, 7 523:10 clause 395:16,18 cleanup 499:23 clear 320:25 333:11 336:11 353:15 358:21 366:22 375:6 386:9 391:19,23 417:3 419:14 450:3 469:16 473:22 480:1 489:21 493:8 496:23 513:19 clearance 432:4 clearer 386:7 client 359:5 384:24 385:5,23 389:2 397:17 432:25 436:1,22 491:5 496:25 client's 461:18 clients 311:1 436:3 437:4,16 466:1 496:7 clock 462:25 497:4 504:24 close 410:12 414:8 closeout 501:26 closer 375:26 closest 300:8
---	--	--	--	---

co-author 307:24	commitments 488:18,24	company's 350:10 519:9	complicated 507:18	493:21
co-authored 488:11	committed 334:14	compared 438:13 441:2	comply 345:2 404:24 466:14,17	concrete 349:20 351:20 352:3,10 367:10 368:3 500:14,16,18 501:9 503:1 517:15,26
coating 510:22	committee 461:14	compensated 329:1	complying 319:11	condition 377:10 378:5 416:1,2
code 466:15 516:24	common 364:23 426:7,10 460:1 475:20	compensation 305:12 310:17 312:5 329:3,4,11 437:2 446:17 447:1 451:22,24 452:11,18 453:1	component 414:10	conditions 521:13 522:7,20
codicil 490:25	commonly 423:5	compete 438:15 441:3 444:1	components 335:4 381:3 511:23	conduct 357:9
cognizant 305:1 462:20 471:12	communicated 465:8	competition 474:19	composed 499:19	confer 431:21 504:23 520:24
colleague 318:2 322:13 410:18	communication 340:22	competitive 475:9 483:14 485:13 488:20 489:16,18	comprehensively 453:20	confidential 360:21 362:8 425:20
colleagues 312:16	communities 445:9	competitors 426:11	comprised 327:11	confirm 321:26 326:13 328:21 339:17 340:9 351:10 352:24 353:1,16 355:1 356:6,16 365:17 370:4 373:18 375:19,22 392:22 404:5 449:26 465:1,26 496:21 503:17 504:23 524:5
collected 330:6	community 306:20 330:18 410:1 455:12	complement 430:1	computer 447:16	confirmation 349:25
collective 494:10	companies 300:6 305:4 310:20,21 312:24 321:20 327:26 328:2,13 337:7 341:17 342:7 377:5 384:15 394:7 433:13 435:5 475:15 521:25	complete 330:22 336:24 361:8 371:24 510:13 511:18 525:4	conceivable 470:8	confirmed 451:11
collectively 300:5 517:16	companies' 300:7,26 301:4, 17 312:26 313:25 338:12,13 419:16	completed 326:7 360:8 365:3,9 375:11,16 379:5, 8 387:9,11 425:3 508:13 510:12 516:24	concept 342:7 358:6	confirming 313:22 465:13
column 394:22 395:7	company 309:18 324:15 327:10 348:19 356:10 357:4 360:7 361:3 371:12 372:9 373:20 378:1,3 379:25 382:5,20 383:4 387:25,26 419:24,25 447:26 448:17 475:16 485:20,22 509:4, 23 510:13 519:12	competitively 455:13	conceptual 309:12	confirms 341:15
combines 479:20		completes 498:16	conceptually 332:16	conflates 492:15
comfortable 458:3 516:4		completion 403:25 515:2	concern 313:20 327:16 376:24 377:1 396:15 408:1 429:1	conflict 428:8
COMMENCED 299:1 402:16		complex 409:23 506:3,15 509:7, 11,17,26 516:9	concerned 396:17	confused 489:22 492:13 514:13 521:2
comment 380:21 410:11,12 438:23		compliance 310:25 361:9	concerns 323:14 325:23 327:6 503:18,21,25 516:16,25	confuses 408:8
comments 310:5, 6 323:16 329:18 331:5 424:4			conclude 366:5 504:17	confusing 459:9
commerce 483:18			concluded 494:14 496:22	confusion 425:10
commercial 323:10 332:12,21			concludes 338:11 523:17,20	
commercially 385:24			conclusion 321:25 415:25	
commission 357:23				
Commissioner 401:6,7 505:3 512:25 513:1 515:14				
commissioners 305:26 408:17 428:3,21 481:1				

connection 340:24 373:23 consent 460:25 461:2 462:6 consequence 519:11 Conservation 311:23 conservative 472:21 considerable 325:2 consideration 310:6 378:16 435:21 439:6 440:9 442:5 considerations 305:16 308:12 512:7 considered 307:19 383:13 503:9,10,13 506:3 509:23 512:6,9 considers 442:8, 18 consistent 324:10 328:20 385:11 394:15 508:16 consists 313:1 315:20 316:13 317:5 347:10 constant 413:22 415:4 417:7,8,12 constitute 457:4 constraints 428:17 construct 409:8 412:6 461:16 constructed 321:5 323:24 369:16 375:10 409:2 459:12 460:6	constructing 472:22 construction 304:10 329:13 335:5 341:22 342:19 347:2 349:20 351:20 434:17,18 435:20 477:21 499:26 500:15,22,24 501:3,6,7,19,25 521:22 consult 400:5 consultant 347:1 385:3 consultation 389:22 404:26 consulted 391:4 consulting 306:2 310:20 522:23 contact 347:25 348:10 contained 312:13 363:13,17 376:5 405:21 413:1 contemplated 363:6 371:26 425:21 contemplates 467:10 content 393:14 395:2 context 328:11 347:6 393:12,15, 21 402:20 412:24 449:23 contingency 335:8 367:14 387:8 500:2 502:9 contingent 490:17 continually 358:26	continue 337:2 384:8 516:5 continued 307:22 continuous 466:18 continuously 358:23 contract 312:7 360:2 427:1 contractor 501:3,15 contractors 515:4,5 contracts 426:6 489:1 490:16 contractual 488:17,24 489:14 490:13 491:2 contradict 373:2 contrast 320:6 325:10 contributing 417:4 control 306:14 324:13,15 327:26 330:2 convene 313:3,7 conventional 340:2 conversation 354:22 407:18,24 conversations 354:19 355:2 399:20 503:7 conversely 519:9 convert 456:14 conveying 391:3 cooperates 319:17 coordinating 469:19 copies 355:15,24	copy 359:19 481:7 copy-- 447:17 corner 395:13 Corp 402:11,12 corporate 398:19 428:5 430:18 431:4 Corporation 302:17 318:3 402:1,4,7 420:20 corporations 311:1 419:5 correct 321:22 326:9 328:16 339:20 341:3 343:10,11 344:4 345:4 346:4 347:20,21,26 348:2,19,20,25 349:22 350:2 351:16,21,22 352:4,8 353:13, 14,19,22,23 354:2,17 355:6,7 356:12,13,18,19 357:5 359:8,9 360:9,14 362:4 363:19 365:20,26 369:10 370:9 371:14,16,19 372:2,15,17,24 373:24 374:5,12, 16,19,22 375:2, 25 376:6 377:7, 22 381:16 383:10 390:26 391:1 393:8,9 395:3,11 405:10 406:2 411:15 416:24 417:2 418:8 421:5,13,20 432:19,20 433:20 435:8 438:25 441:21 446:9,10, 14,15,21,22	449:14,15 452:20,21,22 453:5 459:8 460:13,24 462:5 466:3,15,19,20, 23,24 467:4 468:3,11,23,25, 26 470:20 471:2 473:20 476:2 477:24 479:3 481:16 488:21 492:23 495:4,15 503:19 510:12 517:5 523:8 corrected 460:18 corrections 314:8,22 315:9, 26 316:21 317:12 correctly 377:3 430:17 464:23 correspondence 347:4,9 348:7,10 463:15 cost 318:4,5 319:21 320:11, 15,19 321:17,19 323:18 324:7,20 328:12,18 330:21 331:2,8 332:8 333:9,22 334:1,3, 6,12,18,22 335:3, 6,8,11,12 336:10, 12,25 348:17 349:4 350:25 352:25 353:21 358:1,17 359:3 363:13,17,24,25 364:2,13,15,18 365:14 371:20 375:22 376:10,13 378:23 379:3,7 382:15,17,18 384:18 387:1,3, 14 396:10 397:15 402:23 403:22 408:9 409:14 413:5 414:7
---	---	--	---	--

415:6 416:9,12, 15 418:23 419:2, 10,20 422:17 423:8 424:5,14, 19,23,25 425:14 426:15 435:17 436:1,5 437:19 438:1 441:16,18 443:17 471:22,25 472:19,22 474:18 479:14 486:13 489:24 495:25 496:1,4 499:18 500:20,22 502:4, 5,11 509:12,16, 19,20 510:10,23, 25 511:3,20 513:7 514:21 515:7 516:6 517:26 518:12 521:20 522:5,19, 26 523:7 cost-based 490:20,21 494:7 cost- reimbursable 303:22 cost-sharing 320:1 321:12,13, 23 322:1,14,18 323:15 325:8,24, 25 326:6,10,11, 14 327:2,7,17,20, 25 328:9,22 424:22,23,25 costly 337:1 costs 318:20 319:1,24 321:2 324:6,9 325:1,3, 7,13 326:8 328:3, 6,14 329:21 330:12 331:19,20 332:1 336:7,16, 19 337:10 354:1, 13 359:12 360:23 366:3 376:10 378:26 381:19	382:18,23,24 385:16,20,25,26 396:22 409:23 412:12 414:5,17 415:7 419:17,26 425:14,17 426:23 427:6,16,21 433:19,24 434:6, 15,18 435:18 436:15 438:15 439:4,16 441:7,9, 24 442:3,7,19 445:18 451:26 452:5 458:9 471:20 477:2,5 483:14 486:12 490:6,8,23 492:4, 26 493:9,10 499:10,14,17 502:3 507:2,23, 24 508:9 511:13, 15 517:14 519:21 520:9,11 council 469:1,10 470:6,10,16,17 councils 468:25 counsel 306:8 338:18 339:13 368:22 388:22 389:14,22 390:5, 16 391:4 400:4,6 401:9,10 417:18 428:20 429:13 436:6 464:10 465:11 499:1 count 333:8 counterparties 361:6 counterparts 518:19 counterparty 358:1 361:22 364:19 387:4,11 506:5,23 507:11, 19,21 508:6	countries 489:10 country 449:2 County 460:11, 14,17,20,23 461:7,9,10 County's 461:4 couple 334:4 336:17 399:9 417:18 420:8 431:1 466:5 498:14 508:2 520:12 court 299:9,16 301:9,14 310:1 311:24 402:14 463:12 523:24 525:15,21 courts 307:11 311:17 cover 323:18 324:7 354:1 412:26 413:23 covered 358:9 covers 384:6 create 321:14 487:9 512:2 created 318:24 creates 520:7 creating 352:16 366:4 454:17 credit 513:23 crediting 514:14 crews 499:21 criteria 443:1,7 criterion 395:18 crop 329:13 cross 320:13 324:13 333:26 334:14 345:21 355:11 362:9 365:15 368:20 369:4 371:9 373:6,15 376:22 380:25 384:1,12	388:18 389:12 390:2,19 391:9, 20 392:5,8,11,14 393:4,17 397:4 400:1,5 403:5 404:12 407:7,15 409:13,20 410:5 416:20 418:13 421:8,23,24 422:4,5,8,10 424:7,12 430:8 431:4 459:23 460:10,21 462:1, 2 472:18 497:20 498:23,24 505:22 519:19,21 cross- examination 339:2 341:7 428:20,24 430:10 463:5 464:6,15 496:22 498:11,16 524:1 cross- examinations 417:19 429:23 cross-examine 430:19 Cross-examines 339:8 404:8 420:21 432:12 499:4 cross-examining 431:2 498:21 crossed 410:10 520:16 crosses 353:4,17 356:17 371:17 378:2 384:26 392:23 459:5,18 520:15 crossing 304:24 305:12 310:17 319:22 323:23 324:13,14,18 325:12 328:12	331:21 332:2,6, 26 333:4,9,22 334:6,7,20 335:6, 19 336:8 337:9, 10,19,25 338:19 343:12,17 344:10,12,20 346:15,23 348:23 350:1,17,21,24 351:15 352:6,17 353:3,22 354:10 357:16,19 358:15 359:14 360:17 363:13 364:9,20 365:19,25 366:4, 8 368:16 369:5,7, 14,22 372:3,10 373:16,23 378:9, 14 379:14,16 380:11,15,19 384:9 385:14,19 386:19 388:5 390:11 404:6 408:24 409:26 410:11,22 411:24 412:12,25 413:2, 18 414:5 415:5, 24 416:12 418:21 419:21 423:4,6,7 427:6 434:6,13, 14 436:1 442:3,7 451:25 452:5 459:24 460:2,12, 24 461:2,6 462:3 472:7,8,20 473:13 477:2 486:14,25 487:26 490:3,4 496:10, 11 499:15 500:19 502:26 505:10, 15,17,21 506:2,8, 9,11,26 508:10, 14,22 509:6,7,8, 10,11,12,18 510:1,11,13 511:15,18,19 512:1 514:18,21 516:23,26 517:3
--	---	---	--	--

518:7,9,11,26 519:12,16,23 520:1,13 crossings 303:23 320:9 326:5 329:21 331:1 339:18,23 340:11,19,25 342:3 352:15 375:7 381:4,20 382:6 383:18,19, 21 396:22,23 408:9,20 410:20 411:16,21 413:6 414:8 419:7 422:17 425:15 426:10 433:26 434:12 439:5 441:16 471:15 472:6 473:9,10, 16,19 477:9 487:7,15 492:5 494:5 507:19 509:8,22,25 516:9 518:2 520:8 Crown 460:2 crude 323:2,5 327:13,14 395:1 crushed 500:16 CSA 319:7 342:3, 12,26 343:10 344:3 345:3 346:2,10 358:8 384:2 395:16 CSR(A) 402:14 525:14,20 current 308:23 309:21 313:3,7 328:5 405:21 425:3 468:14 516:26 cursor 410:18 411:23,26 customer 360:21 426:6	customers 323:2 419:26 425:19 426:19,21 427:10,14 490:2 cut 420:25 CV 466:5 474:24 CVS 300:24 301:2,6 cycle 413:12 <hr/> D <hr/> Dakota 307:23 damage 304:10 329:14 404:26 509:5 damages 307:21 329:13 452:13 453:4 date 313:6,13 349:25 367:4 374:14 375:15,19 392:25 393:1 403:25 411:20 dated 313:2,17, 19,20,23,26 315:21 316:15 317:7 334:19 335:18 356:7 373:19 388:21 390:21 392:5,11 466:2 525:8 day 405:12 415:14 448:12 464:8 495:2 498:22 501:21,22 510:9 525:9 day's 501:14 day-to-day 380:9 days 336:17 412:2 455:4 500:23 501:21,22 506:6,7 508:14 deal 398:7 403:4 437:5 452:26	453:4 475:7,19 478:1 483:17 485:11 509:22 dealing 306:9 343:4 344:22 394:26 396:21 408:18 437:22,24 439:16 477:3,8 478:2 485:14 490:2,12 511:16 deals 311:11 396:25 409:19 dealt 437:26 454:4 459:15 476:14 Dec 392:5,11 decades 483:7 December 313:2 352:26 388:21 448:12 decide 335:1 364:19 403:4 420:15 422:15 442:10 466:25 481:1 decided 388:24 508:7 decides 507:14 deciding 385:18 decision 313:3,6 321:26 326:13 328:22 372:9 394:5 425:18 427:17,22 446:26 449:7 decision-making 403:2 420:16 decisions 308:25 309:5 declined 389:15 declines 390:23 declining 328:17 deduct 425:5	deeply 489:11,13 define 387:18 470:3 defined 388:5,9, 15 479:2 498:7 defining 388:12 454:9 definition 457:2 479:1 480:5 494:12 definitive 363:12,15 365:18,24 367:26 505:12 degree 308:14 311:6 403:7 delay 420:12 deleted 482:10 deliberations 420:16 deliver 317:24 322:9 326:23 delta 415:7 demand 426:13 445:26 449:4 densities 457:11 density 442:13 457:5,6,10 density's 333:16 deny 321:26 326:13 328:22 355:1 394:5 depart 497:7 department 509:5 departure 318:6 322:23 328:4 depend 490:16 dependent 508:3 515:3 518:20 depending 409:24 430:12 440:5 443:1,24 444:5,23 445:26	450:19,25 depends 344:19, 21 414:24 441:13 444:10 445:23 451:8 453:14 458:12 489:13 507:11 depreciation 421:3 depth 412:26 413:23 Derek 525:3 derive 328:2 derived 354:12, 25 describe 301:23 302:5,19 303:12 304:1 356:8 408:16 412:8 426:15 describing 305:17 363:2 description 301:18 design 308:16 309:12 330:17 362:15 415:13 455:7,10,22 456:2,4,11,12,13, 23 457:24 474:19 designation 311:7,9,10,12 466:25 467:3 designed 455:13 designing 330:18 455:4 desirable 451:13 desired 379:9 desk 344:6 desktop 344:6 detail 446:9 500:19 detailed 324:4 337:21,22,23,26
---	---	---	--	--

338:1 357:11 387:13 411:22 509:19 details 333:17 504:10 521:21 523:10 determination 351:13 366:6 402:25 430:14 determine 319:4 342:11 343:8 344:1 378:13,21 412:19 420:6 443:15 515:7 determined 329:5,25 346:1,9 366:11 determining 383:24 443:14,20 deters 438:20 develop 442:25 443:1,24 473:1 523:13 developable 330:13 449:19 450:7 developed 331:16 445:22 456:15 developer 319:8, 20 325:10 328:5 330:17,22 335:9, 11,12,14,25 337:18 338:4 347:1,16 353:25 360:25 361:1,12 377:26 379:26 380:6,12 381:8, 12,14,20 382:10, 23 385:5 388:1 408:7 412:6 414:4 427:17,18 435:13,17,25 436:12 437:18,19 441:22 442:8,18, 26 443:13 444:17	445:6 453:12 456:9 471:11 490:5,22 491:7 492:25 505:9 522:17 523:13 developer's 353:21 443:17 developers 309:10 319:17 323:17 336:16 337:5,7,13 339:14 362:16 385:23 386:10,12 401:18 407:26 408:1 433:14 435:5,22 436:14, 21 437:24 438:12,17 441:1 443:4,5,19 457:14 471:13,19 473:1 492:23 493:9,21 494:22 504:7,12,15 developers' 508:17 developing 308:22 409:11 443:23 development 309:3,4,6,13,14, 19 310:3 312:5 318:19,21,24 319:16 322:20 324:26 325:6 328:1,4 329:19 330:15,16 331:13 337:15 338:6 348:18 381:25 408:20 435:11 440:8,25 441:17 442:12,20,22 443:2 445:8,12, 21 449:18 450:6, 7,17,20,23,26 451:13,19,20 453:23 454:3,4 455:20,24 456:16	457:16 469:3,8 470:7,19,23,26 472:24 485:4 486:13 487:5 491:14 492:9 495:7 512:8,15, 16,17,21,23 developments 323:10 401:16 442:14 491:15 diagonally 353:17 454:16 dictate 429:19 difference 364:2 376:9 416:5,6 417:1 494:8 514:16 differently 344:9 difficult 299:8 331:21 337:23 412:19 470:6 507:11 difficulty 490:1 dig 508:22 diligence 337:8, 14 338:5 381:9 441:26 diminish 488:11 direct 301:20 330:20 338:12 339:26 340:21 354:4 375:24 410:25 426:11 452:9 457:1 472:2 473:22 522:12 directing 326:2 522:4 direction 305:2 314:6,20 315:7, 23 316:19 317:10 320:3 483:4 Directive 394:3 directives 434:20 471:18	directly 354:10 484:17 492:5 director 300:21, 23 306:1 307:2 directs 522:24,25 dirt 435:20 dis 441:6 disagree 359:23 479:25 disagreement 328:11 366:20 disbelieve 393:10 discount 438:13 441:2 444:6 518:13 discounts 445:4 discover 380:3 discovered 396:10,14 discuss 337:11 338:2 368:16 382:18 399:10 455:1 507:22 discussed 322:3 326:16 332:26 363:3 484:14 499:10 discussing 367:11 403:22 discussion 303:24 397:2 399:17 427:25 438:6 455:5 481:3 488:15 discussions 339:18,22,26 340:10,15,18 398:12 399:20 437:15 dismissing 321:23 326:11 328:18 disperses 502:21	disposal 304:16, 21 dispositions 310:25 311:12 dispute 320:22 321:2 435:16,25 483:1 490:5 493:4 disputes 435:6 437:13 475:15,20 481:11 485:16,20 disrespect 517:11 disrupt 413:15 491:3 distinct 474:25 494:13 distinguish 380:24 381:19 distributing 457:11 distributors 476:15 district 468:13 disturb 519:18 ditch 511:8 divide 332:22 divided 330:12 Dixon 401:20 430:5,6 498:22 do-over 467:18 document 356:7 363:4 373:19 394:18 395:13 406:17 420:19 421:11 446:26 468:20 documents 316:15 417:22 468:13 dollar 366:26 dollars 514:18,20 517:17 519:3
---	---	--	---	---

door 333:21	458:15,19,22,25	effective 395:19, 24	encourage 328:9	346:26 357:3
double 364:22	easier 518:11	effectively	encroaches	360:7,18 362:15
doubt 411:19	easiest 329:8	347:24 445:21	322:20	365:3,5,9 435:20
dozen 306:4	easily 483:14	efficiencies	encroachment	502:3 506:1,16
drafted 367:26	east 411:8	336:23,25 379:7	413:10	513:14
dramatic 364:2	eastern 476:15	457:13	end 335:13	engineers 364:17
drawing 500:18	easy 428:26	efficiency 379:18	337:22 352:3	438:1
drawings 337:21	453:16	455:6 456:26	367:8,9 375:9	English 475:20
349:6	EBITDA 421:2,	457:3,4,10,14,20	381:12 409:22	ensure 345:18
driven 384:2	19	efficient 324:1	440:9 454:18	352:2 469:8
416:9,15 426:8	echo 503:11	327:22 455:24	474:4 495:2	509:13 515:5
501:22	economic 300:21	456:24 457:22	501:24,26 511:2	516:9
drop 454:23	443:7 444:21	523:26	513:21 514:4,15	ensuring 377:6,
Drummondville	445:21 456:25	effort 520:10	517:23 518:2,4	20
308:21,23	476:19 478:17	eight-lane 413:7	endeavour	enter 334:12
due 334:5 337:8,	491:5	elaborate 322:3	497:10	361:12,18 363:16
14 338:5 345:19	economically	326:16 330:5	ended 369:8,15	364:15 368:19
362:19 381:9	473:1	382:14 426:1	376:4 514:8	386:22 387:4,17
406:6 441:26	economics 305:9,	Electric 307:13	endless 475:14,	461:6 507:5
504:6	25 306:12,19,26	electronic 515:9	19	entered 334:6
Duncanson	307:4,6,9 445:23	elegant 343:22	ends 368:1	348:17 359:11
402:11 465:12	456:16	element 456:11	445:15	363:2 369:20
duty 308:3 310:9	economist 478:7	elements 455:16	energy 302:15	391:15
312:17	economists	457:4,21	304:14,18 305:8,	entering 363:6
dwelling 332:2,9,	306:3	elephant 480:24	25 306:25 307:3,	387:24
16 333:7 472:4	Economy 306:17	481:1	6,7,9,15 311:21	enterprises
dwellings 442:16	475:5	elevation 500:13	327:9,19 377:2	321:21 489:15
	Edmonton	500:13	397:9 402:3,6,9	entire 429:11,21
	347:17 408:20	eliminate 456:5	477:12 482:24	492:20 518:1
	422:18 461:13	ellipses 479:11	485:3,4 518:24	entirety 449:25
	467:9,23,25	email 347:12,14,	engage 357:25	entities 385:25
	468:21 486:25	23 364:12 370:2,	483:25 485:26	entitled 306:16
	491:10,16 495:9	10,12	engaged 307:8	373:21 475:5
	504:7	emails 347:11	483:22 485:24	entry 447:7
	Edmonton's	353:12	engagement	environment
	468:15	emergency 304:8	304:7	508:21 515:25
	education 303:4	396:5 397:20	engineer 302:12	environmental
	311:5	404:20,26 405:1,	303:17 343:14	312:7
	educational	17,18,20,21	361:2 384:3	EPZ 498:4,7
	304:3	406:1,3,10,18	396:1 417:10	equal 410:23
	effect 312:1	407:1	418:1 517:11	450:22
	452:12,18 453:2,	employed 355:8	engineer's	equation 417:10
	9,15,25 454:5,9,	Enbridge 307:21	417:16	equitable 424:10
	20,22 472:26		engineering	479:15
			303:6 304:10	
<hr/>				
E				
earlier 324:23				
380:23 414:9				
423:4 452:18				
504:4,13				
early 358:3				
465:17				
earn 444:17				
earnings 418:19				
419:24 421:2				
492:2,12,18				
earth 388:1				
ease 514:22				
easement 312:2				

equity 479:15,20 480:3 equivalent 331:4 ERCB 309:25 433:5 erosion 438:16 441:8 essential 488:6 essentially 350:20 457:3 481:9 484:18 501:1 established 319:14 320:9 413:11 438:14 441:3 477:1 479:3 establishing 388:23 estate 305:12 310:17,23 311:14 312:13 329:26 445:11 estimate 334:23, 24,26 335:3,24 338:1 354:9 358:1,17 363:13, 18,24,25 364:15, 18,22,23,25 365:2,3,7,14 368:14 371:22 376:5,11 382:8 385:12 387:3 430:7 500:20 502:24 509:19 510:10,24,25 511:4,21 512:1 514:7 523:7,15 estimated 334:22 335:7 348:23 360:23 371:24 376:9,10 430:7 468:14 472:19 500:24,26 501:11 502:11 507:23,24 514:6,18	estimates 355:3 364:2,13,26 382:9 386:21 513:22 522:26 estimation 333:11 430:4 evaluate 307:16 357:26 473:12 evaluation 312:7 413:9 event 388:4 464:14 514:2 everybody's 350:7 everyone's 420:11 524:2 evidence 301:20 308:4 310:11 311:26 312:14, 19,23,25,26 314:15 315:3,16, 19 316:8,12 317:1,4,18 331:11 333:11 346:25 354:5 372:26 373:2 378:17 393:9,11 403:3 447:13 448:1 454:19 457:1,17 472:2 473:22 474:16 477:12,16 478:9 484:2 492:22 493:1 494:17 503:19 515:17 517:3 519:10 exacerbates 438:16 441:8 exact 333:17 409:5 410:9 416:13 440:25 511:22 examination 338:12 374:12 examples 324:21 386:25 446:8	455:26 457:18 512:6 excavate 502:19 excavated 374:17 excavating 367:8 excavation 349:18 351:8,24 359:7 374:11 499:22 500:13 501:4 exceeds 395:20, 25 446:17 excellent 417:16 498:8 exception 464:1 excessively 476:12 exchange 388:26 exchanges 503:7 excuse 324:5 440:4 464:9 485:1 excused 428:23 execute 334:7 364:9 374:8 376:16 508:1 516:1 521:18 522:14,18 executed 365:18, 25 366:1 374:22, 25 380:16 384:18 514:5 executing 319:18 366:25 380:15 382:16 388:8,10 507:26 execution 303:20 367:13,23 368:13 387:5,6 executive 300:18 exercise 332:1 455:10 456:24 473:12,14 509:10	exhibit 301:1,5,8 313:5,8,12,15,18, 19,21 315:21 316:17,18 317:8, 9 331:26 335:20 345:7 346:17 347:10 348:15 352:26 353:8 362:25 368:19 369:1,3 370:1 373:7,13,14,18 384:21 386:5 391:23 392:4,7, 10,13,17 407:8, 11,14 422:5,7,9 432:16 446:23 449:11,12 465:23 467:6 471:4 472:11 473:7 474:9 510:5 exhibits 313:24 314:1 391:9,16 421:26 exist 380:11 415:4 existence 453:3 existing 318:19, 22 319:16 322:20 325:4 341:25,26 342:4,11,18,20 343:26 378:2 419:18 441:5 460:5 472:18 498:6 520:17 expand 343:6 expansion 307:22 516:22 expect 318:25,26 422:14 522:14 expectation 374:3,6 512:8 expectations 439:19 expected 331:2 344:11 376:17 387:8 439:4	445:12 expecting 333:15 expenses 471:14 experience 304:7 305:20 311:5 334:5 337:11 338:3,8 365:13 408:18 410:1,2 434:11,24 435:1, 2,16 436:14 437:1 439:3 443:20,22 471:21,22 474:15 476:1,9 504:6 508:12 experienced 471:11 508:18 experiences 508:16 517:15 experiencing 504:9 expert 301:3 305:7,10,14 306:8 307:11 308:3 309:25,26 310:10 311:16 312:18 329:4 432:22 433:3,6 436:26 437:3 443:22 451:22 475:3,26 476:1,6, 10 477:11,16 478:9 496:6 499:1 expertise 305:24 306:24 308:11 310:15 319:9 437:6,12 443:20 445:8 474:25 494:16 experts 305:3,6, 19 431:6,9,16 437:26 explain 329:4 333:25 334:21 335:21 354:12
--	---	--	--	---

364:1 395:12 404:14 499:13 518:3,12 521:26 explained 336:2 354:16,24 explanation 329:8 376:8 397:5 409:16 explore 418:3 419:1,9 expose 328:13 exposed 350:4 351:5,25 501:16 511:9 express 481:22 expressed 448:23 expressing 469:2 expression 469:19 expressly 485:6 extending 341:25 extensive 327:11 413:8 474:24 extent 348:6 429:24 476:25 477:10 external 350:8 351:4 358:24 359:13 374:15 501:16 extra 501:24 extraction 489:8 extremely 325:9 337:1 364:21 417:13 423:3 441:19 442:7	facilitating 328:4 facilities 300:10 304:13,17 318:12 327:12,13,15 396:25 477:17 478:2 484:15 facility 304:9,18 477:19,22 484:18,21 fact 351:14 359:18 363:5 366:7 369:9 375:9 377:20 388:22 397:20,25 405:7 454:7 455:21 456:23 458:6 471:9 480:14 493:25 494:11 518:13 factor 417:4 factors 324:15 371:7 502:14 facts 453:17 494:25 fading 458:17 failure 439:12 fair 308:4 310:10 312:18 321:7 323:26 325:20 329:10 332:14 344:23,25,26 354:8 366:5 370:18 398:10 467:1 476:20 513:8,11,15 518:6 521:13 522:8 fairly 381:25 384:4 389:24 394:21 411:1 437:6 515:11 fairness 320:18 423:14,19 faith 360:25 361:1 386:3	fall 506:13 falls 498:6 false 493:2 familiar 342:7 410:8 417:23 458:12 familiarity 403:8 fantastic 463:26 farmer's 344:8 416:10 fashion 470:4 fear 361:14 February 313:9 316:15 317:7 345:8 federal 307:11 311:3 fee 329:10 434:8 452:1 feed 443:6 feel 341:13 367:15 458:3 464:6 feeling 474:5 fees 409:7 felt 470:10 512:1 fibre 413:6 423:24 518:23 field 344:8 477:4 501:2 502:6 fields 451:5 fifty-nine 367:5 figure 356:21 419:4 472:25 507:3 file 334:23 436:22 filed 438:8 Filipchuk 300:9, 25 301:11 303:26 304:3,26 315:5,8 326:21,25 328:25 403:17	fill 511:11 Fillcrete 352:8 368:3,4 502:19, 20,21 511:11 final 300:22 335:8 351:13 363:7 373:21 415:11 445:14 514:10,21 517:23 finally 310:14 313:25 317:4 326:4,21 finance 489:18 financial 418:2 419:24 421:17 423:21 473:15 488:26 489:1,10, 24 financially 419:11 financing 445:16 find 393:24 424:9 fine 368:15 371:5 398:4 415:2 416:5 418:12 454:14 458:4 462:17 464:2 467:17 469:26 470:21 473:17 487:3 522:21 finer 521:21 fingertips 406:4 finish 428:13 432:7 456:13 463:24 464:14 465:16 508:11 finished 375:15 404:5 430:18 firm 306:2 309:9 first-in-right 519:7 first-in-time 461:5 519:6 firstly 394:25	446:25 452:11 468:24 fit 357:2 443:7 Fitch 338:20,26 339:3,7,8,10,11, 13 341:5,10 345:6,11 346:16, 19 347:7,9 348:3, 6,14,16 349:1,3, 13,15 353:7,11 355:10,13,14,17, 20,23 356:1,5,24, 26 362:24,26 368:18,26 369:6 371:8,10 372:11, 14 373:5,10,17 380:20 384:20,23 388:17,19 390:1, 3 391:8,17 392:3, 16,19 394:17,19 396:13,14,19 397:11,12,13 398:13,24,25 399:4,11,13 401:16 403:14, 16,21 404:1,7,8, 10 406:14,20,24 407:6,13,17 416:7 418:25,26 420:8,17,21,23 421:22 422:12 427:26 429:8,23 430:3,17,22 432:9,12,14 437:9,11 446:2,4 455:3 456:8,26 462:11,16,19,22, 24 463:2 464:5, 13 465:20,25 473:26 474:4,8, 11,13 478:15 493:16,19 496:16,19,22,23 497:3 498:3,8,10, 19,24 510:6 fits 505:16
<hr/>				
F				
face 438:10,17 440:14 facilitate 319:22 362:11 508:10 516:21				

Fjeldheim 330:25 331:6 472:5 flawed 320:21 flexibility 444:8 flexible 464:8 flow 339:2 426:19,24 464:6 flow-through 382:19 426:15 flowed 419:26 flower 474:6 fluctuation 445:25 focus 377:4 focused 307:5 309:21 focusing 351:19 folks 357:25 429:12 follow 519:11 521:23 522:1 follow-up 404:18 521:10 523:19 for-profit 321:21 forced 438:12 441:1 forecasted 396:20 foregoing 525:4 forget 421:3 490:25 forgetting 385:1 407:20 forgive 519:5 form 343:17 356:9 362:6 formal 388:24 formally 305:2 491:1 formula 332:3 333:6	forum 398:10 forward 305:6,7, 10,14 322:2 326:15 334:10 366:2 413:21 436:2,6,8,20 504:15 forwarded 389:9 390:17 found 421:11 441:4 491:16 foundation 384:10 414:14 416:9,16 foundations 475:22 490:19 four-lane 343:6 416:11,23 fourthly 452:13 fractional 384:17 frame 387:10 500:26 512:10,11 frames 507:10 framework 396:25 France 308:17 free 341:13 388:26 freely 396:9 freeways 413:8 frequency 350:10 frequently 320:12 fresh 474:6 Friday 465:17 friend 397:16 418:18 419:22 430:10,13 498:24 friends 396:8 397:22 413:3 523:26 front 303:26 334:3 388:12	447:16 455:17 456:3,6 501:24 514:16,20 front-facing 455:26 fulfill 308:3 310:9 312:17 470:11 fulfilled 407:4 498:9 full 319:24 321:9 323:18 325:14 328:5 329:9 360:2 382:24 429:14 430:1 431:10 fully 319:20 320:4 323:13 function 414:14, 15 functions 506:1 fundamental 426:7 fundamentally 320:21 507:15 funding 374:1,4, 7 future 380:16 386:20 413:13 451:25 452:4 453:14 512:12 513:14	23 490:15 491:4 gas-free 395:22 gathering 318:12 322:26 327:14 gave 372:19 512:6 Gavin 339:13 Gee 409:10 general 302:14, 16 322:17 346:7 495:1 501:3,6 generally 484:3 485:10 486:4 generated 361:25 362:7 368:9 gentlemen 422:16 geo 352:21 geographic 410:9 geotechnical 352:21 358:24 Gerein 359:17 454:12 Gerein's 372:26 454:19 give 333:14 337:26 382:7 383:16,17 397:26 399:9 411:6 428:15 462:1 472:12 483:4 497:1 498:19 499:17 504:22 520:24 giving 456:19 glance 410:18 goal 506:4 goals 439:20,23 469:24 good 299:3 300:1 301:25 302:8,22 303:14 304:3	307:1 310:19 317:25 322:10 326:26 339:11 345:10 348:5 365:14 372:9 398:18 430:6 432:3,14,15 467:8 468:7 473:26 474:11 499:16 500:8 520:7,16 523:19 524:7 Google 411:13,19 governing 310:1 government 311:18 483:1 governments 311:3 475:16 Govier 299:6 401:1 graduate 307:5 graduated 308:17 grand 384:17 grant 318:4 granted 318:5 321:13 322:15,18 327:3 460:11,22 462:2 Granting 328:8 gravel 416:10 500:17 great 398:7 414:23 475:18 greater 331:17 396:6 412:11 414:3 453:26 green 451:7 454:8 456:15 Greg 300:9 301:11 403:17 grew 475:6 gross 365:2 418:7
--	---	--	---	---

ground 342:17 344:7 376:16 419:18 grounds 478:26 group 302:10 303:19 337:5 339:14 381:24 401:18 408:7,13 492:23 493:25,26 494:10 505:24,25 509:25 522:10 groups 494:1 growing 467:11 468:13 growth 467:10, 24 468:8,9 469:9, 13,19,23 470:12 491:17 Grzyb 401:12 guess 349:6 377:25 384:23 388:19 391:25 397:23 409:15 419:22 426:18 430:26 434:16 465:13 496:23 guy 418:2	happen 352:17 426:21,22,26 445:24 465:16 484:23 485:2 498:15 506:26 511:3 522:13 happened 411:2 518:22 happening 368:1 416:23 444:24 464:18 happy 382:18 427:18,19,23 454:26 hard 337:1 355:15,24 417:13 447:17 harder 421:12 harm 419:7,8 head 405:9 406:4 411:9,10 heading 461:22 headquartered 318:8 322:25 327:10 hear 435:6 467:16 heard 328:26 330:25 359:17 408:10 409:6 415:8 419:14,15 434:17 463:12 472:5 492:22 494:16 499:7 504:7 505:9 508:2,17 512:7 513:6,22 517:13 521:5 hearing 299:8, 17,19,23 310:4 322:5 326:18 333:1 336:17 396:15 397:23 401:6,7 405:7 408:16 416:25	428:17,21 429:15 431:24 477:12, 17,19,20 480:26 484:19 485:20 492:20 524:4 hearings 428:16 heat 498:15 hectare 330:12 332:14 hectares 330:14 height 500:17 held 477:20 helped 489:21 helpful 341:14 383:15 429:19 430:2 431:13 493:18 508:23 520:19 helps 384:19 high 438:11 440:1,15,21 444:15 445:18 high-level 381:25 382:6,7 507:20 higher 404:23 409:24 448:14,22 512:20 514:8 highest 329:15 448:24,26 449:20 450:8 512:7,9,12 highlighted 356:15,20 highway 323:7 341:24,26 416:12 highways 323:10 hill 329:19 331:1 348:18 356:9 358:26 371:11 373:20 468:9 472:16 Hills 351:17 370:3 409:1 468:12,22 470:16,24 473:2	510:12 hold 307:4 417:6, 12 holder 304:20 home 329:19 444:13 homebuyers 330:7 493:11 homeowner 330:21 homeowners 492:5,26 homes 333:1,7 441:4 456:1 Honestly 399:1 hook 516:10 hope 384:18 474:5,7 hoping 399:5 418:11 horizon 512:23 horizons 512:15 Horse 329:19 331:1 348:18 351:17 356:9 371:11 373:20 409:1 468:9,12, 22 470:16,24 472:16 473:2 510:12 hour 399:23 428:19 498:22 hours 397:4,26 403:6 430:8 431:1 house 440:10 456:3,4,6 houses 329:24 442:14,16 housing 331:4 426:12 438:12,19 440:2,16,22 442:23	humour 515:16 hundred 393:14 415:6 416:14 442:15 459:26 522:17 hundred- thousand-dollar 444:4 hundreds 304:24 hurdle 484:6,11 Huxley 399:26 401:10 499:2,4,6 504:19 hydrocarbon 318:10 hydrogen 395:2, 10,24 hypothetical 413:22 414:18 415:11 427:12 435:24 437:17 464:12 hypothetically 361:18 hypotheticals 412:21,25 414:26
H				
H2s 395:20 396:3 404:15 405:5 half 363:25 376:4 488:4 495:19 half-and-half 477:2 Hall 299:6 401:1 Hamdan 401:14 hammering 384:14 hand 424:1 517:22 hands 430:13 431:14				
I				
				i.e. 395:22 420:1 522:16 Ian 300:15 301:12,26 361:16 403:18 409:18 idea 333:19 383:17 481:9 494:4 identified 324:3 379:6 429:1 435:18 439:16 identifies 468:9 identify 436:4 identifying 448:21

ignore 480:25 imagine 459:17 469:10 470:6 immediately 409:1 448:26 impact 327:22 329:23 376:19 404:19 405:16 412:20 419:1,10 422:22 423:12,21 424:20 426:16 441:11 442:22 454:24 455:14 473:12,15 impacted 329:20 367:21 impacts 312:7 327:17 357:16 452:24 454:4,6 impaired 450:9 impede 451:18, 20 impeded 413:13 impediment 441:25 implement 469:7,21 implies 480:16 importance 488:17 important 343:11 377:13,16 380:22,23 393:12 415:26 434:4 490:24 impose 477:1 imposed 450:5 477:5 imposing 477:5 impossible 328:15 480:25 impression 398:8 474:25	improving 341:23 in-time 425:7 inaccessible 379:5 inappropriate 398:9 inbound 409:19 incentive 306:9 476:6 include 311:1,4, 17 332:11 385:26 473:9 499:25 included 303:22 326:6 335:7,14 357:14 404:16 499:22,23 500:2, 4 501:2 includes 350:14 374:11 394:8 489:6 including 306:5, 6 310:23 318:17 389:16 390:8 471:15 474:18 475:4,7 491:2 501:5 507:26 incomplete 506:19 inconvenience 312:2 incorrectly 476:11 increase 331:3, 10 445:2 451:4 457:17 467:24 515:19 increased 333:16 345:20 487:8 increases 515:23 incremental 359:2 364:17 386:26 410:7 516:13	incur 331:9 incurred 328:3 330:22 335:26 incurring 329:20 385:26 independent 306:8 308:3 310:10 312:18 436:26 444:23 476:6 indication 415:22 435:22 448:13 449:1 457:7 470:17 individual 413:2 414:25 493:21 518:7 individuals 311:1 industrial 300:10 302:25 304:13 312:6 327:12 332:12,21 industrialization s 475:8 industries 306:15 307:6 318:17 324:11 423:22 481:15 490:15 520:3 industry 302:11, 15,25 303:18 304:5,6 318:6,14, 17 320:9 321:16 322:23 327:23 422:23 485:13,14 488:26 489:1,10, 12,18,23 520:17 industry's 425:3 inefficiencies 322:19 328:8 inevitable 485:12 inferred 480:23 informal 388:26 389:3 390:7	information 324:4 335:1 337:9,12,18 338:3 348:9 353:23 354:3,21 357:13,18 358:13,20 360:17,19,21 361:14,25 362:6 364:5 365:14 367:3,7,19,23 368:8,10 373:1 381:16,17,23 382:4 383:8,13, 14 384:4,14 386:19 387:26 388:25,26 389:3 390:7,13 392:20 403:24 410:13 411:7 419:24 420:3 439:18,21 442:1 502:25 503:7 505:23 506:5,19,22 507:7,8,9,20,25 508:6 516:14 523:13 infrastructure 304:19 320:14 322:21 323:11 327:10,19 359:3 411:5 457:12 488:19 ings 376:22 inherently 436:16 479:16,22 480:4,6,11 481:12 inhibits 438:18 initial 310:4 312:9 316:13 317:5 329:9 331:24 444:20 initially 326:10 328:17	initiate 342:19 initiating 434:4, 13,21 initiation 341:22 injurious 312:8 inline 350:14,16, 23 input 319:10 340:5 443:13,17 445:18 inputs 444:22 inquire 381:9,14 385:6 397:26 inquiries 393:20 inquiry 397:18 498:4 inspect 367:15 inspected 349:26 350:18 inspecting 367:8 inspection 349:10,17,19 350:6,7,8,9,14, 16,19,24 351:2,4, 25 359:13 374:15 377:22 380:3 414:22 500:15 501:13,17 installation 501:11 503:1 instance 326:14 382:20 476:14 instances 433:22 459:15 Institute 311:8,9 466:7,10,13 institutions 475:6,13 instrument 362:11 363:22 469:18 instruments 506:10
---	--	---	---	--

integrate 455:19	12,15,17 493:26	introduce 300:4	325:16 339:19,23	jumped 484:12
integrating	494:1,9,12 495:6	322:18 325:2	340:11,19 380:16	June 393:6
455:17	496:12	introduced	397:14 429:9	jurisdiction
integrity 304:11	interested 438:6	455:16	435:12 437:22	452:26 469:7
336:20 342:13	439:7 471:9	introductory	449:20 454:25	478:4 482:25
344:24 345:19	478:21	439:7	473:19 476:23	483:22 485:23
354:7 357:4,9,14	interesting	invasive 503:13	issued 360:6	justification
358:7,10,13,14	387:20	inverse 423:17	419:3 422:21	491:6
359:19,21 360:12	interests 312:4	investment	427:3	justify 456:10
361:14 371:3	481:23 482:8	438:20 439:23	issues 306:9	JV 324:19 334:19
372:15,19 376:24	485:12	443:1	307:25 312:6	369:8,16,20
377:6,21 379:7	interfere 321:10	investor 417:20	326:1 389:19	514:5
380:5 381:2,9	interim 356:10	421:15,24 422:10	390:25 394:7	
383:4,12 384:14,	359:25 363:3,6,	investors 421:16	428:4 436:7,19	
16 385:17 386:1,	17 368:20 369:4	invite 478:18	478:17 509:24	K
10,11 387:25	371:13 372:1	invoice 330:20	517:1	
389:4,16 390:8	373:15 507:13	335:14 382:22	item 360:11	keeping 386:7
408:3 499:25	internal 350:9	515:3,6	374:1 417:4	key 335:4 376:24
500:3 503:18,21	358:24 374:1,4,7	invoiced 335:8,	500:22 501:9,19	377:4 458:24
515:24 516:5	381:17 502:4	13 336:2 511:2,	502:2 510:21,23	Keyera 402:11,
intend 431:15	internally 437:26	22 514:6,9	items 500:12,21	12 464:11,24
intended 334:26	international	invoices 335:15	iterative 354:20	465:1,14 524:6
335:24	311:8,10	387:13	358:19 507:4	Keyera's 464:18
intending 357:1	interpret 483:21	invoicing 514:14	509:15	465:2,3,11
intent 313:22	484:11	invoke 484:12	J	kilometres
358:9,12	interpretation	invokes 484:6		323:5,6 324:24
interact 323:9	483:5	involved 310:21,	jan 392:8,14	kilomole 395:2
interest 305:8,25	interpreting	22 339:17,22,25	January 314:1	kilopascal
306:14,25	418:2	340:10,13,15,18	315:21 340:1	395:21
307:15,16,19	interprets	433:1,22,24	390:21	kilopascals
312:13 320:18	483:26	434:12 435:16	Jaret 300:14	395:25 396:3
325:19 326:4	interrupt 339:1	436:9,19 437:12	301:11 302:9	404:17
361:24 399:17	403:20 406:16	471:14 479:23	403:17	kind 343:5 347:5
402:24 421:2	413:20 428:20	480:11 489:11	Jeff 300:22	353:6 397:18
426:10 438:7	interruption	involvement	301:12 305:26	413:24 427:4
461:4,6,19 469:4,	325:22	488:12	403:18	437:16 475:14
6,11,13,15,20	intersection	involving 307:9	Jesse 464:10	478:1 489:11
470:3,8,9 477:23	345:16 346:14	IR 390:23	job 299:10	492:14 504:21
478:22,25 479:1,	351:8 353:5,18	irrelevant 397:6	joint 300:4	515:16
2,17,21,24 480:4,	375:9 406:21	398:9,20	313:26	kinds 437:15
6 481:4,13,25	407:3	IRS 392:6,8,12,	Jones 390:4	475:8 491:1
482:1,6,11,14,19	interstate	14	judgment 358:2	King's 310:1
483:5,17 484:5,9,	474:17,21	issue 307:15,19	jump 454:13	311:24
11,21 485:5,7,23,	intrastate 474:17	320:3 321:3		knew 367:25
25 486:1 488:1,2				376:15 473:11
491:18 492:1,2,				

knowledge 314:12,26 315:13 316:5,25 317:16 321:9 325:5,15 354:11 355:6 370:17,19 421:6 445:11 519:6	landowner 484:16 485:19,21 landowners 309:10 475:15 485:7,14 lands 321:6,8,11 325:14,19,21 337:14 443:6 459:4 landscape 427:4 lane 456:3,7 language 487:21 large 309:9 318:12 457:24 481:1 493:13 large-scale 455:20 largely 334:4 larger 487:7 492:17 largest 306:2 510:23 lastly 315:5 403:9 late 429:16 430:25 431:20 latest 306:15,16 Laura 300:21 301:12 307:2 403:18 law 475:20 lawyer 389:8 393:16 396:1 418:1 436:24 437:3,7 458:3 475:21 493:13 lawyers 438:1 484:4 522:3 lead 328:8 415:25 485:20 leading 327:9 409:23 learn 354:21 learned 498:24	learning 466:18 leave 398:8,17 495:17 left 465:6 474:4, 24 476:3 legal 339:13 388:21 389:14,22 391:4 436:6 460:7 461:22 475:22 484:17 519:6 legislated 307:18 legislation 434:20,23 453:4 471:18,24,25 legitimate 321:7 length 499:11 lengthy 505:13 letter 356:8,9 371:11 388:21,22 389:9,21,23 390:3,17,20,22 392:5,11 450:5 465:9,10 letters 313:22 466:26 level 481:24 482:10 levy 330:6,9,14 331:3,10 332:8 licence 304:20 392:21,23 393:7, 13,21 394:2,8,10, 13,20 395:14 403:6,8 404:16, 17,23 405:22,23 407:15 licenced 395:1 licences 405:4 licencing 404:24 licensed 311:14 licensee 319:2 377:9 458:7,8 516:9	licensees 394:2 licensing 396:26 life 413:12 lifecycle 513:21 light 413:5 498:23 light-duty 413:6 likelihood 412:11 427:13 limit 371:21 475:1 limitations 462:21 limited 324:19 348:19 356:10 369:8,17 371:12 398:10,20 401:21,23 limiting 476:13 linear 310:26 311:11 312:3 320:13 423:23 457:15 lines 334:17 411:25 519:13 link 299:13 liquid 318:9 395:22 liquids 323:6 liquified 323:2 list 306:4 374:10 432:21 436:17 474:16 475:26 listed 357:6 360:4 477:26 485:9 live 362:3 367:21 494:1 live-streamed 299:13 living 480:24 load 358:16 380:17 382:5 412:25 413:8 502:21 516:26	loads 383:23 local 459:13,24 469:7 487:5,8,15, 22 located 300:25 301:3,7 313:4,8, 11,14,17 316:16 325:19 347:19 location 342:25 344:1 350:1,17, 24 351:15 352:21 357:9 359:14 362:10 366:8 378:6,14,23 380:1 381:10 388:1 410:9 502:15 503:5 locations 324:26 342:1 372:7 472:17 logic 461:18 logistical 497:15 logistics 318:15 463:6,10 lone 497:23 long 304:17 338:22 389:14 431:11,19 436:17 443:5,24 490:14 507:19 510:9 523:12 long-standing 318:6 322:23 long-term 439:20 longer 512:18 523:23 looked 363:5 368:21 372:2 378:8 439:17 474:24 476:8 Lopez 402:14 525:3,20 loss 312:1 452:11 454:9 455:6
--	--	--	---	---

lost 372:11
456:21
lot 309:21 375:4
376:11,15,18
377:2 382:4
412:15,21 417:11
426:5,13 427:5
434:12 439:21
440:10 457:22
461:1 476:1
520:10,18
lots 329:24
330:18 383:19
428:16 437:13
443:12,21,23
444:5,6,14,16
445:19,22
456:17,18
low 427:13
441:19 442:7
444:16 446:7
517:23 518:2,4
low-cost 518:11
low-grade 343:5
lower 511:2,23
lowering 502:15
lowest-cost
503:15
LPRT 309:26
lunch 355:24
399:19,21 407:24
ly 300:22

M

Machell 402:7
mad 522:3
Madam 300:1
301:9,14,16
305:1 312:22
317:25,26 322:10
326:26 338:11,20
339:10 356:2
368:18,24 373:5,
9 391:8,12,18

396:19 398:6
400:2 403:16
407:9 418:16
419:13 420:17
427:26 429:7
431:8 432:9
436:25 464:9
465:19 474:1
493:15 497:6,22
498:10 499:2
505:4 517:20
521:1 523:22
made 306:5
308:25 310:6,7
312:11 320:17,18
323:16 324:14
333:19 351:13
355:24,25 361:15
366:6 394:21
402:21 414:9
419:6 423:10,13,
15 427:22 446:5
473:21 478:10
479:5 487:17
516:3
Madison 306:13
magnitude
410:23
main 435:10
465:11
maintain 379:1
408:3 413:12
423:2 519:17,20
maintaining
303:1 469:13,23
470:12
maintains 321:3
maintenance
303:3,9,21 325:4
336:21 350:10,11
354:7 377:22
378:4,13,15,21
379:6 380:3,6,10
381:10 385:18
386:1,14 387:26
389:5,16 390:9,

13 413:16 510:25
major 303:5
342:6 411:21,24
419:5
majority 324:2
350:13 476:9
509:22 515:21
517:10
make 314:8,22
315:9,26 316:21
317:12 333:2
358:1,2 361:6
372:9 377:2,9
385:21 386:6
391:22 393:20
397:17 399:12,21
404:1 412:16
425:2 428:3
430:22 436:7,16
455:13,21 473:23
475:16 483:20,23
484:4 485:16
489:2,19 490:17
492:3,16 494:3
497:14 503:23
506:26 511:10
515:6 516:6,7
519:25 520:8,10,
22,25 521:3,4,9,
10,14,17,24
522:7,12 523:2
makes 318:21
337:22 417:1
456:24 464:21
484:4 492:9
495:1 517:18,21
520:18
Makholm 300:23
301:2,12 305:5,7,
22 306:1 308:2,7
315:19,25 316:3,
7,11 403:18
474:3,6,12,13
478:14 486:26
491:7 493:16,19,
20 496:17,18

making 490:22
522:2
manage 377:1
management
300:10 304:13
327:9,18 360:9,
20 499:26 502:5
517:12
manager 300:12
303:15 340:21
managers 303:19
managing
300:23 306:1
308:25
mandate 307:18
483:5 485:9,17
mandated
484:20 485:6
manifest 482:22
manifestly
487:20
Manitoba 311:19
manner 324:1,10
manufacture
320:22
Map 411:19
marathon 474:7
March 313:17
348:16,19 371:11
401:3 524:10
525:9
mark 368:19
373:5 391:8
marked 313:19,
21,24 314:1
315:21 316:17
317:9 335:20
352:26 407:7
421:25
market 321:8
325:20 329:10,
15,26 330:2
408:22 426:8,12
443:11,25,26

444:1,7 445:14,
19 447:13 448:1
452:11 483:13
488:20 492:4,7
493:7,22
marketing
318:15 323:1
markets 307:9,
16 474:20 483:15
489:16,24
marking 391:19
markup 394:13
Marquis 324:19
326:7 334:5,8,19
352:6 369:7,8,14,
16,20 373:16
390:11 444:13
445:9 470:26
504:6 514:5
material 331:11
333:3 352:7
472:25
materials 314:3,
5,11,14,18,19,25
315:2,5,12,15
316:18,24 317:1,
10,15,18
math 514:19,22
matted 434:15
matter 301:19
321:3 416:26
417:1 435:9
447:8 460:16
475:12,13 476:14
479:23 480:12
481:24 482:9
483:15,18 488:2
492:17 495:1
499:1 523:11
matters 306:13
307:9 312:13
474:16 476:7,11
478:3,5 481:13
maximum
371:21 395:1

<p>405:4,5</p> <p>Mcintosh 370:3</p> <p>Mcnaughtan 401:7 505:3,4,8 510:8,16,19,21 512:26</p> <p>meaning 393:23 397:19 488:11</p> <p>means 396:2 455:22,24 477:3 506:15</p> <p>meant 364:5</p> <p>mechanical 303:17</p> <p>medium 512:17</p> <p>meet 342:2,12,26 343:9,10 344:2, 15 358:7 439:19, 23 516:24</p> <p>meets 497:26</p> <p>member 301:16 302:12 466:6,9, 12,16,26</p> <p>members 300:2,7 317:26 322:11 326:26 337:4 339:12 342:5 420:1 466:22 497:6</p> <p>mention 413:9 465:5</p> <p>mentioned 304:12 324:23 326:5 362:14 380:22 423:4 435:4 451:21 457:5 463:14 465:11 500:12 501:5,14,17,21 504:5 517:24 518:1,5 519:7,10</p> <p>mere 456:23</p> <p>Meridian 334:21 335:10 336:9 345:17 346:8,24</p>	<p>347:2 352:6 353:5,18 356:17 359:7 365:19,24 369:5 378:20 384:26 389:6 392:24 406:21 407:4 411:8 416:24 460:5,10, 22</p> <p>message 421:17, 18</p> <p>met 457:9</p> <p>metals 327:13</p> <p>method 383:24 474:21</p> <p>methodology 351:26</p> <p>metre 350:20</p> <p>metres 498:5,6</p> <p>Metropolitan 467:10,24,25</p> <p>Meysami 401:5</p> <p>mic 379:20</p> <p>middle 486:9</p> <p>Midstream 302:24 303:3,8 322:25 347:5 392:21 402:2,5,8 407:16</p> <p>millimetres 500:13,17</p> <p>million 332:26 333:5,10,22 363:26 385:3,7 467:12,26 468:16 472:22 514:18,20 517:16 519:2</p> <p>mind 386:7 424:13 462:13 521:8</p> <p>minimal 397:4</p> <p>minimize 334:10 455:14</p>	<p>minus 334:25 365:8 456:18 463:19 501:23</p> <p>minute 455:1</p> <p>minutes 338:22 399:10 412:1 420:8 462:14,16, 25,26 496:25 497:2 504:22</p> <p>miscellaneous 499:24</p> <p>missed 458:17,24</p> <p>missing 463:8</p> <p>mistakenly 390:4</p> <p>misunderstandi ng 396:16</p> <p>misused 361:15</p> <p>mitigated 457:22</p> <p>mixed 375:7</p> <p>MLC 369:16 408:13</p> <p>MLC's 408:17</p> <p>mobilizing 499:20,23</p> <p>moles 395:2</p> <p>moment 435:4 472:12 484:14 495:17 498:15</p> <p>Monday 464:24 524:5</p> <p>money 444:17 483:10 488:3,5 489:14,15,23 495:17 514:1,3, 16,25 520:8</p> <p>monitor 355:1 503:22</p> <p>monitoring 358:23,26</p> <p>monograph 306:16 475:5,23</p> <p>month 509:9</p>	<p>months 445:5 505:13 507:18 520:12</p> <p>Montréal 308:15</p> <p>moot 495:21</p> <p>morning 299:3 300:1 301:25 302:8,22 303:14 304:3 307:1 310:19 317:25 322:10 326:26 330:25 338:24 339:11,15 393:17 513:19 524:5</p> <p>Morrison 307:26 310:7 312:14 333:4 446:5 450:2 478:26 479:10,19,25 486:10 492:15 494:13</p> <p>Morrison's 328:26 449:14 466:1 479:12 480:9 482:7,16 488:15</p> <p>move 308:9 333:24 366:2 371:25 376:20,22 387:22 388:16 399:8 417:17 427:24 436:7 442:24 443:3 499:21</p> <p>moved 309:1,7 428:1 433:15,24</p> <p>moving 300:17 333:12 334:10 435:11 474:1 504:15</p> <p>MPS 510:11</p> <p>multiple 424:23, 24 518:8</p> <p>municipal 309:19 310:1 311:2,18 320:19</p>	<p>468:25 491:11</p> <p>municipalities 461:1</p> <p>municipality 460:3 462:2 469:19 470:13 483:2</p> <p>Munro 390:4 392:12</p> <p>Myers 299:26 300:1 301:14,21 305:1,22 312:22 314:3 338:11,16 368:22,24 373:8, 9,11 390:21 391:2,11,12,18 402:4 403:20 407:9 418:15,16 419:12,13 420:7 422:1 425:8 428:10 429:2,6,7 431:8 436:25 463:14,22 464:4 510:7,8 523:22</p> <p>Métis 311:20</p> <hr/> <p style="text-align: center;">N</p> <hr/> <p>Naffin 388:22 389:14,21 392:6 396:12,18,19 398:5,6,23 402:1 403:9 493:15 497:6,9,14,22 521:1,11,14</p> <p>Naffin's 402:26</p> <p>names 498:14</p> <p>narrow 350:21 483:3</p> <p>narrowed 364:6</p> <p>narrowing 483:26</p> <p>national 300:21</p> <p>nations 311:2 489:7</p>
---	--	---	---	---

<p>natural 311:22 318:10 323:6 520:17</p> <p>nature 310:26 402:24 410:11 420:1 425:10 518:24</p> <p>NDE 335:5</p> <p>NDT 510:22,26 511:6</p> <p>necessarily 331:20 332:8 381:19 412:15 415:19,23 416:5 426:12 457:17 469:5</p> <p>necessitated 487:8 491:16</p> <p>necessity 499:13</p> <p>needed 350:22 367:6 370:23 371:21 409:7 415:23 489:2</p> <p>negative 365:1 423:16</p> <p>negatively 327:22</p> <p>negligible 424:20</p> <p>negotiate 427:7, 11</p> <p>negotiated 447:6</p> <p>negotiating 506:9</p> <p>negotiation 435:9</p> <p>negotiations 328:7 427:8 449:24</p> <p>negotiators 437:22</p> <p>neighbourhood 408:26 409:2,4,8 410:20 411:13, 18,23 440:5,6</p>	<p>442:13 444:7 453:22,23 454:17 455:15 470:24,25 494:19</p> <p>neighbourhoods 323:10 438:10,14 439:26 440:14, 18,19,21 441:3,5 444:13,24,25 451:3 494:21</p> <p>NERA 300:22,23 306:1,2,3 307:2, 3,24 315:20 316:4,8 474:3</p> <p>net 449:19 450:6</p> <p>network 318:9 325:5 327:11</p> <p>news 473:26</p> <p>NGL 300:16 301:26</p> <p>Nicholas 408:13, 17</p> <p>Nicholson 409:10</p> <p>Nigel 300:12 301:11 302:23 403:17 407:22 426:4</p> <p>Nodding 399:22</p> <p>nominal 434:8</p> <p>nondestructive 374:11 511:7</p> <p>nondisclosure 361:13</p> <p>nonpartisan 308:4 310:11 312:19</p> <p>nonprofit 311:2</p> <p>nonresidential 332:11,20</p> <p>noon 399:18</p> <p>normal 304:25 357:15 377:24 380:5,9 386:1</p>	<p>516:6</p> <p>north 300:13 302:24 307:10 318:11 390:11 475:7 489:12</p> <p>Northeast 347:16</p> <p>Northeastern 307:4</p> <p>nos 392:6,12</p> <p>note 349:3,6 361:19 373:26 392:25 395:17 402:26 429:22 434:4 500:3</p> <p>noted 327:24 351:2 443:11 463:13 500:23</p> <p>notes 525:6</p> <p>notice 313:10,14, 16 398:10 426:8</p> <p>noticing 399:18</p> <p>noting 520:25</p> <p>notion 479:20</p> <p>notwithstanding 493:9</p> <p>Nova 311:23</p> <p>November 392:26</p> <p>NPS 407:16</p> <p>nuisance 312:1</p> <p>number 306:4 310:20 311:16 318:12 324:25 332:23 341:7 355:12 356:20 368:20 371:6,9 373:6 382:6 388:18 389:4,12 390:2,20 391:26 392:1 393:5,23 395:7,8 404:12 405:4 406:18 407:7,11 417:4</p>	<p>418:13 421:9,23, 24 422:4,5 445:17 456:17 472:7 477:26 494:7 500:2 501:8,11 509:20 512:6 514:6</p> <p>numbering 391:20</p> <p>numbers 331:23 332:5,18 333:17 364:3 385:1 390:23 391:23 417:26 420:26 424:23,24 517:23,25 518:1, 5</p> <p>numerous 310:2, 25 323:7 324:21</p> <hr/> <p style="text-align: center;">O</p> <hr/> <p>object 396:9 493:14</p> <p>objecting 425:8</p> <p>objection 368:23, 24 373:9 391:12 402:26 407:10 422:1 436:5</p> <p>objective 308:4 310:10 312:18 457:7</p> <p>objects 436:1 437:19</p> <p>obligated 426:22</p> <p>obligation 343:7 345:2</p> <p>obligations 358:22</p> <p>observance 299:21</p> <p>obtain 408:9 439:20 496:10</p> <p>obtaining 309:11</p>	<p>obvious 437:10 487:20</p> <p>occasion 359:18</p> <p>occupy 325:21</p> <p>occur 309:15 324:26 328:1 330:15</p> <p>occurred 348:10 374:16,20 379:17</p> <p>occurring 318:22 491:17</p> <p>occurs 469:8</p> <p>offer 426:14 438:12 441:1 444:14</p> <p>offers 318:13</p> <p>office 458:16,21</p> <p>officer 300:15,18 302:10 309:3</p> <p>official 299:15,16 402:14 525:15,21</p> <p>oil 302:11 304:5, 6,21 307:10 318:14 323:2,5 327:13,14 395:1 474:17,21 475:10,11,15 477:22 481:15 484:18 485:13, 19,22 489:5,8,19, 23 490:15 491:4</p> <p>oil-producing 485:11</p> <p>oils 490:15</p> <p>older 414:23</p> <p>oldest 306:2</p> <p>Olive 300:21 301:2,12 305:5,9 306:23 307:1,2 308:1,2,6 315:19, 24 316:2,6,10 403:18 478:6,8 486:19,20,21,22 488:12,13</p>
---	---	---	--	---

<p>496:18,19,20 one's 388:20 one-and-a-half 430:8 one-sided 321:19 one-way 424:13 onetime 329:11, 14 452:19,24 ongoing 329:12 503:21 online 299:18 onward 512:19 open 456:6,21 opening 299:2 317:23 322:8 326:22 362:14 385:11 operate 321:11 362:21 405:12 413:11 operates 318:9, 11 323:4,7 324:23 operating 300:15 302:9,26 319:13 325:22 377:10 394:11 405:13 519:20 operation 303:2, 9 307:22 319:3 325:4 327:22 336:15,21 380:9 383:5 388:11 477:21 operational 360:20 operations 300:11,13 302:3, 16,23 304:9,14, 18,22 337:2 361:10 377:24 379:1 410:26 423:3 502:3,6 505:26 506:16 516:11</p>	<p>operator 307:14 343:7 345:3 358:7 361:4 362:18 398:2 408:2 414:4 424:7 436:2 459:21 461:19 471:26 operators 336:24 358:22 386:8 408:19 423:7,16 427:5 operators' 339:12 408:24 opine 362:16,19 opinion 329:23 380:19 415:1 425:1 435:1 439:17 448:18,23 455:8 477:10 481:19,22 482:16,20 486:3 491:3 495:12 opportunities 398:14 opportunity 322:2 326:15 403:10 404:22 417:22 oppose 427:10 opposed 362:10 414:6 opposes 320:1 opposing 427:18 opposite 445:3 ops 506:15 optic 413:6 optics 423:24 518:23 options 503:15 order 326:2 342:11 360:6 383:26 384:11 391:19,21,24 419:2,10 422:15,</p>	<p>21 423:10,12,13, 15,18 424:19,23 427:3 429:17 433:18 438:14 439:20 441:3 446:13 447:3,8 484:12 486:11 505:6 520:22,25 521:3,5,18,24 522:3,5,8 ordered 484:3 489:25 ordering 328:12 orderly 485:17 490:11 orders 318:5 320:1 321:13 322:14,18 323:15 325:25 327:2,7 328:9 424:22,24, 25 organization 304:23 408:21 organizations 311:2 352:22 orient 362:26 original 321:1 335:6 347:1 404:16 473:4,7 originally 460:10,22 outcome 321:18 365:4 outcomes 364:26 outlier 319:23 outline 305:4 336:9 outlined 305:21 350:25 437:1 output 372:22 outset 330:17 331:18 425:9 outstanding 497:10</p>	<p>overland 485:15 oversee 303:19 oversees 397:1 oversight 304:15 overstated 480:21 491:19,20 overstatement 372:5 overtop 361:7 413:10 overview 305:17 owner's 335:5 502:4 owns 318:9,11 323:4,7 324:23</p> <hr/> <p style="text-align: center;">P</p> <hr/> <p>pages 301:7 313:5,8,11,14,17 316:16 317:8 525:4 paid 329:13 330:15 335:15 446:6 448:13 451:24 494:21 513:24 514:16 515:5 panel 300:2,4,8,9 301:17,20 305:18 312:16 317:26 321:25 322:11 326:12,26 328:21 331:25 337:5 338:13 339:9,12 340:23 342:6 355:24 399:20 400:1 404:9 420:6,22 428:10, 14,18,25 429:11, 12,14,21 430:9, 20,21 431:10,11, 12 432:6,8,13 463:19 464:15, 17,26 473:24</p>	<p>477:6 497:6 498:12,21,25 499:3,5 502:13 504:22 505:1,7 515:16 520:22 521:15 522:10,23 524:8 Panel's 305:2 313:10,13 430:15 paper 481:7 paperwork 509:9 paragraph 345:12,24 349:7 356:15,21 363:3, 11 393:26 438:7 441:14 443:10 446:7 447:12 448:2 449:17 471:9 472:14 473:3 474:14 478:23,24 480:5, 15 481:5,8,20 482:3 486:6,7,9 487:4,11 488:8, 14 paragraphs 331:26 475:25 476:8 parameters 394:11,13 405:13 476:20 paraphrase 345:13 parcel 450:22 453:8 459:20 475:23 489:16 parcels 454:19 pardon 483:25 511:14 parenthetical 482:9 part 308:19 337:7 343:16 345:11 350:24 351:1</p>
--	--	---	--	--

<p>354:6 357:7 372:15 377:20 378:11 380:5,19 381:8 398:13 428:2 437:23 449:5 453:20,22 474:23 475:23 484:13 489:16 512:12 523:21 524:3</p> <p>partial 312:4 394:22 395:8,20, 24 396:3 404:14, 15,24 405:5,6,8, 11</p> <p>participate 313:18,23 489:2</p> <p>participated 478:4</p> <p>participating 327:15</p> <p>parties 299:22 319:10,15 321:2, 4 323:18,22,26 324:4,7 328:10 360:17,22 363:6 368:12 388:26 399:22 429:24 433:22 479:16, 21,23 480:3,12 481:11 483:1,13 490:7 503:17 517:13</p> <p>partly 475:18</p> <p>parts 343:12 368:6 380:24</p> <p>party 318:18 319:2 320:10,13, 16 324:12 325:6 333:26 334:13 336:13,22 357:25 364:19 365:15 374:3,6 383:9 385:13,19,22 386:20 387:2,18, 19 419:20 424:7,</p>	<p>12 426:22 433:17 434:5,7,21 483:21 485:21,22 507:14 509:4,18 514:3,10,20,23 515:3,6,10 520:13,15 522:15</p> <p>party's 328:4</p> <p>pass 425:14 483:14 492:4 509:24</p> <p>passage 356:15 438:9</p> <p>passed 330:21 492:26 493:11</p> <p>passes 453:7</p> <p>passing 420:24</p> <p>past 336:17 339:4 390:9 399:18,24 408:23 412:1 428:16 438:1 471:22 504:24 507:13</p> <p>paths 451:5</p> <p>pathways 455:18</p> <p>patience 420:11</p> <p>patient 504:21</p> <p>pause 431:3</p> <p>pay 318:26 320:5, 19 321:4 324:19 326:8 329:9 332:14 336:12, 19,20 346:21 353:26 359:11 366:3 374:4,6 377:14 380:7 382:11 385:15,22 419:6,20 426:23 434:21 435:23 436:13 443:16 445:20 461:20 490:21 494:8 495:19 499:8 514:20 515:4 522:17,25</p>	<p>paying 381:12 382:12 386:13 388:2 408:1 426:18 434:15 435:13 495:18 515:4</p> <p>payment 329:9, 11,14 330:13,14, 16 332:10 333:26 334:3,12 382:22 452:19,24 514:3</p> <p>pays 320:11,15 335:26 435:9</p> <p>PDF 301:7 313:4, 8,11,14,17 316:16 317:8 345:7,9 346:18 347:10 349:2 353:9 356:25 361:21 362:25 370:1 372:13 373:25 384:21 386:5 392:17 394:12 420:18 421:13 432:16, 21,22 433:25 438:5 443:9 446:2,23 449:12 465:23 466:4 467:7 471:5 472:1,13 474:9 478:22 481:21 486:5</p> <p>Peace 340:3 353:16 384:24</p> <p>Pembina 299:24 300:5,15,16 302:1,2,10,16 314:4,15 317:6, 23 318:2,11 319:4,9,14,17 320:1,3,12,14,20 321:3,25 327:6 328:20 329:22 335:18 336:7,12, 19,24 337:23 341:11,15</p>	<p>345:12,22 352:7 353:3,4,13,20 354:1,11,12,23, 24 355:8 356:10 357:4,24 359:5, 20 360:12 362:20 363:11,15 366:1 369:4,7,9,14,20, 21 370:3,7,14,25 371:12 372:15 373:15,21,22 374:1 375:1 376:23 377:19 378:18,19 379:2, 6 381:6 383:6 385:2,17,20 388:12 390:23 391:3 392:12,14 402:1,4,7 409:19 413:3 417:24 418:6 419:2 420:19 421:24 422:8,13,19,22 425:19 426:9 428:7 429:25 432:19 433:10 447:3,4,9,10 460:9,21 461:26 464:15 465:3 476:23 478:18 481:24 482:9 483:11 486:11 495:19 496:11 499:12 505:8,20 506:12 520:22</p> <p>Pembina's 313:1,9,15,22 316:14 318:8 320:7,16 321:5,9, 11,22 335:19 336:9 337:11 338:8 345:7 354:4 366:20 374:2 403:23 417:19 418:7,17, 19,21 420:4 424:20 428:12</p>	<p>461:5 488:3 510:4 516:1 519:23</p> <p>Pembina/plains/ secure 301:20 339:8 404:8 420:21 432:12 499:4 505:7</p> <p>people 340:4,6,14 362:18 409:20 410:5 428:14 431:22 438:2</p> <p>people's 423:6,7 431:22</p> <p>perceive 485:26 515:22 521:13 522:8,20</p> <p>percent 329:20 331:3,22 332:18, 20 334:25 335:7 365:6,8 366:26 385:15 393:14 415:6 423:8,15 459:26 500:2 502:9 508:11,19 519:21,24 522:15,17</p> <p>perfectly 522:21</p> <p>performed 331:6 335:14</p> <p>period 370:20 446:19</p> <p>periods 508:1</p> <p>permit 330:16</p> <p>permits 309:4,13</p> <p>permitting 502:6</p> <p>person 341:15 416:20 434:12 505:21</p> <p>personal 355:6 370:17,19 425:1</p> <p>personally 340:13,17,20</p> <p>perspective 324:12 325:8</p>
--	--	---	---	---

421:17	6,11,13,19	416:11,13,17	411:17,21	402:2,5,8 403:6
petroleum	329:21 330:26	417:5,6 419:7,15	414:21,22 415:20	404:13 406:20
302:12 323:3	334:7,20 335:20	420:20 422:17,23	419:17 433:14	407:16 417:20,25
488:20	336:8 337:7,9	423:6,16 424:6	435:6 437:13	419:2 421:15,25
phase 331:13	338:12,13	425:15 427:6	450:9 455:19,22	422:10,13,19,22
395:22 440:24	339:12,18,23	432:26 433:4,12,	456:1,23 460:6	426:9 428:11
442:17	340:2,4,11,18,25	13,18,23 435:5,	472:18 474:17	432:19 433:10
phases 349:11	341:8,20,25	26 436:2,23	475:5,10 476:17,	447:2,4,7 460:9,
Phd 306:12 307:4	342:1,6,12,17,18,	439:5 447:7,9,25	23 485:15 486:24	21 461:26 476:23
philosophy	21,25 343:7,8,15,	448:17 450:16,	490:12,14 503:18	478:17 481:23
360:20	18,19,25,26	22,24 451:8,11,	515:23 516:11	482:8 483:11
photographs	344:1,7,10,13,15,	14,25 452:5	519:23	486:11 495:19
515:20	20 345:3,14,19,	453:1,2,8,10,25	pipelines' 337:10	496:11 499:12
phrase 449:18	21,26 346:2,8,10,	454:2,16 455:17	486:14	500:7 503:26
487:21	23 349:10,18,19,	456:10 457:9,12	pits 416:3	505:8 508:25
physical 352:20	26 350:12,18,20	458:5,15,19	place 325:17	509:12,16 518:19
359:13 374:15	351:4,25 352:2	459:5,11,17,21,	336:26 348:7	519:23,24 520:1,
picky 516:8	353:4,16,17,21	23 474:19,20,22	354:23 380:11	23 523:5
piece 359:3 380:4	354:14 356:16	477:14,22 478:11	382:16 416:16	Plains' 313:5,12,
393:9,10 442:24	358:6,22,25	482:26 487:7,14,	423:1 424:11	15,21 316:14
454:17	359:14 361:4	16,17 488:19	492:11 509:13	317:7 322:17,21
pieces 500:1	362:9,18,21	498:5 500:14,15	516:7	323:9 324:9,17
pipe 367:16	363:12 367:9	501:13,16,17	plain 492:17	325:1,4,15,20
370:14 380:5,18	370:4,5,6,8,15,26	502:15,22 503:2	Plains 299:24	326:5,9 329:22
408:3 415:14,17,	371:17 372:3	506:21 510:26	300:5,12,14	333:25 334:1,2,
18 416:2,26	374:12,16 376:24	511:19 516:13,23	302:24 303:3,8,	20 338:2,7
510:22,26 511:10	377:5,21 378:1,2,	517:4 518:7,25	16,21 314:18	347:19 349:16
pipe's 511:9	3,5 379:25 380:2,	519:9,12 520:1,	315:3 320:20	388:21 403:23
pipeline 300:6,	25 381:2 382:4,	14 521:25	322:8,13,25	404:18 420:4
11,26 301:4,17	20 383:23 384:1,	pipeline's 414:19	323:4,7,14,21,25	426:3 461:5
302:3,10,16	12,25 385:19	450:5 453:11	324:3,20,23	488:3 500:10
303:1 304:8,14,	386:8,16 387:25	pipelines 300:7	325:5,7,9,16,20,	502:2 504:5,11
18 305:4,15	388:3,11 389:5	303:4,10 304:11,	23,24,26 326:3,	516:21
306:19 307:20,23	390:10 392:23	21 306:15,17	12 327:6 328:21	Plains/pembina
308:12 312:24,26	393:8,13 394:2,7	307:10 312:12	334:11,18 335:15	481:12
313:25 318:2,17,	395:1,21,23	318:10 319:13	341:11,14 346:6,	plan 325:7,12
19,22 319:2,16,	396:4 397:21	323:5,6,9 324:24	7,20,23 347:4,11,	330:11 331:1,19
18,25 320:9,25	398:1 402:1,4,7,	325:1 327:14	12,15,23 348:8,	332:3,18,24
321:5,10,11,20,	22 403:23	328:1 329:1,6,9,	18 351:7 359:6	333:8,15 347:2
24 322:21,22	404:20,22,25	22 333:20 334:1,	365:13 367:11	350:11 381:25
323:19,23,25	405:3,6,18 406:1,	14 342:4 346:20	376:23 377:19	405:2,18,21
324:7,13,14,17	20,23,24 407:3,	350:12,13 352:15	378:18 381:6	406:3 441:10
325:4,12,15,16,	15,16 408:19	358:23 372:7	382:20 383:7	443:5 453:21,22
18,22 326:1,6	409:5,21 410:3,	377:7,9 379:5	388:20 389:13,	454:18 455:15
327:23,26 328:2,	26 411:5 412:7,	383:3 384:16	15,24 392:6,8,21	456:2,5 457:8
	10,13 413:26	386:19 394:25	393:7 394:26	463:23 467:10,
	414:3,6,11,12,15,	409:12,13 410:10	398:2,12,18	13,14,24 468:8,
	19 415:13,15			

18,22 469:2,17 470:10,14,25 507:21 planned 399:24 453:21 487:5 491:14,15 492:9 planner 308:21 309:2 466:23 planners 466:7, 9,13 467:2 planning 305:15 308:12,14,23,26 309:5,9,14 310:24 312:5 319:18 396:5 397:20 404:20 405:17,20 406:1, 10,19 407:2 442:17 450:25 451:16 453:15 454:3,15,25 463:26 468:13 469:18,21,22 521:22 plannings 309:21 plans 309:19,20 350:10 381:10 385:17 469:7 507:15 plant 477:23 play 473:20 played 309:9 playgrounds 451:5 pleased 318:1 327:1 498:23 pleasure 300:4 322:12 PM 400:10 402:16 pocket 483:11 488:4,5 508:9 pockets 483:11 point 336:11 338:4 350:23	390:10,11,12 395:25 406:9 416:15 418:9 423:11 434:21,23 436:15 438:11 440:1,5,15,18,22 444:1,26 448:8 449:3 458:24 465:6 469:17 470:3 471:17,23, 24 479:24 480:8 485:18 505:25 507:1 pointing 386:5 448:8 points 326:16 374:9 440:9,19, 26 policies 302:15 303:8 308:22 434:20 469:18 471:18 policy 302:3 304:22 309:19 political 303:5 306:16 475:5 population 467:11,19,25 468:14,15 Porco 525:3,14 portfolio 303:20, 22 portion 331:10 336:7 389:5 390:10 portions 347:18 position 301:18, 23 302:6,20 303:13 304:1 320:6,7 321:1,22 322:17 325:11 326:9 334:2 336:10 389:24 391:3 404:18 415:10 426:3 427:23 428:15	441:23 461:18 473:18 511:14 516:21 positions 322:3 327:5 328:20 positive 365:1 possibility 430:11 445:23 464:17,26 possibly 419:6 potential 325:5 328:14 364:26 393:17 442:3 450:19 453:14 463:24 potentially 352:19 358:25 359:1,3 367:17 388:14 396:6 power 303:6 486:2,4 492:4,7 493:7,22 519:13 powers 483:13 practice 307:3 309:16 318:16 320:9 321:16 323:17 324:9,11, 16,21 328:5 360:24 385:13 425:3 466:15 471:13 514:26 519:12 520:17 practices 303:9 318:7 322:24 365:5 practicing 308:18 309:17,23 predecessor 309:25 325:20 483:6 predecessors 311:22 predict 328:15 predictable 490:11	preference 428:12 429:11,26 430:15 431:9,15 preliminaries 299:22 preliminary 440:24 premature 381:22 preparation 501:25 prepare 312:9 347:2 355:15 prepared 310:4 314:5,20 315:6, 22 316:18 317:10,22 320:4 322:7 326:3,22 336:7,12 362:2 432:19 465:26 487:24 521:18 preparedness 304:8 preparing 396:14 prepayment 451:25 452:4 presence 321:9 325:15 450:9 457:9 present 325:26 327:1 332:1 387:4 presentation 417:21 421:15,25 422:10 presented 331:11 387:12 391:25 president 300:9, 13,14,16,19 301:26 302:9,23 304:12 340:2 Press 306:18 pressure 394:22 395:8,20,24,26	396:3 404:15,24 405:5,6,8,11 presume 495:5 presumption 492:6 pretty 382:6,7 400:4 428:26 435:18 437:9 515:9 preventative 385:18 prevention 304:10 405:1 509:5 preventive 336:20 previous 394:13 442:4 previously 304:12 327:24 372:19 403:19 408:25 520:20 price 329:18 426:13 438:11 439:2,6,12,18 440:1,5,9,15,18, 19,22,26 441:7 443:12,20 444:9, 12,14,15,16,22,26 445:19 501:12 price-sensitive 438:15 prices 329:25 440:10,11 444:20 445:2 pricey 443:3 pricing 443:23 444:8 primary 420:5 principal 490:19 principles 494:7 print 356:3 prior 337:14 338:5 341:22
---	---	---	---	---

366:24 429:15 430:7 433:9 439:21 priority 468:9 pristine 416:2 private 309:7,8 323:11 459:18, 20,22 479:21,23 480:12 481:11,23 482:8 483:15,18 484:16 485:21,22 487:26 488:25 492:12 494:9,10 probability 441:17 442:6 512:20 problem 429:1 problematic 327:25 problems 493:24 procedural 428:4 proceed 299:26 335:2 363:21,23 364:20 386:26 430:15,23 442:20,21 464:2 497:26 498:2 506:8 507:15 508:7,8 proceeded 516:4 proceeding 299:13 301:19,24 302:7,21 303:13 304:2 305:3,6 310:11 312:19,24 313:1,4,7,23 314:15 315:3,16, 20 316:9,13 317:2,19 320:7 325:16 327:16 358:2 388:24 389:19 390:25 396:21 397:3,6 398:3,13,15,16 408:6 419:23	420:2 425:10 433:11 473:20 476:24,26 478:19 495:21 497:24 proceedings 299:1 308:5 400:10 401:1 402:16 501:14 524:10 525:5 proceeds 351:24 process 312:12 321:7 323:22 330:9 337:8,17 353:6 354:20 358:19 364:14,21 374:2 386:18,22 387:16,23 388:23 397:9 403:1 413:19 422:26 429:19 443:13 485:17 504:5,9, 11,14 505:20 506:25 507:5,20 509:2,11,15,26 515:10 processed 388:25 processes 304:23 319:14 397:17 processing 304:15,17 318:12 327:12 410:4 505:20 508:14 procure 382:21 produce 299:16 produced 412:3 507:8 516:15 product 362:7 413:1 444:2 production 488:18 products 352:20 professional 311:12 361:2 466:9,13,14,18, 23 467:2	profile 350:19 profit 421:1 profitable 419:5 program 354:7 378:13 380:6 466:18 programs 303:8 358:14 377:23 380:3 503:21,23 516:5 prohibited 299:20 project 303:19 335:13 340:20 347:16 349:5 359:16 360:4,9 367:13,20 371:24 374:7 376:15 382:21 434:6 467:19 486:13 502:5 517:12 projected 421:18 projection 421:14 467:19 projects 300:12 303:15,21,23 323:20 384:9 467:24 promised 497:22 promulgate 483:9 promulgated 477:9 proof 382:12 proper 469:24 519:20 properly 320:11 352:2 361:8 properties 312:3 438:13 441:2 455:18 property 310:25 311:20,26 312:6 319:8 436:17,18	442:11,25 443:16 448:4,24 452:25 474:21 proponent 496:9 proposal 435:12 505:12 propose 305:3 497:24 proposed 337:19, 25 343:25 469:3 484:18 488:4 500:14 proposing 416:20 520:14 proprietary 360:19 362:7 383:14 384:4 386:12 protect 506:21 511:19 protected 352:2 protection 517:4 prove 493:23 provide 301:17 305:19 318:3 329:18 331:5 334:26 357:1,18 360:16,17,22 361:13 364:15 382:4 385:25 386:9 387:25 404:2,18 406:5, 18 407:1 409:15 438:19 473:23 504:10 509:18 provided 309:5 313:10,13 320:5 323:13 324:6 333:3 337:17 340:5 360:15 363:26 365:23 373:22 386:21 397:3,25 403:5 417:18 448:18 474:15 499:9	503:3 510:6,8 518:21 providing 308:4, 24 310:10 312:18 province 311:15 320:14 321:15 323:12 324:25 329:2,6 423:5,26 426:25 446:19 493:22 525:8 provinces 485:11 provincial 311:3 460:3 provincially 329:5 proximity 410:12 public 305:8,25 306:14,25 307:15,16,19 308:19 312:13 320:17 323:11 325:19 326:4 332:21 361:3,15 381:18 397:23 402:24 404:26 413:15 420:1 438:7 446:26 449:6 459:2,4,5, 12,18 461:4 469:4,6,11,13,14, 20 470:3,8,9 472:23 475:9 477:23 478:22,25 479:1,2,16,21,24 480:4,6 481:3,13, 25 482:1,6,10,14, 19 483:1,5,17,22 484:5,8,11,21 485:5,23,25 486:1,26 487:26 488:1,2 491:18 492:1,2,15,17 494:8,12 495:4,6 496:12 516:10 519:13
--	---	--	---	---

<p>publish 306:13</p> <p>published 306:17</p> <p>pull 369:26 510:17</p> <p>purchase 360:6 436:16 439:2,6, 12,18,22 442:10, 26 449:24</p> <p>purchased 321:8 325:14 337:20 442:11</p> <p>purchaser 441:18 443:15</p> <p>purchasers 330:1 444:11,12 445:20</p> <p>purchasing 337:14 338:6 436:18 442:5</p> <p>purely 416:1</p> <p>purporting 437:7</p> <p>purpose 299:9 325:21 328:3 371:25 372:8</p> <p>purposes 338:6</p> <p>pursuant 330:6 432:25 478:10</p> <p>pursue 328:10 398:11</p> <p>purview 438:2</p> <p>put 305:7,10,14 344:7 362:1 377:2 381:1 391:21 409:9 412:24 416:16 431:5 436:2,16 437:6,17 445:16 456:4 471:24 476:21 480:2 488:4 502:20 509:12 513:24 516:7</p> <p>putting 305:5 517:15</p>	<hr/> <p style="text-align: center;">Q</p> <hr/> <p>Q1 417:21</p> <p>Qualico 318:26 319:9,10,18,23 320:2,5,6 321:8, 21 322:15 323:15,22 325:10,14 327:7, 21 329:20 331:11 333:4 335:18 336:6,13,16,23 339:13,18,22,26 340:6,10,15,18, 24 348:17 351:18 352:7,24 354:10 355:11 357:19 359:18 360:15,16 361:20 362:2,20 363:16 364:6,8 365:18,25 366:1 368:9,19 369:3, 21 371:9 372:20, 24 373:6,14,22 374:22 375:1 376:5 378:19 379:9,13,26 385:14,22 387:12 388:18 389:2 390:2 392:4,6,7, 8,10,12,13,14 393:4 401:16 404:12 407:7,14 408:6 422:7,9 424:26 425:18 427:22 438:8 439:3 443:19 445:9 461:14 471:11 472:20,26 481:12,23,26 482:8,18 483:12 486:14,24 491:9, 12 492:1,3,13,22 493:6,7 495:19 515:18 516:3 517:13 520:20</p>	<p>522:25</p> <p>Qualico's 318:4, 23 320:17,21,26 321:1,12,23,26 325:8,24 326:6, 10,13 327:2,17, 20,25 328:17,18, 22 329:19 341:6 363:1 385:2 394:19 425:18 438:21 467:6 472:14 473:18 486:12 487:5,9 488:5 492:1,18 521:19</p> <p>qualifications 305:20,24 306:24 308:10 310:15 311:4 466:6</p> <p>qualified 441:12, 13 451:1</p> <p>qualify 469:5</p> <p>qualifying 305:2</p> <p>Quarry 408:26 409:11,12 411:7</p> <p>quarter 339:4 399:24 400:7 421:25 422:11 448:5 450:16 451:7,12,14 453:18,20 497:5</p> <p>question 341:12 343:2,20,21 347:17 361:17 363:14 366:16,22 368:5,7 375:4 377:25 378:7 381:10 383:3 384:23 385:23 386:4,8 387:21, 23,24 388:1,7 397:15 398:9,20 399:6,7 403:13, 15 404:13 405:15,19 408:15 409:5,15 413:25</p>	<p>417:13,15 418:22,23 422:13 423:21 432:24 437:4,10 458:4, 26 460:19 461:8 464:20 467:17,23 471:16 478:2 482:23 483:8 484:8 485:18 488:6 490:1 491:26 493:17 495:16 504:2 510:4 511:6 512:5 513:2,21 515:17,22 519:5 520:20 521:10, 15,17,23,24 522:6</p> <p>questioning 338:14 358:6 399:3 420:15 425:9 430:13 435:17 463:20 464:18 523:21</p> <p>questions 322:4 326:17 339:15 341:11 346:14 347:25 389:15 420:5 421:9 428:21,22 429:13,15,25,26 430:20 431:4 432:10 437:8 463:25 466:5 482:6 487:24 496:16 499:3 504:18,23 505:1, 6,7 512:24 515:12,15 521:6, 7 523:18</p> <p>quick 406:9 410:19 411:13 448:12 515:10</p> <p>quickly 474:2 515:11</p> <p>quiet 467:15</p>	<p>quotation 448:2</p> <p>quote 434:2 438:7,9,21 479:9, 11,12 480:2</p> <p>quote/unquote 504:8</p> <p>Québec 308:15</p> <hr/> <p style="text-align: center;">R</p> <hr/> <p>radar 497:15</p> <p>railcars 323:8</p> <p>railway 343:17</p> <p>rainbow 406:23, 24 407:2 500:14</p> <p>raise 475:14 489:14,23</p> <p>raised 307:25 429:15</p> <p>raising 429:8 478:17 485:19 489:2,11,13</p> <p>range 334:25 364:26 405:11 417:8 518:4,12</p> <p>rate 419:23 474:19 501:21</p> <p>rate-regulated 476:24</p> <p>rates 425:11 426:7 474:26</p> <p>rationale 333:25</p> <p>re-direct 403:10 523:20,21,22</p> <p>re-evaluate 366:13,24</p> <p>reach 506:23</p> <p>reaches 468:15</p> <p>read 341:19,21 342:18 343:24 345:13,25 349:9, 17 363:8 389:17 390:22 393:26 394:1 395:16,17</p>
---	--	--	--	---

408:12,15 418:7 434:3 438:9,26 439:8,25 440:13, 20 441:15 443:10 446:16 448:3 449:6 450:2,11 471:10 472:15 473:3 476:11 479:13,18 480:2, 7,10 481:10,25 482:4,17 486:11 487:4 488:14 500:11 reading 521:8 ready 339:7 366:2 431:11 516:1 522:13,18 real 305:12 310:17,23 311:14 312:12 329:25 424:6 445:1,11 509:24 517:1 realistic 442:2 reality 438:10 439:26 440:14 realize 488:10 realtor 329:17 437:1 reason 319:25 364:4 393:10 408:8 415:14 422:25 451:14 485:8 489:4,6,9 516:8 reasonable 307:20 318:26 319:4 381:7,14 385:5,25 403:7 407:26 469:8 492:6 512:8,10, 11 reasons 320:18 372:20 397:8 492:16 rebroadcasting 299:19	recall 507:23 receive 359:19 361:24 383:19,21 509:3 received 337:13 338:4 359:20 393:7 receiving 505:11 recently 334:4 reciprocal 520:2 recognize 488:16 recognized 450:4 recommendatio n 480:17 recommendatio ns 478:26 488:15 reconsider 313:3,6 reconsideration 313:4,7,11,14,16 reconstruction 436:11 record 299:14 341:19 369:15 381:18 398:17 406:17 408:14 recording 299:19 records 357:14 380:2 389:5,17 390:9 recover 304:15 427:16,22 520:9 recovery 304:15 324:20 334:1,3,6, 12,18 335:4,12 348:17 349:4 350:25 352:25 382:15 403:22 509:13,16,20 513:7 521:20 recycling 304:16 327:13 red 395:12	redesignation 309:4 redevelopment 309:22 reduce 457:19 refer 300:6 466:22 482:3 reference 334:18 335:17 353:15 372:14 395:15 500:18 referenced 502:4 referencing 418:10 referred 397:16 505:11 referring 331:24 343:18 364:25 366:9 369:22 449:13 482:12 488:23,24 504:13 511:1 refers 370:3 refine 364:18 refined 387:3 reflected 475:4 reflection 367:6 reflects 329:9 389:24 refresh 523:2,14 refunded 509:14 refused 334:8 refusing 326:10 regard 354:22 region 300:13 302:24 467:10, 11,24,25 504:8 regional 467:14 register 459:6 registered 303:17 312:4 458:15,20,22 466:23 467:2	regular 338:23 350:9 377:22 378:13,15,21 386:14 416:10 503:23 regularly 319:17 411:1 regulated 306:14 307:6 329:5 477:7 regulating 481:14 483:17 regulation 306:9 342:24 361:4 362:19 441:10 475:13 476:6 477:5 485:5 487:17 490:20,26 regulations 404:25 410:25 434:20 471:18 476:16 491:2 Regulator 325:18 388:23 397:1,10 433:20 461:16 477:13 482:24 485:6 486:10 Regulator's 483:22 regulators 307:11,16 regulatory 307:8 310:24 319:12 396:24 397:9 reimburse 334:8 reinforce 487:14 reinforced 345:15 reinforcement 487:6,19 495:20 reinforcing 380:17 383:25 413:8 486:14	relate 314:4,18 315:6 384:9 396:10 related 303:9 304:9 306:14 307:17 308:12 334:19 335:19 337:8 341:23 360:19 365:18 374:7 376:21 380:26 397:14 403:24 relates 305:24 306:24 307:19 308:11 310:16 395:9 437:5 513:4 relating 387:23 447:13 relation 346:7 378:19 403:23 447:1 relations 489:14 relative 312:12 relevance 403:1 418:18,26 420:15 relevant 305:23 306:24 308:10 310:15 389:18 390:24 391:5 398:16 403:3 418:22 419:25 420:5 425:1 reliable 379:1 423:2 488:17,24 relief 328:10 relieve 458:7,8 relocated 433:18 relocating 435:6, 26 437:13 relocation 435:11,17 436:10 437:19 rely 319:10
--	--	---	---	---

remainder 513:20 515:8	19 421:23 422:8 432:18 434:3 446:5 448:9,24 449:5,7,11,14,17, 20,23 465:26 466:2 471:3,7 472:10 473:4,6,7 474:14,23 475:25 478:23,24 479:9, 12 480:9 486:5 488:9,11	requested 320:1 321:13 322:14 327:2 328:9 494:9 508:21	434:14 516:24	response 304:8 310:5 313:10,13 342:23 347:11,22 372:25 389:13 404:26 405:2,18, 21 406:3 479:18 486:17 497:10
remaining 452:12 454:10		requesting 505:10	requires 485:14	
remains 366:2 430:11		requests 323:23 337:12 338:4 389:1,3,4 390:8 409:20 410:5 505:21 506:12 515:10	requiring 333:25	
remarks 299:2 317:24 322:9 323:13			rerouted 370:8, 16,23,26	
remember 379:3 455:3 505:5	reported 340:6, 14,22		research 300:22	
remind 399:26	Reporter 301:9, 15 402:14 525:15,21	require 328:7 363:22 380:12 399:7 410:6 411:3 413:8 455:9 456:12 502:14	resetting 427:4	responsibility 319:24 328:6 377:8 458:9 469:6 471:22 495:13
reminder 299:12		required 309:14 319:26 320:19 323:19 324:5 330:14 334:15 336:14,20,21 337:24 344:25 345:26 346:9 348:23 361:3,8 378:22 380:9 385:15 386:15 404:23 433:15 466:14,17 475:11 488:19 494:20 499:9,14 502:15, 18,26 506:10 511:18 512:2 519:16	residential 309:12 319:8 323:9 332:11,19, 22 333:15 401:20,22 443:12 449:2 472:4,24 486:13	responsible 303:2,20 318:20, 25 319:3,20 321:17 332:10 340:3,21 364:7,8 377:6 379:13,16 387:19 398:1 427:5 434:5,10, 14,18,26 471:13, 20 485:3,4
removal 349:18 456:10 500:15	reporters 299:16 463:12 523:24		Resources 311:22	
renegotiated 427:2	reporting 299:9 306:8 504:8		respect 301:19, 24 302:6,20 303:13 304:2 313:16 321:2 325:11 327:7 336:10 337:12 338:3 354:17 355:2 358:23 387:7 404:19 410:26 476:13,14 479:19 482:13 488:16 490:6 499:15 503:3 516:16	responsibly 324:9
renewal 427:7	reports 312:10 467:3			responsiveness 337:6
renewed 427:2	represent 318:5 322:22 332:2			rest 428:24 439:13 522:10
repair 388:2 415:16 502:16 510:26 512:2	representatives 342:6 430:18			restate 403:15
repairs 408:2 415:23 510:22	represented 432:25 435:5			restriction 450:17,19 451:12
repeat 342:16 363:14 365:21 386:4 481:9 508:26	representing 426:9 435:25 437:18		respectfully 321:25 326:12 328:21	restrictions 431:23 449:18 450:6 453:13
repeated 366:23	represents 334:22,24 335:22,23		respecting 342:3	result 321:19 323:23 352:16 361:25 379:14 383:23 413:4 427:17 445:20 511:19
rephrase 403:15	reproduce 449:25	requirement 361:26 405:22 487:6,14,15,16 491:11 516:22	respond 307:25 312:10 315:22 322:4 326:17 389:15 390:23 422:15 505:15	results 358:13 360:18 371:2 386:10 427:4 449:3
replacement 415:16	request 299:21 313:2,5,18 324:14 334:11 386:19 388:25 434:13 505:15 509:3 514:2,19 521:19 522:26 524:3	requirements 319:6,12 342:3, 12,26 343:10 344:3 345:2 346:2,10 358:8 362:17 380:17 395:19 396:26	responded 391:6 430:1	retained 306:7 312:9 347:1
reply 310:5 312:10 313:15 316:17 317:9 466:1			responding 449:13 450:1,10, 14	
report 301:3 307:24 310:4,5 315:20,22 316:4, 8,13,17 317:6,9 331:24,25 332:25 346:25 372:22 393:2 417:20 418:6,17 420:4,				

433:10 448:17 return 358:5 392:16 407:17 408:4 431:10 444:21 458:1 462:10 514:22 515:8 returned 514:4, 25 returns 445:12 revenue 421:1 revenues 418:7 review 311:23 329:8 357:4,7 360:12 361:14 372:15,19 382:25 390:17 393:18 411:24,26 442:1 509:17 513:13 reviewed 309:4 314:4,19 348:2 418:5 446:8 474:23 reviews 347:23 394:4 503:8 rezoning 308:24 Ridge 408:26 409:11,12 411:7 right-hand 395:13 right-of-entry 446:13 447:3 right-of-way 312:2 341:26 347:19 396:7 406:2 413:11 415:5 447:2,5,6 448:13 451:17,18 453:12 454:7 458:15,20 459:2, 5,6,17,22 461:5, 17,25,26 488:25 498:7 right-of-ways 423:23,24	rights 305:11 310:16,25 311:18,20 312:5 322:22 329:3,4, 12 437:2 451:22 452:10,26 454:23 459:23 460:9 461:9 466:24 484:17 rights-of-way 446:6 rise 481:24 482:10 risk 324:12 334:10 360:20 438:18 515:23 road 323:24 330:26 331:9 336:26 341:24,25 342:20 343:12,16 344:10 354:14,15 378:2 379:4 380:25 383:23, 25,26 384:10,11 411:4,21 412:6,9 413:10 414:11,14 416:10,17,23 441:16 456:10,20 457:15,18 459:2, 5,7,12,19,23 460:8 461:4,15, 17,24 462:1,2 486:26 491:10, 12,13 495:3,4,8, 25 496:9 503:2 511:19 515:20,21 516:22 517:2 518:7 519:16,18, 19,22 road's 417:8 roads 331:15 409:13 411:17,24 471:15 472:18,23 486:15 487:7 494:20 495:14 519:12,13	roadway 343:6 345:16 347:18 382:5 491:11 roadwork 343:25 380:1 Rob 310:19 Robert 300:19 301:13 403:19 Robinson 401:6 513:1,2 515:14 robust 396:24 405:1 role 301:18,24 302:6,14,20 303:13 304:1,20 305:18 308:20,24 309:2,10,17 361:5 469:6 roles 303:19 Romanesky 300:18 301:6,13 305:5,14 308:9, 13,14 316:12,20 330:5,8,24 333:23 403:19 454:13,26 455:2, 25 462:10 465:22,25 466:3 487:2,23 room 299:18 432:3 480:24 492:20 505:6 rough 355:3 364:13,15 365:13 385:12 386:21 roughly 302:11 376:7 round 303:26 route 436:4 routed 454:16 routine 394:21 routinely 397:1 routing 305:15 308:12 310:24	312:3 row 300:17 303:26 Royal 311:9 RPP 466:25,26 RPR 402:14 525:20 rule 477:1 483:9 488:4 490:13,18 519:11 Rules 341:8,20 343:8,25 346:3, 11 487:16 ruling 399:6,12, 21 402:19 420:13 run 312:23 357:15 409:12 415:20 516:5 runner 474:7 running 450:16, 23,24 451:12,14 459:19 runs 406:20 407:3 453:8 459:18 rush 445:1	sale 329:24,25 444:14 sales 330:3 512:22 sandblasting 374:11 Saskatchewan 311:19,25 satisfactory 399:22 462:15 463:19 satisfy 319:5 385:24 386:2,12 scale 517:24 scenario 501:2 504:13 scenarios 412:20 416:22 schedule 349:4,5 360:5,24 390:13 399:23 507:22 509:19 523:25 scheduled 378:14 380:4 429:23 scheduling 300:3 scheme 309:12 384:17 scholarly 306:18, 19 482:5 scholarship 482:13,16 School 308:16 science 303:5 311:6 scope 319:5 320:24 333:19 337:18,22 349:5, 16 350:25 351:19 354:19 357:8,10, 11,12 358:17 360:4,12,23 364:6 367:18,20 371:26 372:16
---	--	---	---	---

S

safe 319:3
336:14,21 337:2
358:22 361:4
362:17 377:9
379:1 388:11
410:26 414:23
423:2 516:11
safely 319:12
384:12
safety 345:19
515:24 516:10
Saint-etienne
308:17
sake 350:7

373:26 374:10 376:15 379:12,19 387:1,7 388:12 396:21 409:22 500:4,10,12 507:22 510:11 516:2 scotches 492:8 Scotia 311:23 screen 356:7 447:15 510:15 screens 341:6 scripted 462:13 scroll 390:6 394:12 467:8 468:6 scrutinize 382:25 search 411:13 seat 428:13 seated 299:4 300:20 339:6 399:16 400:1 402:17 420:10 431:10 432:2 463:4 497:19 504:26 second-end 364:19 second-in 425:7 second-in-time 318:18 320:10,12 321:16 323:18 336:13,22 361:6 378:26 379:8 383:9 385:13,21 386:20 387:2,12, 18 415:5 419:20 423:1 424:7 461:19 second-last 443:9 secondary 474:20 section 320:24 321:24 328:19	331:12,17 341:20 342:8,18 343:24 345:11 377:12 402:22 432:26 433:2,4,7,11,21, 26 436:23 448:5 450:17 451:7,12, 14 453:18,20 477:13 478:10 482:26 483:21,23 484:1,3,5,7,13 522:1 sections 476:11 sector 308:20 309:7,8 SECURE 299:25 300:5,11 304:14, 20,22,23 315:6, 16 326:23 327:1, 5,9,15 328:16,21 402:3,6,9 520:23 SECURE's 304:16 313:18,20 327:18,20 security 432:4 seek 433:17 seeking 324:12 333:26 337:9 349:24 396:16 411:7 412:6 segment 304:19 segments 327:19 seizes 484:8 sell 442:15 444:16,17 445:3, 17 456:17 sellers 330:1 selling 330:19 send 389:21 sending 389:23 senior 300:14,23 302:9 306:1 311:10 342:6 sense 318:21	430:22 464:21 483:20,23 484:4, 5 495:1 520:18 sensitive 441:7 sensitivity 438:11 440:1,15, 21 sentence 438:23 439:8 440:20 449:23 471:10 486:23 separate 397:8 521:6 separately 499:13 September 340:1 353:13 370:2 serve 483:15 service 357:2 395:19,23 426:14 472:23 474:18 475:9 494:20 services 304:9,14 310:23 318:13 323:1 382:22 402:3,6,9 434:8 Session 401:3 set 358:14 421:9 444:8 469:25 470:11 sets 426:13 443:11 setting 425:11 474:21 settled 352:1 Settlement 311:20 shaking 411:9,10 shape 414:19,23 share 322:13 332:14,22 336:7 381:23 383:4,9, 13 384:15 486:12	shared 372:20,23 381:18 shares 327:6 sharing 318:4,5 328:12,19 396:10 397:15 419:2,10 422:17 424:6,14, 19,23,25 425:14 477:2 479:14 489:24 495:25 496:1,4 Sheckter 451:24 Sheckter's 453:18 shift 320:19 325:1 ship 475:11 shipper 427:8 shippers 425:15 short 338:21 349:8 389:14 shorthand 525:5, 6 show 456:5 515:6,7 showing 382:17 394:13 shown 335:2,3 351:3 468:13 shows 321:1 shred 491:18 sic 340:1 409:10 416:3 418:5,6 460:1 side 308:24 389:6 423:17 424:15 431:19 459:23 sidewalk 347:18 sign 467:3 signed 361:23 376:6 521:20 significant 318:6,9 321:14, 19 322:19,23	325:23 328:14 361:4 376:9 422:24 423:17,25 440:7 441:18,24 442:3,7,9,19 445:10 significantly 448:14 signing 507:13 similar 309:10,18 312:16 323:14 324:22 328:10 336:1 338:8 340:14 365:12 411:4 426:12 485:10 509:2 512:23 516:20 518:18 similarly 339:21 340:9 simple 329:10 361:12 384:4 413:5 443:2 452:1 506:8,10, 24 509:6,7,10,23 514:19 517:11 simplicity 506:14 simply 332:15,17 350:23 404:13 439:11 475:12 514:6,9 single 492:25 singular 478:18 sir 302:4,18 303:25 306:22 310:8 312:21 314:17 329:16 330:4 334:16 335:16 336:4 337:3 338:10 365:13 375:22 383:18 387:20 389:25 405:20 406:3,7 407:20 408:5 411:10 414:7 424:18
--	--	--	---	--

432:24 434:19 435:4,9 437:11 439:7,24 440:17 443:18 444:18 445:18 450:16 451:23 452:19 453:7,24 456:22 457:26 458:2 460:4 461:3 466:5 467:1,9 469:10,16 470:23 471:6,21 472:8, 14 473:3,25 474:5,23 475:25 476:22 477:11 479:26 480:8,13 482:17,23 483:24 484:14,15 485:18 486:18,22 487:13 488:8,23 491:22 492:19 494:15 496:6,8 514:1 sit 429:16 431:11, 12,16,20 463:19 507:21 site 331:16 499:21 501:7 sits 321:6 sitting 492:19 523:23 524:4,5 situation 336:1 357:26 366:13,24 427:12 437:5,17 441:13 455:11 456:8 457:23 459:20 511:12 situations 322:20 507:13 six-lane 413:7 size 331:10 382:5 397:20 415:21 443:14 sizes 352:20 skill 525:7 skip 356:14	slab 349:20 351:20 352:3,10 367:10 368:3 500:14 slabs 500:16,18 501:10,11 503:1 517:15,26 slate 455:11 457:24 sleeve 510:22 sliding 358:26 slightly 333:16 376:20 slow 462:26 463:1 504:24 slower 428:1 slowly 299:11 small 384:13 509:25 smaller 494:4 smart 364:17 smoothly 299:11 so-called 365:23 social 306:14 soft 443:26 softly 299:10 soil 502:20 sold 444:3 sole 321:20 solely 423:8 solution 368:2,4 428:26 solutions 503:4 sophisticated 377:23 437:25 443:19 sort 331:8 357:16 369:25 381:8 389:6 393:3 409:9 410:13 412:24 413:5 419:23 423:14,19 426:1 428:19	444:18 500:1 513:3,4,13,21,24, 25 514:14 sorts 474:16 sought 424:25 sound 324:11 358:2 375:12 sour 395:19 396:25 sour-service 396:4 source 490:9 493:24 south 390:10 409:1 411:8 southeast 453:19 space 426:11 451:8 454:8 456:7,15,21 speak 299:10 302:2 303:7 304:22 397:22 400:2,5 411:1 420:25 421:18 505:5 517:21 518:2 speaking 379:20 493:17 speaks 341:1 383:1 439:15 specialist 394:1 specialized 308:16 specific 350:17 351:3 359:1 369:11 372:22 376:22 397:15 414:21 415:25 502:14 503:5 504:12 517:22 518:6 522:6 523:10 specifically 311:11 341:11 393:22 422:13	449:17 479:2 499:14 504:2 spectrum 309:14 split 354:13,25 385:6 spoke 340:6 364:24 517:9 spoken 340:24 400:4 sports 451:5 Sprott 300:14,24 301:11 302:5,8,9 314:3,7 317:22, 25 322:6 323:14, 16 327:24 336:5, 11 339:16,20 340:26 345:23 352:18 353:11 354:26 356:5 357:21 358:21 360:26 361:11 362:13,20 364:11 365:17 366:12,19 375:3 378:17,25 383:1 385:9 403:17 407:19,25 410:16,21 415:3, 8 417:3,24 418:9 420:23 421:7 422:14,20 424:4, 17,22 426:17 428:6 463:8 489:26 490:3,10 491:8 498:13 510:5 518:17 522:9 spurred 487:5 St 369:5 stabilized 491:1 stable 488:17,23 489:13 staff 401:11,12, 13,14 429:13 430:20 463:20 stage 330:16	337:17 468:19 stake 333:20 486:1 stakeholder 304:7 stakeholders 506:17 stand 331:7 341:17 standard 362:6 383:21 standards 319:6 415:13 519:20 standpoint 469:22 STANDS 524:8 Stanislavski 401:13 Stantec 395:15 449:16 start 300:2,8 301:22 330:18 331:8 332:7 338:19 341:10 346:13,20,22 353:7 369:25 375:8 382:16 418:17 439:24 444:19,26 499:6 507:16 508:11 509:1 started 308:23 309:1,7,16 310:22 521:21 starting 305:22 333:16 390:10 460:7 starts 505:21 state 345:25 367:2 412:7 480:21 488:14 stated 365:7 372:21 388:25 506:11
--	--	--	--	---

statement 313:20 317:23 322:8 326:22 349:8 352:4 362:14 385:11 391:3 398:17 414:9 439:14,15 449:22 450:1,4,11 479:5 492:3 493:12 statements 312:11 states 341:20 345:12 390:22 449:18 475:17 479:1 485:11 489:4 static 417:14 stating 479:22 480:14,15 statutorily 484:20 statutory 485:17 stay 361:9 432:3, 5 463:11,13 stayed 497:15 519:25 staying 430:25 steering 461:14 step 386:17,22,26 steps 505:14 stipulates 395:18 Stoll 418:5 stood 428:11 stop 343:13 storage 323:1,8 327:15 Stott 418:6 straightforward 323:21 435:18 Strathcona 460:11,14 streams 304:16 street 320:10 334:21 336:9	345:17 346:8,24 347:3 352:6 353:5,18 356:17 359:7 365:19,25 369:22 378:20 384:26 389:6 392:24 406:22 407:4 411:8 416:24 423:5 424:13 456:3,6 460:5,10,22 514:5 strengthened 345:14 stress 380:18 382:5 438:18 stresses 380:26 381:1 strictly 299:20 strong 428:12 431:9 490:24 strongly 480:16 structure 309:20 330:11 331:1 332:3,17,24 333:8,14 384:10 414:10,13 423:9 453:21,22 454:18 455:15 456:2,5 457:8 468:18,22 469:2,17 470:10, 25 struggles 384:24 study 344:6 360:8 411:22 482:13 515:18 516:15 stuff 434:16 436:8 Sturgeon 460:15, 17,19,23 style 443:14 subdivided 332:13	subdivision 308:25 310:2 330:15,23 487:9 subject 301:19 312:12 375:17,18 387:3 403:26 416:19 448:4 473:10 499:1 subjects 474:18 submission 300:26 301:4 310:7 313:9,12, 26 345:8 439:1,9 submissions 313:16 316:15 317:7 396:18 397:12 398:5 418:15,25 419:12,16 submit 323:22 389:2 455:23 submits 505:23 submitted 506:5, 19 subsection 341:19 343:24 522:2,4,6 subsections 402:22 522:2 subsequently 328:18 334:8 substantial 438:13 441:2 472:25 substantive 410:23 substantively 430:11 substructure 383:25 subtotal 502:8 success 475:18 successful 427:12 489:5	497:12 successfully 483:7 succinctly 409:9 suck 436:13 suggest 338:25 399:19 437:8 508:5 suggested 336:5 337:5 425:9 476:26 suggesting 430:20 437:10 464:23 suggestion 398:7,18 suitable 362:16 sulphide 395:2, 10,24 sum 387:5 summarize 305:23 306:23 308:10 310:15 summarized 448:1 summary 305:19 345:26 sums 386:24 superimposed 395:14 supervisor 501:20,25 supervisors 499:26 supplied 413:18 supply 442:23 445:26 support 307:13 356:11 363:7 368:21 369:4 371:13 372:1 373:15,21 482:7, 16 488:18 494:5 502:6 505:26	supported 461:15 supports 327:5 489:18 suppose 397:17 427:1 463:7 504:3 supposed 430:24 surface 305:11 310:16 311:18 312:5,7 322:21 329:3,4 437:2 451:22 452:10 454:23 surprising 494:1 508:18 surrounding 412:17 survey 335:5 surveyed 460:8 Surveyors 311:10 suspect 430:9 sustainable 309:20 469:8,13, 23 470:12,18 Swan 370:3 swear 301:10 switch 399:2 system 307:14 331:9 systems 395:21, 23 <hr/> T <hr/> Tab 300:25 301:3 316:14 317:6 table 420:26 477:26 485:9 tag 407:20 tagged 385:7 takes 326:1 356:8 443:24
--	---	---	--	---

taking 452:1,16 talk 302:14 366:16 369:13 383:8 398:2 430:25 436:24 457:20 463:6 496:25 505:14 talked 377:20 454:12,14 472:2 490:1 492:11 513:6 518:8 talking 340:4 350:8 363:5 365:2 370:5,6 410:24 418:20 454:7 468:18 469:15 478:21 488:26 talks 349:17 388:22 tangent 343:13 tanks 323:8 targets 333:12 tariffs 474:22,26 475:12 476:10, 12,18 tasked 522:1 tax 330:20 taxes 421:2 team 505:26 506:16 508:17 teams 505:26 technical 304:9 319:6,11 410:14 505:26 technicians 499:25 techniques 489:8 Telford 300:19 301:6,13 305:6, 10 310:14,19,20 312:15 317:4,5, 11 328:26 329:7 403:19 432:11, 14,15,18 436:25 437:21 449:19,23 450:4 458:1,11, 14 471:17 487:1, 23 492:11 512:5, 14 telling 340:7 370:7,15 421:15 ten 307:4 390:9 413:15 416:14 445:5 462:14,16 497:2,4 504:22 512:21 tend 513:22 tension 520:7,17 term 490:14 512:17,18 terminalling 318:14 323:1 terminals 327:14 terminated 352:25 374:26 terminologies 517:12 terms 337:18 346:6 352:1 372:5 378:12 383:12 391:20 412:16 430:14 436:18 454:5 514:24 519:6 521:12 522:7,19 test 479:2 testified 375:24 408:7 454:12 testify 330:26 359:17 testimony 336:6 408:13 412:2 432:23 455:3 testing 511:7 thanking 300:2 that'd 493:18	theme 426:7 themselves 469:25 470:11 thicker 415:18 thickness 415:21, 22 416:1,26 thing 344:16 351:19 361:12 372:6 408:8 413:7 416:21 453:16 479:6 484:1 494:6 things 333:12 357:17,18 367:16,21 371:25 376:17 384:17 390:22 412:25 413:14,17 414:11 418:3 421:1 428:1 438:1 441:11 450:21 498:15 499:25 501:5 503:22 518:13 thinking 425:11 430:26 521:26 thinks 385:5 thinner 415:14 third-party 303:23 357:3 360:6 500:22 501:3,15 thirdly 452:12 thought 371:21 377:15 390:4 397:24 398:1 431:3 469:11 470:7 476:8 521:2,4 thousands 324:24 413:3 throw 417:26 tight 443:25 till 432:4 463:11, 18	time 299:8 301:9 306:6 308:18 314:9,23 315:10 316:1,22 317:13 336:25 339:17 341:17 348:11,22 353:20,24 354:3 357:13 359:1 361:22 364:5 365:16,22 367:7, 25 370:20,21 376:12 379:8 382:7,25 385:3 387:10,22 397:26 399:18 420:24 424:24 428:3 429:12 430:4 440:23 441:4 443:26 445:24 446:20 449:3 452:2,16 453:7 455:20 459:1 462:6 464:16 492:21 499:18 500:24,26 502:25 507:10,12,23 508:1,19 512:10, 11 515:19 516:3, 25 time-consuming 328:7 timeline 505:10, 16 514:24 timelines 426:6 times 386:23 415:9 461:1 498:14 508:3 512:9 518:9 519:8 timing 328:14 380:16 429:9 431:19 tired 467:21 474:5 title 458:23 459:7 478:25	titled 349:5 356:10 371:12 374:1 394:22 395:8 titles 458:16,20 today 299:24 302:2,14 303:7 304:20 307:24 318:1 322:12 327:1 333:20 351:13 359:6 366:2,6 380:23 397:7 398:21 405:9 419:14 420:2 422:25 423:4 426:9 428:2,10,13 429:3,16 431:5 432:7 462:21 463:24 464:15 465:3,16 499:11 503:19 505:19 508:3 517:1,24 519:15 520:3 today's 453:4 523:20 524:3 told 351:7 352:5 353:26 359:5 362:20 363:15,21 375:11 395:5 396:2 405:16 416:4 433:9 437:12 491:13 499:8 tolls 307:20 474:26 475:12 476:10,12,18 tomorrow 428:8, 14 431:6 463:17, 21 464:1,18 465:1,2,4,12,14, 17 524:4 tonight 431:17 top 347:23 361:21 395:13 405:9 406:4 413:24
---	---	---	---

421:1 432:22 468:6 500:21 502:9,20 top-line 421:18 Torr 300:11,24 301:11 303:12, 14,15 322:13 326:15 334:17,23 336:1 338:2,7 340:17,20 342:16,22 344:26 346:22 348:12,20 349:14 351:12 352:24 353:1 364:24 378:7 380:20 382:14,26 383:1,6,8,10 389:8 392:19,25 393:6 403:17 410:18 411:9,12 414:7 416:7 500:8 502:24 503:11,25 508:25,26 513:6, 10 517:9,20 523:16 total 333:5 387:14 473:11 502:10 totally 441:6 touched 452:8 tough 337:26 414:26 tract 457:24 tracts 332:13 trade 302:12 303:17 traditional 456:2 477:3,8 traffic 344:12 345:20 383:24 412:25 413:23 487:8 515:18,23 516:13,22,26 trailers 499:26	501:6 Transcanada 476:16,17 transcribed 525:6 transcript 299:15,17 408:14 525:1,4 transfer 327:12 515:9 transparency 337:6 382:24 transparent 323:21 382:17 435:19 transport 307:7 485:15 489:19 transportation 322:26 treatment 306:18 424:10 treatments 482:5 trespass 307:21 triangle 455:5 triangles 454:15 triangular- shaped 454:19 Tribunal 311:20, 21 452:26 tribunals 311:17 tricky 341:16 trigger 484:19 Trim 300:12,25 301:11 302:19, 22,23 303:11 314:18,21 322:7, 10 326:20 327:24 333:24 334:2 340:9,13 341:3 342:9 346:6,12, 22 347:13 352:24 365:12 376:25 377:4 380:8 381:11 383:11	389:8,11,20 392:19 403:17 404:21 406:23 407:22,23,25 410:8,17 411:7 412:23 417:25 421:10 422:14 424:1,3 425:25 426:4 463:8 497:23 498:3,13 504:3,14 516:20 521:16 523:5 Trim's 380:21 trucks 323:7 true 344:3 381:19 419:1 450:13,18 455:25 479:3 Tuesday 328:26 330:25 336:5 turn 345:6 346:18 348:15 353:3 355:11 356:24 362:24 367:10 369:6 371:8 373:18,25 388:18 390:19 392:17 432:10, 16,21 446:2,23 454:26 456:6 465:21,23 467:5, 7 472:1,13 473:6 474:2,9 turnaround 507:12 turned 472:6 twenty 501:23 two-lane 343:5 two-way 320:10 423:5 type 324:14 337:12 338:3 381:23 410:22 411:4 413:7,14 416:16 424:14 432:22 450:25 454:5 499:8,13,	18 509:6 types 344:12 352:16 372:9 381:1 411:3 442:14 444:5 512:22 513:12 typically 334:24 335:3 337:16 360:16 381:17 382:3,8 419:19 507:17 515:1 519:19 <hr/> U <hr/> ULC 392:22 402:2,5,8 ultimate 480:17 ultimately 319:3 331:15 332:6 377:5 384:11 433:23 438:20 443:15 503:14 unable 325:7 uncertain 423:3 uncertainties 367:14 uncertainty 321:15 322:19 422:24 423:26 424:17 490:9 unclear 321:18 518:5 unconventional 489:7 uncover 380:14 underneath 359:25 underpins 461:18 understand 317:22 322:7 326:21 342:13,15 343:11 356:26 358:4 360:1	361:7 387:1 393:22 395:10 405:3 410:14,22 415:9 418:18 421:12 427:23 437:14 440:12 454:11 461:8,24 473:21 494:15,22 517:12 understanding 319:20 394:16 405:26 421:14 429:16 466:21 515:2 understood 354:4 430:17 431:18 464:22 488:13 521:15 undertake 326:3 337:23 359:12 377:15,24 381:21 388:3 406:5 undertaken 360:2 undertaking 334:15 337:13 338:5 406:17,18 407:1 497:9,23 498:9 undertook 359:25 360:4,9 underway 471:1 undeveloped 453:19 unencumbered 413:12 unexpected 441:9 unfair 320:8 321:18 325:9 397:7 unique 352:14 383:20 409:25 415:24 440:6 511:12 518:9,14,
--	---	--	---	---

<p>18</p> <p>uniquely 489:17, 18</p> <p>unit 300:16 302:1 331:4 332:9,16 340:2 448:5 472:4 501:12</p> <p>United 475:17 489:4</p> <p>units 332:2,23 333:7,15 457:7, 15</p> <p>University 306:12,17 307:5 308:15 311:6</p> <p>unknown 324:25</p> <p>unlike 394:25</p> <p>unpredictability 325:3</p> <p>unreasonable 320:8</p> <p>unscripted 462:12</p> <p>unsurprising 494:6</p> <p>up-front 333:25 334:11</p> <p>update 503:23</p> <p>updated 523:7</p> <p>updates 340:5</p> <p>upfront 514:2</p> <p>upgrade 379:4 388:3 491:10 500:10</p> <p>upgraded 342:2, 13,25 343:9 344:2 345:16 486:15 517:2</p> <p>upgrades 408:2 499:8</p> <p>upgrading 344:15 366:4 378:15 386:15 415:16 471:14</p>	<p>502:14</p> <p>upset 490:13</p> <p>urban 308:14,16, 21 309:2</p> <p>urging 486:10</p> <p>user 335:1 490:20,21 494:8</p> <p>utilities 311:21 423:24 447:1 449:6</p> <p>utility 311:23 419:23</p> <hr/> <p style="text-align: center;">V</p> <hr/> <p>valuation 300:20 305:13 310:18 312:1,11 317:5 436:15 445:11,14</p> <p>valuations 312:2</p> <p>values 442:2,3 445:4 448:21,22</p> <p>variable 415:12, 26</p> <p>variables 413:22, 24 415:25 417:7, 9,11,14</p> <p>variation 440:7 444:4</p> <p>varied 434:25 517:14,19,21</p> <p>variety 307:8 318:13 323:2</p> <p>vast 324:2 488:18</p> <p>VERBAL 342:23 372:25 486:17</p> <p>versa 341:15</p> <p>version 320:26</p> <p>versus 354:14 412:13 416:11 508:13 514:14</p> <p>vibrant 489:5,17 491:3</p>	<p>vibration 358:16</p> <p>vice 300:9,13,14, 16 301:26 302:9, 23 304:12 340:1 341:15</p> <p>vicinity 433:2</p> <p>video 299:12,14, 15,20</p> <p>view 320:17 325:25 327:20 328:16 397:24 427:3 436:15 469:3 483:7,16</p> <p>views 318:3 322:14 329:1</p> <p>violate 322:21 494:7</p> <p>virtue 459:24</p> <p>vision 469:24 470:11,18</p> <p>visualize 456:20</p> <p>volume 345:20 413:23</p> <p>voluntarily 447:5</p> <hr/> <p style="text-align: center;">W</p> <hr/> <p>waiting 346:21 493:13</p> <p>walk 353:6 500:20</p> <p>wall 415:14,21,22 416:1</p> <p>walled 415:18</p> <p>Walton 347:1</p> <p>Walton's 385:2</p> <p>wanted 363:21 364:9 391:22 418:3 464:11 465:1 473:23 497:14 521:14</p> <p>wanting 352:17 383:4</p>	<p>waste 300:9 304:13,15,16,17 327:9,11,18</p> <p>watch 462:24</p> <p>watching 299:18</p> <p>water 304:21 327:14</p> <p>waterline 518:22,23</p> <p>waterlines 423:25</p> <p>wave 299:8</p> <p>ways 426:14 443:6 455:19</p> <p>website 299:14</p> <p>week 300:3</p> <p>weekend 524:7</p> <p>weeks 520:12</p> <p>weigh 403:3</p> <p>weight 345:20</p> <p>weird 454:18</p> <p>well-defined 379:2 387:7</p> <p>well-established 321:16 387:16 422:26</p> <p>well-known 471:12</p> <p>West 401:16</p> <p>whack 523:3</p> <p>whatever's 520:11</p> <p>wide 417:7 475:4</p> <p>widely 306:13 318:16</p> <p>widen 378:2</p> <p>widened 495:3</p> <p>widening 341:24 342:20</p> <p>window 500:24</p> <p>Wisconsin 306:13 307:22</p>	<p>wishing 334:13</p> <p>witnesses 301:10 312:25 336:6 338:18 362:26 391:21 397:7,22 403:6 404:13 408:7 419:15 428:5 429:25 431:4 463:14,16 476:26 505:9 510:4</p> <p>won 477:10</p> <p>Wonderful 497:3</p> <p>wondering 329:2 513:7</p> <p>word 379:18 434:9 437:15 456:26 457:3 469:20 470:9 480:14 490:10 514:14</p> <p>wording 342:8 343:21</p> <p>words 352:3 363:8 419:3 439:7 480:16 482:3 492:8</p> <p>work 307:5 309:18,19 318:20,23,25 319:1,5,19,21,26 320:3,4,5,11,15, 16,23 321:4 323:19,24 324:3, 6,8,16,19 325:12 326:2,8 330:10 332:11 334:7,14, 22 335:2,13,24 336:10,14,21,24 337:9,22,24,26 344:21,25 348:22,23 349:5 350:25 351:8,14, 19,24 352:1,16 354:5,9 357:8,10,</p>
--	--	--	--	---

11,12,24 358:9,
17,20 359:1,2,12,
25 360:1,4,5,12,
22,23 361:2,5,8
362:4,7 363:16,
22 364:6,7,15,17
365:3,9 366:2,7,
9,10,21,25 367:4,
6,9,24 368:1
371:24,26 372:9,
16 373:26 374:3,
10,26 375:11,15,
23 376:12,17
377:14,22 378:4,
15,21 379:7,9,12,
15,17,19 380:4,8,
12,14,15,24,25,26
381:2,13 382:11,
12,16,18 383:4
384:6,8,16,18
385:15,18 386:1,
13,15,26 387:2,8,
9,11 388:2,6,8,
10,12,13 403:25
404:5 405:4
409:22 410:22
411:3 412:19
414:21 415:17
418:20,23 419:21
423:1 425:7
426:20,21,26
427:19,20
435:14,20 443:4
444:18 445:13
456:12 458:8,10
475:16 489:3
492:14 499:9,14,
18 500:4,10
501:1,26 502:26
505:12 506:11,
20,25 507:16,22,
26 508:1,5,9
509:14,21 510:1,
10 512:2,11
513:14,18 515:2,
24 516:2 517:9,
10,18 519:24
520:9 521:18

522:4,12,16,17,
24

work's 412:18

worked 302:25

307:3 308:21

309:11 433:13

436:21

working 309:1

347:16 436:14

437:24 444:7

447:16 513:26

works 330:9

342:15 358:3

364:21 386:18

494:17 513:25

514:1 519:15

520:3

world 306:3

469:21 475:7

489:7

world's 491:3

worries 355:22

worse 414:19

worst-case 501:1

worth 441:5

Wow 496:1

writings 475:4,
24

written 300:26

301:4 312:26

313:26 314:14

315:2,15,19

316:12 317:4

345:8 434:19

wrong 411:22

414:2 416:25

418:3 493:23

wrote 449:7

473:4 486:23

487:10,13

X

X' 428:22

Y

yard 455:17

year 306:7,10

409:20,22 410:5

413:4 418:19

427:2 476:4

506:12

years 302:11,26

303:18 304:5,6

306:20 307:4

311:4 321:6

325:17 334:4

354:18 390:9,14

408:23 409:11

413:15,26 416:14

419:19 433:1,14

434:11,25 445:25

474:15 512:16,

18,21 520:26

523:1

years' 435:15

yesterday 337:5

393:17 408:13

409:6 417:18

428:11 429:2,10

455:3,4 457:1

504:7

Z

Z662 319:7

342:3,12,26

343:10,15 344:3,

15 345:3 346:2,

10 358:8

Z662-23 395:16

zone 396:5

397:21 404:20

405:17,20 406:1,

10,19 407:2

498:4