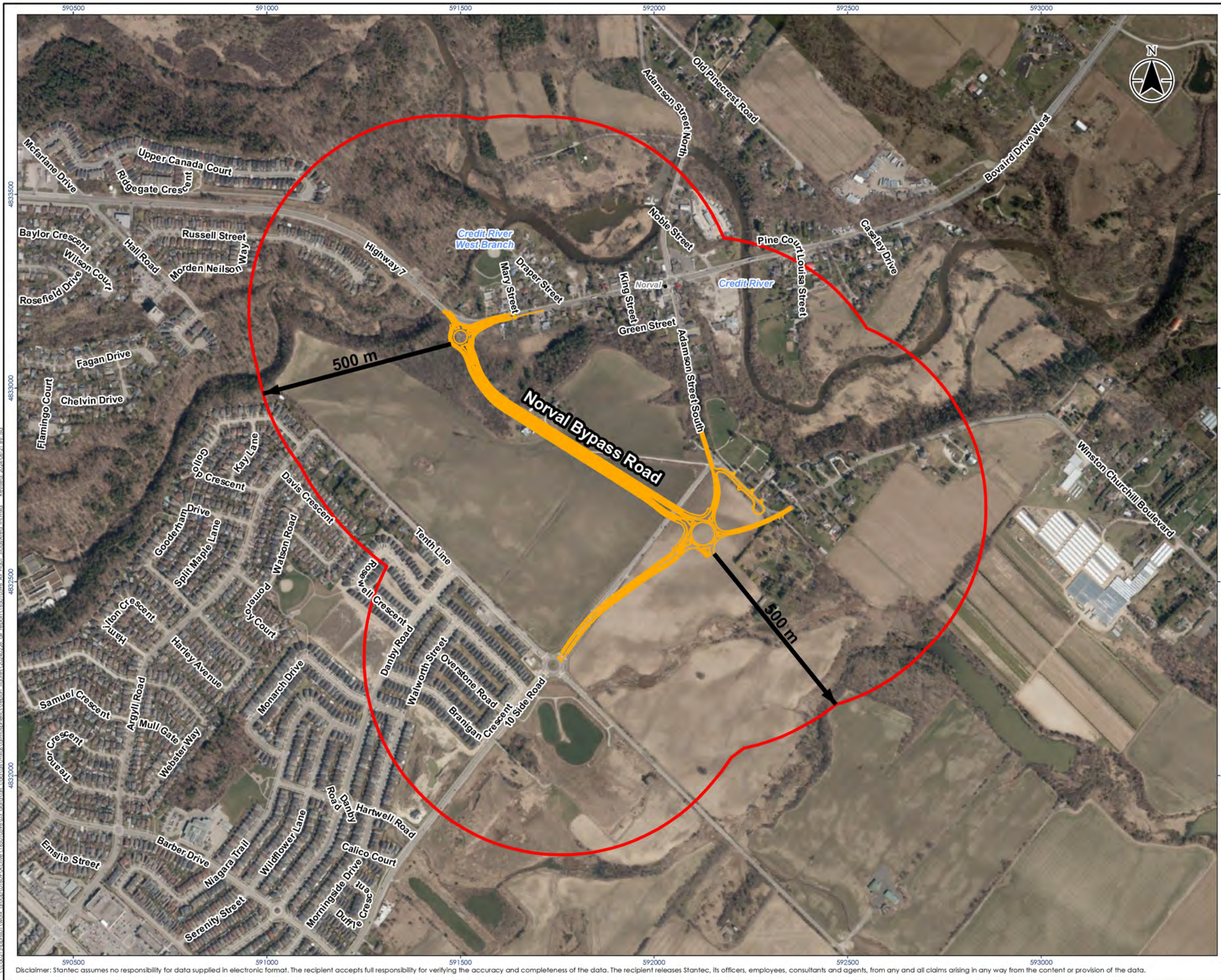


Appendices



Appendix A Air Quality Study Area and Preferred Alignment

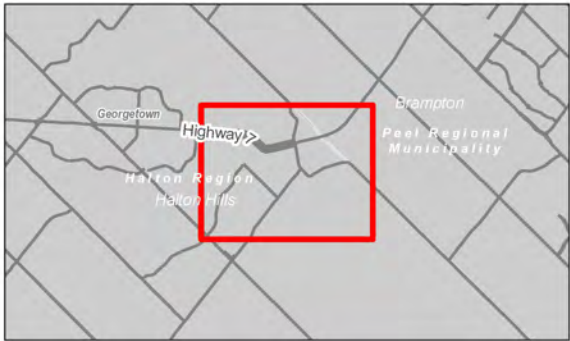




- Legend**
- Recommended Design (The Project)
 - Air Quality Study Area

0 200 400 Metres
1:10,000 (At original document size of 11x17)

- Notes**
1. Coordinate System: NAD 1983 UTM Zone 17N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.
 3. Orthoimagery © First Base Solutions, 2023, imagery date 2023.



Project Location: Halton Region
Prepared by J.Sa on 2024-06-21
165010598

Client/Project:
HALTON REGION
NORVAL WEST BYPASS - CLASS EA

Figure No.
A.1
Title
Air Quality Study Area

Appendix B Receptor Map



Appendix C: Summary of Traffic Data and Assumptions
Project Name: Norval Bypass

BASELINE (2016) SCENARIO													
MOVES ID	Source ID	Road Description	Vehicle Distribution	# of Lanes	Single Lane Width	Road Width	Plume Width (Road Width + 6 m)	Modelled Road Length	Modelled Average Travel Speed	NB/SB	EB/WB	NB/SB	EB/WB
					(m)	(m)	(m)	(m)	(km/h)	vph	vph	ADT	ADT
2	1a_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	9	1,975	-	19,750	-
1	1b_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	856	-	8,560	-
5	2a_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	125	32	-	2,083	-	20,830
6	2b_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	1,804	-	18,040
9	3_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1698	50	-	2,083	-	20,830
9	4_C	NB/SB Adamson St N (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	751	50	856	-	8,560	-
9	5_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	882	50	-	1,804	-	18,040
9	6_C	NB/SB Adamson St (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	435	50	1,975	-	19,750	-
1	7b_Q	NB/SB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	1,975	-	19,750	-
8	8a_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	120	38	-	1,547	-	15,470
6	8b_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	820	-	8,200
10	9_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	471	60	-	1,547	-	15,470
9	10_C	EB/WB Winston Churchill Blvd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	947	50	-	820	-	8,200
7	11a_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	35	-	1,297	-	12,970
7	11b_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	84	35	-	1,527	-	15,270
7	12a_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	57	35	632	-	6,320	-
7	12b_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	47	35	437	-	4,370	-
10	13_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	306	60	437	-	4,370	-
9	14_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	715	50	242	-	2,420	-
11	15_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1274	70	-	1,297	-	12,970
12	16_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1073	80	632	-	6,320	-

Note:

2016 baseline traffic data provided from the Stantec traffic team on March 21, 2023 via email.

Appendix C: Summary of Traffic Data and Assumptions
Project Name: Norval Bypass

FUTURE (2031) NO BUILD SCENARIO													
MOVES ID	Source ID	Road Description	Vehicle Distribution	# of Lanes	Single Lane Width	Road Width	Plume Width (Road Width + 6 m)	Modelled Road Length	Modelled Average Travel Speed	NB/SB	EB/WB	NB/SB	EB/WB
					(m)								
2	1a_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	9	2,293	-	22,929	-
1	1b_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	994	-	9,938	-
5	2a_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	125	32	-	2,418	-	24,183
6	2b_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	2,094	-	20,944
9	3_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1698	50	-	2,418	-	24,183
9	4_C	NB/SB Adamson St N (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	751	50	994	-	9,938	-
9	5_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	882	50	-	2,094	-	20,944
9	6_C	NB/SB Adamson St (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	435	50	2,293	-	22,929	-
1	7b_Q	NB/SB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	2,293	-	22,929	-
8	8a_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	120	38	-	1,796	-	17,960
6	8b_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	952	-	9,520
10	9_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	471	60	-	1,796	-	17,960
9	10_C	EB/WB Winston Churchill Blvd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	947	50	-	952	-	9,520
7	11a_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	35	-	1,506	-	15,058
7	11b_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	84	35	-	1,773	-	17,728
7	12a_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	57	35	734	-	7,337	-
7	12b_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	47	35	507	-	5,073	-
10	13_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	306	60	507	-	5,073	-
9	14_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	715	50	281	-	2,810	-
11	15_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1274	70	-	1,506	-	15,058
12	16_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1073	80	734	-	7,337	-
Note: 2031 traffic data projected using 2016 baseline traffic multiplied by an annual growth rate of 1% per year.													

Appendix C: Summary of Traffic Data and Assumptions
Project Name: Norval Bypass

FUTURE (2031) BUILD SCENARIO													
MOVES ID	Source ID	Road Description	Vehicle Distribution	# of Lanes	Single Lane Width	Road Width	Plume Width (Road Width + 6 m)	Modelled Road Length	Modelled Average Travel Speed	NB/SB	EB/WB	NB/SB	EB/WB
					(m)	(m)	(m)	(m)	(km/h)	vph	vph	ADT	ADT
2	1a_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	9	89	-	890	-
1	1b_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	620	-	6,200	-
5	2a_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	125	32	-	1,087	-	10,870
6	2b_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	572	-	5,720
9	3_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	369	50	-	1,087	-	10,870
9	4_C	NB/SB Adamson St N (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	751	50	620	-	6,200	-
9	5_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	882	50	-	572	-	5,720
9	6_C	NB/SB Adamson St (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	416	50	1,191	-	11,910	-
9	7a_Q	NB/SB South Winston Churchill (queue link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	69	50	1,180	-	11,800	-
7	7b_Q	NB/SB Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	228	35	1,191	-	11,910	-
9	8b_Q	EB/WB East Winston Churchill Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	50	-	348	-	3,480
9	10_C	EB/WB Winston Churchill Blvd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	888	50	-	348	-	3,480
7	11a_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	35	-	1,631	-	16,310
7	11b_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	84	35	-	1,740	-	17,400
7	12a_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	57	35	901	-	9,010	-
7	12b_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	47	35	414	-	4,140	-
10	13_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	306	60	414	-	4,140	-
9	14_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	715	50	414	-	4,140	-
11	15_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1274	70	-	1,631	-	16,310
12	16_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1073	80	901	-	9,010	-
9	17_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1223	50	-	2,040	-	20,400
7	18a_Q	NB/SB Hwy 7 / Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	3	3.5	11	17	52	35	1,865	-	18,650	-
7	19a_Q	EB/WB Hwy 7 / Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	63	35	-	2,040	-	20,400
7	19b_Q	EB/WB Hwy 7 / Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	3	3.5	11	17	63	35	-	1,087	-	10,870
10	20_C	NB/SB Norval West Bypass (cruise link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	549	60	1,413	-	14,130	-
13	21b_Q	NB/SB Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	195	40	1,413	-	14,130	-
14	22a_Q	EB/WB 10 Side Rd (queue link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	140	45	-	1,740	-	17,400
10	23_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	283	60	-	1,740	-	17,400
9	24_C	NB/SB South Winston Churchill (cruise link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	375	50	1,180	-	11,800	-

Note:
2031 future build traffic data provided from the Stantec traffic team on March 21, 2023 via email. An updated traffic analysis considering a 5-leg roundabout was provided by the traffic team on August 12, 2023 and is also used in the AQ assessment.

Appendix C Data and Assumptions



Appendix C: Summary of Traffic Data and Assumptions
Project Name: Norval Bypass

BASELINE (2016) SCENARIO													
MOVES ID	Source ID	Road Description	Vehicle Distribution	# of Lanes	Single Lane Width	Road Width	Plume Width (Road Width + 6 m)	Modelled Road Length	Modelled Average Travel Speed	NB/SB	EB/WB	NB/SB	EB/WB
					(m)	(m)	(m)	(m)	(km/h)	vph	vph	ADT	ADT
2	1a_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	9	1,975	-	19,750	-
1	1b_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	856	-	8,560	-
5	2a_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	125	32	-	2,083	-	20,830
6	2b_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	1,804	-	18,040
9	3_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1698	50	-	2,083	-	20,830
9	4_C	NB/SB Adamson St N (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	751	50	856	-	8,560	-
9	5_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	882	50	-	1,804	-	18,040
9	6_C	NB/SB Adamson St (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	435	50	1,975	-	19,750	-
1	7b_Q	NB/SB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	1,975	-	19,750	-
8	8a_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	120	38	-	1,547	-	15,470
6	8b_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	820	-	8,200
10	9_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	471	60	-	1,547	-	15,470
9	10_C	EB/WB Winston Churchill Blvd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	947	50	-	820	-	8,200
7	11a_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	35	-	1,297	-	12,970
7	11b_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	84	35	-	1,527	-	15,270
7	12a_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	57	35	632	-	6,320	-
7	12b_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	47	35	437	-	4,370	-
10	13_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	306	60	437	-	4,370	-
9	14_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	715	50	242	-	2,420	-
11	15_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1274	70	-	1,297	-	12,970
12	16_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1073	80	632	-	6,320	-

Note:

2016 baseline traffic data provided from the Stantec traffic team on March 21, 2023 via email.

Appendix C: Summary of Traffic Data and Assumptions
Project Name: Norval Bypass

FUTURE (2031) NO BUILD SCENARIO													
MOVES ID	Source ID	Road Description	Vehicle Distribution	# of Lanes	Single Lane Width	Road Width	Plume Width (Road Width + 6 m)	Modelled Road Length	Modelled Average Travel Speed (km/h)	NB/SB	EB/WB	NB/SB	EB/WB
					(m)								
2	1a_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	9	2,293	-	22,929	-
1	1b_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	994	-	9,938	-
5	2a_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	125	32	-	2,418	-	24,183
6	2b_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	2,094	-	20,944
9	3_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1698	50	-	2,418	-	24,183
9	4_C	NB/SB Adamson St N (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	751	50	994	-	9,938	-
9	5_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	882	50	-	2,094	-	20,944
9	6_C	NB/SB Adamson St (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	435	50	2,293	-	22,929	-
1	7b_Q	NB/SB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	2,293	-	22,929	-
8	8a_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	120	38	-	1,796	-	17,960
6	8b_Q	EB/WB 10 Side Rd / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	952	-	9,520
10	9_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	471	60	-	1,796	-	17,960
9	10_C	EB/WB Winston Churchill Blvd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	947	50	-	952	-	9,520
7	11a_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	35	-	1,506	-	15,058
7	11b_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	84	35	-	1,773	-	17,728
7	12a_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	57	35	734	-	7,337	-
7	12b_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	47	35	507	-	5,073	-
10	13_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	306	60	507	-	5,073	-
9	14_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	715	50	281	-	2,810	-
11	15_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1274	70	-	1,506	-	15,058
12	16_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1073	80	734	-	7,337	-
Note: 2031 traffic data projected using 2016 baseline traffic multiplied by an annual growth rate of 1% per year.													

Appendix C: Summary of Traffic Data and Assumptions
Project Name: Norval Bypass

FUTURE (2031) BUILD SCENARIO													
MOVES ID	Source ID	Road Description	Vehicle Distribution	# of Lanes	Single Lane Width	Road Width	Plume Width (Road Width + 6 m)	Modelled Road Length	Modelled Average Travel Speed	NB/SB	EB/WB	NB/SB	EB/WB
					(m)	(m)	(m)	(m)	(km/h)	vph	vph	ADT	ADT
2	1a_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	9	89	-	890	-
1	1b_Q	NB/SB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	20	8	620	-	6,200	-
5	2a_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	125	32	-	1,087	-	10,870
6	2b_Q	EB/WB Hwy 7 / Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	16	34	-	572	-	5,720
9	3_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	369	50	-	1,087	-	10,870
9	4_C	NB/SB Adamson St N (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	751	50	620	-	6,200	-
9	5_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	882	50	-	572	-	5,720
9	6_C	NB/SB Adamson St (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	416	50	1,191	-	11,910	-
9	7a_Q	NB/SB South Winston Churchill (queue link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	69	50	1,180	-	11,800	-
7	7b_Q	NB/SB Adamson St (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	228	35	1,191	-	11,910	-
9	8b_Q	EB/WB East Winston Churchill Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	50	-	348	-	3,480
9	10_C	EB/WB Winston Churchill Blvd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	888	50	-	348	-	3,480
7	11a_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	42	35	-	1,631	-	16,310
7	11b_Q	EB/WB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	84	35	-	1,740	-	17,400
7	12a_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	57	35	901	-	9,010	-
7	12b_Q	NB/SB 10 Side Rd / Tenth Line (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	47	35	414	-	4,140	-
10	13_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	306	60	414	-	4,140	-
9	14_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	715	50	414	-	4,140	-
11	15_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1274	70	-	1,631	-	16,310
12	16_C	NB/SB Tenth Line (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1073	80	901	-	9,010	-
9	17_C	EB/WB Hwy 7 (cruise link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	1223	50	-	2,040	-	20,400
7	18a_Q	NB/SB Hwy 7 / Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	3	3.5	11	17	52	35	1,865	-	18,650	-
7	19a_Q	EB/WB Hwy 7 / Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	2	3.5	7	13	63	35	-	2,040	-	20,400
7	19b_Q	EB/WB Hwy 7 / Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	3	3.5	11	17	63	35	-	1,087	-	10,870
10	20_C	NB/SB Norval West Bypass (cruise link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	549	60	1,413	-	14,130	-
13	21b_Q	NB/SB Norval West Bypass (queue link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	195	40	1,413	-	14,130	-
14	22a_Q	EB/WB 10 Side Rd (queue link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	140	45	-	1,740	-	17,400
10	23_C	EB/WB 10 Side Rd (cruise link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	283	60	-	1,740	-	17,400
9	24_C	NB/SB South Winston Churchill (cruise link)	96% car, 1% heavy truck, 3% medium truck	4	3.5	14	20	375	50	1,180	-	11,800	-

Note:
2031 future build traffic data provided from the Stantec traffic team on March 21, 2023 via email. An updated traffic analysis considering a 5-leg roundabout was provided by the traffic team on August 12, 2023 and is also used in the AQ assessment.