

Lanes, Volumes, Timings
4: Sixth Line South & Steeles Avenue

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Future Volume (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		30.0	50.0		30.0	30.0		0.0	55.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.949			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3085	1615	1736	2798	1538	1597	1739	0	1719	1663	0
Flt Permitted	0.518			0.130			0.715			0.450		
Satd. Flow (perm)	937	3085	1615	237	2798	1538	1202	1739	0	814	1663	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64			165		20			35	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		905.3			497.0			169.8			447.0	
Travel Time (s)		40.7			22.4			12.2			32.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	17%	0%	4%	29%	5%	13%	2%	7%	5%	5%	5%
Adj. Flow (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	1290	35	110	395	165	15	235	0	35	65	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	

Lanes, Volumes, Timings

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Premier Gateway Phase 1B Employment Area

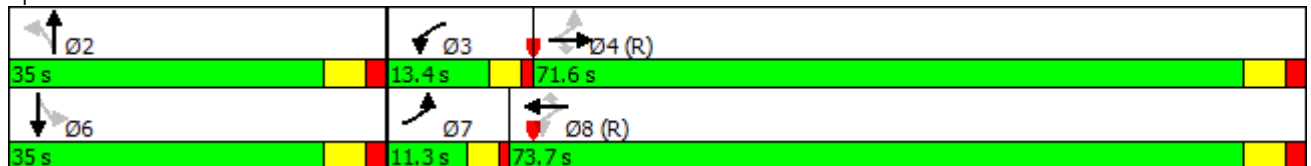


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	35.0	35.0		24.0	24.0	
Total Split (s)	11.3	71.6	71.6	13.4	73.7	73.7	35.0	35.0		35.0	35.0	
Total Split (%)	9.4%	59.7%	59.7%	11.2%	61.4%	61.4%	29.2%	29.2%		29.2%	29.2%	
Maximum Green (s)	7.3	65.6	65.6	9.4	67.7	67.7	29.0	29.0		29.0	29.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		Max	Max	
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0		0	0	
Act Effct Green (s)	76.3	67.0	67.0	77.7	67.7	67.7	29.0	29.0		29.0	29.0	
Actuated g/C Ratio	0.64	0.56	0.56	0.65	0.56	0.56	0.24	0.24		0.24	0.24	
v/c Ratio	0.28	0.75	0.04	0.43	0.25	0.18	0.05	0.54		0.18	0.15	
Control Delay	8.4	23.8	1.0	12.3	13.8	2.3	35.7	41.5		39.1	20.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	8.4	23.8	1.0	12.3	13.8	2.3	35.7	41.5		39.1	20.3	
LOS	A	C	A	B	B	A	D	D		D	C	
Approach Delay		21.4			10.7			41.2			26.9	
Approach LOS		C			B			D			C	

Intersection Summary

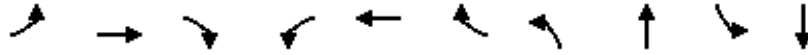
Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.75
Intersection Signal Delay:	20.8
Intersection Capacity Utilization:	77.3%
Analysis Period (min):	15
Intersection LOS:	C
ICU Level of Service:	D

Splits and Phases: 4: Sixth Line South & Steeles Avenue



Queues
4: Sixth Line South & Steeles Avenue

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	180	1290	35	110	395	165	15	235	35	65
v/c Ratio	0.28	0.75	0.04	0.43	0.25	0.18	0.05	0.54	0.18	0.15
Control Delay	8.4	23.8	1.0	12.3	13.8	2.3	35.7	41.5	39.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.4	23.8	1.0	12.3	13.8	2.3	35.7	41.5	39.1	20.3
Queue Length 50th (m)	14.8	122.1	0.0	8.6	24.8	0.0	2.9	46.7	6.9	5.8
Queue Length 95th (m)	23.6	155.5	1.6	15.1	34.3	9.6	8.8	73.7	16.5	17.8
Internal Link Dist (m)		881.3			473.0			145.8		423.0
Turn Bay Length (m)	50.0		30.0	50.0		30.0	30.0		55.0	
Base Capacity (vph)	643	1722	929	273	1578	939	290	435	196	428
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.75	0.04	0.40	0.25	0.18	0.05	0.54	0.18	0.15
Intersection Summary										

HCM Signalized Intersection Capacity Analysis
4: Sixth Line South & Steeles Avenue

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Future Volume (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1719	3085	1615	1736	2798	1538	1597	1739		1719	1663	
Flt Permitted	0.52	1.00	1.00	0.13	1.00	1.00	0.71	1.00		0.45	1.00	
Satd. Flow (perm)	937	3085	1615	237	2798	1538	1202	1739		815	1663	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
RTOR Reduction (vph)	0	0	15	0	0	72	0	15	0	0	27	0
Lane Group Flow (vph)	180	1290	20	110	395	93	15	220	0	35	38	0
Heavy Vehicles (%)	5%	17%	0%	4%	29%	5%	13%	2%	7%	5%	5%	5%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2				6
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	74.3	67.0	67.0	75.7	67.7	67.7	29.0	29.0		29.0	29.0	
Effective Green, g (s)	74.3	67.0	67.0	75.7	67.7	67.7	29.0	29.0		29.0	29.0	
Actuated g/C Ratio	0.62	0.56	0.56	0.63	0.56	0.56	0.24	0.24		0.24	0.24	
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	627	1722	901	249	1578	867	290	420		196	401	
v/s Ratio Prot	0.02	c0.42		c0.03	0.14			c0.13			0.02	
v/s Ratio Perm	0.16		0.01	0.25		0.06	0.01			0.04		
v/c Ratio	0.29	0.75	0.02	0.44	0.25	0.11	0.05	0.52		0.18	0.10	
Uniform Delay, d1	9.7	20.1	11.8	12.9	13.3	12.1	34.9	39.5		36.1	35.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	3.0	0.0	1.3	0.4	0.2	0.3	4.6		2.0	0.5	
Delay (s)	10.0	23.2	11.9	14.1	13.7	12.4	35.3	44.1		38.0	35.8	
Level of Service	A	C	B	B	B	B	D	D		D	D	
Approach Delay (s)		21.3			13.4			43.6			36.6	
Approach LOS		C			B			D			D	

Intersection Summary

HCM 2000 Control Delay	22.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings
11: Trafalgar Rd & Hornby Rd

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	80	10	5	460	1895	310
Future Volume (vph)	80	10	5	460	1895	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	50.0	30.0			100.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		100.0			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1444	1380	1203	3112	3438	1615
Flt Permitted	0.950		0.080			
Satd. Flow (perm)	1444	1380	101	3112	3438	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		10				310
Link Speed (k/h)	60			80	80	
Link Distance (m)	74.6			894.4	1771.4	
Travel Time (s)	4.5			40.2	79.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	25%	17%	50%	16%	5%	0%
Adj. Flow (vph)	80	10	5	460	1895	310
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	10	5	460	1895	310
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0	2.0	0.6	0.6	2.0
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm	Perm	NA	NA	Perm
Protected Phases				2	6	
Permitted Phases	8	8	2			6
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0

Lanes, Volumes, Timings
11: Trafalgar Rd & Hornby Rd

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0	46.0	46.0	46.0	46.0
Total Split (%)	34.3%	34.3%	65.7%	65.7%	65.7%	65.7%
Maximum Green (s)	18.0	18.0	40.0	40.0	40.0	40.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	9.2	9.2	52.3	52.3	52.3	52.3
Actuated g/C Ratio	0.13	0.13	0.75	0.75	0.75	0.75
v/c Ratio	0.42	0.05	0.07	0.20	0.74	0.24
Control Delay	33.7	14.4	7.0	4.1	9.9	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	14.4	7.0	4.1	9.9	1.1
LOS	C	B	A	A	A	A
Approach Delay	31.6		4.2		8.7	
Approach LOS	C		A		A	

Intersection Summary

Area Type: Other
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 8.6
 Intersection Capacity Utilization 66.8%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service C

Splits and Phases: 11: Trafalgar Rd & Hornby Rd



Queues
11: Trafalgar Rd & Hornby Rd

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	80	10	5	460	1895	310
v/c Ratio	0.42	0.05	0.07	0.20	0.74	0.24
Control Delay	33.7	14.4	7.0	4.1	9.9	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	14.4	7.0	4.1	9.9	1.1
Queue Length 50th (m)	10.3	0.0	0.2	9.6	75.2	0.0
Queue Length 95th (m)	21.4	3.7	1.6	18.1	131.4	7.3
Internal Link Dist (m)	50.6			870.4	1747.4	
Turn Bay Length (m)		50.0	30.0			100.0
Base Capacity (vph)	371	362	75	2323	2566	1284
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.03	0.07	0.20	0.74	0.24
Intersection Summary						

HCM Signalized Intersection Capacity Analysis
11: Trafalgar Rd & Hornby Rd

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	80	10	5	460	1895	310
Future Volume (vph)	80	10	5	460	1895	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1444	1380	1203	3112	3438	1615
Flt Permitted	0.95	1.00	0.08	1.00	1.00	1.00
Satd. Flow (perm)	1444	1380	102	3112	3438	1615
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	80	10	5	460	1895	310
RTOR Reduction (vph)	0	9	0	0	0	89
Lane Group Flow (vph)	80	1	5	460	1895	221
Heavy Vehicles (%)	25%	17%	50%	16%	5%	0%
Turn Type	Perm	Perm	Perm	NA	NA	Perm
Protected Phases				2	6	
Permitted Phases	8	8	2			6
Actuated Green, G (s)	8.1	8.1	49.9	49.9	49.9	49.9
Effective Green, g (s)	8.1	8.1	49.9	49.9	49.9	49.9
Actuated g/C Ratio	0.12	0.12	0.71	0.71	0.71	0.71
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	167	159	72	2218	2450	1151
v/s Ratio Prot				0.15	c0.55	
v/s Ratio Perm	c0.06	0.00	0.05			0.14
v/c Ratio	0.48	0.01	0.07	0.21	0.77	0.19
Uniform Delay, d1	29.0	27.4	3.0	3.4	6.4	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.2	0.0	1.9	0.2	2.4	0.4
Delay (s)	31.1	27.4	4.9	3.6	8.9	3.7
Level of Service	C	C	A	A	A	A
Approach Delay (s)	30.7			3.6	8.2	
Approach LOS	C			A	A	

Intersection Summary

HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Future Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		115.0	40.0		0.0	40.0		20.0	50.0		20.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	80.0			80.0			100.0			100.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.984				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1656	3539	1568	1687	3300	0	1444	2888	1357	1480	3374	1292
Flt Permitted	0.663			0.268			0.075			0.454		
Satd. Flow (perm)	1156	3539	1568	476	3300	0	114	2888	1357	707	3374	1292
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		11				120			120
Link Speed (k/h)		60			60			80			80	
Link Distance (m)		223.8			665.2			1771.4			262.0	
Travel Time (s)		13.4			39.9			79.7			11.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	9%	2%	3%	7%	1%	63%	25%	25%	19%	22%	7%	25%
Adj. Flow (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	460	380	120	140	0	40	495	60	35	1810	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	25.0	25.0	7.0	25.0	25.0

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.0	22.0	22.0	9.0	22.0		11.0	32.0	32.0	11.0	32.0	32.0
Total Split (s)	9.0	22.0	22.0	9.0	22.0		11.0	58.0	58.0	11.0	58.0	58.0
Total Split (%)	9.0%	22.0%	22.0%	9.0%	22.0%		11.0%	58.0%	58.0%	11.0%	58.0%	58.0%
Maximum Green (s)	5.0	16.0	16.0	5.0	16.0		7.0	52.0	52.0	7.0	52.0	52.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0			20.0	20.0		20.0	20.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	23.0	16.0	16.0	24.6	19.6		62.6	56.4	56.4	62.6	56.4	56.4
Actuated g/C Ratio	0.23	0.16	0.16	0.25	0.20		0.63	0.56	0.56	0.63	0.56	0.56
v/c Ratio	0.16	0.81	1.02	0.67	0.21		0.24	0.30	0.07	0.07	0.95	0.06
Control Delay	29.0	53.2	79.5	51.2	33.5		10.1	12.9	0.2	6.7	34.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	53.2	79.5	51.2	33.5		10.1	12.9	0.2	6.7	34.6	0.1
LOS	C	D	E	D	C		B	B	A	A	C	A
Approach Delay		63.3			41.7			11.5			33.3	
Approach LOS		E			D			B			C	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	11 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.02
Intersection Signal Delay:	37.6
Intersection LOS:	D
Intersection Capacity Utilization:	93.5%
ICU Level of Service:	F
Analysis Period (min):	15

Splits and Phases: 14: Trafalgar Rd & 5 Side Road



Queues
14: Trafalgar Rd & 5 Side Road

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	45	460	380	120	140	40	495	60	35	1810	45
v/c Ratio	0.16	0.81	1.02	0.67	0.21	0.24	0.30	0.07	0.07	0.95	0.06
Control Delay	29.0	53.2	79.5	51.2	33.5	10.1	12.9	0.2	6.7	34.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	53.2	79.5	51.2	33.5	10.1	12.9	0.2	6.7	34.6	0.1
Queue Length 50th (m)	6.9	48.2	~53.4	19.2	12.2	2.7	29.3	0.0	2.3	~209.5	0.0
Queue Length 95th (m)	15.8	#72.3	#114.5	#42.9	21.5	6.3	40.7	0.2	5.7	#253.8	0.0
Internal Link Dist (m)		199.8			641.2		1747.4			238.0	
Turn Bay Length (m)	40.0		115.0	40.0		40.0		20.0	50.0		20.0
Base Capacity (vph)	290	566	372	178	655	164	1628	817	496	1902	781
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.81	1.02	0.67	0.21	0.24	0.30	0.07	0.07	0.95	0.06

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
14: Trafalgar Rd & 5 Side Road

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗↗	↘	↘	↗↗		↘	↗↗	↘	↘	↗↗	↘
Traffic Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Future Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1656	3539	1568	1687	3300		1444	2888	1357	1480	3374	1292
Flt Permitted	0.66	1.00	1.00	0.27	1.00		0.08	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	1156	3539	1568	476	3300		114	2888	1357	707	3374	1292
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
RTOR Reduction (vph)	0	0	119	0	9	0	0	0	28	0	0	21
Lane Group Flow (vph)	45	460	261	120	131	0	40	495	32	35	1810	24
Heavy Vehicles (%)	9%	2%	3%	7%	1%	63%	25%	25%	19%	22%	7%	25%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	20.6	17.6	17.6	24.6	19.6		57.4	53.2	53.2	57.4	53.2	53.2
Effective Green, g (s)	20.6	17.6	17.6	24.6	19.6		57.4	53.2	53.2	57.4	53.2	53.2
Actuated g/C Ratio	0.21	0.18	0.18	0.25	0.20		0.57	0.53	0.53	0.57	0.53	0.53
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	253	622	275	177	646		121	1536	721	438	1794	687
v/s Ratio Prot	0.01	0.13		c0.03	0.04		c0.01	0.17		0.00	c0.54	
v/s Ratio Perm	0.03		c0.17	0.13			0.18		0.02	0.04		0.02
v/c Ratio	0.18	0.74	0.95	0.68	0.20		0.33	0.32	0.04	0.08	1.01	0.03
Uniform Delay, d1	32.4	39.0	40.7	32.1	33.7		20.7	13.2	11.2	9.3	23.4	11.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	5.6	40.7	9.9	0.3		1.6	0.6	0.1	0.1	23.4	0.1
Delay (s)	32.7	44.6	81.5	42.0	34.0		22.3	13.8	11.3	9.4	46.8	11.3
Level of Service	C	D	F	D	C		C	B	B	A	D	B
Approach Delay (s)		59.8			37.7			14.1			45.3	
Approach LOS		E			D			B			D	

Intersection Summary

HCM 2000 Control Delay	43.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings
15: Eighth Line & 5 Sideroad

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕↕		↕	↕	
Traffic Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Future Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	25.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.990			0.970			0.981	
Flt Protected		0.997			0.986			0.999		0.950		
Satd. Flow (prot)	0	3489	0	0	3374	0	0	1811	0	1805	1862	0
Flt Permitted		0.914			0.622			0.982		0.644		
Satd. Flow (perm)	0	3198	0	0	2128	0	0	1781	0	1224	1862	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			9			33			17	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		643.4			668.7			2468.4			454.5	
Travel Time (s)		38.6			40.1			126.9			23.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	2%	14%	7%	3%	8%	0%	1%	4%	0%	0%	1%
Adj. Flow (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	525	0	0	290	0	0	180	0	85	835	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	

Lanes, Volumes, Timings
15: Eighth Line & 5 Sideroad

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	25.0	25.0		25.0	25.0		55.0	55.0		55.0	55.0	
Total Split (%)	31.3%	31.3%		31.3%	31.3%		68.8%	68.8%		68.8%	68.8%	
Maximum Green (s)	19.0	19.0		19.0	19.0		49.0	49.0		49.0	49.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		17.3			17.3			49.0			49.0	
Actuated g/C Ratio		0.22			0.22			0.63			0.63	
v/c Ratio		0.74			0.61			0.16			0.11	
Control Delay		35.5			32.6			5.6			6.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		35.5			32.6			5.6			6.7	
LOS		D			C			A			A	
Approach Delay		35.5			32.6			5.6				13.6
Approach LOS		D			C			A				B

Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	78.3
Natural Cycle:	60
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.74
Intersection Signal Delay:	21.7
Intersection LOS:	C
Intersection Capacity Utilization:	92.0%
ICU Level of Service:	F
Analysis Period (min):	15

Splits and Phases: 15: Eighth Line & 5 Sideroad



Queues
15: Eighth Line & 5 Sideroad



Lane Group	EBT	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	525	290	180	85	835
v/c Ratio	0.74	0.61	0.16	0.11	0.71
Control Delay	35.5	32.6	5.6	6.7	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	32.6	5.6	6.7	14.3
Queue Length 50th (m)	40.2	20.8	8.5	4.9	78.6
Queue Length 95th (m)	57.4	33.8	17.1	10.8	128.0
Internal Link Dist (m)	619.4	644.7	2444.4		430.5
Turn Bay Length (m)				25.0	
Base Capacity (vph)	778	523	1127	766	1172
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.67	0.55	0.16	0.11	0.71
Intersection Summary					

HCM Signalized Intersection Capacity Analysis
15: Eighth Line & 5 Sideroad

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↔			↔			↕		↘	↙		
Traffic Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105	
Future Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		6.0			6.0			6.0		6.0	6.0		
Lane Util. Factor		0.95			0.95			1.00		1.00	1.00		
Frt		1.00			0.99			0.97		1.00	0.98		
Flt Protected		1.00			0.99			1.00		0.95	1.00		
Satd. Flow (prot)		3490			3374			1811		1805	1862		
Flt Permitted		0.91			0.62			0.98		0.64	1.00		
Satd. Flow (perm)		3199			2126			1781		1223	1862		
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. Flow (vph)	30	485	10	80	190	20	5	135	40	85	730	105	
RTOR Reduction (vph)	0	2	0	0	7	0	0	12	0	0	6	0	
Lane Group Flow (vph)	0	523	0	0	283	0	0	168	0	85	829	0	
Heavy Vehicles (%)	13%	2%	14%	7%	3%	8%	0%	1%	4%	0%	0%	1%	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA		
Protected Phases		4			8			2			6		
Permitted Phases	4			8			2			6			
Actuated Green, G (s)		17.3			17.3			49.0		49.0	49.0		
Effective Green, g (s)		17.3			17.3			49.0		49.0	49.0		
Actuated g/C Ratio		0.22			0.22			0.63		0.63	0.63		
Clearance Time (s)		6.0			6.0			6.0		6.0	6.0		
Vehicle Extension (s)		3.0			3.0			3.0		3.0	3.0		
Lane Grp Cap (vph)		706			469			1114		765	1165		
v/s Ratio Prot											c0.45		
v/s Ratio Perm		c0.16			0.13			0.09		0.07			
v/c Ratio		0.74			0.60			0.15		0.11	0.71		
Uniform Delay, d1		28.4			27.4			6.1		5.9	9.9		
Progression Factor		1.00			1.00			1.00		1.00	1.00		
Incremental Delay, d2		4.2			2.2			0.3		0.3	3.7		
Delay (s)		32.6			29.6			6.3		6.2	13.6		
Level of Service		C			C			A		A	B		
Approach Delay (s)		32.6			29.6			6.3			12.9		
Approach LOS		C			C			A			B		
Intersection Summary													
HCM 2000 Control Delay			20.2									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.72										
Actuated Cycle Length (s)			78.3									Sum of lost time (s)	12.0
Intersection Capacity Utilization			92.0%									ICU Level of Service	F
Analysis Period (min)			15										
c	Critical Lane Group												

Lanes, Volumes, Timings
19: Trafalgar Road & "Street B"

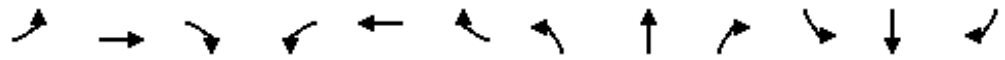
2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Future Volume (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	85.0		50.0	50.0		50.0	50.0		50.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1810	1538	1719	1810	1538	1719	3167	1538	1719	3438	1538
Flt Permitted				0.769			0.073			0.492		
Satd. Flow (perm)	1810	1810	1538	1392	1810	1538	132	3167	1538	890	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			199			479			280			133
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		207.1			712.3			595.2			894.4	
Travel Time (s)		14.9			51.3			26.8			40.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	14%	5%	5%	5%	5%
Adj. Flow (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8		8	4		4	2		2	6		6
Detector Phase	3	8	8	7	4	4	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Lanes, Volumes, Timings
19: Trafalgar Road & "Street B"

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area

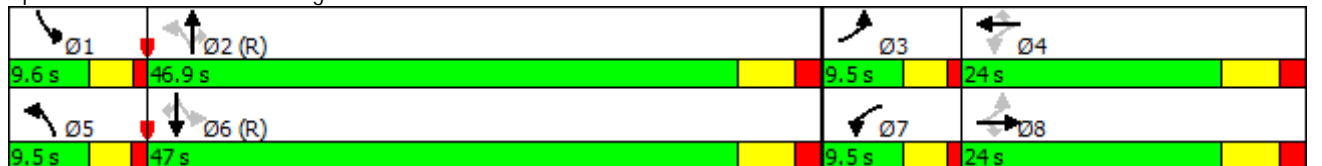


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0	24.0	9.5	24.0	24.0
Total Split (s)	9.5	24.0	24.0	9.5	24.0	24.0	9.5	46.9	46.9	9.6	47.0	47.0
Total Split (%)	10.6%	26.7%	26.7%	10.6%	26.7%	26.7%	10.6%	52.1%	52.1%	10.7%	52.2%	52.2%
Maximum Green (s)	5.5	18.0	18.0	5.5	18.0	18.0	5.5	40.9	40.9	5.6	41.0	41.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.5		5.5	9.3		5.5	69.2	63.4	63.4	71.1	65.9	65.9
Actuated g/C Ratio	0.09		0.06	0.10		0.06	0.77	0.70	0.70	0.79	0.73	0.73
v/c Ratio	0.15		0.07	0.42		0.05	0.24	0.19	0.24	0.12	0.70	0.05
Control Delay	34.8		0.5	42.1		0.2	6.1	7.2	1.8	3.3	12.9	0.1
Queue Delay	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8		0.5	42.1		0.2	6.1	7.2	1.8	3.3	12.9	0.1
LOS	C		A	D		A	A	A	A	A	B	A
Approach Delay		19.6			31.1			5.1			12.0	
Approach LOS		B			C			A			B	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay:	10.9
Intersection LOS:	B
Intersection Capacity Utilization	76.8%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 19: Trafalgar Road & "Street B"



Queues
19: Trafalgar Road & "Street B"

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	25	20	70	25	50	420	280	95	1765	60
v/c Ratio	0.15	0.07	0.42	0.05	0.24	0.19	0.24	0.12	0.70	0.05
Control Delay	34.8	0.5	42.1	0.2	6.1	7.2	1.8	3.3	12.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	0.5	42.1	0.2	6.1	7.2	1.8	3.3	12.9	0.1
Queue Length 50th (m)	4.4	0.0	12.4	0.0	1.1	12.4	0.0	2.1	90.9	0.0
Queue Length 95th (m)	10.7	0.0	22.9	0.0	5.1	27.1	10.4	8.3	175.8	0.0
Internal Link Dist (m)						571.2			870.4	
Turn Bay Length (m)	50.0	50.0	85.0	50.0	50.0		50.0	50.0		50.0
Base Capacity (vph)	165	466	167	690	210	2230	1166	765	2516	1161
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.04	0.42	0.04	0.24	0.19	0.24	0.12	0.70	0.05
Intersection Summary										

HCM Signalized Intersection Capacity Analysis
19: Trafalgar Road & "Street B"

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Future Volume (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		6.0	4.0		6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00		0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719		1538	1719		1538	1719	3167	1538	1719	3438	1538
Flt Permitted	1.00		1.00	0.77		1.00	0.07	1.00	1.00	0.49	1.00	1.00
Satd. Flow (perm)	1810		1538	1392		1538	132	3167	1538	890	3438	1538
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
RTOR Reduction (vph)	0	0	20	0	0	24	0	0	103	0	0	21
Lane Group Flow (vph)	25	0	0	70	0	1	50	420	177	95	1765	39
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	14%	5%	5%	5%	5%
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8		8	4		4	2		2	6		6
Actuated Green, G (s)	4.4		2.2	10.4		5.2	60.9	57.0	57.0	64.3	58.7	58.7
Effective Green, g (s)	4.4		2.2	10.4		5.2	60.9	57.0	57.0	64.3	58.7	58.7
Actuated g/C Ratio	0.05		0.02	0.12		0.06	0.68	0.63	0.63	0.71	0.65	0.65
Clearance Time (s)	4.0		6.0	4.0		6.0	4.0	6.0	6.0	4.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86		37	179		88	158	2005	974	687	2242	1003
v/s Ratio Prot	0.01			c0.02			c0.01	0.13		c0.01	c0.51	
v/s Ratio Perm	0.01		0.00	c0.02		0.00	0.20		0.12	0.09		0.03
v/c Ratio	0.29		0.01	0.39		0.02	0.32	0.21	0.18	0.14	0.79	0.04
Uniform Delay, d1	41.3		42.8	36.7		40.0	9.5	7.0	6.8	3.9	11.2	5.6
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9		0.1	1.4		0.1	1.2	0.2	0.4	0.1	2.9	0.1
Delay (s)	43.2		43.0	38.1		40.1	10.6	7.2	7.2	4.0	14.1	5.7
Level of Service	D		D	D		D	B	A	A	A	B	A
Approach Delay (s)		43.1			38.6			7.5			13.3	
Approach LOS		D			D			A			B	

Intersection Summary

HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings
20: Eighth Line & "Street B"

2026 Total AM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	40	155	160	825	120
Future Volume (vph)	30	40	155	160	825	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0	0.0	25.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.983	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	1863	1824	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	1863	1824	0
Link Speed (k/h)	50			70	70	
Link Distance (m)	712.3			618.0	2468.4	
Travel Time (s)	51.3			31.8	126.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	5%
Adj. Flow (vph)	30	40	155	160	825	120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	40	155	160	945	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	72.6%
ICU Level of Service	C
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 20: Eighth Line & "Street B"

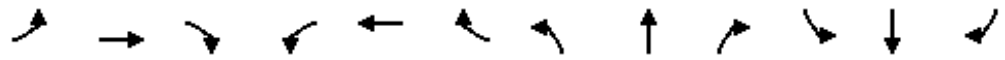
2026 Total AM - Remedial Measures
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	40	155	160	825	120
Future Volume (Veh/h)	30	40	155	160	825	120
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	40	155	160	825	120
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1355	885	945			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1355	885	945			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	76	88	78			
cM capacity (veh/h)	127	340	714			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	
Volume Total	30	40	155	160	945	
Volume Left	30	0	155	0	0	
Volume Right	0	40	0	0	120	
cSH	127	340	714	1700	1700	
Volume to Capacity	0.24	0.12	0.22	0.09	0.56	
Queue Length 95th (m)	6.9	3.2	6.6	0.0	0.0	
Control Delay (s)	41.9	17.0	11.4	0.0	0.0	
Lane LOS	E	C	B			
Approach Delay (s)	27.7		5.6		0.0	
Approach LOS	D					
Intersection Summary						
Average Delay			2.8			
Intersection Capacity Utilization			72.6%		ICU Level of Service	C
Analysis Period (min)			15			

Lanes, Volumes, Timings
4: Sixth Line South/"Street A" & Steeles Avenue

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Future Volume (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		30.0	50.0		30.0	30.0		0.0	55.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.886			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3085	1615	1736	2798	1583	1597	1591	0	1770	1712	0
Flt Permitted	0.162			0.358			0.552			0.408		
Satd. Flow (perm)	302	3085	1615	654	2798	1583	928	1591	0	760	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136			100		110				48
Link Speed (k/h)		80			80			50				50
Link Distance (m)		905.3			497.0			169.8				447.0
Travel Time (s)		40.7			22.4			12.2				32.2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	17%	0%	4%	29%	2%	13%	2%	7%	2%	2%	2%
Adj. Flow (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	580	15	310	1280	45	30	165	0	165	335	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6				3.6
Link Offset(m)		0.0			0.0			0.0				0.0
Crosswalk Width(m)		4.8			4.8			4.8				4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4				9.4
Detector 2 Size(m)		0.6			0.6			0.6				0.6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	

Lanes, Volumes, Timings
4: Sixth Line South/"Street A" & Steeles Avenue

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area

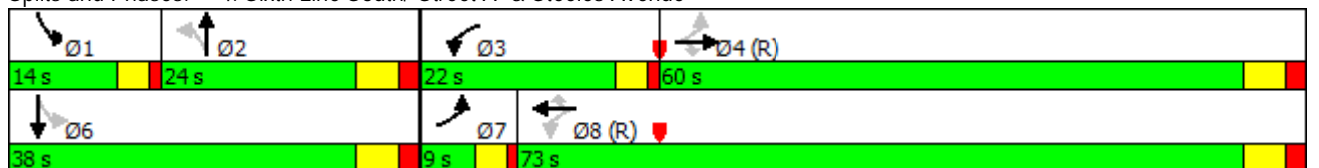


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.0	24.0	24.0	9.0	24.0	24.0	24.0	24.0		9.0	24.0	
Total Split (s)	9.0	60.0	60.0	22.0	73.0	73.0	24.0	24.0		14.0	38.0	
Total Split (%)	7.5%	50.0%	50.0%	18.3%	60.8%	60.8%	20.0%	20.0%		11.7%	31.7%	
Maximum Green (s)	5.0	54.0	54.0	18.0	67.0	67.0	18.0	18.0		10.0	32.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		None	Max	
Walk Time (s)		7.0	7.0		7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0			0	
Act Effct Green (s)	64.5	57.5	57.5	78.0	68.8	68.8	18.1	18.1		34.0	32.0	
Actuated g/C Ratio	0.54	0.48	0.48	0.65	0.57	0.57	0.15	0.15		0.28	0.27	
v/c Ratio	0.20	0.39	0.02	0.56	0.80	0.05	0.21	0.49		0.55	0.68	
Control Delay	11.0	21.5	0.1	13.1	25.5	0.1	49.3	22.7		42.1	41.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	11.0	21.5	0.1	13.1	25.5	0.1	49.3	22.7		42.1	41.7	
LOS	B	C	A	B	C	A	D	C		D	D	
Approach Delay		20.2			22.4			26.8			41.8	
Approach LOS		C			C			C			D	

Intersection Summary

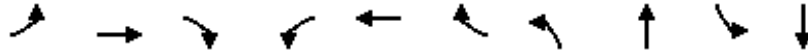
Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.80
Intersection Signal Delay:	25.5
Intersection LOS:	C
Intersection Capacity Utilization:	81.2%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 4: Sixth Line South/"Street A" & Steeles Avenue



Queues
4: Sixth Line South/"Street A" & Steeles Avenue

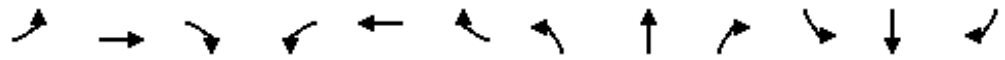
2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	45	580	15	310	1280	45	30	165	165	335
v/c Ratio	0.20	0.39	0.02	0.56	0.80	0.05	0.21	0.49	0.55	0.68
Control Delay	11.0	21.5	0.1	13.1	25.5	0.1	49.3	22.7	42.1	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	21.5	0.1	13.1	25.5	0.1	49.3	22.7	42.1	41.7
Queue Length 50th (m)	3.7	47.2	0.0	30.2	129.7	0.0	6.6	12.2	32.4	64.3
Queue Length 95th (m)	8.0	65.5	0.0	44.6	163.5	0.0	16.4	34.6	52.5	98.6
Internal Link Dist (m)		881.3			473.0			145.8		423.0
Turn Bay Length (m)	50.0		30.0	50.0		30.0	30.0		55.0	
Base Capacity (vph)	223	1478	844	587	1604	950	140	334	299	491
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.39	0.02	0.53	0.80	0.05	0.21	0.49	0.55	0.68
Intersection Summary										

HCM Signalized Intersection Capacity Analysis
 4: Sixth Line South/"Street A" & Steeles Avenue

2026 Total PM - Remedial Measures
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Future Volume (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.89		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3085	1615	1736	2798	1583	1597	1592		1770	1713	
Flt Permitted	0.16	1.00	1.00	0.36	1.00	1.00	0.55	1.00		0.41	1.00	
Satd. Flow (perm)	301	3085	1615	653	2798	1583	928	1592		760	1713	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
RTOR Reduction (vph)	0	0	8	0	0	20	0	93	0	0	35	0
Lane Group Flow (vph)	45	580	7	310	1280	26	30	72	0	165	300	0
Heavy Vehicles (%)	2%	17%	0%	4%	29%	2%	13%	2%	7%	2%	2%	2%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	61.5	57.5	57.5	76.0	68.0	68.0	18.1	18.1		32.0	32.0	
Effective Green, g (s)	61.5	57.5	57.5	76.0	68.0	68.0	18.1	18.1		32.0	32.0	
Actuated g/C Ratio	0.51	0.48	0.48	0.63	0.57	0.57	0.15	0.15		0.27	0.27	
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	1478	773	544	1585	897	139	240		285	456	
v/s Ratio Prot	0.01	0.19		c0.07	c0.46			0.04		0.05	c0.18	
v/s Ratio Perm	0.11		0.00	0.29		0.02	0.03			0.11		
v/c Ratio	0.22	0.39	0.01	0.57	0.81	0.03	0.22	0.30		0.58	0.66	
Uniform Delay, d1	15.6	20.0	16.3	10.6	20.8	11.5	44.7	45.3		35.9	39.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.8	0.0	1.4	4.5	0.1	3.5	3.2		2.8	7.2	
Delay (s)	16.2	20.8	16.4	12.0	25.3	11.5	48.2	48.5		38.8	46.4	
Level of Service	B	C	B	B	C	B	D	D		D	D	
Approach Delay (s)		20.4			22.4			48.4			43.9	
Approach LOS		C			C			D			D	

Intersection Summary

HCM 2000 Control Delay	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings
11: Trafalgar Rd & Hornby Rd

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	10	5	1545	570	155
Future Volume (vph)	325	10	5	1545	570	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	50.0	30.0			100.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		100.0			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3539	3539	1615
Flt Permitted	0.950		0.438			
Satd. Flow (perm)	1805	1615	832	3539	3539	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		10				155
Link Speed (k/h)	60			80	80	
Link Distance (m)	54.4			891.1	1511.0	
Travel Time (s)	3.3			40.1	68.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Adj. Flow (vph)	325	10	5	1545	570	155
Shared Lane Traffic (%)						
Lane Group Flow (vph)	325	10	5	1545	570	155
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0	2.0	0.6	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm	Perm	NA	NA	Perm
Protected Phases				2	6	
Permitted Phases	8	8	2			6
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0

Lanes, Volumes, Timings
11: Trafalgar Rd & Hornby Rd

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area

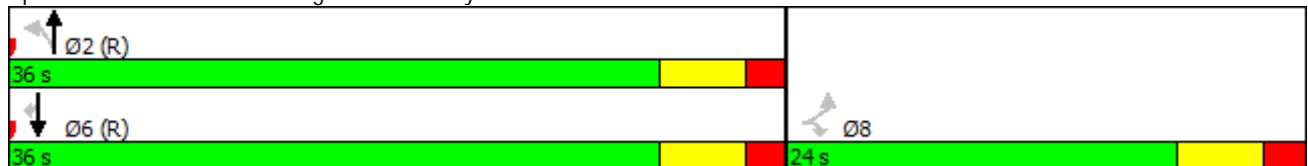


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	24.0	24.0	36.0	36.0	36.0	36.0
Total Split (%)	40.0%	40.0%	60.0%	60.0%	60.0%	60.0%
Maximum Green (s)	18.0	18.0	30.0	30.0	30.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	15.1	15.1	32.9	32.9	32.9	32.9
Actuated g/C Ratio	0.25	0.25	0.55	0.55	0.55	0.55
v/c Ratio	0.72	0.02	0.01	0.80	0.29	0.16
Control Delay	29.5	9.0	7.6	16.2	8.4	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	9.0	7.6	16.2	8.4	2.2
LOS	C	A	A	B	A	A
Approach Delay	28.9			16.1	7.1	
Approach LOS	C			B	A	

Intersection Summary

Area Type: Other
 Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 15.3 Intersection LOS: B
 Intersection Capacity Utilization 70.7% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 11: Trafalgar Rd & Hornby Rd



Queues
11: Trafalgar Rd & Hornby Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	325	10	5	1545	570	155
v/c Ratio	0.72	0.02	0.01	0.80	0.29	0.16
Control Delay	29.5	9.0	7.6	16.2	8.4	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	9.0	7.6	16.2	8.4	2.2
Queue Length 50th (m)	33.7	0.0	0.3	70.0	17.3	0.0
Queue Length 95th (m)	55.3	2.9	1.7	#125.3	28.4	7.4
Internal Link Dist (m)	30.4			867.1	1487.0	
Turn Bay Length (m)		50.0	30.0			100.0
Base Capacity (vph)	541	491	456	1941	1941	956
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.02	0.01	0.80	0.29	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
 11: Trafalgar Rd & Hornby Rd

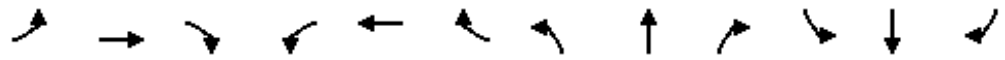
2026 Total PM - Remedial Measures
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	10	5	1545	570	155
Future Volume (vph)	325	10	5	1545	570	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1805	1615	1805	3539	3539	1615
Flt Permitted	0.95	1.00	0.44	1.00	1.00	1.00
Satd. Flow (perm)	1805	1615	832	3539	3539	1615
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	325	10	5	1545	570	155
RTOR Reduction (vph)	0	7	0	0	0	70
Lane Group Flow (vph)	325	3	5	1545	570	85
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type	Perm	Perm	Perm	NA	NA	Perm
Protected Phases				2	6	
Permitted Phases	8	8	2			6
Actuated Green, G (s)	15.1	15.1	32.9	32.9	32.9	32.9
Effective Green, g (s)	15.1	15.1	32.9	32.9	32.9	32.9
Actuated g/C Ratio	0.25	0.25	0.55	0.55	0.55	0.55
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	454	406	456	1940	1940	885
v/s Ratio Prot				c0.44	0.16	
v/s Ratio Perm	c0.18	0.00	0.01			0.05
v/c Ratio	0.72	0.01	0.01	0.80	0.29	0.10
Uniform Delay, d1	20.5	16.8	6.2	10.9	7.3	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	0.0	0.0	3.5	0.4	0.2
Delay (s)	25.8	16.8	6.2	14.4	7.7	6.7
Level of Service	C	B	A	B	A	A
Approach Delay (s)	25.5			14.3	7.5	
Approach LOS	C			B	A	
Intersection Summary						
HCM 2000 Control Delay			13.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.77			
Actuated Cycle Length (s)			60.0		Sum of lost time (s)	12.0
Intersection Capacity Utilization			70.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Future Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		115.0	40.0		0.0	40.0		20.0	50.0		20.0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (m)	80.0			80.0			100.0			100.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.985				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1656	3539	1482	1805	3556	0	1770	3471	1615	1583	3438	1509
Flt Permitted	0.314			0.632			0.272			0.098		
Satd. Flow (perm)	547	3539	1482	1201	3556	0	507	3471	1615	163	3438	1509
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			95		13				95			95
Link Speed (k/h)		60			60			80			80	
Link Distance (m)		223.8			665.2			264.1			262.0	
Travel Time (s)		13.4			39.9			11.9			11.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	9%	2%	9%	0%	0%	0%	2%	4%	0%	14%	5%	7%
Adj. Flow (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	190	75	90	495	0	185	1750	135	10	800	80
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	15.0	15.0		7.0	25.0	25.0	7.0	25.0	25.0

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		11.0	31.0	31.0	11.0	31.0	31.0
Total Split (s)	21.0	21.0	21.0	21.0	21.0		13.0	48.0	48.0	11.0	46.0	46.0
Total Split (%)	26.3%	26.3%	26.3%	26.3%	26.3%		16.3%	60.0%	60.0%	13.8%	57.5%	57.5%
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0		9.0	42.0	42.0	7.0	40.0	40.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)	25.0	25.0	25.0	25.0	25.0			20.0	20.0		20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0	0		0	0
Act Effct Green (s)	15.0	15.0	15.0	15.0	15.0		54.6	50.8	50.8	49.8	40.8	40.8
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19		0.68	0.64	0.64	0.62	0.51	0.51
v/c Ratio	0.64	0.29	0.21	0.40	0.73		0.39	0.79	0.13	0.04	0.46	0.10
Control Delay	60.6	29.3	6.0	34.7	37.1		6.9	15.7	3.2	4.6	13.7	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.6	29.3	6.0	34.7	37.1		6.9	15.7	3.2	4.6	13.7	2.3
LOS	E	C	A	C	D		A	B	A	A	B	A
Approach Delay		30.2			36.7			14.1			12.6	
Approach LOS		C			D			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 13 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 18.5
 Intersection LOS: B
 Intersection Capacity Utilization 98.9%
 ICU Level of Service F
 Analysis Period (min) 15

Splits and Phases: 14: Trafalgar Rd & 5 Side Road



Queues
14: Trafalgar Rd & 5 Side Road

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	65	190	75	90	495	185	1750	135	10	800	80
v/c Ratio	0.64	0.29	0.21	0.40	0.73	0.39	0.79	0.13	0.04	0.46	0.10
Control Delay	60.6	29.3	6.0	34.7	37.1	6.9	15.7	3.2	4.6	13.7	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.6	29.3	6.0	34.7	37.1	6.9	15.7	3.2	4.6	13.7	2.3
Queue Length 50th (m)	9.7	13.8	0.0	12.8	38.5	8.7	86.8	1.9	0.4	40.7	0.0
Queue Length 95th (m)	#29.7	23.2	8.1	27.1	55.4	15.4	#192.1	11.1	1.8	56.2	5.2
Internal Link Dist (m)		199.8			641.2		240.1			238.0	
Turn Bay Length (m)	40.0		115.0	40.0		40.0		20.0	50.0		20.0
Base Capacity (vph)	102	663	355	225	677	487	2204	1060	226	1754	816
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.29	0.21	0.40	0.73	0.38	0.79	0.13	0.04	0.46	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
14: Trafalgar Rd & 5 Side Road

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



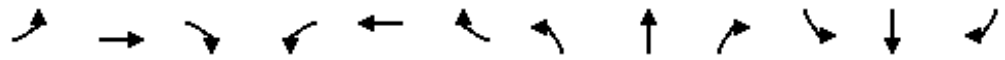
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Future Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1656	3539	1482	1805	3555		1770	3471	1615	1583	3438	1509
Flt Permitted	0.31	1.00	1.00	0.63	1.00		0.27	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	547	3539	1482	1201	3555		506	3471	1615	163	3438	1509
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
RTOR Reduction (vph)	0	0	61	0	11	0	0	0	38	0	0	39
Lane Group Flow (vph)	65	190	14	90	484	0	185	1750	97	10	800	41
Heavy Vehicles (%)	9%	2%	9%	0%	0%	0%	2%	4%	0%	14%	5%	7%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	15.0	15.0	15.0	15.0	15.0		53.0	47.6	47.6	42.2	40.8	40.8
Effective Green, g (s)	15.0	15.0	15.0	15.0	15.0		53.0	47.6	47.6	42.2	40.8	40.8
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19		0.66	0.60	0.60	0.53	0.51	0.51
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	6.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	102	663	277	225	666		464	2065	960	110	1753	769
v/s Ratio Prot		0.05			c0.14		c0.04	c0.50		0.00	0.23	
v/s Ratio Perm	0.12		0.01	0.07			0.22		0.06	0.05		0.03
v/c Ratio	0.64	0.29	0.05	0.40	0.73		0.40	0.85	0.10	0.09	0.46	0.05
Uniform Delay, d1	30.0	27.9	26.7	28.5	30.6		6.0	13.2	7.0	11.9	12.5	9.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.8	0.5	0.2	2.4	4.9		0.6	4.5	0.2	0.4	0.9	0.1
Delay (s)	46.7	28.4	26.8	31.0	35.4		6.5	17.8	7.2	12.2	13.4	10.0
Level of Service	D	C	C	C	D		A	B	A	B	B	B
Approach Delay (s)		31.7			34.7			16.1			13.1	
Approach LOS		C			C			B			B	

Intersection Summary

HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings
15: Eighth Line & 5 Side Road

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕↕		↕	↕	
Traffic Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Future Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	25.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.979			0.979			0.969	
Flt Protected		0.989			0.997					0.950		
Satd. Flow (prot)	0	3448	0	0	3466	0	0	1830	0	1805	1826	0
Flt Permitted		0.684			0.902			0.998		0.378		
Satd. Flow (perm)	0	2385	0	0	3136	0	0	1827	0	718	1826	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			41			25			34	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		643.4			668.7			2468.4			454.5	
Travel Time (s)		38.6			40.1			126.9			23.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	2%	22%	11%	1%	1%	0%	1%	5%	0%	0%	4%
Adj. Flow (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	400	0	0	675	0	0	635	0	25	220	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lanes, Volumes, Timings
15: Eighth Line & 5 Side Road

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area

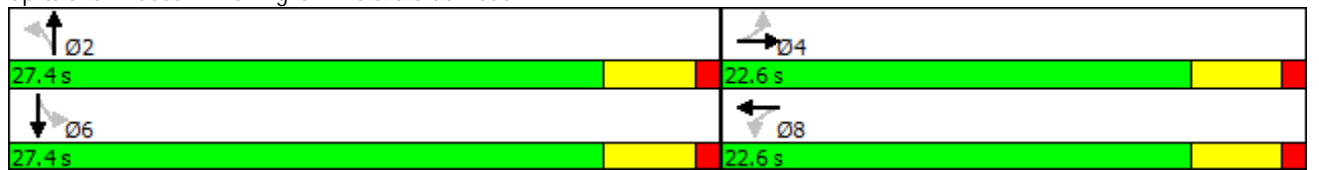


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		27.4	27.4		27.4	27.4	
Total Split (%)	45.2%	45.2%		45.2%	45.2%		54.8%	54.8%		54.8%	54.8%	
Maximum Green (s)	18.1	18.1		18.1	18.1		22.9	22.9		22.9	22.9	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		14.2			14.2			23.0			23.0	
Actuated g/C Ratio		0.31			0.31			0.50			0.50	
v/c Ratio		0.54			0.68			0.69			0.07	0.24
Control Delay		15.9			16.8			14.9			8.0	7.2
Queue Delay		0.0			0.0			0.0			0.0	0.0
Total Delay		15.9			16.8			14.9			8.0	7.2
LOS		B			B			B			A	A
Approach Delay		15.9			16.8			14.9				7.3
Approach LOS		B			B			B				A

Intersection Summary

Area Type:	Other
Cycle Length:	50
Actuated Cycle Length:	46.3
Natural Cycle:	50
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.69
Intersection Signal Delay:	14.8
Intersection LOS:	B
Intersection Capacity Utilization	79.6%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 15: Eighth Line & 5 Side Road



Queues
15: Eighth Line & 5 Side Road



Lane Group	EBT	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	400	675	635	25	220
v/c Ratio	0.54	0.68	0.69	0.07	0.24
Control Delay	15.9	16.8	14.9	8.0	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	16.8	14.9	8.0	7.2
Queue Length 50th (m)	14.3	24.1	35.5	1.0	8.0
Queue Length 95th (m)	24.6	38.1	#93.6	4.6	20.4
Internal Link Dist (m)	619.4	644.7	2444.4		430.5
Turn Bay Length (m)				25.0	
Base Capacity (vph)	940	1257	920	356	924
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.43	0.54	0.69	0.07	0.24

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

15: Eighth Line & 5 Side Road

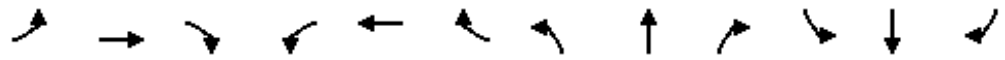
2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕↕		↕	↕	
Traffic Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Future Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5		4.5	4.5	
Lane Util. Factor		0.95			0.95			1.00		1.00	1.00	
Frt		1.00			0.98			0.98		1.00	0.97	
Flt Protected		0.99			1.00			1.00		0.95	1.00	
Satd. Flow (prot)		3450			3464			1829		1805	1827	
Flt Permitted		0.68			0.90			1.00		0.38	1.00	
Satd. Flow (perm)		2384			3137			1826		718	1827	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	85	305	10	45	535	95	5	530	100	25	175	45
RTOR Reduction (vph)	0	4	0	0	28	0	0	13	0	0	17	0
Lane Group Flow (vph)	0	396	0	0	647	0	0	622	0	25	203	0
Heavy Vehicles (%)	5%	2%	22%	11%	1%	1%	0%	1%	5%	0%	0%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.2			14.2			23.0		23.0	23.0	
Effective Green, g (s)		14.2			14.2			23.0		23.0	23.0	
Actuated g/C Ratio		0.31			0.31			0.50		0.50	0.50	
Clearance Time (s)		4.5			4.5			4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)		732			964			909		357	909	
v/s Ratio Prot											0.11	
v/s Ratio Perm		0.17			0.21			0.34		0.03		
v/c Ratio		0.54			0.67			0.68		0.07	0.22	
Uniform Delay, d1		13.3			14.0			8.8		6.0	6.6	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.8			1.8			4.2		0.4	0.6	
Delay (s)		14.1			15.8			13.0		6.4	7.1	
Level of Service		B			B			B		A	A	
Approach Delay (s)		14.1			15.8			13.0			7.0	
Approach LOS		B			B			B			A	
Intersection Summary												
HCM 2000 Control Delay			13.5			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			46.2			Sum of lost time (s)			9.0			
Intersection Capacity Utilization			79.6%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
19: Trafalgar Road & "Street B"

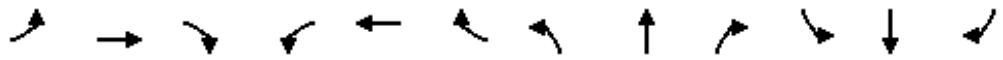
2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Future Volume (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	85.0		50.0	50.0		50.0	50.0		50.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.757			0.620			0.426			0.086		
Satd. Flow (perm)	1410	1863	1583	1155	1863	1583	794	3539	1583	160	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			323			184			164			164
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		207.1			712.3			589.5			891.1	
Travel Time (s)		14.9			51.3			26.5			40.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	24.0	24.0	10.0	24.0	24.0	9.5	24.0	24.0	9.5	24.0	24.0

Lanes, Volumes, Timings
19: Trafalgar Road & "Street B"

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area

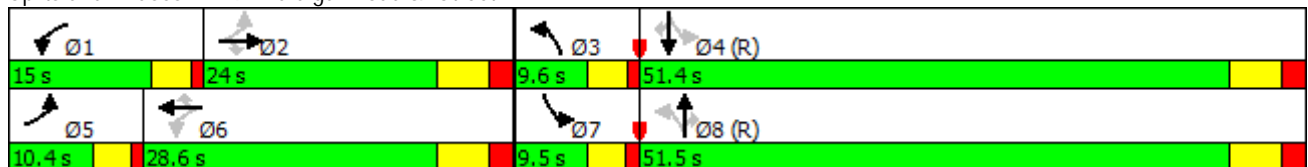


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	10.4	24.0	24.0	15.0	28.6	28.6	9.6	51.5	51.5	9.5	51.4	51.4
Total Split (%)	10.4%	24.0%	24.0%	15.0%	28.6%	28.6%	9.6%	51.5%	51.5%	9.5%	51.4%	51.4%
Maximum Green (s)	6.4	18.0	18.0	11.0	22.6	22.6	5.6	45.5	45.5	5.5	45.4	45.4
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	26.4		18.0	35.0		22.6	53.9	47.4	47.4	53.7	47.3	47.3
Actuated g/C Ratio	0.26		0.18	0.35		0.23	0.54	0.47	0.47	0.54	0.47	0.47
v/c Ratio	0.29		0.18	0.72		0.23	0.15	0.79	0.17	0.29	0.31	0.10
Control Delay	25.7		0.7	37.0		1.8	10.5	26.9	2.4	13.9	17.4	0.2
Queue Delay	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7		0.7	37.0		1.8	10.5	26.9	2.4	13.9	17.4	0.2
LOS	C		A	D		A	B	C	A	B	B	A
Approach Delay		14.1			28.1			23.8			14.9	
Approach LOS		B			C			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 4:SBTL and 8:NBTL, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 21.7
 Intersection LOS: C
 Intersection Capacity Utilization 79.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 19: Trafalgar Road & "Street B"



Queues
19: Trafalgar Road & "Street B"

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	115	100	340	115	70	1320	145	50	515	85
v/c Ratio	0.29	0.18	0.72	0.23	0.15	0.79	0.17	0.29	0.31	0.10
Control Delay	25.7	0.7	37.0	1.8	10.5	26.9	2.4	13.9	17.4	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	0.7	37.0	1.8	10.5	26.9	2.4	13.9	17.4	0.2
Queue Length 50th (m)	16.1	0.0	55.2	0.0	6.0	119.4	0.0	4.2	34.2	0.0
Queue Length 95th (m)	29.4	0.0	84.0	2.4	12.3	149.7	8.4	9.5	46.5	0.0
Internal Link Dist (m)						565.5			867.1	
Turn Bay Length (m)	50.0	50.0	85.0	50.0	50.0		50.0	50.0		50.0
Base Capacity (vph)	395	549	471	500	482	1677	836	174	1674	835
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.18	0.72	0.23	0.15	0.79	0.17	0.29	0.31	0.10
Intersection Summary										

HCM Signalized Intersection Capacity Analysis
19: Trafalgar Road & "Street B"

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Future Volume (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		6.0	4.0		6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00		0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770		1583	1770		1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.76		1.00	0.62		1.00	0.43	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)	1410		1583	1154		1583	794	3539	1583	160	3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
RTOR Reduction (vph)	0	0	82	0	0	89	0	0	77	0	0	45
Lane Group Flow (vph)	115	0	18	340	0	26	70	1320	68	50	515	40
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	24.4		18.0	33.0		22.6	51.1	46.6	46.6	50.9	46.5	46.5
Effective Green, g (s)	24.4		18.0	33.0		22.6	51.1	46.6	46.6	50.9	46.5	46.5
Actuated g/C Ratio	0.24		0.18	0.33		0.23	0.51	0.47	0.47	0.51	0.46	0.46
Clearance Time (s)	4.0		6.0	4.0		6.0	4.0	6.0	6.0	4.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	367		284	448		357	449	1649	737	152	1645	736
v/s Ratio Prot	0.02			c0.08			0.01	c0.37		c0.01	0.15	
v/s Ratio Perm	0.06		0.01	c0.17		0.02	0.07		0.04	0.15		0.02
v/c Ratio	0.31		0.06	0.76		0.07	0.16	0.80	0.09	0.33	0.31	0.05
Uniform Delay, d1	30.6		34.0	29.2		30.5	12.5	22.7	14.9	16.7	16.7	14.7
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5		0.4	7.2		0.4	0.2	4.2	0.2	1.3	0.5	0.1
Delay (s)	31.1		34.4	36.4		30.9	12.7	26.9	15.1	18.0	17.2	14.8
Level of Service	C		C	D		C	B	C	B	B	B	B
Approach Delay (s)		32.6			35.0			25.2			17.0	
Approach LOS		C			C			C			B	

Intersection Summary

HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lanes, Volumes, Timings
20: Eighth Line & "Street B"

2026 Total PM - Remedial Measures
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	145	190	80	585	185	65
Future Volume (vph)	145	190	80	585	185	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0	0.0	25.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.965	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1798	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	1863	1798	0
Link Speed (k/h)	50			70	70	
Link Distance (m)	712.3			618.0	2468.4	
Travel Time (s)	51.3			31.8	126.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	145	190	80	585	185	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	145	190	80	585	250	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.5%
	ICU Level of Service A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 20: Eighth Line & "Street B"

2026 Total PM - Remedial Measures
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	145	190	80	585	185	65
Future Volume (Veh/h)	145	190	80	585	185	65
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	145	190	80	585	185	65
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	962	218	250			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	962	218	250			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	46	77	94			
cM capacity (veh/h)	266	822	1316			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	
Volume Total	145	190	80	585	250	
Volume Left	145	0	80	0	0	
Volume Right	0	190	0	0	65	
cSH	266	822	1316	1700	1700	
Volume to Capacity	0.54	0.23	0.06	0.34	0.15	
Queue Length 95th (m)	23.9	7.1	1.6	0.0	0.0	
Control Delay (s)	33.5	10.7	7.9	0.0	0.0	
Lane LOS	D	B	A			
Approach Delay (s)	20.6		1.0	0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			6.0			
Intersection Capacity Utilization			45.5%	ICU Level of Service	A	
Analysis Period (min)			15			