Appendix 3.5

Detailed Calculation of Chimney, Portal, Top Opening and Ventilation Building Emission

Emission Calculation for Chimney (In-use only)

Sources	Source ID	Type	X	Y	Release Height	Exit Temperature	Exit Velocity	Internal Diameter	NOX Emission Rate	RSP Emission Rate	Remark
			(m)	(m)	(m)	(K)	(m/s)	(m)	(g/s)	(g/s)	
Chimney	We1	POINT	835512.7	819388.3	50	373	6	0.2	4.44E-02	4.44E-03	Continuously in-use with 200L/hr fuel consumption for three chimneys for the Boiler at Tak Yue Restaurant
	We2	POINT	835512.7	819388.3	50	373	6	0.2	4.44E-02	4.44E-03	
	We3	POINT	835512.7	819388.3	50	373	6	0.2	4.44E-02	4.44E-03	
	We4	POINT	835585.6	819028.1	15	373	6	0.3	1.33E-01	1.33E-02	Continuously in-use with 200L/hr fuel consumption for the Boiler at Mei Du Restaurant
	We5	POINT	835538.8	819398.3	-	-	-	-	-	-	Emergency use only for the back-up power generator on roof-top of Hip Kwan Commercial Building
	We6	POINT	835573.6	819409.4	-	-	-	-	-	-	Emergency use only for the back-up power generator on roof-top of Cheong Wai Building
	We7	POINT	835566.5	819050.2	-	-	-	-	-	-	Emergency use only for the back-up power generator on roof-top of Dorsett Seaview Hotel
	We8	POINT	835566.5	819050.2	-	-	-	-	-	-	
	We9	POINT	834627.4	820011.2	-	-	-	-	-	-	Emergency use only for the back-up power generator on roof-top of HSBC Centre
	We10	POINT	835367.0	819328.0	-	-	-	-	-	-	Not used for the Boiler at Kam Wah Building
	We11	POINT	835474.0	819595.0	-	-	-	-	-	-	Not used for the Boiler at Tung Chun Commercial Centre
	We12	POINT	835634.0	819088.0	-	-	-	-	-	-	Not used for the Boiler at Sunbeam Commercial Building

- The information is referenced to Appendix 4.9 of Approved EIA of "Central Kowloon Route" and on-site survey.

Refering to USEPA AP-42, Section 1.3, Table 1.3-1, 05/2010 edition:

Emission Factor for Industrial Chimney	NOX	20	lb/10^3 gal
		2.4	g/L
	RSP	2	lb/10^3 gal
		0.24	g/L
Maximum fuel oil consumption rate		200	L/hr
Maximum Emission Rate	NOX	480	g/hr
		1.33E-01	g/s
	RSP	48	g/hr
		1.33E-02	g/s
The Emission Rate for We4	NOX	1.33E-01	g/s
	RSP	1.33E-02	g/s
The Emission Rate for We1 to We3	NOX	4.44E-02	g/s
	RSP	1.33E-02	g/s

Sample Calculation of NOX for Tunnel Portal for Cherry Street of Hour 18 of Year 2016

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission / VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
CSEB	Cherry St (Underpass) (EB)	160	0.099	80	0.996	7.920	0.002	-	0.001	0.001	
CSWB	Cherry St (Underpass) (WB)	160	0.099	1450	1.863	268.644	0.075	-	0.050	0.025	

Sample Calculation of NOX for Tunnel Portal and Ventilation Building for West Harbour Crossing of Hour 18 of Year 2016

Scenario	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission / VB	Portal Emission		Remark
									first 125m	second 125m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
Scenario 1	West Harbour Crossing NB	1960	1.218	2480	2.114	6387	1.774	1.242	0.355	0.177	Assume 30% from portal /70% from VB
Scenario 2	West Harbour Crossing NB	1960	1.218	2480	2.114	6387	1.774	0.887	0.591	0.296	Assume 50% from portal /50% from VB
Scenario 3	West Harbour Crossing NB	1960	1.218	2480	2.114	6387	1.774	0.000	1.183	0.591	Assume 100% from portal

Emission Inventory for Tunnel Portal for Cherry Street of Year 2016 - NOX

			Location		Point Source				Volume Source																									
Sources	Source ID	Type	X	Y	Release Height	Exit Temperatur	Exit velocity	Internal diameter	Lateral Dim. (Sy)	Vertical Dim. (Sz)	Hourly NOX Emission Rate (g/s) or (g/m2/s)																							
			(m)	(m)	(m)	(K)	(m/s)	(m)	(m)	(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Cherry Street (EB)	CSEB_01	VOLUME	834623.4	819856.2	2.85	-	-	-	3.63	2.65	3.92E-05	3.85E-05	3.76E-05	1.40E-05	1.40E-05	1.40E-05	3.76E-05	5.26E-05	1.09E-04	1.09E-04	9.19E-05	5.46E-05	5.38E-05	1.40E-04	1.18E-04	1.42E-04	1.45E-04	2.06E-04	2.10E-04	2.07E-04	1.41E-04	1.17E-04	1.14E-04	1.12E-04
	CSEB_02	VOLUME	834630.7	819859.0	2.85	-	-	-	3.63	2.65	3.92E-05	3.85E-05	3.76E-05	1.40E-05	1.40E-05	1.40E-05	3.76E-05	5.26E-05	1.09E-04	1.09E-04	9.19E-05	5.46E-05	5.38E-05	1.40E-04	1.18E-04	1.42E-04	1.45E-04	2.06E-04	2.10E-04	2.07E-04	1.41E-04	1.17E-04	1.14E-04	1.12E-04
	CSEB_03	VOLUME	834638.0	819861.9	2.85	-	-	-	3.63	2.65	3.92E-05	3.85E-05	3.76E-05	1.40E-05	1.40E-05	1.40E-05	3.76E-05	5.26E-05	1.09E-04	1.09E-04	9.19E-05	5.46E-05	5.38E-05	1.40E-04	1.18E-04	1.42E-04	1.45E-04	2.06E-04	2.10E-04	2.07E-04	1.41E-04	1.17E-04	1.14E-04	1.12E-04
	CSEB_04	VOLUME	834645.2	819864.7	2.85	-	-	-	3.63	2.65	3.92E-05	3.85E-05	3.76E-05	1.40E-05	1.40E-05	1.40E-05	3.76E-05	5.26E-05	1.09E-04	1.09E-04	9.19E-05	5.46E-05	5.38E-05	1.40E-04	1.18E-04	1.42E-04	1.45E-04	2.06E-04	2.10E-04	2.07E-04	1.41E-04	1.17E-04	1.14E-04	1.12E-04
	CSEB_05	VOLUME	834652.5	819867.5	2.85	-	-	-	3.63	2.65	3.92E-05	3.85E-05	3.76E-05	1.40E-05	1.40E-05	1.40E-05	3.76E-05	5.26E-05	1.09E-04	1.09E-04	9.19E-05	5.46E-05	5.38E-05	1.40E-04	1.18E-04	1.42E-04	1.45E-04	2.06E-04	2.10E-04	2.07E-04	1.41E-04	1.17E-04	1.14E-04	1.12E-04
	CSEB_06	VOLUME	834659.8	819870.4	2.85	-	-	-	3.63	2.65	3.92E-05	3.85E-05	3.76E-05	1.40E-05	1.40E-05	1.40E-05	3.76E-05	5.26E-05	1.09E-04	1.09E-04	9.19E-05	5.46E-05	5.38E-05	1.40E-04	1.18E-04	1.42E-04	1.45E-04	2.06E-04	2.10E-04	2.07E-04	1.41E-04	1.17E-04	1.14E-04	1.12E-04
	CSEB_07	VOLUME	834667.0	819873.2	2.85	-	-	-	3.63	2.65	3.92E-05	3.85E-05	3.76E-05	1.40E-05	1.40E-05	1.40E-05	3.76E-05	5.26E-05	1.09E-04	1.09E-04	9.19E-05	5.46E-05	5.38E-05	1.40E-04	1.18E-04	1.42E-04	1.45E-04	2.06E-04	2.10E-04	2.07E-04	1.41E-04	1.17E-04	1.14E-04	1.12E-04
	CSEB_08	VOLUME	834674.3	819876.1	2.85	-	-	-	3.63	2.65	1.96E-05	1.93E-05	1.88E-05	7.02E-06	7.02E-06	7.02E-06	1.88E-05	2.63E-05	5.47E-05	5.43E-05	4.60E-05	2.73E-05	2.69E-05	7.02E-05	5.88E-05	7.12E-05	7.23E-05	1.03E-04	1.05E-04	1.03E-04	7.04E-05	5.84E-05	5.72E-05	5.61E-05
	CSEB_09	VOLUME	834681.6	819878.9	2.85	-	-	-	3.63	2.65	1.96E-05	1.93E-05	1.88E-05	7.02E-06	7.02E-06	7.02E-06	1.88E-05	2.63E-05	5.47E-05	5.43E-05	4.60E-05	2.73E-05	2.69E-05	7.02E-05	5.88E-05	7.12E-05	7.23E-05	1.03E-04	1.05E-04	1.03E-04	7.04E-05	5.84E-05	5.72E-05	5.61E-05
	CSEB_10	VOLUME	834688.8	819881.7	2.85	-	-	-	3.63	2.65	1.96E-05	1.93E-05	1.88E-05	7.02E-06	7.02E-06	7.02E-06	1.88E-05	2.63E-05	5.47E-05	5.43E-05	4.60E-05	2.73E-05	2.69E-05	7.02E-05	5.88E-05	7.12E-05	7.23E-05	1.03E-04	1.05E-04	1.03E-04	7.04E-05	5.84E-05	5.72E-05	5.61E-05
	CSEB_11	VOLUME	834696.1	819884.6	2.85	-	-	-	3.63	2.65	1.96E-05	1.93E-05	1.88E-05	7.02E-06	7.02E-06	7.02E-06	1.88E-05	2.63E-05	5.47E-05	5.43E-05	4.60E-05	2.73E-05	2.69E-05	7.02E-05	5.88E-05	7.12E-05	7.23E-05	1.03E-04	1.05E-04	1.03E-04	7.04E-05	5.84E-05	5.72E-05	5.61E-05
	CSEB_12	VOLUME	834703.4	819887.4	2.85	-	-	-	3.63	2.65	1.96E-05	1.93E-05	1.88E-05	7.02E-06	7.02E-06	7.02E-06	1.88E-05	2.63E-05	5.47E-05	5.43E-05	4.60E-05	2.73E-05	2.69E-05	7.02E-05	5.88E-05	7.12E-05	7.23E-05	1.03E-04	1.05E-04	1.03E-04	7.04E-05	5.84E-05	5.72E-05	5.61E-05
	CSEB_13	VOLUME	834710.6	819890.3	2.85	-	-	-	3.63	2.65	1.96E-05	1.93E-05	1.88E-05	7.02E-06	7.02E-06	7.02E-06	1.88E-05	2.63E-05	5.47E-05	5.43E-05	4.60E-05	2.73E-05	2.69E-05	7.02E-05	5.88E-05	7.12E-05	7.23E-05	1.03E-04	1.05E-04	1.03E-04	7.04E-05	5.84E-05	5.72E-05	5.61E-05
	CSEB_14	VOLUME	834717.9	819893.1	2.85	-	-	-	3.63	2.65	1.96E-05	1.93E-05	1.88E-05	7.02E-06	7.02E-06	7.02E-06	1.88E-05	2.63E-05	5.47E-05	5.43E-05	4.60E-05	2.73E-05	2.69E-05	7.02E-05	5.88E-05	7.12E-05	7.23E-05	1.03E-04	1.05E-04	1.03E-04	7.04E-05	5.84E-05	5.72E-05	5.61E-05
Cherry Street (WB)	CSWB_01	VOLUME	834463.0	819813.3	2.85	-	-	-	3.63	2.65	2.12E-03	2.00E-03	1.17E-03	6.11E-04	6.11E-04	5.88E-04	1.06E-03	1.37E-03	2.86E-03	3.17E-03	2.75E-03	2.40E-03	2.46E-03	3.79E-03	3.19E-03	4.27E-03	5.30E-03	6.65E-03	7.11E-03	5.99E-03	5.25E-03	4.18E-03	3.43E-03	3.06E-03
	CSWB_02	VOLUME	834455.2	819813.3	2.85	-	-	-	3.63	2.65	2.12E-03	2.00E-03	1.17E-03	6.11E-04	6.11E-04	5.88E-04	1.06E-03	1.37E-03	2.86E-03	3.17E-03	2.75E-03	2.40E-03	2.46E-03	3.79E-03	3.19E-03	4.27E-03	5.30E-03	6.65E-03	7.11E-03	5.99E-03	5.25E-03	4.18E-03	3.43E-03	3.06E-03
	CSWB_03	VOLUME	834447.4	819813.3	2.85	-	-	-	3.63	2.65	2.12E-03	2.00E-03	1.17E-03	6.11E-04	6.11E-04	5.88E-04	1.06E-03	1.37E-03	2.86E-03	3.17E-03	2.75E-03	2.40E-03	2.46E-03	3.79E-03	3.19E-03	4.27E-03	5.30E-03	6.65E-03	7.11E-03	5.99E-03	5.25E-03	4.18E-03	3.43E-03	3.06E-03
	CSWB_04	VOLUME	834439.6	819813.3	2.85	-	-	-	3.63	2.65	2.12E-03	2.00E-03	1.17E-03	6.11E-04	6.11E-04	5.88E-04	1.06E-03	1.37E-03	2.86E-03	3.17E-03	2.75E-03	2.40E-03	2.46E-03	3.79E-03	3.19E-03	4.27E-03	5.30E-03	6.65E-03	7.11E-03	5.99E-03	5.25E-03	4.18E-03	3.43E-03	3.06E-03
	CSWB_05	VOLUME	834431.8	819813.3	2.85	-	-	-	3.63	2.65	2.12E-03	2.00E-03	1.17E-03	6.11E-04	6.11E-04	5.88E-04	1.06E-03	1.37E-03	2.86E-03	3.17E-03	2.75E-03	2.40E-03	2.46E-03	3.79E-03	3.19E-03	4.27E-03	5.30E-03	6.65E-03	7.11E-03	5.99E-03	5.25E-03	4.18E-03	3.43E-03	3.06E-03
	CSWB_06	VOLUME	834424.0	819813.3	2.85	-	-	-	3.63	2.65	2.12E-03	2.00E-03	1.17E-03	6.11E-04	6.11E-04	5.88E-04	1.06E-03	1.37E-03	2.86E-03	3.17E-03	2.75E-03	2.40E-03	2.46E-03	3.79E-03	3.19E-03	4.27E-03	5.30E-03	6.65E-03	7.11E-03	5.99E-03	5.25E-03	4.18E-03	3.43E-03	3.06E-03
	CSWB_07	VOLUME	834416.2	819813.3	2.85	-	-	-	3.63	2.65	2.12E-03	2.00E-03	1.17E-03	6.11E-04	6.11E-04	5.88E-04	1.06E-03	1.37E-03	2.86E-03	3.17E-03	2.75E-03	2.40E-03	2.46E-03	3.79E-03	3.19E-03	4.27E-03	5.30E-03	6.65E-03	7.11E-03	5.99E-03	5.25E-03	4.18E-03	3.43E-03	3.06E-03
	CSWB_08	VOLUME	834408.4	819813.3	2.85	-	-	-	3.63	2.65	1.06E-03	1.00E-03	5.83E-04	3.06E-04	3.06E-04	2.94E-04	5.32E-04	6.84E-04	1.43E-03	1.58E-03	1.38E-03	1.20E-03	1.23E-03	1.90E-03	1.59E-03	2.13E-03	2.65E-03	3.33E-03	3.55E-03	2.99E-03	2.62E-03	2.09E-03	1.72E-03	1.53E-03
	CSWB_09	VOLUME	834400.6	819813.3	2.85	-	-	-	3.63	2.65	1.06E-03	1.00E-03	5.83E-04	3.06E-04	3.06E-04	2.94E-04	5.32E-04	6.84E-04	1.43E-03	1.58E-03	1.38E-03	1.20E-03	1.23E-03	1.90E-03	1.59E-03	2.13E-03	2.65E-03	3.33E-03	3.55E-03	2.99E-03	2.62E-03	2.09E-03	1.72E-03	1.53E-03
	CSWB_10	VOLUME	834392.8	819813.3	2.85	-	-	-	3.63	2.65	1.06E-03	1.00E-03	5.83E-04	3.06E-04	3.06E-04	2.94E-04	5.32E-04	6.84E-04	1.43E-03	1.58E-03	1.38E-03	1.20E-03	1.23E-03	1.90E-03	1.59E-03	2.13E-03	2.65E-03	3.33E-03	3.55E-03	2.99E-03	2.62E-03	2.09E-03	1.72E-03	1.53E-03
	CSWB_11	VOLUME	834385.0	819813.3	2.85	-	-	-	3.63	2.65	1.06E-03	1.00E-03	5.83E-04	3.06E-04	3.06E-04	2.94E-04	5.32E-04	6.84E-04	1.43E-03	1.58E-03	1.38E-03	1.20E-03	1.23E-03	1.90E-03	1.59E-03	2.13E-03	2.65E-03	3.33E-03	3.55E-03	2.99E-03	2.62E-03	2.09E-03	1.72E-03	1.53E-03
	CSWB_12	VOLUME	834377.2	819813.3	2.85	-	-	-	3.63	2.65	1.06E-03	1.00E-03	5.83E-04	3.06E-04	3.06E-04	2.94E-04	5.32E-04	6.84E-04	1.43E-03	1.58E-03	1.38E-03	1.20E-03	1.23E-03	1.90E-03	1.59E-03	2.13E-03	2.65E-03	3.33E-03	3.55E-03	2.99E-03	2.62E-03	2.09E-03	1.72E-03	1.53E-03
	CSWB_13	VOLUME	834369.4	819813.3	2.85	-	-	-	3.63	2.65	1.06E-03	1.00E-03	5.83E-04	3.06E-04	3.06E-04	2.94E-04	5.32E-04	6.84E-04	1.43E-03	1.58E-03	1.38E-03	1.20E-03	1.23E-03	1.90E-03	1.59E-03	2.13E-03	2.65E-03	3.33E-03	3.55E-03	2.99E-03	2.62E-03	2.09E-03	1.72E-03	1.53E-03
	CSWB_14	VOLUME	834361.6	819813.3	2.85	-	-	-	3.63	2.65	1.06E-03	1.00E-03	5.83E-04	3.06E-04	3.06E-04	2.94E-04	5.32E-04	6.84E-04	1.43E-03	1.58E-03	1.38E-03	1.20E-03	1.23E-03	1.90E-03	1.59E-03	2.13E-03	2.65E-03	3.33E-03	3.55E-03	2.99E-03	2.62E-03	2.09E-03	1.72E-03	1.53E-03

Emission Inventory for Tunnel Portal for West Harbour Crossing of Year 2016 (NOX)

Scenario	Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Point Source Exit Temperatur (K)	Point Source Exit Velocity (m/s)	Point Source Internal Diameter (m)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly Nox Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
1	West Harbour Crossing VB	WHCVB	POINT	834036.1	817852.9	28	303	0	9.49	-	-	2.81E-01	1.22E-01	1.22E-01	1.21E-01	1.20E-01	1.20E-01	2.18E-01	3.29E-01	8.53E-01	7.79E-01	7.03E-01	7.21E-01	6.34E-01	6.49E-01	8.11E-01	8.19E-01	8.46E-01	1.04E+00	1.24E+00	9.06E-01	5.89E-01	4.31E-01	4.19E-01	2.77E-01
	West Harbour Crossing NB	W1	VOLUME	834182.7	818038.7	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W2	VOLUME	834191.2	818049.7	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W3	VOLUME	834199.8	818060.8	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W4	VOLUME	834208.3	818071.9	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W5	VOLUME	834216.9	818083.0	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W6	VOLUME	834225.4	818094.1	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W7	VOLUME	834234.0	818105.2	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W8	VOLUME	834242.5	818116.2	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W9	VOLUME	834250.8	818122.7	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W10	VOLUME	834259.0	818133.4	4.29	-	-	-	6.51	3.99	8.04E-03	3.48E-03	3.48E-03	3.46E-03	3.43E-03	3.43E-03	6.24E-03	9.40E-03	2.44E-02	2.23E-02	2.01E-02	2.06E-02	1.81E-02	1.86E-02	2.32E-02	2.34E-02	2.42E-02	2.98E-02	3.55E-02	2.59E-02	1.68E-02	1.23E-02	1.20E-02	7.90E-03
		W11	VOLUME	834267.2	818144.1	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W12	VOLUME	834275.3	818154.8	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W13	VOLUME	834283.5	818165.6	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W14	VOLUME	834291.7	818176.3	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W15	VOLUME	834299.9	818187.0	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W16	VOLUME	834308.1	818197.8	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W17	VOLUME	834316.3	818208.5	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W18	VOLUME	834324.5	818219.2	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W19	VOLUME	834332.7	818230.0	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
		W20	VOLUME	834340.9	818240.7	4.29	-	-	-	6.51	3.99	4.02E-03	1.74E-03	1.74E-03	1.73E-03	1.72E-03	1.72E-03	3.12E-03	4.70E-03	1.22E-02	1.11E-02	1.00E-02	1.03E-02	9.06E-03	9.28E-03	1.16E-02	1.17E-02	1.21E-02	1.49E-02	1.77E-02	1.29E-02	8.42E-03	6.16E-03	5.98E-03	3.95E-03
2	West Harbour Crossing VB	WHCVB	POINT	834036.1	817852.9	28	303	0	9.49	-	-	2.01E-01	8.71E-02	8.71E-02	8.66E-02	8.58E-02	8.58E-02	1.56E-01	2.35E-01	6.09E-01	5.56E-01	5.02E-01	5.15E-01	4.53E-01	4.64E-01	5.79E-01	5.85E-01	6.04E-01	7.45E-01	8.87E-01	6.47E-01	4.21E-01	3.08E-01	2.99E-01	1.98E-01
	West Harbour Crossing NB	W1	VOLUME	834182.7	818038.7	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W2	VOLUME	834191.2	818049.7	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W3	VOLUME	834199.8	818060.8	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W4	VOLUME	834208.3	818071.9	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W5	VOLUME	834216.9	818083.0	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W6	VOLUME	834225.4	818094.1	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W7	VOLUME	834234.0	818105.2	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W8	VOLUME	834242.5	818116.2	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W9	VOLUME	834250.8	818122.7	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W10	VOLUME	834259.0	818133.4	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W11	VOLUME	834267.2	818144.1	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W12	VOLUME	834275.3	818154.8	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W13	VOLUME	834283.5	818165.6	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W14	VOLUME	834291.7	818176.3	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W15	VOLUME	834299.9	818187.0	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W16	VOLUME	834308.1	818197.8	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W17	VOLUME	834316.3	818208.5	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W18	VOLUME	834324.5	818219.2	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W19	VOLUME	834332.7	818230.0	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
		W20	VOLUME	834340.9	818240.7	4.29	-	-	-	6.51	3.99	6.70E-03	2.90E-03	2.90E-03	2.89E-03	2.86E-03	2.86E-03	5.20E-03	7.83E-03	2.03E-02	1.85E-02	1.67E-02	1.72E-02	1.51E-02	1.55E-02	1.93E-02	1.95E-02	2.01E-02	2.48E-02	2.96E-02	2.16E-02	1.40E-02	1.03E-02	9.97E-03	6.59E-03
3	West Harbour Crossing VB	WHCVB	POINT	834036.1	817852.9	28	303	0	9.49	-	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	West Harbour Crossing NB	W1	VOLUME	834182.7	818038.7	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W2	VOLUME	834191.2	818049.7	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W3	VOLUME	834199.8	818060.8	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W4	VOLUME	834208.3	818071.9	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W5	VOLUME	834216.9	818083.0	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W6	VOLUME	834225.4	818094.1	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W7	VOLUME	834234.0	818105.2	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W8	VOLUME	834242.5	818116.2	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W9	VOLUME	834250.8	818122.7	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W10	VOLUME	834259.0	818133.4	4.29	-	-	-	6.51	3.99	2.68E-02	1.16E-02	1.16E-02	1.15E-02	1.14E-02	1.14E-02	2.08E-02	3.13E-02	8.12E-02	7.42E-02	6.70E-02	6.87E-02	6.04E-02	6.18E-02	7.72E-02	7.80E-02	8.05E-02	9.93E-02	1.18E-01	8.63E-02	5.61E-02	4.11E-02	3.99E-02	2.63E-02
		W11	VOLUME	834267.2	818144.1	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W12	VOLUME	834275.3	818154.8	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W13	VOLUME	834283.5	818165.6	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W14	VOLUME	834291.7	818176.3	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02	5.91E-02	4.32E-02	2.81E-02	2.05E-02	1.99E-02	1.32E-02
		W15	VOLUME	834299.9	818187.0	4.29	-	-	-	6.51	3.99	1.34E-02	5.81E-03	5.81E-03	5.77E-03	5.72E-03	5.72E-03	1.04E-02	1.57E-02	4.06E-02	3.71E-02	3.35E-02	3.43E-02	3.02E-02	3.09E-02	3.86E-02	3.90E-02	4.03E-02	4.97E-02

Sample Calcuation of NOX Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 1 - 10%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	1.252	41	0.011	0.001	-	-	0.1 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	1.252	133	0.037	0.005	-	-	0.1 x 0.9 x Tunnel Section A + 0.1 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	1.252	60	0.017	0.009	-	-	0.1 x 0.9 x 0.9 x Tunnel Section A + 0.1 x 0.9 x Tunnel Section B + 0.1 x Tunnel Section C + 0.1 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	1.303	114	0.032				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	1.303	127	0.035	0.006	-	-	0.1 x 0.9 x Tunnel Section E + 0.1 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	1.090	119	0.033	0.045	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.9 x 0.9 x Tunnel Section E + 0.9 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	1.249	21	0.006				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.752	20	0.006				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	1.252	96	0.027	-	0.036	0.018	0.9 x 0.9 x 0.9 x Tunnel Section A + 0.9 x 0.9 x Tunnel Section B + 0.9 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	1.303	52	0.014	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.603	4	0.001	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	1.293	40	0.011	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	1.010	125	0.035	-	0.067	0.033	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.9 x 0.9 x Tunnel Section E + 0.9 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.987	7	0.002	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	1.223	64	0.018	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	1.199	54	0.015	-	0.012	0.006	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	1.034	75	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	1.225	77	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.708	17	0.005	-	0.027	0.007	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.9 x 0.9 x Tunnel Section E + 0.9 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Sample Calcuation of NOX Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 2 - 20%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark [1]
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	1.252	41	0.011	0.002	-	-	0.2 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	1.252	133	0.037	0.009	-	-	0.2 x 0.8 x Tunnel Section A + 0.2 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	1.252	60	0.017	0.017	-	-	0.2 x 0.8 x 0.8 x Tunnel Section A + 0.2 x 0.8 x Tunnel Section B + 0.2 x Tunnel Section C + 0.2 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	1.303	114	0.032				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	1.303	127	0.035	0.012	-	-	0.2 x 0.8 x Tunnel Section E + 0.2 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	1.090	119	0.033	0.043	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.8 x 0.8 x Tunnel Section E + 0.8 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	1.249	21	0.006				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.752	20	0.006				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	1.252	96	0.027	-	0.029	0.015	0.8 x 0.8 x 0.8 x Tunnel Section A + 0.8 x 0.8 x Tunnel Section B + 0.8 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	1.303	52	0.014	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.603	4	0.001	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	1.293	40	0.011	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	1.010	125	0.035	-	0.063	0.031	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.8 x 0.8 x Tunnel Section E + 0.8 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.987	7	0.002	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	1.223	64	0.018	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	1.199	54	0.015	-	0.012	0.006	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	1.034	75	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	1.225	77	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.708	17	0.005	-	0.026	0.007	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.8 x 0.8 x Tunnel Section E + 0.8 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Sample Calcuation of NOX Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 3 - 30%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	1.252	41	0.011	0.003	-	-	0.3 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	1.252	133	0.037	0.014	-	-	0.3 x 0.7 x Tunnel Section A + 0.3 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	1.252	60	0.017	0.024	-	-	0.3 x 0.7 x 0.7 x Tunnel Section A + 0.3 x 0.7 x Tunnel Section B + 0.3 x Tunnel Section C + 0.3 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	1.303	114	0.032				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	1.303	127	0.035	0.017	-	-	0.3 x 0.7 x Tunnel Section E + 0.3 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	1.090	119	0.033	0.042	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.7 x 0.7 x Tunnel Section E + 0.7 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	1.249	21	0.006				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.752	20	0.006				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	1.252	96	0.027	-	0.023	0.012	0.7 x 0.7 x 0.7 x Tunnel Section A + 0.7 x 0.7 x Tunnel Section B + 0.7 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	1.303	52	0.014	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.603	4	0.001	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	1.293	40	0.011	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	1.010	125	0.035	-	0.059	0.029	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.7 x 0.7 x Tunnel Section E + 0.7 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.987	7	0.002	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	1.223	64	0.018	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	1.199	54	0.015	-	0.012	0.006	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	1.034	75	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	1.225	77	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.708	17	0.005	-	0.025	0.007	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.7 x 0.7 x Tunnel Section E + 0.7 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Sample Calcuation of NOX Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 4 - Max%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	1.252	41	0.011	0.007	-	-	0.6 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	1.252	133	0.037	0.040	-	-	0.97 x 0.4 x Tunnel Section A + 0.97 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	1.252	60	0.017	0.021	-	-	0.43 x(1-0.97) x(1- 0.6) x Tunnel Section A + 0.43 x (1-0.97)x Tunnel Section B + 0.43 x Tunnel Section C + 0.43 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	1.303	114	0.032				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	1.303	127	0.035	0.021	-	-	0.4 x(1-0.43) x Tunnel Section E + 0.4 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	1.090	119	0.033	0.041	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.6 x 0.57 x Tunnel Section E + 0.6 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	1.249	21	0.006				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.752	20	0.006				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	1.252	96	0.027	-	0.008	0.004	0.57 x 0.03 x 0.4 x Tunnel Section A + 0.57 x 0.03 x Tunnel Section B + 0.57 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	1.303	52	0.014	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.603	4	0.001	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	1.293	40	0.011	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	1.010	125	0.035	-	0.055	0.027	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.6 x 0.57 x Tunnel Section E + 0.6 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.987	7	0.002	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	1.223	64	0.018	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	1.199	54	0.015	-	0.012	0.006	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	1.034	75	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	1.225	77	0.021	-	0.014	0.007	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.708	17	0.005	-	0.025	0.007	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.6 x 0.57 x Tunnel Section E + 0.6 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Maximum Percentage Emission from Opening at Level B2 of Austin Road/Lin Cheung Road Underpass

Opening ID	Calculation	Percentage
A	2/3 x 45/50	60%
B	2/3 x 50/50 + 1/3 x 45/50	97%
CE	2/3 x 32/50	43%
F	2/3 x 30/50	40%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 1) - NOX

Scenario 1

Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	2.01E-06	2.02E-06	1.02E-06	8.63E-07	8.82E-07	8.82E-07	1.89E-06	2.78E-06	5.78E-06	5.69E-06	4.42E-06	3.07E-06	3.01E-06	3.64E-06	2.64E-06	3.62E-06	3.79E-06	3.92E-06	3.65E-06	3.40E-06	3.37E-06	2.78E-06	2.54E-06	2.55E-06
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	8.14E-06	8.19E-06	5.77E-06	3.50E-06	3.58E-06	3.58E-06	7.65E-06	1.13E-05	2.34E-05	2.31E-05	1.79E-05	1.25E-05	1.22E-05	1.48E-05	1.07E-05	1.47E-05	1.54E-05	1.59E-05	1.48E-05	1.38E-05	1.37E-05	1.13E-05	1.03E-05	1.04E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	6.91E-06	5.96E-06	4.53E-06	3.18E-06	3.23E-06	3.24E-06	6.59E-06	1.20E-05	2.49E-05	2.24E-05	1.70E-05	1.36E-05	1.22E-05	1.38E-05	1.10E-05	1.34E-05	1.39E-05	1.40E-05	1.42E-05	1.35E-05	1.18E-05	1.06E-05	8.98E-06	9.07E-06
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	2.82E-03	2.83E-03	2.04E-03	1.21E-03	1.24E-03	1.24E-03	2.65E-03	3.92E-03	8.14E-03	8.01E-03	6.22E-03	4.36E-03	4.26E-03	5.15E-03	3.75E-03	5.12E-03	5.37E-03	5.58E-03	5.21E-03	4.86E-03	4.77E-03	3.94E-03	3.60E-03	3.61E-03
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	2.82E-03	2.83E-03	2.04E-03	1.21E-03	1.24E-03	1.24E-03	2.65E-03	3.92E-03	8.14E-03	8.01E-03	6.22E-03	4.36E-03	4.26E-03	5.15E-03	3.75E-03	5.12E-03	5.37E-03	5.58E-03	5.21E-03	4.86E-03	4.77E-03	3.94E-03	3.60E-03	3.61E-03
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	2.82E-03	2.83E-03	2.04E-03	1.21E-03	1.24E-03	1.24E-03	2.65E-03	3.92E-03	8.14E-03	8.01E-03	6.22E-03	4.36E-03	4.26E-03	5.15E-03	3.75E-03	5.12E-03	5.37E-03	5.58E-03	5.21E-03	4.86E-03	4.77E-03	3.94E-03	3.60E-03	3.61E-03
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	2.82E-03	2.83E-03	2.04E-03	1.21E-03	1.24E-03	1.24E-03	2.65E-03	3.92E-03	8.14E-03	8.01E-03	6.22E-03	4.36E-03	4.26E-03	5.15E-03	3.75E-03	5.12E-03	5.37E-03	5.58E-03	5.21E-03	4.86E-03	4.77E-03	3.94E-03	3.60E-03	3.61E-03
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	2.82E-03	2.83E-03	2.04E-03	1.21E-03	1.24E-03	1.24E-03	2.65E-03	3.92E-03	8.14E-03	8.01E-03	6.22E-03	4.36E-03	4.26E-03	5.15E-03	3.75E-03	5.12E-03	5.37E-03	5.58E-03	5.21E-03	4.86E-03	4.77E-03	3.94E-03	3.60E-03	3.61E-03
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	2.82E-03	2.83E-03	2.04E-03	1.21E-03	1.24E-03	1.24E-03	2.65E-03	3.92E-03	8.14E-03	8.01E-03	6.22E-03	4.36E-03	4.26E-03	5.15E-03	3.75E-03	5.12E-03	5.37E-03	5.58E-03	5.21E-03	4.86E-03	4.77E-03	3.94E-03	3.60E-03	3.61E-03
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	2.82E-03	2.83E-03	2.04E-03	1.21E-03	1.24E-03	1.24E-03	2.65E-03	3.92E-03	8.14E-03	8.01E-03	6.22E-03	4.36E-03	4.26E-03	5.15E-03	3.75E-03	5.12E-03	5.37E-03	5.58E-03	5.21E-03	4.86E-03	4.77E-03	3.94E-03	3.60E-03	3.61E-03
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	1.41E-03	1.41E-03	1.02E-03	6.06E-04	6.19E-04	6.19E-04	1.32E-03	1.96E-03	4.07E-03	4.01E-03	3.11E-03	2.18E-03	2.13E-03	2.57E-03	1.88E-03	2.56E-03	2.68E-03	2.79E-03	2.60E-03	2.43E-03	2.38E-03	1.97E-03	1.80E-03	1.81E-03
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	1.41E-03	1.41E-03	1.02E-03	6.06E-04	6.19E-04	6.19E-04	1.32E-03	1.96E-03	4.07E-03	4.01E-03	3.11E-03	2.18E-03	2.13E-03	2.57E-03	1.88E-03	2.56E-03	2.68E-03	2.79E-03	2.60E-03	2.43E-03	2.38E-03	1.97E-03	1.80E-03	1.81E-03
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	1.41E-03	1.41E-03	1.02E-03	6.06E-04	6.19E-04	6.19E-04	1.32E-03	1.96E-03	4.07E-03	4.01E-03	3.11E-03	2.18E-03	2.13E-03	2.57E-03	1.88E-03	2.56E-03	2.68E-03	2.79E-03	2.60E-03	2.43E-03	2.38E-03	1.97E-03	1.80E-03	1.81E-03
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	1.41E-03	1.41E-03	1.02E-03	6.06E-04	6.19E-04	6.19E-04	1.32E-03	1.96E-03	4.07E-03	4.01E-03	3.11E-03	2.18E-03	2.13E-03	2.57E-03	1.88E-03	2.56E-03	2.68E-03	2.79E-03	2.60E-03	2.43E-03	2.38E-03	1.97E-03	1.80E-03	1.81E-03
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	1.41E-03	1.41E-03	1.02E-03	6.06E-04	6.19E-04	6.19E-04	1.32E-03	1.96E-03	4.07E-03	4.01E-03	3.11E-03	2.18E-03	2.13E-03	2.57E-03	1.88E-03	2.56E-03	2.68E-03	2.79E-03	2.60E-03	2.43E-03	2.38E-03	1.97E-03	1.80E-03	1.81E-03
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	1.41E-03	1.41E-03	1.02E-03	6.06E-04	6.19E-04	6.19E-04	1.32E-03	1.96E-03	4.07E-03	4.01E-03	3.11E-03	2.18E-03	2.13E-03	2.57E-03	1.88E-03	2.56E-03	2.68E-03	2.79E-03	2.60E-03	2.43E-03	2.38E-03	1.97E-03	1.80E-03	1.81E-03
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	1.41E-03	1.41E-03	1.02E-03	6.06E-04	6.19E-04	6.19E-04	1.32E-03	1.96E-03	4.07E-03	4.01E-03	3.11E-03	2.18E-03	2.13E-03	2.57E-03	1.88E-03	2.56E-03	2.68E-03	2.79E-03	2.60E-03	2.43E-03	2.38E-03	1.97E-03	1.80E-03	1.81E-03
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	8.77E-06	4.06E-06	4.06E-06	4.76E-06	4.76E-06	4.85E-06	8.68E-06	2.37E-05	4.92E-05	3.83E-05	2.78E-05	2.80E-05	2.19E-05	2.20E-05	2.09E-05	2.05E-05	2.06E-05	1.94E-05	2.36E-05	2.33E-05	1.54E-05	1.70E-05	1.22E-05	1.25E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	6.58E-03	4.54E-03	4.59E-03	2.89E-03	2.91E-03	3.31E-03	5.13E-03	1.57E-02	3.04E-02	2.55E-02	2.04E-02	2.06E-02	1.66E-02	1.65E-02	1.54E-02	1.59E-02	1.60E-02	1.50E-02	1.67E-02	1.66E-02	1.21E-02	1.31E-02	9.80E-03	9.14E-03
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	6.58E-03	4.54E-03	4.59E-03	2.89E-03	2.91E-03	3.31E-03	5.13E-03	1.57E-02	3.04E-02	2.55E-02	2.04E-02	2.06E-02	1.66E-02	1.65E-02	1.54E-02	1.59E-02	1.60E-02	1.50E-02	1.67E-02	1.66E-02	1.21E-02	1.31E-02	9.80E-03	9.14E-03
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	6.58E-03	4.54E-03	4.59E-03	2.89E-03	2.91E-03	3.31E-03	5.13E-03	1.57E-02	3.04E-02	2.55E-02	2.04E-02	2.06E-02	1.66E-02	1.65E-02	1.54E-02	1.59E-02	1.60E-02	1.50E-02	1.67E-02	1.66E-02	1.21E-02	1.31E-02	9.80E-03	9.14E-03
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	6.58E-03	4.54E-03	4.59E-03	2.89E-03	2.91E-03	3.31E-03	5.13E-03	1.57E-02	3.04E-02	2.55E-02	2.04E-02	2.06E-02	1.66E-02	1.65E-02	1.54E-02	1.59E-02	1.60E-02	1.50E-02	1.67E-02	1.66E-02	1.21E-02	1.31E-02	9.80E-03	9.14E-03
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	3.29E-03	2.27E-03	2.29E-03	1.45E-03	1.45E-03	1.66E-03	2.57E-03	7.84E-03	1.52E-02	1.28E-02	1.02E-02	1.03E-02	8.28E-03	8.25E-03	7.72E-03	7.95E-03	8.00E-03	7.48E-03	8.35E-03	8.30E-03	6.03E-03	6.54E-03	4.90E-03	4.57E-03
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	3.29E-03	2.27E-03	2.29E-03	1.45E-03	1.45E-03	1.66E-03	2.57E-03	7.84E-03	1.52E-02	1.28E-02	1.02E-02	1.03E-02	8.28E-03	8.25E-03	7.72E-03	7.95E-03	8.00E-03	7.48E-03	8.35E-03	8.30E-03	6.03E-03	6.54E-03	4.90E-03	4.57E-03
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	3.29E-03	2.27E-03	2.29E-03	1.45E-03	1.45E-03	1.66E-03	2.57E-03	7.84E-03	1.52E-02	1.28E-02	1.02E-02	1.03E-02	8.28E-03	8.25E-03	7.72E-03	7.95E-03	8.00E-03	7.48E-03	8.35E-03	8.30E-03	6.03E-03	6.54E-03	4.90E-03	4.57E-03
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	3.29E-03	2.27E-03	2.29E-03	1.45E-03	1.45E-03	1.66E-03	2.57E-03	7.84E-03	1.52E-02	1.28E-02	1.02E-02	1.03E-02	8.28E-03	8.25E-03	7.72E-03	7.95E-03	8.00E-03	7.48E-03	8.35E-03	8.30E-03	6.03E-03	6.54E-03	4.90E-03	4.57E-03
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	8.81E-06	5.63E-06	5.66E-06	3.61E-06	3.61E-06	3.72E-06	5.86E-06	1.86E-05	3.50E-05	3.08E-05	2.57E-05	2.66E-05	2.24E-05	2.27E-05	2.22E-05	2.41E-05	2.55E-05	2.48E-05	2.80E-05	2.75E-05	1.90E-05	1.95E-05	1.52E-05	1.35E-05
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.43E-04	6.79E-04	3.23E-04	3.23E-04	3.24E-04	7.92E-04	1.28E-03	2.59E-03	2.56E-03	2.02E-03	1.46E-03	1.41E-03	1.71E-03	1.25E-03	1.66E-03	1.69E-03	1.80E-03	1.67E-03	1.53E-03	1.49E-03	1.28E-03	1.08E-03	1.06E-03
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.43E-04	6.79E-04	3.23E-04	3.23E-04	3.24E-04	7.92E-04	1.28E-03	2.59E-03	2.56E-03	2.02E-03	1.46E-03	1.41E-03	1.71E-03	1.25E-03	1.66E-03	1.69E-03	1.80E-03	1.67E-03	1.53E-03	1.49E-03	1.28E-03	1.08E-03	1.06E-03
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.43E-04	6.79E-04	3.23E-04	3.23E-04	3.24E-04	7.92E-04	1.28E-03	2.59E-03	2.56E-03	2.02E-03	1.46E-03	1.41E-03	1.71E-03	1.25E-03	1.66E-03	1.69E-03	1.80E-03	1.67E-03	1.53E-03	1.49E-03	1.28E-03	1.08E-03	1.06E-03
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.43E-04	6.79E-04	3.23E-04	3.23E-04	3.24E-04	7.92E-04	1.28E-03	2.59E-03	2.56E-03	2.02E-03	1.46E-03	1.41E-03	1.71E-03	1.25E-03	1.66E-03	1.69E-03	1.80E-03	1.67E-03	1.53E-03	1.49E-03	1.28E-03	1.08E-03	1.06E-03
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.43E-04	6.79E-04	3.23E-04	3.23E-04	3.24E-04	7.92E-04	1.28E-03	2.59E-03	2.56E-03	2.02E-03	1.46E-03	1.41E-03	1.71E-03	1.25E-03	1.66E-03	1.69E-03	1.80E-03	1.67E-03	1.53E-03	1.49E-03	1.28E-03	1.08E-03	1.06E-03
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.43E-04	6.79E-04	3.23E-04	3.23E-04	3.24E-04	7.92E-04	1.28E-03	2.59E-03	2.56E-03	2.02E-03	1.46E-03	1.41E-03	1.71E-03	1.25E-03	1.66E-03	1.69E-03	1.80E-03	1.67E-03	1.53E-03	1.49E-03	1.28E-03	1.08E-03	1.06E-03
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.43E-04	6.79E-04	3.23E-04	3.23E-04	3.24E-04	7.92E-04	1.28E-03	2.59E-03	2.56E-03	2.02E-03	1.46E-03	1.41E-03	1.71E-03	1.25E-03	1.66E-03	1.69E-03	1.80E-03	1.67E-03	1.53E-03	1.49E-03	1.28E-03	1.08E-03	1.06E-03
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.72E-04	3.39E-04	1.61E-04	1.61E-04	1.62E-04	3.96E-04	6.40E-04	1.30E-03	1.28E-03	1.01E-03	7.32E-04	7.06E-04	8.57E-04	6.27E-04	8.29E-04	8.45E-04	9.00E-04	8.36E-04	7.66E-04	7.45E-04	6.38E-04	5.42E-04	5.28E-04
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.72E-04	3.39E-04	1.61E-04	1.61E-04	1.62E-04	3.96E-04	6.40E-04	1.30E-03	1.28E-03	1.01E-03	7.32E-04	7.06E-04	8.57E-04	6.27E-04	8.29E-04	8.45E-04	9.00E-04	8.36E-04	7.66E-04	7.45E-04	6.38E-04	5.42E-04	5.28E-04
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.72E-04	3.39E-04	1.61E-04	1.61E-04	1.62E-04	3.96E-04	6.40E-04	1.30E-03	1.28E-03	1.01E-03	7.32E-04	7.06E-04	8.57E-04	6.27E-04	8.29E-04	8.45E-04	9.00E-04	8.36E-04	7.66E-04	7.45E-04	6.38E-04	5.42E-04	5.28E-04
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.72E-04	3.39E-04	1.61E-04	1.61E-04	1.62E-04	3.96E-04	6.40E-04	1.30E-03	1.28E-03	1.01E-03	7.32E-04	7.06E-04	8.57E-04	6.27E-04	8.29E-04	8.45E-04	9.00E-04	8.36E-04	7.66E-04	7.45E-04	6.38E-04	5.42E-04	5.28E-04
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.72E-04	3.39E-04	1.61E-04	1.61E-04	1.62E-04	3.96E-04	6.40E-04	1.30E-03	1.28E-03	1.01E-03	7.32E-04	7.06E-04	8.57E-04	6.27E-04	8.29E-04	8.45E-04	9.00E-04	8.36E-04	7.66E-04	7.45E-04	6.38E-04	5.42E-04	5.28E-04
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.72E-04	3.39E-04	1.61E-04	1.61E-04	1.62E-04	3.96E-04	6.40E-04	1.30E-03	1.28E-03	1.01E-03	7.32E-04	7.06E-04	8.57E-04	6.27E-04	8.29E-04	8.45E-04	9.00E-04	8.36E-04	7.66E-04	7.45E-04	6.38E-04	5.42E-04	5.28E-04
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.72E-04	3.39E-04	1.61E-04	1.61E-04	1.62E-04	3.96E-04	6.40E-04	1.30E-03	1.28E-03	1.01E-03	7.32E-04	7.06E-04	8.57E-04	6.27E-04	8.29E-04	8.45E-04	9.00E-04	8.36E-04	7.66E-04	7.45E-04	6.38E-04	5.42E-04	5.28E-04
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	2.05E

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 2) - NOX

Scenario 1

Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	4.01E-06	4.04E-06	2.04E-06	1.73E-06	1.76E-06	1.76E-06	3.77E-06	5.56E-06	1.16E-05	1.14E-05	8.84E-06	6.14E-06	6.01E-06	7.28E-06	5.28E-06	7.24E-06	7.58E-06	7.84E-06	7.30E-06	6.80E-06	6.74E-06	5.55E-06	5.08E-06	5.10E-06
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	1.59E-05	1.60E-05	1.13E-05	6.84E-06	6.99E-06	6.99E-06	1.49E-05	2.20E-05	4.58E-05	4.51E-05	3.50E-05	2.43E-05	2.38E-05	2.88E-05	2.09E-05	2.87E-05	3.00E-05	3.11E-05	2.89E-05	2.70E-05	2.67E-05	2.20E-05	2.01E-05	2.02E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	1.29E-05	1.09E-05	8.40E-06	5.94E-06	6.03E-06	6.06E-06	1.23E-05	2.26E-05	4.70E-05	4.21E-05	3.18E-05	2.57E-05	2.29E-05	2.59E-05	2.08E-05	2.51E-05	2.60E-05	2.61E-05	2.66E-05	2.53E-05	2.19E-05	1.98E-05	1.67E-05	1.69E-05
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	2.27E-03	2.27E-03	1.65E-03	9.75E-04	9.97E-04	9.97E-04	2.13E-03	3.16E-03	6.56E-03	6.46E-03	5.01E-03	3.52E-03	3.44E-03	4.15E-03	3.03E-03	4.13E-03	4.33E-03	4.50E-03	4.21E-03	3.93E-03	3.85E-03	3.18E-03	2.91E-03	2.92E-03
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	2.27E-03	2.27E-03	1.65E-03	9.75E-04	9.97E-04	9.97E-04	2.13E-03	3.16E-03	6.56E-03	6.46E-03	5.01E-03	3.52E-03	3.44E-03	4.15E-03	3.03E-03	4.13E-03	4.33E-03	4.50E-03	4.21E-03	3.93E-03	3.85E-03	3.18E-03	2.91E-03	2.92E-03
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	2.27E-03	2.27E-03	1.65E-03	9.75E-04	9.97E-04	9.97E-04	2.13E-03	3.16E-03	6.56E-03	6.46E-03	5.01E-03	3.52E-03	3.44E-03	4.15E-03	3.03E-03	4.13E-03	4.33E-03	4.50E-03	4.21E-03	3.93E-03	3.85E-03	3.18E-03	2.91E-03	2.92E-03
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	2.27E-03	2.27E-03	1.65E-03	9.75E-04	9.97E-04	9.97E-04	2.13E-03	3.16E-03	6.56E-03	6.46E-03	5.01E-03	3.52E-03	3.44E-03	4.15E-03	3.03E-03	4.13E-03	4.33E-03	4.50E-03	4.21E-03	3.93E-03	3.85E-03	3.18E-03	2.91E-03	2.92E-03
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	2.27E-03	2.27E-03	1.65E-03	9.75E-04	9.97E-04	9.97E-04	2.13E-03	3.16E-03	6.56E-03	6.46E-03	5.01E-03	3.52E-03	3.44E-03	4.15E-03	3.03E-03	4.13E-03	4.33E-03	4.50E-03	4.21E-03	3.93E-03	3.85E-03	3.18E-03	2.91E-03	2.92E-03
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	2.27E-03	2.27E-03	1.65E-03	9.75E-04	9.97E-04	9.97E-04	2.13E-03	3.16E-03	6.56E-03	6.46E-03	5.01E-03	3.52E-03	3.44E-03	4.15E-03	3.03E-03	4.13E-03	4.33E-03	4.50E-03	4.21E-03	3.93E-03	3.85E-03	3.18E-03	2.91E-03	2.92E-03
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	2.27E-03	2.27E-03	1.65E-03	9.75E-04	9.97E-04	9.97E-04	2.13E-03	3.16E-03	6.56E-03	6.46E-03	5.01E-03	3.52E-03	3.44E-03	4.15E-03	3.03E-03	4.13E-03	4.33E-03	4.50E-03	4.21E-03	3.93E-03	3.85E-03	3.18E-03	2.91E-03	2.92E-03
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	1.14E-03	1.14E-03	8.25E-04	4.88E-04	4.98E-04	4.98E-04	1.06E-03	1.58E-03	3.28E-03	3.23E-03	2.50E-03	1.76E-03	1.72E-03	2.08E-03	1.52E-03	2.07E-03	2.16E-03	2.25E-03	2.10E-03	1.97E-03	1.92E-03	1.59E-03	1.45E-03	1.46E-03
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	1.14E-03	1.14E-03	8.25E-04	4.88E-04	4.98E-04	4.98E-04	1.06E-03	1.58E-03	3.28E-03	3.23E-03	2.50E-03	1.76E-03	1.72E-03	2.08E-03	1.52E-03	2.07E-03	2.16E-03	2.25E-03	2.10E-03	1.97E-03	1.92E-03	1.59E-03	1.45E-03	1.46E-03
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	1.14E-03	1.14E-03	8.25E-04	4.88E-04	4.98E-04	4.98E-04	1.06E-03	1.58E-03	3.28E-03	3.23E-03	2.50E-03	1.76E-03	1.72E-03	2.08E-03	1.52E-03	2.07E-03	2.16E-03	2.25E-03	2.10E-03	1.97E-03	1.92E-03	1.59E-03	1.45E-03	1.46E-03
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	1.14E-03	1.14E-03	8.25E-04	4.88E-04	4.98E-04	4.98E-04	1.06E-03	1.58E-03	3.28E-03	3.23E-03	2.50E-03	1.76E-03	1.72E-03	2.08E-03	1.52E-03	2.07E-03	2.16E-03	2.25E-03	2.10E-03	1.97E-03	1.92E-03	1.59E-03	1.45E-03	1.46E-03
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	1.14E-03	1.14E-03	8.25E-04	4.88E-04	4.98E-04	4.98E-04	1.06E-03	1.58E-03	3.28E-03	3.23E-03	2.50E-03	1.76E-03	1.72E-03	2.08E-03	1.52E-03	2.07E-03	2.16E-03	2.25E-03	2.10E-03	1.97E-03	1.92E-03	1.59E-03	1.45E-03	1.46E-03
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	1.14E-03	1.14E-03	8.25E-04	4.88E-04	4.98E-04	4.98E-04	1.06E-03	1.58E-03	3.28E-03	3.23E-03	2.50E-03	1.76E-03	1.72E-03	2.08E-03	1.52E-03	2.07E-03	2.16E-03	2.25E-03	2.10E-03	1.97E-03	1.92E-03	1.59E-03	1.45E-03	1.46E-03
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	1.14E-03	1.14E-03	8.25E-04	4.88E-04	4.98E-04	4.98E-04	1.06E-03	1.58E-03	3.28E-03	3.23E-03	2.50E-03	1.76E-03	1.72E-03	2.08E-03	1.52E-03	2.07E-03	2.16E-03	2.25E-03	2.10E-03	1.97E-03	1.92E-03	1.59E-03	1.45E-03	1.46E-03
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	1.67E-05	7.71E-06	7.71E-06	9.04E-06	9.04E-06	9.21E-06	1.65E-05	4.51E-05	9.35E-05	7.27E-05	5.28E-05	5.32E-05	4.16E-05	4.19E-05	3.96E-05	3.89E-05	3.91E-05	3.69E-05	4.49E-05	4.44E-05	2.94E-05	3.24E-05	2.32E-05	2.38E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	6.19E-03	4.38E-03	4.42E-03	2.69E-03	2.71E-03	3.10E-03	4.76E-03	1.47E-02	2.83E-02	2.39E-02	1.92E-02	1.94E-02	1.56E-02	1.56E-02	1.46E-02	1.50E-02	1.51E-02	1.41E-02	1.57E-02	1.56E-02	1.14E-02	1.24E-02	9.28E-03	8.60E-03
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	6.19E-03	4.38E-03	4.42E-03	2.69E-03	2.71E-03	3.10E-03	4.76E-03	1.47E-02	2.83E-02	2.39E-02	1.92E-02	1.94E-02	1.56E-02	1.56E-02	1.46E-02	1.50E-02	1.51E-02	1.41E-02	1.57E-02	1.56E-02	1.14E-02	1.24E-02	9.28E-03	8.60E-03
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	6.19E-03	4.38E-03	4.42E-03	2.69E-03	2.71E-03	3.10E-03	4.76E-03	1.47E-02	2.83E-02	2.39E-02	1.92E-02	1.94E-02	1.56E-02	1.56E-02	1.46E-02	1.50E-02	1.51E-02	1.41E-02	1.57E-02	1.56E-02	1.14E-02	1.24E-02	9.28E-03	8.60E-03
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	6.19E-03	4.38E-03	4.42E-03	2.69E-03	2.71E-03	3.10E-03	4.76E-03	1.47E-02	2.83E-02	2.39E-02	1.92E-02	1.94E-02	1.56E-02	1.56E-02	1.46E-02	1.50E-02	1.51E-02	1.41E-02	1.57E-02	1.56E-02	1.14E-02	1.24E-02	9.28E-03	8.60E-03
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	3.10E-03	2.19E-03	2.21E-03	1.34E-03	1.35E-03	1.55E-03	2.38E-03	7.34E-03	1.42E-02	1.19E-02	9.62E-03	9.71E-03	7.82E-03	7.79E-03	7.28E-03	7.52E-03	7.57E-03	7.07E-03	7.83E-03	7.80E-03	5.70E-03	6.18E-03	4.64E-03	4.30E-03
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	3.10E-03	2.19E-03	2.21E-03	1.34E-03	1.35E-03	1.55E-03	2.38E-03	7.34E-03	1.42E-02	1.19E-02	9.62E-03	9.71E-03	7.82E-03	7.79E-03	7.28E-03	7.52E-03	7.57E-03	7.07E-03	7.83E-03	7.80E-03	5.70E-03	6.18E-03	4.64E-03	4.30E-03
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	3.10E-03	2.19E-03	2.21E-03	1.34E-03	1.35E-03	1.55E-03	2.38E-03	7.34E-03	1.42E-02	1.19E-02	9.62E-03	9.71E-03	7.82E-03	7.79E-03	7.28E-03	7.52E-03	7.57E-03	7.07E-03	7.83E-03	7.80E-03	5.70E-03	6.18E-03	4.64E-03	4.30E-03
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	3.10E-03	2.19E-03	2.21E-03	1.34E-03	1.35E-03	1.55E-03	2.38E-03	7.34E-03	1.42E-02	1.19E-02	9.62E-03	9.71E-03	7.82E-03	7.79E-03	7.28E-03	7.52E-03	7.57E-03	7.07E-03	7.83E-03	7.80E-03	5.70E-03	6.18E-03	4.64E-03	4.30E-03
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	8.48E-06	5.48E-06	5.51E-06	3.43E-06	3.43E-06	3.54E-06	5.53E-06	1.77E-05	3.32E-05	2.93E-05	2.46E-05	2.56E-05	2.16E-05	2.19E-05	2.15E-05	2.33E-05	2.47E-05	2.41E-05	2.71E-05	2.66E-05	1.84E-05	1.89E-05	1.47E-05	1.30E-05
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	1.99E

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 3) - NOX

Scenario 1

Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	6.02E-06	6.06E-06	3.06E-06	2.59E-06	2.65E-06	2.65E-06	5.66E-06	8.34E-06	1.73E-05	1.71E-05	1.33E-05	9.21E-06	9.02E-06	1.09E-05	7.92E-06	1.09E-05	1.14E-05	1.18E-05	1.09E-05	1.02E-05	1.01E-05	8.33E-06	7.62E-06	7.65E-06
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	2.32E-05	2.34E-05	1.67E-05	1.00E-05	1.02E-05	1.02E-05	2.18E-05	3.22E-05	6.69E-05	6.60E-05	5.12E-05	3.56E-05	3.48E-05	4.22E-05	3.06E-05	4.20E-05	4.39E-05	4.54E-05	4.23E-05	3.94E-05	3.91E-05	3.22E-05	2.94E-05	2.95E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	1.79E-05	1.50E-05	1.16E-05	8.31E-06	8.43E-06	8.48E-06	1.71E-05	3.20E-05	6.65E-05	5.92E-05	4.47E-05	3.65E-05	3.23E-05	3.63E-05	2.94E-05	3.52E-05	3.63E-05	3.64E-05	3.73E-05	3.56E-05	3.05E-05	2.78E-05	2.33E-05	2.36E-05
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	1.79E-03	1.79E-03	1.31E-03	7.69E-04	7.85E-04	7.85E-04	1.68E-03	2.49E-03	5.18E-03	5.09E-03	3.95E-03	2.78E-03	2.72E-03	3.28E-03	2.40E-03	3.27E-03	3.42E-03	3.57E-03	3.34E-03	3.11E-03	3.04E-03	2.51E-03	2.30E-03	2.31E-03
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	1.79E-03	1.79E-03	1.31E-03	7.69E-04	7.85E-04	7.85E-04	1.68E-03	2.49E-03	5.18E-03	5.09E-03	3.95E-03	2.78E-03	2.72E-03	3.28E-03	2.40E-03	3.27E-03	3.42E-03	3.57E-03	3.34E-03	3.11E-03	3.04E-03	2.51E-03	2.30E-03	2.31E-03
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	1.79E-03	1.79E-03	1.31E-03	7.69E-04	7.85E-04	7.85E-04	1.68E-03	2.49E-03	5.18E-03	5.09E-03	3.95E-03	2.78E-03	2.72E-03	3.28E-03	2.40E-03	3.27E-03	3.42E-03	3.57E-03	3.34E-03	3.11E-03	3.04E-03	2.51E-03	2.30E-03	2.31E-03
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	1.79E-03	1.79E-03	1.31E-03	7.69E-04	7.85E-04	7.85E-04	1.68E-03	2.49E-03	5.18E-03	5.09E-03	3.95E-03	2.78E-03	2.72E-03	3.28E-03	2.40E-03	3.27E-03	3.42E-03	3.57E-03	3.34E-03	3.11E-03	3.04E-03	2.51E-03	2.30E-03	2.31E-03
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	1.79E-03	1.79E-03	1.31E-03	7.69E-04	7.85E-04	7.85E-04	1.68E-03	2.49E-03	5.18E-03	5.09E-03	3.95E-03	2.78E-03	2.72E-03	3.28E-03	2.40E-03	3.27E-03	3.42E-03	3.57E-03	3.34E-03	3.11E-03	3.04E-03	2.51E-03	2.30E-03	2.31E-03
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	1.79E-03	1.79E-03	1.31E-03	7.69E-04	7.85E-04	7.85E-04	1.68E-03	2.49E-03	5.18E-03	5.09E-03	3.95E-03	2.78E-03	2.72E-03	3.28E-03	2.40E-03	3.27E-03	3.42E-03	3.57E-03	3.34E-03	3.11E-03	3.04E-03	2.51E-03	2.30E-03	2.31E-03
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	1.79E-03	1.79E-03	1.31E-03	7.69E-04	7.85E-04	7.85E-04	1.68E-03	2.49E-03	5.18E-03	5.09E-03	3.95E-03	2.78E-03	2.72E-03	3.28E-03	2.40E-03	3.27E-03	3.42E-03	3.57E-03	3.34E-03	3.11E-03	3.04E-03	2.51E-03	2.30E-03	2.31E-03
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	8.95E-04	8.95E-04	6.54E-04	3.84E-04	3.93E-04	3.93E-04	8.39E-04	1.25E-03	2.59E-03	2.55E-03	1.97E-03	1.39E-03	1.36E-03	1.64E-03	1.20E-03	1.63E-03	1.71E-03	1.78E-03	1.67E-03	1.56E-03	1.52E-03	1.26E-03	1.15E-03	1.15E-03
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	8.95E-04	8.95E-04	6.54E-04	3.84E-04	3.93E-04	3.93E-04	8.39E-04	1.25E-03	2.59E-03	2.55E-03	1.97E-03	1.39E-03	1.36E-03	1.64E-03	1.20E-03	1.63E-03	1.71E-03	1.78E-03	1.67E-03	1.56E-03	1.52E-03	1.26E-03	1.15E-03	1.15E-03
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	8.95E-04	8.95E-04	6.54E-04	3.84E-04	3.93E-04	3.93E-04	8.39E-04	1.25E-03	2.59E-03	2.55E-03	1.97E-03	1.39E-03	1.36E-03	1.64E-03	1.20E-03	1.63E-03	1.71E-03	1.78E-03	1.67E-03	1.56E-03	1.52E-03	1.26E-03	1.15E-03	1.15E-03
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	8.95E-04	8.95E-04	6.54E-04	3.84E-04	3.93E-04	3.93E-04	8.39E-04	1.25E-03	2.59E-03	2.55E-03	1.97E-03	1.39E-03	1.36E-03	1.64E-03	1.20E-03	1.63E-03	1.71E-03	1.78E-03	1.67E-03	1.56E-03	1.52E-03	1.26E-03	1.15E-03	1.15E-03
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	8.95E-04	8.95E-04	6.54E-04	3.84E-04	3.93E-04	3.93E-04	8.39E-04	1.25E-03	2.59E-03	2.55E-03	1.97E-03	1.39E-03	1.36E-03	1.64E-03	1.20E-03	1.63E-03	1.71E-03	1.78E-03	1.67E-03	1.56E-03	1.52E-03	1.26E-03	1.15E-03	1.15E-03
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	8.95E-04	8.95E-04	6.54E-04	3.84E-04	3.93E-04	3.93E-04	8.39E-04	1.25E-03	2.59E-03	2.55E-03	1.97E-03	1.39E-03	1.36E-03	1.64E-03	1.20E-03	1.63E-03	1.71E-03	1.78E-03	1.67E-03	1.56E-03	1.52E-03	1.26E-03	1.15E-03	1.15E-03
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	8.95E-04	8.95E-04	6.54E-04	3.84E-04	3.93E-04	3.93E-04	8.39E-04	1.25E-03	2.59E-03	2.55E-03	1.97E-03	1.39E-03	1.36E-03	1.64E-03	1.20E-03	1.63E-03	1.71E-03	1.78E-03	1.67E-03	1.56E-03	1.52E-03	1.26E-03	1.15E-03	1.15E-03
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	2.37E-05	1.10E-05	1.10E-05	1.29E-05	1.29E-05	1.31E-05	2.35E-05	6.41E-05	1.33E-04	1.03E-04	7.50E-05	7.56E-05	5.91E-05	5.95E-05	5.63E-05	5.53E-05	5.56E-05	5.24E-05	6.38E-05	6.31E-05	4.17E-05	4.60E-05	3.30E-05	3.38E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	5.84E-03	4.21E-03	4.26E-03	2.49E-03	2.51E-03	2.91E-03	4.40E-03	1.37E-02	2.63E-02	2.23E-02	1.81E-02	1.83E-02	1.47E-02	1.47E-02	1.37E-02	1.42E-02	1.43E-02	1.33E-02	1.47E-02	1.46E-02	1.08E-02	1.17E-02	8.78E-03	8.09E-03
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	5.84E-03	4.21E-03	4.26E-03	2.49E-03	2.51E-03	2.91E-03	4.40E-03	1.37E-02	2.63E-02	2.23E-02	1.81E-02	1.83E-02	1.47E-02	1.47E-02	1.37E-02	1.42E-02	1.43E-02	1.33E-02	1.47E-02	1.46E-02	1.08E-02	1.17E-02	8.78E-03	8.09E-03
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	5.84E-03	4.21E-03	4.26E-03	2.49E-03	2.51E-03	2.91E-03	4.40E-03	1.37E-02	2.63E-02	2.23E-02	1.81E-02	1.83E-02	1.47E-02	1.47E-02	1.37E-02	1.42E-02	1.43E-02	1.33E-02	1.47E-02	1.46E-02	1.08E-02	1.17E-02	8.78E-03	8.09E-03
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	5.84E-03	4.21E-03	4.26E-03	2.49E-03	2.51E-03	2.91E-03	4.40E-03	1.37E-02	2.63E-02	2.23E-02	1.81E-02	1.83E-02	1.47E-02	1.47E-02	1.37E-02	1.42E-02	1.43E-02	1.33E-02	1.47E-02	1.46E-02	1.08E-02	1.17E-02	8.78E-03	8.09E-03
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	2.92E-03	2.10E-03	2.13E-03	1.25E-03	1.26E-03	1.45E-03	2.20E-03	6.85E-03	1.32E-02	1.12E-02	9.06E-03	9.14E-03	7.37E-03	7.34E-03	6.85E-03	7.10E-03	7.15E-03	6.67E-03	7.35E-03	7.32E-03	5.39E-03	5.83E-03	4.39E-03	4.05E-03
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	2.92E-03	2.10E-03	2.13E-03	1.25E-03	1.26E-03	1.45E-03	2.20E-03	6.85E-03	1.32E-02	1.12E-02	9.06E-03	9.14E-03	7.37E-03	7.34E-03	6.85E-03	7.10E-03	7.15E-03	6.67E-03	7.35E-03	7.32E-03	5.39E-03	5.83E-03	4.39E-03	4.05E-03
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	2.92E-03	2.10E-03	2.13E-03	1.25E-03	1.26E-03	1.45E-03	2.20E-03	6.85E-03	1.32E-02	1.12E-02	9.06E-03	9.14E-03	7.37E-03	7.34E-03	6.85E-03	7.10E-03	7.15E-03	6.67E-03	7.35E-03	7.32E-03	5.39E-03	5.83E-03	4.39E-03	4.05E-03
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	2.92E-03	2.10E-03	2.13E-03	1.25E-03	1.26E-03	1.45E-03	2.20E-03	6.85E-03	1.32E-02	1.12E-02	9.06E-03	9.14E-03	7.37E-03	7.34E-03	6.85E-03	7.10E-03	7.15E-03	6.67E-03	7.35E-03	7.32E-03	5.39E-03	5.83E-03	4.39E-03	4.05E-03
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	8.17E-06	5.34E-06	5.37E-06	3.26E-06	3.26E-06	3.37E-06	5.22E-06	1.69E-05	3.15E-05	2.80E-05	2.36E-05	2.46E-05	2.09E-05	2.11E-05	2.07E-05	2.26E-05	2.40E-05	2.34E-05	2.63E-05	2.58E-05	1.78E-05	1.83E-05	1.43E-05	1.26E-05
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	1.

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 4) - NOX

Scenario 1

Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	1.20E-05	1.21E-05	6.12E-06	5.18E-06	5.29E-06	5.29E-06	1.13E-05	1.67E-05	3.47E-05	3.42E-05	2.65E-05	1.84E-05	1.80E-05	2.18E-05	1.58E-05	2.17E-05	2.27E-05	2.35E-05	2.19E-05	2.04E-05	2.02E-05	1.67E-05	1.52E-05	1.53E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	6.92E-05	6.96E-05	5.09E-05	2.98E-05	3.04E-05	3.04E-05	6.50E-05	9.58E-05	1.99E-04	1.96E-04	1.52E-04	1.06E-04	1.04E-04	1.25E-04	9.10E-05	1.25E-04	1.31E-04	1.35E-04	1.26E-04	1.17E-04	1.16E-04	9.58E-05	8.76E-05	8.79E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	1.44E-05	1.03E-05	8.67E-06	7.09E-06	7.15E-06	7.23E-06	1.40E-05	3.03E-05	6.29E-05	5.29E-05	3.93E-05	3.50E-05	2.94E-05	3.16E-05	2.73E-05	3.02E-05	3.09E-05	3.02E-05	3.31E-05	3.20E-05	2.49E-05	2.44E-05	1.93E-05	1.96E-05
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	5.56E-04	5.48E-04	4.17E-04	2.38E-04	2.43E-04	2.43E-04	5.18E-04	7.81E-04	1.62E-03	1.59E-03	1.23E-03	8.97E-04	8.73E-04	1.04E-03	7.75E-04	1.04E-03	1.09E-03	1.15E-03	1.09E-03	1.02E-03	9.64E-04	8.05E-04	7.35E-04	7.37E-04
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	5.56E-04	5.48E-04	4.17E-04	2.38E-04	2.43E-04	2.43E-04	5.18E-04	7.81E-04	1.62E-03	1.59E-03	1.23E-03	8.97E-04	8.73E-04	1.04E-03	7.75E-04	1.04E-03	1.09E-03	1.15E-03	1.09E-03	1.02E-03	9.64E-04	8.05E-04	7.35E-04	7.37E-04
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	5.56E-04	5.48E-04	4.17E-04	2.38E-04	2.43E-04	2.43E-04	5.18E-04	7.81E-04	1.62E-03	1.59E-03	1.23E-03	8.97E-04	8.73E-04	1.04E-03	7.75E-04	1.04E-03	1.09E-03	1.15E-03	1.09E-03	1.02E-03	9.64E-04	8.05E-04	7.35E-04	7.37E-04
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	5.56E-04	5.48E-04	4.17E-04	2.38E-04	2.43E-04	2.43E-04	5.18E-04	7.81E-04	1.62E-03	1.59E-03	1.23E-03	8.97E-04	8.73E-04	1.04E-03	7.75E-04	1.04E-03	1.09E-03	1.15E-03	1.09E-03	1.02E-03	9.64E-04	8.05E-04	7.35E-04	7.37E-04
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	5.56E-04	5.48E-04	4.17E-04	2.38E-04	2.43E-04	2.43E-04	5.18E-04	7.81E-04	1.62E-03	1.59E-03	1.23E-03	8.97E-04	8.73E-04	1.04E-03	7.75E-04	1.04E-03	1.09E-03	1.15E-03	1.09E-03	1.02E-03	9.64E-04	8.05E-04	7.35E-04	7.37E-04
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	5.56E-04	5.48E-04	4.17E-04	2.38E-04	2.43E-04	2.43E-04	5.18E-04	7.81E-04	1.62E-03	1.59E-03	1.23E-03	8.97E-04	8.73E-04	1.04E-03	7.75E-04	1.04E-03	1.09E-03	1.15E-03	1.09E-03	1.02E-03	9.64E-04	8.05E-04	7.35E-04	7.37E-04
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	5.56E-04	5.48E-04	4.17E-04	2.38E-04	2.43E-04	2.43E-04	5.18E-04	7.81E-04	1.62E-03	1.59E-03	1.23E-03	8.97E-04	8.73E-04	1.04E-03	7.75E-04	1.04E-03	1.09E-03	1.15E-03	1.09E-03	1.02E-03	9.64E-04	8.05E-04	7.35E-04	7.37E-04
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	2.78E-04	6.85E-04	2.08E-04	1.19E-04	1.21E-04	1.21E-04	2.59E-04	3.90E-04	8.12E-04	7.95E-04	6.15E-04	4.49E-04	4.37E-04	5.22E-04	3.88E-04	5.19E-04	5.45E-04	5.77E-04	5.45E-04	5.11E-04	4.82E-04	4.02E-04	3.67E-04	3.68E-04
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	2.78E-04	6.85E-04	2.08E-04	1.19E-04	1.21E-04	1.21E-04	2.59E-04	3.90E-04	8.12E-04	7.95E-04	6.15E-04	4.49E-04	4.37E-04	5.22E-04	3.88E-04	5.19E-04	5.45E-04	5.77E-04	5.45E-04	5.11E-04	4.82E-04	4.02E-04	3.67E-04	3.68E-04
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	2.78E-04	6.85E-04	2.08E-04	1.19E-04	1.21E-04	1.21E-04	2.59E-04	3.90E-04	8.12E-04	7.95E-04	6.15E-04	4.49E-04	4.37E-04	5.22E-04	3.88E-04	5.19E-04	5.45E-04	5.77E-04	5.45E-04	5.11E-04	4.82E-04	4.02E-04	3.67E-04	3.68E-04
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	2.78E-04	6.85E-04	2.08E-04	1.19E-04	1.21E-04	1.21E-04	2.59E-04	3.90E-04	8.12E-04	7.95E-04	6.15E-04	4.49E-04	4.37E-04	5.22E-04	3.88E-04	5.19E-04	5.45E-04	5.77E-04	5.45E-04	5.11E-04	4.82E-04	4.02E-04	3.67E-04	3.68E-04
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	2.78E-04	6.85E-04	2.08E-04	1.19E-04	1.21E-04	1.21E-04	2.59E-04	3.90E-04	8.12E-04	7.95E-04	6.15E-04	4.49E-04	4.37E-04	5.22E-04	3.88E-04	5.19E-04	5.45E-04	5.77E-04	5.45E-04	5.11E-04	4.82E-04	4.02E-04	3.67E-04	3.68E-04
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	2.78E-04	6.85E-04	2.08E-04	1.19E-04	1.21E-04	1.21E-04	2.59E-04	3.90E-04	8.12E-04	7.95E-04	6.15E-04	4.49E-04	4.37E-04	5.22E-04	3.88E-04	5.19E-04	5.45E-04	5.77E-04	5.45E-04	5.11E-04	4.82E-04	4.02E-04	3.67E-04	3.68E-04
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	2.78E-04	6.85E-04	2.08E-04	1.19E-04	1.21E-04	1.21E-04	2.59E-04	3.90E-04	8.12E-04	7.95E-04	6.15E-04	4.49E-04	4.37E-04	5.22E-04	3.88E-04	5.19E-04	5.45E-04	5.77E-04	5.45E-04	5.11E-04	4.82E-04	4.02E-04	3.67E-04	3.68E-04
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	2.94E-05	1.36E-05	1.36E-05	1.59E-05	1.59E-05	1.62E-05	2.91E-05	7.94E-05	1.65E-04	1.28E-04	9.30E-05	9.37E-05	7.33E-05	7.38E-05	6.99E-05	6.86E-05	6.89E-05	6.50E-05	7.91E-05	7.82E-05	5.18E-05	5.71E-05	4.09E-05	4.19E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	5.48E-03	4.04E-03	4.09E-03	2.30E-03	2.32E-03	2.71E-03	4.05E-03	1.27E-02	2.43E-02	2.08E-02	1.70E-02	1.71E-02	1.39E-02	1.38E-02	1.29E-02	1.34E-02	1.35E-02	1.26E-02	1.37E-02	1.37E-02	1.01E-02	1.10E-02	8.29E-03	7.58E-03
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	5.48E-03	4.04E-03	4.09E-03	2.30E-03	2.32E-03	2.71E-03	4.05E-03	1.27E-02	2.43E-02	2.08E-02	1.70E-02	1.71E-02	1.39E-02	1.38E-02	1.29E-02	1.34E-02	1.35E-02	1.26E-02	1.37E-02	1.37E-02	1.01E-02	1.10E-02	8.29E-03	7.58E-03
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	5.48E-03	4.04E-03	4.09E-03	2.30E-03	2.32E-03	2.71E-03	4.05E-03	1.27E-02	2.43E-02	2.08E-02	1.70E-02	1.71E-02	1.39E-02	1.38E-02	1.29E-02	1.34E-02	1.35E-02	1.26E-02	1.37E-02	1.37E-02	1.01E-02	1.10E-02	8.29E-03	7.58E-03
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	5.48E-03	4.04E-03	4.09E-03	2.30E-03	2.32E-03	2.71E-03	4.05E-03	1.27E-02	2.43E-02	2.08E-02	1.70E-02	1.71E-02	1.39E-02	1.38E-02	1.29E-02	1.34E-02	1.35E-02	1.26E-02	1.37E-02	1.37E-02	1.01E-02	1.10E-02	8.29E-03	7.58E-03
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	2.74E-03	2.03E-03	2.05E-03	1.15E-03	1.16E-03	1.35E-03	2.02E-03	6.37E-03	1.22E-02	1.04E-02	8.49E-03	8.57E-03	6.93E-03	6.89E-03	6.43E-03	6.69E-03	6.73E-03	6.28E-03	6.87E-03	6.85E-03	5.07E-03	5.49E-03	4.14E-03	3.79E-03
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	2.74E-03	2.03E-03	2.05E-03	1.15E-03	1.16E-03	1.35E-03	2.02E-03	6.37E-03	1.22E-02	1.04E-02	8.49E-03	8.57E-03	6.93E-03	6.89E-03	6.43E-03	6.69E-03	6.73E-03	6.28E-03	6.87E-03	6.85E-03	5.07E-03	5.49E-03	4.14E-03	3.79E-03
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	2.74E-03	2.03E-03	2.05E-03	1.15E-03	1.16E-03	1.35E-03	2.02E-03	6.37E-03	1.22E-02	1.04E-02	8.49E-03	8.57E-03	6.93E-03	6.89E-03	6.43E-03	6.69E-03	6.73E-03	6.28E-03	6.87E-03	6.85E-03	5.07E-03	5.49E-03	4.14E-03	3.79E-03
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	2.74E-03	2.03E-03	2.05E-03	1.15E-03	1.16E-03	1.35E-03	2.02E-03	6.37E-03	1.22E-02	1.04E-02	8.49E-03	8.57E-03	6.93E-03	6.89E-03	6.43E-03	6.69E-03	6.73E-03	6.28E-03	6.87E-03	6.85E-03	5.07E-03	5.49E-03	4.14E-03	3.79E-03
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	7.87E-06	5.20E-06	5.22E-06	3.09E-06	3.09E-06	3.20E-06	4.92E-06	1.60E-05	2.97E-05	2.67E-05	2.27E-05	2.36E-05	2.01E-05	2.03E-05	2.00E-05	2.19E-05	2.33E-05	2.27E-05	2.54E-05	2.50E-05	1.73E-05	1.77E-05	1.39E-05	1.21E-05
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	9.46E-04	9.58E-04	6.93E-04	3.29E-04	3.29E-04	3.31E-04	7.99E-04	1.31E-03	2.64E-03	2.61E-03	2.07E-03	1.51E-03	1.45E-03	1.76E-03	1.29E-03	1.70E-03	1.73E-03	1.84E-03	1.67E-03	1.57E-03	1.52E-03	1.31E-03	1.11E-03	1.07E-03
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	4.73E-04	4.79E-04	3.47E-04	1.65E-04	1.65E-04	1.66E-04	4.00E-04	6.56E-04	1.32E-03	1.30E-03	1.03E-03	7.54E-04	7.26E-04	8.78E-04	6.45E-04	8.51E-04	8.63E-04	9.19E-04	8.36E-04	7.85E-04	7.61E-04	6.54E-04	5.55E-04	5.37E-04
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	1.48E-03	1.16E-03	9.34E-04	6.98E-04	6.98E-04	6.98E-04	1.35E-03	2.91E-03	6.01E-03	5.05E-03	3.77E-03	3.39E-03	2.95E-03	3.13E-03	2.79E-03	2.93E-03	3.11E-03	3.27E-03	3.53E-03	3.22E-03	2.74E-03	2.46E-03	2.00E-03	2.07E-03
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	7.38E-04	5.82E-04	4.67E-04	3.49E-04	3.49E-04	3.49E-04	6.76E-04	1.45E-03	3.01E-03	2.52E-03	1.88E-03	1.69E-03	1.48E-03	1.56E-03	1.40E-03	1.47E-03	1.55E-03	1.64E-03	1.76E-03	1.61E-03	1.37E-03	1.23E-03	1.00E-03	1.04E-03
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	1.88E

Sample Calculation of RSP for Tunnel Portal for Cherry Street of Hour 18 of Year 2016

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission / VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
CSEB	Cherry St (Underpass) (EB)	160	0.099	80	0.053	0.424	0.000	-	0.000	0.000	
CSWB	Cherry St (Underpass) (WB)	160	0.099	1450	0.079	11.323	0.003	-	0.002	0.001	

Sample Calculation of RSP for Tunnel Portal and Ventilation Building for West Harbour Crossing of Hour 18 of Year 2016

Scenario	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission / VB	Portal Emission		Remark
									first 125m	second 125m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
Scenario 1	West Harbour Crossing NB	1960	1.218	2480	0.069	209	0.058	0.041	0.012	0.006	Assume 30% from portal /70% from VB
Scenario 2	West Harbour Crossing NB	1960	1.218	2480	0.069	209	0.058	0.029	0.019	0.010	Assume 50% from portal /50% from VB
Scenario 3	West Harbour Crossing NB	1960	1.218	2480	0.069	209	0.058	0.000	0.039	0.019	Assume 100% from portal

Emission Inventory for Tunnel Portal for Cherry Street of Year 2016 - RSP

			Location		Point Source				Volume Source																										
Sources	Source ID	Type	X	Y	Release Height	Exit Temperatur	Exit velocity	Internal diameter	Lateral Dim. (Sy)	Vertical Dim. (Sz)	Hourly NOX Emission Rate (g/s) or (g/m2/s)																								
			(m)	(m)	(m)	(K)	(m/s)	(m)	(m)	(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Cherry Street (EB)	CSEB_01	VOLUME	834623.4	819856.2	2.85	-	-	-	3.63	2.65	2.23E-06	2.17E-06	2.08E-06	9.74E-08	9.74E-08	9.74E-08	2.08E-06	2.23E-06	4.71E-06	4.71E-06	4.48E-06	2.40E-06	2.40E-06	7.49E-06	5.61E-06	7.86E-06	7.97E-06	1.12E-05	1.12E-05	1.11E-05	7.70E-06	5.62E-06	5.41E-06	5.21E-06
	CSEB_02	VOLUME	834630.7	819859.0	2.85	-	-	-	3.63	2.65	2.23E-06	2.17E-06	2.08E-06	9.74E-08	9.74E-08	9.74E-08	2.08E-06	2.23E-06	4.71E-06	4.71E-06	4.48E-06	2.40E-06	2.40E-06	7.49E-06	5.61E-06	7.86E-06	7.97E-06	1.12E-05	1.12E-05	1.11E-05	7.70E-06	5.62E-06	5.41E-06	5.21E-06
	CSEB_03	VOLUME	834638.0	819861.9	2.85	-	-	-	3.63	2.65	2.23E-06	2.17E-06	2.08E-06	9.74E-08	9.74E-08	9.74E-08	2.08E-06	2.23E-06	4.71E-06	4.71E-06	4.48E-06	2.40E-06	2.40E-06	7.49E-06	5.61E-06	7.86E-06	7.97E-06	1.12E-05	1.12E-05	1.11E-05	7.70E-06	5.62E-06	5.41E-06	5.21E-06
	CSEB_04	VOLUME	834645.2	819864.7	2.85	-	-	-	3.63	2.65	2.23E-06	2.17E-06	2.08E-06	9.74E-08	9.74E-08	9.74E-08	2.08E-06	2.23E-06	4.71E-06	4.71E-06	4.48E-06	2.40E-06	2.40E-06	7.49E-06	5.61E-06	7.86E-06	7.97E-06	1.12E-05	1.12E-05	1.11E-05	7.70E-06	5.62E-06	5.41E-06	5.21E-06
	CSEB_05	VOLUME	834652.5	819867.5	2.85	-	-	-	3.63	2.65	2.23E-06	2.17E-06	2.08E-06	9.74E-08	9.74E-08	9.74E-08	2.08E-06	2.23E-06	4.71E-06	4.71E-06	4.48E-06	2.40E-06	2.40E-06	7.49E-06	5.61E-06	7.86E-06	7.97E-06	1.12E-05	1.12E-05	1.11E-05	7.70E-06	5.62E-06	5.41E-06	5.21E-06
	CSEB_06	VOLUME	834659.8	819870.4	2.85	-	-	-	3.63	2.65	2.23E-06	2.17E-06	2.08E-06	9.74E-08	9.74E-08	9.74E-08	2.08E-06	2.23E-06	4.71E-06	4.71E-06	4.48E-06	2.40E-06	2.40E-06	7.49E-06	5.61E-06	7.86E-06	7.97E-06	1.12E-05	1.12E-05	1.11E-05	7.70E-06	5.62E-06	5.41E-06	5.21E-06
	CSEB_07	VOLUME	834667.0	819873.2	2.85	-	-	-	3.63	2.65	2.23E-06	2.17E-06	2.08E-06	9.74E-08	9.74E-08	9.74E-08	2.08E-06	2.23E-06	4.71E-06	4.71E-06	4.48E-06	2.40E-06	2.40E-06	7.49E-06	5.61E-06	7.86E-06	7.97E-06	1.12E-05	1.12E-05	1.11E-05	7.70E-06	5.62E-06	5.41E-06	5.21E-06
	CSEB_08	VOLUME	834674.3	819876.1	2.85	-	-	-	3.63	2.65	1.12E-06	1.09E-06	1.04E-06	4.87E-08	4.87E-08	4.87E-08	1.04E-06	1.12E-06	2.36E-06	2.36E-06	2.24E-06	1.20E-06	1.20E-06	3.74E-06	2.81E-06	3.93E-06	3.98E-06	5.61E-06	5.61E-06	5.56E-06	3.85E-06	2.81E-06	2.70E-06	2.61E-06
	CSEB_09	VOLUME	834681.6	819878.9	2.85	-	-	-	3.63	2.65	1.12E-06	1.09E-06	1.04E-06	4.87E-08	4.87E-08	4.87E-08	1.04E-06	1.12E-06	2.36E-06	2.36E-06	2.24E-06	1.20E-06	1.20E-06	3.74E-06	2.81E-06	3.93E-06	3.98E-06	5.61E-06	5.61E-06	5.56E-06	3.85E-06	2.81E-06	2.70E-06	2.61E-06
	CSEB_10	VOLUME	834688.8	819881.7	2.85	-	-	-	3.63	2.65	1.12E-06	1.09E-06	1.04E-06	4.87E-08	4.87E-08	4.87E-08	1.04E-06	1.12E-06	2.36E-06	2.36E-06	2.24E-06	1.20E-06	1.20E-06	3.74E-06	2.81E-06	3.93E-06	3.98E-06	5.61E-06	5.61E-06	5.56E-06	3.85E-06	2.81E-06	2.70E-06	2.61E-06
	CSEB_11	VOLUME	834696.1	819884.6	2.85	-	-	-	3.63	2.65	1.12E-06	1.09E-06	1.04E-06	4.87E-08	4.87E-08	4.87E-08	1.04E-06	1.12E-06	2.36E-06	2.36E-06	2.24E-06	1.20E-06	1.20E-06	3.74E-06	2.81E-06	3.93E-06	3.98E-06	5.61E-06	5.61E-06	5.56E-06	3.85E-06	2.81E-06	2.70E-06	2.61E-06
	CSEB_12	VOLUME	834703.4	819887.4	2.85	-	-	-	3.63	2.65	1.12E-06	1.09E-06	1.04E-06	4.87E-08	4.87E-08	4.87E-08	1.04E-06	1.12E-06	2.36E-06	2.36E-06	2.24E-06	1.20E-06	1.20E-06	3.74E-06	2.81E-06	3.93E-06	3.98E-06	5.61E-06	5.61E-06	5.56E-06	3.85E-06	2.81E-06	2.70E-06	2.61E-06
	CSEB_13	VOLUME	834710.6	819890.3	2.85	-	-	-	3.63	2.65	1.12E-06	1.09E-06	1.04E-06	4.87E-08	4.87E-08	4.87E-08	1.04E-06	1.12E-06	2.36E-06	2.36E-06	2.24E-06	1.20E-06	1.20E-06	3.74E-06	2.81E-06	3.93E-06	3.98E-06	5.61E-06	5.61E-06	5.56E-06	3.85E-06	2.81E-06	2.70E-06	2.61E-06
	CSEB_14	VOLUME	834717.9	819893.1	2.85	-	-	-	3.63	2.65	1.12E-06	1.09E-06	1.04E-06	4.87E-08	4.87E-08	4.87E-08	1.04E-06	1.12E-06	2.36E-06	2.36E-06	2.24E-06	1.20E-06	1.20E-06	3.74E-06	2.81E-06	3.93E-06	3.98E-06	5.61E-06	5.61E-06	5.56E-06	3.85E-06	2.81E-06	2.70E-06	2.61E-06
Cherry Street (WB)	CSWB_01	VOLUME	834463.0	819813.3	2.85	-	-	-	3.63	2.65	7.95E-05	7.17E-05	4.54E-05	2.42E-05	2.42E-05	2.22E-05	4.01E-05	5.80E-05	1.26E-04	1.34E-04	1.21E-04	9.72E-05	1.03E-04	1.64E-04	1.40E-04	1.86E-04	2.24E-04	2.89E-04	3.00E-04	2.58E-04	2.19E-04	1.76E-04	1.43E-04	1.30E-04
	CSWB_02	VOLUME	834455.2	819813.3	2.85	-	-	-	3.63	2.65	7.95E-05	7.17E-05	4.54E-05	2.42E-05	2.42E-05	2.22E-05	4.01E-05	5.80E-05	1.26E-04	1.34E-04	1.21E-04	9.72E-05	1.03E-04	1.64E-04	1.40E-04	1.86E-04	2.24E-04	2.89E-04	3.00E-04	2.58E-04	2.19E-04	1.76E-04	1.43E-04	1.30E-04
	CSWB_03	VOLUME	834447.4	819813.3	2.85	-	-	-	3.63	2.65	7.95E-05	7.17E-05	4.54E-05	2.42E-05	2.42E-05	2.22E-05	4.01E-05	5.80E-05	1.26E-04	1.34E-04	1.21E-04	9.72E-05	1.03E-04	1.64E-04	1.40E-04	1.86E-04	2.24E-04	2.89E-04	3.00E-04	2.58E-04	2.19E-04	1.76E-04	1.43E-04	1.30E-04
	CSWB_04	VOLUME	834439.6	819813.3	2.85	-	-	-	3.63	2.65	7.95E-05	7.17E-05	4.54E-05	2.42E-05	2.42E-05	2.22E-05	4.01E-05	5.80E-05	1.26E-04	1.34E-04	1.21E-04	9.72E-05	1.03E-04	1.64E-04	1.40E-04	1.86E-04	2.24E-04	2.89E-04	3.00E-04	2.58E-04	2.19E-04	1.76E-04	1.43E-04	1.30E-04
	CSWB_05	VOLUME	834431.8	819813.3	2.85	-	-	-	3.63	2.65	7.95E-05	7.17E-05	4.54E-05	2.42E-05	2.42E-05	2.22E-05	4.01E-05	5.80E-05	1.26E-04	1.34E-04	1.21E-04	9.72E-05	1.03E-04	1.64E-04	1.40E-04	1.86E-04	2.24E-04	2.89E-04	3.00E-04	2.58E-04	2.19E-04	1.76E-04	1.43E-04	1.30E-04
	CSWB_06	VOLUME	834424.0	819813.3	2.85	-	-	-	3.63	2.65	7.95E-05	7.17E-05	4.54E-05	2.42E-05	2.42E-05	2.22E-05	4.01E-05	5.80E-05	1.26E-04	1.34E-04	1.21E-04	9.72E-05	1.03E-04	1.64E-04	1.40E-04	1.86E-04	2.24E-04	2.89E-04	3.00E-04	2.58E-04	2.19E-04	1.76E-04	1.43E-04	1.30E-04
	CSWB_07	VOLUME	834416.2	819813.3	2.85	-	-	-	3.63	2.65	7.95E-05	7.17E-05	4.54E-05	2.42E-05	2.42E-05	2.22E-05	4.01E-05	5.80E-05	1.26E-04	1.34E-04	1.21E-04	9.72E-05	1.03E-04	1.64E-04	1.40E-04	1.86E-04	2.24E-04	2.89E-04	3.00E-04	2.58E-04	2.19E-04	1.76E-04	1.43E-04	1.30E-04
	CSWB_08	VOLUME	834408.4	819813.3	2.85	-	-	-	3.63	2.65	3.97E-05	3.58E-05	2.27E-05	1.21E-05	1.21E-05	1.11E-05	2.00E-05	2.90E-05	6.30E-05	6.70E-05	6.07E-05	4.86E-05	5.14E-05	8.20E-05	6.98E-05	9.28E-05	1.12E-04	1.45E-04	1.50E-04	1.29E-04	1.10E-04	8.79E-05	7.14E-05	6.52E-05
	CSWB_09	VOLUME	834400.6	819813.3	2.85	-	-	-	3.63	2.65	3.97E-05	3.58E-05	2.27E-05	1.21E-05	1.21E-05	1.11E-05	2.00E-05	2.90E-05	6.30E-05	6.70E-05	6.07E-05	4.86E-05	5.14E-05	8.20E-05	6.98E-05	9.28E-05	1.12E-04	1.45E-04	1.50E-04	1.29E-04	1.10E-04	8.79E-05	7.14E-05	6.52E-05
	CSWB_10	VOLUME	834392.8	819813.3	2.85	-	-	-	3.63	2.65	3.97E-05	3.58E-05	2.27E-05	1.21E-05	1.21E-05	1.11E-05	2.00E-05	2.90E-05	6.30E-05	6.70E-05	6.07E-05	4.86E-05	5.14E-05	8.20E-05	6.98E-05	9.28E-05	1.12E-04	1.45E-04	1.50E-04	1.29E-04	1.10E-04	8.79E-05	7.14E-05	6.52E-05
	CSWB_11	VOLUME	834385.0	819813.3	2.85	-	-	-	3.63	2.65	3.97E-05	3.58E-05	2.27E-05	1.21E-05	1.21E-05	1.11E-05	2.00E-05	2.90E-05	6.30E-05	6.70E-05	6.07E-05	4.86E-05	5.14E-05	8.20E-05	6.98E-05	9.28E-05	1.12E-04	1.45E-04	1.50E-04	1.29E-04	1.10E-04	8.79E-05	7.14E-05	6.52E-05
	CSWB_12	VOLUME	834377.2	819813.3	2.85	-	-	-	3.63	2.65	3.97E-05	3.58E-05	2.27E-05	1.21E-05	1.21E-05	1.11E-05	2.00E-05	2.90E-05	6.30E-05	6.70E-05	6.07E-05	4.86E-05	5.14E-05	8.20E-05	6.98E-05	9.28E-05	1.12E-04	1.45E-04	1.50E-04	1.29E-04	1.10E-04	8.79E-05	7.14E-05	6.52E-05
	CSWB_13	VOLUME	834369.4	819813.3	2.85	-	-	-	3.63	2.65	3.97E-05	3.58E-05	2.27E-05	1.21E-05	1.21E-05	1.11E-05	2.00E-05	2.90E-05	6.30E-05	6.70E-05	6.07E-05	4.86E-05	5.14E-05	8.20E-05	6.98E-05	9.28E-05	1.12E-04	1.45E-04	1.50E-04	1.29E-04	1.10E-04	8.79E-05	7.14E-05	6.52E-05
	CSWB_14	VOLUME	834361.6	819813.3	2.85	-	-	-	3.63	2.65	3.97E-05	3.58E-05	2.27E-05	1.21E-05	1.21E-05	1.11E-05	2.00E-05	2.90E-05	6.30E-05	6.70E-05	6.07E-05	4.86E-05	5.14E-05	8.20E-05	6.98E-05	9.28E-05	1.12E-04	1.45E-04	1.50E-04	1.29E-04	1.10E-04	8.79E-05	7.14E-05	6.52E-05

Emission Inventory for Tunnel Portal for West Harbour Crossing of Year 2016 (RSP)

Scenario	Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Point Source Exit Temperatur (K)	Point Source Exit Velocity (m/s)	Point Source Internal Diameter (m)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly Nox Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
1	West Harbour Crossing VB	WHCVB	POINT	834036.1	817852.9	28	303	0	9.49	-	-	8.47E-03	3.11E-03	3.11E-03	3.09E-03	3.09E-03	3.09E-03	5.88E-03	8.38E-03	2.18E-02	2.09E-02	1.95E-02	2.01E-02	1.85E-02	1.91E-02	2.48E-02	2.55E-02	2.65E-02	3.39E-02	4.07E-02	2.94E-02	1.86E-02	1.34E-02	1.28E-02	8.50E-03
	West Harbour Crossing NB	W1	VOLUME	834182.7	818038.7	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W2	VOLUME	834191.2	818049.7	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W3	VOLUME	834199.8	818060.8	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W4	VOLUME	834208.3	818071.9	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W5	VOLUME	834216.9	818083.0	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W6	VOLUME	834225.4	818094.1	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W7	VOLUME	834234.0	818105.2	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W8	VOLUME	834242.5	818116.2	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W9	VOLUME	834250.8	818122.7	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W10	VOLUME	834259.0	818133.4	4.29	-	-	-	6.51	3.99	2.42E-04	8.89E-05	8.89E-05	8.83E-05	8.83E-05	8.83E-05	1.68E-04	2.39E-04	6.24E-04	5.98E-04	5.58E-04	5.76E-04	5.29E-04	5.47E-04	7.10E-04	7.27E-04	7.58E-04	9.68E-04	1.16E-03	8.40E-04	5.30E-04	3.83E-04	3.66E-04	2.43E-04
		W11	VOLUME	834267.2	818144.1	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W12	VOLUME	834275.3	818154.8	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W13	VOLUME	834283.5	818165.6	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W14	VOLUME	834291.7	818176.3	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W15	VOLUME	834299.9	818187.0	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W16	VOLUME	834308.1	818197.8	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W17	VOLUME	834316.3	818208.5	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W18	VOLUME	834324.5	818219.2	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W19	VOLUME	834332.7	818230.0	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
		W20	VOLUME	834340.9	818240.7	4.29	-	-	-	6.51	3.99	1.21E-04	4.44E-05	4.44E-05	4.41E-05	4.41E-05	4.41E-05	8.40E-05	1.20E-04	3.12E-04	2.99E-04	2.79E-04	2.88E-04	2.65E-04	2.73E-04	3.55E-04	3.64E-04	3.79E-04	4.84E-04	5.82E-04	4.20E-04	2.65E-04	1.91E-04	1.83E-04	1.21E-04
2	West Harbour Crossing VB	WHCVB	POINT	834036.1	817852.9	28	303	0	9.49	-	-	6.05E-03	2.22E-03	2.22E-03	2.21E-03	2.21E-03	2.21E-03	4.20E-03	5.99E-03	1.56E-02	1.50E-02	1.40E-02	1.44E-02	1.32E-02	1.37E-02	1.77E-02	1.82E-02	1.90E-02	2.42E-02	2.91E-02	2.10E-02	1.33E-02	9.57E-03	9.15E-03	6.07E-03
	West Harbour Crossing NB	W1	VOLUME	834182.7	818038.7	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W2	VOLUME	834191.2	818049.7	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W3	VOLUME	834199.8	818060.8	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W4	VOLUME	834208.3	818071.9	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W5	VOLUME	834216.9	818083.0	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W6	VOLUME	834225.4	818094.1	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W7	VOLUME	834234.0	818105.2	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W8	VOLUME	834242.5	818116.2	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W9	VOLUME	834250.8	818122.7	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W10	VOLUME	834259.0	818133.4	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W11	VOLUME	834267.2	818144.1	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W12	VOLUME	834275.3	818154.8	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W13	VOLUME	834283.5	818165.6	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W14	VOLUME	834291.7	818176.3	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W15	VOLUME	834299.9	818187.0	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W16	VOLUME	834308.1	818197.8	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W17	VOLUME	834316.3	818208.5	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W18	VOLUME	834324.5	818219.2	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W19	VOLUME	834332.7	818230.0	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
		W20	VOLUME	834340.9	818240.7	4.29	-	-	-	6.51	3.99	2.02E-04	7.41E-05	7.41E-05	7.36E-05	7.36E-05	7.36E-05	1.40E-04	2.00E-04	5.20E-04	4.99E-04	4.65E-04	4.80E-04	4.41E-04	4.55E-04	5.92E-04	6.06E-04	6.32E-04	8.07E-04	9.70E-04	7.00E-04	4.42E-04	3.19E-04	3.05E-04	2.02E-04
3	West Harbour Crossing VB	WHCVB	POINT	834036.1	817852.9	28	303	0	9.49	-	-	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	West Harbour Crossing NB	W1	VOLUME	834182.7	818038.7	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W2	VOLUME	834191.2	818049.7	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W3	VOLUME	834199.8	818060.8	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W4	VOLUME	834208.3	818071.9	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W5	VOLUME	834216.9	818083.0	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W6	VOLUME	834225.4	818094.1	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W7	VOLUME	834234.0	818105.2	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W8	VOLUME	834242.5	818116.2	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W9	VOLUME	834250.8	818122.7	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W10	VOLUME	834259.0	818133.4	4.29	-	-	-	6.51	3.99	8.07E-04	2.96E-04	2.96E-04	2.94E-04	2.94E-04	2.94E-04	5.60E-04	7.98E-04	2.08E-03	1.99E-03	1.86E-03	1.92E-03	1.76E-03	1.82E-03	2.37E-03	2.42E-03	2.53E-03	3.23E-03	3.88E-03	2.80E-03	1.77E-03	1.28E-03	1.22E-03	8.09E-04
		W11	VOLUME	834267.2	818144.1	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W12	VOLUME	834275.3	818154.8	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W13	VOLUME	834283.5	818165.6	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W14	VOLUME	834291.7	818176.3	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03	1.94E-03	1.40E-03	8.84E-04	6.38E-04	6.10E-04	4.05E-04
		W15	VOLUME	834299.9	818187.0	4.29	-	-	-	6.51	3.99	4.04E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	2.80E-04	3.99E-04	1.04E-03	9.97E-04	9.30E-04	9.60E-04	8.82E-04	9.11E-04	1.18E-03	1.21E-03	1.26E-03	1.61E-03

Sample Calcuation of RSP Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 1 - 10%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	0.052	2	0.0005	0.0000	-	-	0.1 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	0.052	6	0.0015	0.0002	-	-	0.1 x 0.9 x Tunnel Section A + 0.1 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	0.052	3	0.0007	0.0004	-	-	0.1 x 0.9 x 0.9 x Tunnel Section A + 0.1 x 0.9 x Tunnel Section B + 0.1 x Tunnel Section C + 0.1 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	0.049	4	0.0012				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	0.049	5	0.0013	0.0002	-	-	0.1 x 0.9 x Tunnel Section E + 0.1 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	0.043	5	0.0013	0.0017	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.9 x 0.9 x Tunnel Section E + 0.9 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	0.048	1	0.0002				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.021	1	0.0002				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	0.052	4	0.0011	-	0.0015	0.0008	0.9 x 0.9 x 0.9 x Tunnel Section A + 0.9 x 0.9 x Tunnel Section B + 0.9 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	0.049	2	0.0005	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.021	0	0.0000	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	0.051	2	0.0004	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	0.037	5	0.0013	-	0.0025	0.0013	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.9 x 0.9 x Tunnel Section E + 0.9 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.037	0	0.0001	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	0.048	3	0.0007	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	0.049	2	0.0006	-	0.0005	0.0002	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	0.043	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	0.049	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.018	0	0.0001	-	0.0010	0.0003	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.9 x 0.9 x Tunnel Section E + 0.9 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Sample Calcuation of RSP Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 2 - 20%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark [1]
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	0.052	2	0.0005	0.0001	-	-	0.2 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	0.052	6	0.0015	0.0004	-	-	0.2 x 0.8 x Tunnel Section A + 0.2 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	0.052	3	0.0007	0.0007	-	-	0.2 x 0.8 x 0.8 x Tunnel Section A + 0.2 x 0.8 x Tunnel Section B + 0.2 x Tunnel Section C + 0.2 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	0.049	4	0.0012				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	0.049	5	0.0013	0.0005	-	-	0.2 x 0.8 x Tunnel Section E + 0.2 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	0.043	5	0.0013	0.0017	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.8 x 0.8 x Tunnel Section E + 0.8 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	0.048	1	0.0002				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.021	1	0.0002				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	0.052	4	0.0011	-	0.0012	0.0006	0.8 x 0.8 x 0.8 x Tunnel Section A + 0.8 x 0.8 x Tunnel Section B + 0.8 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	0.049	2	0.0005	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.021	0	0.0000	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	0.051	2	0.0004	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	0.037	5	0.0013	-	0.0024	0.0012	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.8 x 0.8 x Tunnel Section E + 0.8 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.037	0	0.0001	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	0.048	3	0.0007	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	0.049	2	0.0006	-	0.0005	0.0002	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	0.043	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	0.049	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.018	0	0.0001	-	0.0010	0.0003	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.8 x 0.8 x Tunnel Section E + 0.8 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Sample Calcuation of RSP Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 3 - 30%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	0.052	2	0.0005	0.0001	-	-	0.3 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	0.052	6	0.0015	0.0006	-	-	0.3 x 0.7 x Tunnel Section A + 0.3 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	0.052	3	0.0007	0.0010	-	-	0.3 x 0.7 x 0.7 x Tunnel Section A + 0.3 x 0.7 x Tunnel Section B + 0.3 x Tunnel Section C + 0.3 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	0.049	4	0.0012				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	0.049	5	0.0013	0.0007	-	-	0.3 x 0.7 x Tunnel Section E + 0.3 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	0.043	5	0.0013	0.0016	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.7 x 0.7 x Tunnel Section E + 0.7 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	0.048	1	0.0002				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.021	1	0.0002				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	0.052	4	0.0011	-	0.0010	0.0005	0.7 x 0.7 x 0.7 x Tunnel Section A + 0.7 x 0.7 x Tunnel Section B + 0.7 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	0.049	2	0.0005	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.021	0	0.0000	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	0.051	2	0.0004	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	0.037	5	0.0013	-	0.0022	0.0011	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.7 x 0.7 x Tunnel Section E + 0.7 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.037	0	0.0001	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	0.048	3	0.0007	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	0.049	2	0.0006	-	0.0005	0.0002	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	0.043	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	0.049	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.018	0	0.0001	-	0.0009	0.0003	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.7 x 0.7 x Tunnel Section E + 0.7 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Sample Calcuation of RSP Emission from Tunnel Portals and Underpass Top Opening of RWWK of Hour 18 of Year 2016 (Scenario 4 - Max%)

Hour18

Tunnel Section	Description	Tunnel Length	Tunnel Length	Traffic Flow	Emission Factor	Total Emission	Total Emission	Top Opening Emission /VB	Portal Emission		Remark
									first 50m	second 50m	
		(m)	(mile)	(veh/hr)	(g/mile-veh)	(g/hr)	(g/s)	(g/s)	(g/s)	(g/s)	
A	Lin Cheung Rd (underpass) (NB)	76	0.047	700	0.052	2	0.0005	0.0003	-	-	0.6 x Tunnel Section A
B	Lin Cheung Rd (underpass) (NB)	245	0.152	700	0.052	6	0.0015	0.0017	-	-	0.97 x 0.4 x Tunnel Section A + 0.97 x Tunnel Section B
C	Lin Cheung Rd (underpass) (NB)	111	0.069	700	0.052	3	0.0007	0.0008	-	-	0.43 x(1-0.97) x(1- 0.6) x Tunnel Section A + 0.43 x (1-0.97)x Tunnel Section B + 0.43 x Tunnel Section C + 0.43 x Tunnel Section E
E	Lin Cheung Rd (underpass) (SB)	155	0.096	910	0.049	4	0.0012				
F	Lin Cheung Rd (underpass) (SB)	172	0.107	910	0.049	5	0.0013	0.0008	-	-	0.4 x(1-0.43) x Tunnel Section E + 0.4 x Tunnel Section F
J	Austin Rd W (depressed) (EB)	198	0.123	890	0.043	5	0.0013	0.0016	-	-	(2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.6 x 0.57 x Tunnel Section E + 0.6 x Tunnel Section F + Tunnel Section G1) x 0.3)
K2	Lin Cheung Rd (depressed) (SB)	27	0.017	1010	0.048	1	0.0002				
O	Austin Rd W (depressed) (EB)	54	0.034	810	0.021	1	0.0002				
D	Lin Cheung Rd (underpass) (NB)	177	0.110	700	0.052	4	0.0011	-	0.0003	0.0002	0.57 x 0.03 x 0.4 x Tunnel Section A + 0.57 x 0.03 x Tunnel Section B + 0.57 x Tunnel Section C + 1 x Tunnel Section D
G1	Lin Cheung Rd (underpass) (SB)	70	0.044	910	0.049	2	0.0005	-	-	-	No portal and top opening emission
G2	Lin Cheung Rd (depressed) (SB)	70	0.044	160	0.021	0	0.0000	-	-	-	No portal and top opening emission
H	Lin Cheung Rd (depressed) (SB)	48	0.030	1040	0.051	2	0.0004	-	-	-	No portal and top opening emission
HI	Austin Rd W (depressed) (WB)	161	0.100	1240	0.037	5	0.0013	-	0.0021	0.0010	(2/3x10/50 + 1/3) x Tunnel Section O x 0.33 + (0.6 x 0.57 x Tunnel Section E + 0.6 x Tunnel Section F + Tunnel Section G1) x 0.7 + Tunnel Section G2 + Tunnel Section H + Tunnel Section I + Tunnel Section HI
I	Austin Rd W (depressed) (EB)	35	0.022	340	0.037	0	0.0001	-	-	-	No portal and top opening emission
K1	Lin Cheung Rd (depressed) (SB)	70	0.044	1200	0.048	3	0.0007	-	-	-	No portal and top opening emission
L	Lin Cheung Rd (depressed) (NB)	98	0.061	740	0.049	2	0.0006	-	0.0005	0.0002	(2/3x10/50+1/3) x Tunnel Section J x 0.05 + (2/3x10/50+1/3) x Tunnel Section O x 0.67 + Tunnel Section L
M	Lin Cheung Rd (SB)	60	0.037	1950	0.043	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
N	Lin Cheung Rd (NB)	60	0.037	1690	0.049	3	0.0009	-	0.0006	0.0003	0.5 x (Tunnel Section M + Tunnel Section N)
P	Austin Rd W (depressed) (WB)	54	0.034	730	0.018	0	0.0001	-	0.0009	0.0003	Tunnel Section P + (2/3x10/50+1/3) x Tunnel Section J x 0.95 + (2/3x10/50+1/3) x (Tunnel Section K2 + Tunnel Section K1 + (0.6 x 0.57 x Tunnel Section E + 0.6 x Tunnel Section F + Tunnel Section G1) x 0.3) x 1.00

From Tunnel ID (Road ID)	To Tunnel ID (Road ID)	%
J (43)	P (69)	95%
	L (200)	5%
K2 (47)	P (69)	100%
O (70)	I (45)	33%
	L (200)	67%
G1 (50)	K2 (47)	30%
	H (46)	70%

Maximum Percentage Emission from Opening at Level B2 of Austin Road/Lin Cheung Road Underpass

Opening ID	Calculation	Percentage
A	2/3 x 45/50	60%
B	2/3 x 50/50 + 1/3 x 45/50	97%
CE	2/3 x 32/50	43%
F	2/3 x 30/50	40%

Remark:

- The Calculation Methodology is referenced to the approved EIA "Road Works at West Kowloon"(AEIAR-141/2009).
- The Calculation is amended based on the latest layout of RWWK after VEP in EP (EP-366/2009/A).
- The traffic flow ratio is provided by Traffic Consultant. As the traffic data from WKCD is not available, the traffic flow from/to WKCD are distributed to Austin Road West and Line Cheung Road in the emission calculation as a conservative approach.
- The latest layout with tunnel ID can be found in Figure A3.5-6.

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 1) - RSP

Scenario 1

Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	6.77E-08	6.78E-08	1.02E-06	3.00E-08	3.00E-08	3.00E-08	6.38E-08	9.40E-08	1.99E-07	1.99E-07	1.64E-07	1.05E-07	1.05E-07	1.37E-07	1.02E-07	1.40E-07	1.44E-07	1.51E-07	1.51E-07	1.41E-07	1.36E-07	1.05E-07	9.81E-08	9.82E-08
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	2.75E-07	2.75E-07	1.10E-06	1.22E-07	1.22E-07	1.22E-07	2.59E-07	3.81E-07	8.09E-07	8.08E-07	6.66E-07	4.27E-07	4.26E-07	5.55E-07	4.14E-07	5.67E-07	5.84E-07	6.12E-07	6.14E-07	5.72E-07	5.52E-07	4.28E-07	3.98E-07	3.99E-07
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	2.47E-07	1.97E-07	5.62E-07	1.13E-07	1.13E-07	1.13E-07	2.35E-07	4.40E-07	9.32E-07	8.35E-07	6.46E-07	5.00E-07	4.49E-07	5.33E-07	4.32E-07	5.25E-07	5.35E-07	5.41E-07	5.70E-07	5.40E-07	4.58E-07	4.02E-07	3.45E-07	3.50E-07
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	9.47E-05	9.47E-05	2.96E-04	4.21E-05	4.21E-05	4.21E-05	8.93E-05	1.32E-04	2.79E-04	2.79E-04	2.30E-04	1.49E-04	1.49E-04	1.93E-04	1.45E-04	1.97E-04	2.03E-04	2.14E-04	2.15E-04	2.01E-04	1.92E-04	1.49E-04	1.39E-04	1.39E-04
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	9.47E-05	9.47E-05	2.96E-04	4.21E-05	4.21E-05	4.21E-05	8.93E-05	1.32E-04	2.79E-04	2.79E-04	2.30E-04	1.49E-04	1.49E-04	1.93E-04	1.45E-04	1.97E-04	2.03E-04	2.14E-04	2.15E-04	2.01E-04	1.92E-04	1.49E-04	1.39E-04	1.39E-04
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	9.47E-05	9.47E-05	2.96E-04	4.21E-05	4.21E-05	4.21E-05	8.93E-05	1.32E-04	2.79E-04	2.79E-04	2.30E-04	1.49E-04	1.49E-04	1.93E-04	1.45E-04	1.97E-04	2.03E-04	2.14E-04	2.15E-04	2.01E-04	1.92E-04	1.49E-04	1.39E-04	1.39E-04
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	9.47E-05	9.47E-05	2.96E-04	4.21E-05	4.21E-05	4.21E-05	8.93E-05	1.32E-04	2.79E-04	2.79E-04	2.30E-04	1.49E-04	1.49E-04	1.93E-04	1.45E-04	1.97E-04	2.03E-04	2.14E-04	2.15E-04	2.01E-04	1.92E-04	1.49E-04	1.39E-04	1.39E-04
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	9.47E-05	9.47E-05	2.96E-04	4.21E-05	4.21E-05	4.21E-05	8.93E-05	1.32E-04	2.79E-04	2.79E-04	2.30E-04	1.49E-04	1.49E-04	1.93E-04	1.45E-04	1.97E-04	2.03E-04	2.14E-04	2.15E-04	2.01E-04	1.92E-04	1.49E-04	1.39E-04	1.39E-04
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	9.47E-05	9.47E-05	2.96E-04	4.21E-05	4.21E-05	4.21E-05	8.93E-05	1.32E-04	2.79E-04	2.79E-04	2.30E-04	1.49E-04	1.49E-04	1.93E-04	1.45E-04	1.97E-04	2.03E-04	2.14E-04	2.15E-04	2.01E-04	1.92E-04	1.49E-04	1.39E-04	1.39E-04
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	9.47E-05	9.47E-05	2.96E-04	4.21E-05	4.21E-05	4.21E-05	8.93E-05	1.32E-04	2.79E-04	2.79E-04	2.30E-04	1.49E-04	1.49E-04	1.93E-04	1.45E-04	1.97E-04	2.03E-04	2.14E-04	2.15E-04	2.01E-04	1.92E-04	1.49E-04	1.39E-04	1.39E-04
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	4.73E-05	4.74E-05	1.48E-04	2.10E-05	2.10E-05	2.10E-05	4.46E-05	6.58E-05	1.40E-04	1.39E-04	1.15E-04	7.45E-05	7.43E-05	9.65E-05	7.23E-05	9.86E-05	1.01E-04	1.07E-04	1.08E-04	1.00E-04	9.60E-05	7.45E-05	6.94E-05	6.95E-05
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	4.73E-05	4.74E-05	1.48E-04	2.10E-05	2.10E-05	2.10E-05	4.46E-05	6.58E-05	1.40E-04	1.39E-04	1.15E-04	7.45E-05	7.43E-05	9.65E-05	7.23E-05	9.86E-05	1.01E-04	1.07E-04	1.08E-04	1.00E-04	9.60E-05	7.45E-05	6.94E-05	6.95E-05
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	4.73E-05	4.74E-05	1.48E-04	2.10E-05	2.10E-05	2.10E-05	4.46E-05	6.58E-05	1.40E-04	1.39E-04	1.15E-04	7.45E-05	7.43E-05	9.65E-05	7.23E-05	9.86E-05	1.01E-04	1.07E-04	1.08E-04	1.00E-04	9.60E-05	7.45E-05	6.94E-05	6.95E-05
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	4.73E-05	4.74E-05	1.48E-04	2.10E-05	2.10E-05	2.10E-05	4.46E-05	6.58E-05	1.40E-04	1.39E-04	1.15E-04	7.45E-05	7.43E-05	9.65E-05	7.23E-05	9.86E-05	1.01E-04	1.07E-04	1.08E-04	1.00E-04	9.60E-05	7.45E-05	6.94E-05	6.95E-05
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	4.73E-05	4.74E-05	1.48E-04	2.10E-05	2.10E-05	2.10E-05	4.46E-05	6.58E-05	1.40E-04	1.39E-04	1.15E-04	7.45E-05	7.43E-05	9.65E-05	7.23E-05	9.86E-05	1.01E-04	1.07E-04	1.08E-04	1.00E-04	9.60E-05	7.45E-05	6.94E-05	6.95E-05
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	4.73E-05	4.74E-05	1.48E-04	2.10E-05	2.10E-05	2.10E-05	4.46E-05	6.58E-05	1.40E-04	1.39E-04	1.15E-04	7.45E-05	7.43E-05	9.65E-05	7.23E-05	9.86E-05	1.01E-04	1.07E-04	1.08E-04	1.00E-04	9.60E-05	7.45E-05	6.94E-05	6.95E-05
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	4.73E-05	4.74E-05	1.48E-04	2.10E-05	2.10E-05	2.10E-05	4.46E-05	6.58E-05	1.40E-04	1.39E-04	1.15E-04	7.45E-05	7.43E-05	9.65E-05	7.23E-05	9.86E-05	1.01E-04	1.07E-04	1.08E-04	1.00E-04	9.60E-05	7.45E-05	6.94E-05	6.95E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	3.63E-07	1.23E-07	1.23E-07	1.79E-07	1.79E-07	1.79E-07	3.52E-07	9.66E-07	2.05E-06	1.59E-06	1.11E-06	1.12E-06	8.80E-07	8.92E-07	8.31E-07	8.18E-07	8.18E-07	7.65E-07	8.97E-07	8.79E-07	5.45E-07	6.51E-07	4.61E-07	4.86E-07
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	2.40E-04	1.33E-04	1.33E-04	9.40E-05	9.39E-05	9.63E-05	1.74E-04	5.36E-04	1.09E-03	9.01E-04	6.89E-04	7.06E-04	5.87E-04	5.93E-04	5.64E-04	5.79E-04	5.89E-04	5.70E-04	6.29E-04	6.16E-04	4.25E-04	4.70E-04	3.33E-04	3.23E-04
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	2.40E-04	1.33E-04	1.33E-04	9.40E-05	9.39E-05	9.63E-05	1.74E-04	5.36E-04	1.09E-03	9.01E-04	6.89E-04	7.06E-04	5.87E-04	5.93E-04	5.64E-04	5.79E-04	5.89E-04	5.70E-04	6.29E-04	6.16E-04	4.25E-04	4.70E-04	3.33E-04	3.23E-04
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	2.40E-04	1.33E-04	1.33E-04	9.40E-05	9.39E-05	9.63E-05	1.74E-04	5.36E-04	1.09E-03	9.01E-04	6.89E-04	7.06E-04	5.87E-04	5.93E-04	5.64E-04	5.79E-04	5.89E-04	5.70E-04	6.29E-04	6.16E-04	4.25E-04	4.70E-04	3.33E-04	3.23E-04
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	2.40E-04	1.33E-04	1.33E-04	9.40E-05	9.39E-05	9.63E-05	1.74E-04	5.36E-04	1.09E-03	9.01E-04	6.89E-04	7.06E-04	5.87E-04	5.93E-04	5.64E-04	5.79E-04	5.89E-04	5.70E-04	6.29E-04	6.16E-04	4.25E-04	4.70E-04	3.33E-04	3.23E-04
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	1.20E-04	6.67E-05	6.67E-05	4.70E-05	4.69E-05	4.81E-05	8.70E-05	2.68E-04	5.47E-04	4.51E-04	3.45E-04	3.53E-04	2.94E-04	2.97E-04	2.82E-04	2.89E-04	2.95E-04	2.85E-04	3.15E-04	3.08E-04	2.12E-04	2.35E-04	1.66E-04	1.61E-04
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	1.20E-04	6.67E-05	6.67E-05	4.70E-05	4.69E-05	4.81E-05	8.70E-05	2.68E-04	5.47E-04	4.51E-04	3.45E-04	3.53E-04	2.94E-04	2.97E-04	2.82E-04	2.89E-04	2.95E-04	2.85E-04	3.15E-04	3.08E-04	2.12E-04	2.35E-04	1.66E-04	1.61E-04
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	1.20E-04	6.67E-05	6.67E-05	4.70E-05	4.69E-05	4.81E-05	8.70E-05	2.68E-04	5.47E-04	4.51E-04	3.45E-04	3.53E-04	2.94E-04	2.97E-04	2.82E-04	2.89E-04	2.95E-04	2.85E-04	3.15E-04	3.08E-04	2.12E-04	2.35E-04	1.66E-04	1.61E-04
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	1.20E-04	6.67E-05	6.67E-05	4.70E-05	4.69E-05	4.81E-05	8.70E-05	2.68E-04	5.47E-04	4.51E-04	3.45E-04	3.53E-04	2.94E-04	2.97E-04	2.82E-04	2.89E-04	2.95E-04	2.85E-04	3.15E-04	3.08E-04	2.12E-04	2.35E-04	1.66E-04	1.61E-04
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	3.33E-07	1.90E-07	1.89E-07	1.23E-07	1.23E-07	1.27E-07	2.09E-07	6.55E-07	1.29E-06	1.11E-06	8.71E-07	9.61E-07	8.25E-07	8.38E-07	8.16E-07	8.65E-07	9.77E-07	9.59E-07	1.07E-06	1.04E-06	6.88E-07	7.23E-07	5.55E-07	5.08E-07
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.37E-05	2.64E-05	9.57E-06	9.57E-06	9.60E-06	2.69E-05	4.33E-05	8.99E-05	8.98E-05	7.39E-05	5.01E-05	4.96E-05	6.54E-05	4.79E-05	6.26E-05	6.25E-05	6.93E-05	6.65E-05	6.14E-05	5.84E-05	4.74E-05	3.93E-05	3.84E-05
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.37E-05	2.64E-05	9.57E-06	9.57E-06	9.60E-06	2.69E-05	4.33E-05	8.99E-05	8.98E-05	7.39E-05	5.01E-05	4.96E-05	6.54E-05	4.79E-05	6.26E-05	6.25E-05	6.93E-05	6.65E-05	6.14E-05	5.84E-05	4.74E-05	3.93E-05	3.84E-05
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.37E-05	2.64E-05	9.57E-06	9.57E-06	9.60E-06	2.69E-05	4.33E-05	8.99E-05	8.98E-05	7.39E-05	5.01E-05	4.96E-05	6.54E-05	4.79E-05	6.26E-05	6.25E-05	6.93E-05	6.65E-05	6.14E-05	5.84E-05	4.74E-05	3.93E-05	3.84E-05
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.37E-05	2.64E-05	9.57E-06	9.57E-06	9.60E-06	2.69E-05	4.33E-05	8.99E-05	8.98E-05	7.39E-05	5.01E-05	4.96E-05	6.54E-05	4.79E-05	6.26E-05	6.25E-05	6.93E-05	6.65E-05	6.14E-05	5.84E-05	4.74E-05	3.93E-05	3.84E-05
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.37E-05	2.64E-05	9.57E-06	9.57E-06	9.60E-06	2.69E-05	4.33E-05	8.99E-05	8.98E-05	7.39E-05	5.01E-05	4.96E-05	6.54E-05	4.79E-05	6.26E-05	6.25E-05	6.93E-05	6.65E-05	6.14E-05	5.84E-05	4.74E-05	3.93E-05	3.84E-05
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.37E-05	2.64E-05	9.57E-06	9.57E-06	9.60E-06	2.69E-05	4.33E-05	8.99E-05	8.98E-05	7.39E-05	5.01E-05	4.96E-05	6.54E-05	4.79E-05	6.26E-05	6.25E-05	6.93E-05	6.65E-05	6.14E-05	5.84E-05	4.74E-05	3.93E-05	3.84E-05
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.37E-05	2.64E-05	9.57E-06	9.57E-06	9.60E-06	2.69E-05	4.33E-05	8.99E-05	8.98E-05	7.39E-05	5.01E-05	4.96E-05	6.54E-05	4.79E-05	6.26E-05	6.25E-05	6.93E-05	6.65E-05	6.14E-05	5.84E-05	4.74E-05	3.93E-05	3.84E-05
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.68E-05	1.32E-05	4.78E-06	4.78E-06	4.80E-06	1.35E-05	2.17E-05	4.50E-05	4.49E-05	3.70E-05	2.50E-05	2.48E-05	3.27E-05	2.40E-05	3.13E-05	3.12E-05	3.47E-05	3.32E-05	3.07E-05	2.92E-05	2.37E-05	1.97E-05	1.92E-05
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.68E-05	1.32E-05	4.78E-06	4.78E-06	4.80E-06	1.35E-05	2.17E-05	4.50E-05	4.49E-05	3.70E-05	2.50E-05	2.48E-05	3.27E-05	2.40E-05	3.13E-05	3.12E-05	3.47E-05	3.32E-05	3.07E-05	2.92E-05	2.37E-05	1.97E-05	1.92E-05
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.68E-05	1.32E-05	4.78E-06	4.78E-06	4.80E-06	1.35E-05	2.17E-05	4.50E-05	4.49E-05	3.70E-05	2.50E-05	2.48E-05	3.27E-05	2.40E-05	3.13E-05	3.12E-05	3.47E-05	3.32E-05	3.07E-05	2.92E-05	2.37E-05	1.97E-05	1.92E-05
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.68E-05	1.32E-05	4.78E-06	4.78E-06	4.80E-06	1.35E-05	2.17E-05	4.50E-05	4.49E-05	3.70E-05	2.50E-05	2.48E-05	3.27E-05	2.40E-05	3.13E-05	3.12E-05	3.47E-05	3.32E-05	3.07E-05	2.92E-05	2.37E-05	1.97E-05	1.92E-05
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.68E-05	1.32E-05	4.78E-06	4.78E-06	4.80E-06	1.35E-05	2.17E-05	4.50E-05	4.49E-05	3.70E-05	2.50E-05	2.48E-05	3.27E-05	2.40E-05	3.13E-05	3.12E-05	3.47E-05	3.32E-05	3.07E-05	2.92E-05	2.37E-05	1.97E-05	1.92E-05
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.68E-05	1.32E-05	4.78E-06	4.78E-06	4.80E-06	1.35E-05	2.17E-05	4.50E-05	4.49E-05	3.70E-05	2.50E-05	2.48E-05	3.27E-05	2.40E-05	3.13E-05	3.12E-05	3.47E-05	3.32E-05	3.07E-05	2.92E-05	2.37E-05	1.97E-05	1.92E-05
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.68E-05	1.32E-05	4.78E-06	4.78E-06	4.80E-06	1.35E-05	2.17E-05	4.50E-05	4.49E-05	3.70E-05	2.50E-05	2.48E-05	3.27E-05	2.40E-05	3.13E-05	3.12E-05	3.47E-05	3.32E-05	3.07E-05	2.92E-05	2.37E-05	1.97E-05	1.92E-05
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	7.49E

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 2) - RSP

Scenario 1

Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	1.35E-07	1.36E-07	2.04E-06	6.01E-08	6.01E-08	6.01E-08	1.28E-07	1.88E-07	3.98E-07	3.98E-07	3.28E-07	2.10E-07	2.10E-07	2.74E-07	2.04E-07	2.80E-07	2.88E-07	3.02E-07	3.03E-07	2.82E-07	2.72E-07	2.11E-07	1.96E-07	1.96E-07
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	5.36E-07	5.37E-07	2.00E-06	2.38E-07	2.38E-07	2.38E-07	5.06E-07	7.44E-07	1.58E-06	1.58E-06	1.30E-06	8.33E-07	8.31E-07	1.08E-06	8.09E-07	1.11E-06	1.14E-06	1.19E-06	1.20E-06	1.12E-06	1.08E-06	8.34E-07	7.77E-07	7.78E-07
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	4.62E-07	3.62E-07	9.34E-07	2.12E-07	2.12E-07	2.12E-07	4.40E-07	8.34E-07	1.77E-06	1.57E-06	1.21E-06	9.49E-07	8.48E-07	9.99E-07	8.15E-07	9.82E-07	1.00E-06	1.01E-06	1.07E-06	1.01E-06	8.51E-07	7.54E-07	6.42E-07	6.53E-07
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	7.62E-05	7.62E-05	2.17E-04	3.38E-05	3.38E-05	3.38E-05	7.18E-05	1.06E-04	2.25E-04	2.24E-04	1.85E-04	1.20E-04	1.20E-04	1.56E-04	1.17E-04	1.59E-04	1.64E-04	1.73E-04	1.74E-04	1.62E-04	1.55E-04	1.20E-04	1.12E-04	1.12E-04
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	7.62E-05	7.62E-05	2.17E-04	3.38E-05	3.38E-05	3.38E-05	7.18E-05	1.06E-04	2.25E-04	2.24E-04	1.85E-04	1.20E-04	1.20E-04	1.56E-04	1.17E-04	1.59E-04	1.64E-04	1.73E-04	1.74E-04	1.62E-04	1.55E-04	1.20E-04	1.12E-04	1.12E-04
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	7.62E-05	7.62E-05	2.17E-04	3.38E-05	3.38E-05	3.38E-05	7.18E-05	1.06E-04	2.25E-04	2.24E-04	1.85E-04	1.20E-04	1.20E-04	1.56E-04	1.17E-04	1.59E-04	1.64E-04	1.73E-04	1.74E-04	1.62E-04	1.55E-04	1.20E-04	1.12E-04	1.12E-04
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	7.62E-05	7.62E-05	2.17E-04	3.38E-05	3.38E-05	3.38E-05	7.18E-05	1.06E-04	2.25E-04	2.24E-04	1.85E-04	1.20E-04	1.20E-04	1.56E-04	1.17E-04	1.59E-04	1.64E-04	1.73E-04	1.74E-04	1.62E-04	1.55E-04	1.20E-04	1.12E-04	1.12E-04
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	7.62E-05	7.62E-05	2.17E-04	3.38E-05	3.38E-05	3.38E-05	7.18E-05	1.06E-04	2.25E-04	2.24E-04	1.85E-04	1.20E-04	1.20E-04	1.56E-04	1.17E-04	1.59E-04	1.64E-04	1.73E-04	1.74E-04	1.62E-04	1.55E-04	1.20E-04	1.12E-04	1.12E-04
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	7.62E-05	7.62E-05	2.17E-04	3.38E-05	3.38E-05	3.38E-05	7.18E-05	1.06E-04	2.25E-04	2.24E-04	1.85E-04	1.20E-04	1.20E-04	1.56E-04	1.17E-04	1.59E-04	1.64E-04	1.73E-04	1.74E-04	1.62E-04	1.55E-04	1.20E-04	1.12E-04	1.12E-04
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	7.62E-05	7.62E-05	2.17E-04	3.38E-05	3.38E-05	3.38E-05	7.18E-05	1.06E-04	2.25E-04	2.24E-04	1.85E-04	1.20E-04	1.20E-04	1.56E-04	1.17E-04	1.59E-04	1.64E-04	1.73E-04	1.74E-04	1.62E-04	1.55E-04	1.20E-04	1.12E-04	1.12E-04
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	3.81E-05	3.81E-05	1.08E-04	1.69E-05	1.69E-05	1.69E-05	3.59E-05	5.30E-05	1.12E-04	1.12E-04	9.24E-05	6.01E-05	5.99E-05	7.79E-05	5.84E-05	7.95E-05	8.18E-05	8.65E-05	8.69E-05	8.11E-05	7.74E-05	6.01E-05	5.60E-05	5.60E-05
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	3.81E-05	3.81E-05	1.08E-04	1.69E-05	1.69E-05	1.69E-05	3.59E-05	5.30E-05	1.12E-04	1.12E-04	9.24E-05	6.01E-05	5.99E-05	7.79E-05	5.84E-05	7.95E-05	8.18E-05	8.65E-05	8.69E-05	8.11E-05	7.74E-05	6.01E-05	5.60E-05	5.60E-05
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	3.81E-05	3.81E-05	1.08E-04	1.69E-05	1.69E-05	1.69E-05	3.59E-05	5.30E-05	1.12E-04	1.12E-04	9.24E-05	6.01E-05	5.99E-05	7.79E-05	5.84E-05	7.95E-05	8.18E-05	8.65E-05	8.69E-05	8.11E-05	7.74E-05	6.01E-05	5.60E-05	5.60E-05
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	3.81E-05	3.81E-05	1.08E-04	1.69E-05	1.69E-05	1.69E-05	3.59E-05	5.30E-05	1.12E-04	1.12E-04	9.24E-05	6.01E-05	5.99E-05	7.79E-05	5.84E-05	7.95E-05	8.18E-05	8.65E-05	8.69E-05	8.11E-05	7.74E-05	6.01E-05	5.60E-05	5.60E-05
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	3.81E-05	3.81E-05	1.08E-04	1.69E-05	1.69E-05	1.69E-05	3.59E-05	5.30E-05	1.12E-04	1.12E-04	9.24E-05	6.01E-05	5.99E-05	7.79E-05	5.84E-05	7.95E-05	8.18E-05	8.65E-05	8.69E-05	8.11E-05	7.74E-05	6.01E-05	5.60E-05	5.60E-05
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	3.81E-05	3.81E-05	1.08E-04	1.69E-05	1.69E-05	1.69E-05	3.59E-05	5.30E-05	1.12E-04	1.12E-04	9.24E-05	6.01E-05	5.99E-05	7.79E-05	5.84E-05	7.95E-05	8.18E-05	8.65E-05	8.69E-05	8.11E-05	7.74E-05	6.01E-05	5.60E-05	5.60E-05
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	3.81E-05	3.81E-05	1.08E-04	1.69E-05	1.69E-05	1.69E-05	3.59E-05	5.30E-05	1.12E-04	1.12E-04	9.24E-05	6.01E-05	5.99E-05	7.79E-05	5.84E-05	7.95E-05	8.18E-05	8.65E-05	8.69E-05	8.11E-05	7.74E-05	6.01E-05	5.60E-05	5.60E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	6.90E-07	2.33E-07	2.33E-07	3.40E-07	3.40E-07	3.40E-07	6.70E-07	1.84E-06	3.89E-06	3.02E-06	2.10E-06	2.12E-06	1.67E-06	1.70E-06	1.58E-06	1.55E-06	1.55E-06	1.45E-06	1.70E-06	1.67E-06	1.04E-06	1.24E-06	8.76E-07	9.24E-07
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	2.24E-04	1.28E-04	1.28E-04	8.64E-05	8.62E-05	8.86E-05	1.59E-04	4.95E-04	1.01E-03	8.33E-04	6.42E-04	6.58E-04	5.50E-04	5.55E-04	5.29E-04	5.44E-04	5.54E-04	5.38E-04	5.90E-04	5.79E-04	4.02E-04	4.42E-04	3.13E-04	3.02E-04
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	2.24E-04	1.28E-04	1.28E-04	8.64E-05	8.62E-05	8.86E-05	1.59E-04	4.95E-04	1.01E-03	8.33E-04	6.42E-04	6.58E-04	5.50E-04	5.55E-04	5.29E-04	5.44E-04	5.54E-04	5.38E-04	5.90E-04	5.79E-04	4.02E-04	4.42E-04	3.13E-04	3.02E-04
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	2.24E-04	1.28E-04	1.28E-04	8.64E-05	8.62E-05	8.86E-05	1.59E-04	4.95E-04	1.01E-03	8.33E-04	6.42E-04	6.58E-04	5.50E-04	5.55E-04	5.29E-04	5.44E-04	5.54E-04	5.38E-04	5.90E-04	5.79E-04	4.02E-04	4.42E-04	3.13E-04	3.02E-04
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	2.24E-04	1.28E-04	1.28E-04	8.64E-05	8.62E-05	8.86E-05	1.59E-04	4.95E-04	1.01E-03	8.33E-04	6.42E-04	6.58E-04	5.50E-04	5.55E-04	5.29E-04	5.44E-04	5.54E-04	5.38E-04	5.90E-04	5.79E-04	4.02E-04	4.42E-04	3.13E-04	3.02E-04
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	1.12E-04	6.42E-05	6.42E-05	4.32E-05	4.31E-05	4.43E-05	7.93E-05	2.47E-04	5.03E-04	4.17E-04	3.21E-04	3.29E-04	2.75E-04	2.78E-04	2.64E-04	2.72E-04	2.77E-04	2.69E-04	2.95E-04	2.89E-04	2.01E-04	2.21E-04	1.57E-04	1.51E-04
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	1.12E-04	6.42E-05	6.42E-05	4.32E-05	4.31E-05	4.43E-05	7.93E-05	2.47E-04	5.03E-04	4.17E-04	3.21E-04	3.29E-04	2.75E-04	2.78E-04	2.64E-04	2.72E-04	2.77E-04	2.69E-04	2.95E-04	2.89E-04	2.01E-04	2.21E-04	1.57E-04	1.51E-04
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	1.12E-04	6.42E-05	6.42E-05	4.32E-05	4.31E-05	4.43E-05	7.93E-05	2.47E-04	5.03E-04	4.17E-04	3.21E-04	3.29E-04	2.75E-04	2.78E-04	2.64E-04	2.72E-04	2.77E-04	2.69E-04	2.95E-04	2.89E-04	2.01E-04	2.21E-04	1.57E-04	1.51E-04
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	1.12E-04	6.42E-05	6.42E-05	4.32E-05	4.31E-05	4.43E-05	7.93E-05	2.47E-04	5.03E-04	4.17E-04	3.21E-04	3.29E-04	2.75E-04	2.78E-04	2.64E-04	2.72E-04	2.77E-04	2.69E-04	2.95E-04	2.89E-04	2.01E-04	2.21E-04	1.57E-04	1.51E-04
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	3.20E-07	1.85E-07	1.85E-07	1.16E-07	1.16E-07	1.20E-07	1.96E-07	6.19E-07	1.21E-06	1.05E-06	8.29E-07	9.19E-07	7.92E-07	8.05E-07	7.85E-07	8.34E-07	9.47E-07	9.30E-07	1.03E-06	1.01E-06	6.67E-07	6.98E-07	5.37E-07	4.89E-07
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	7.23E

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 3) - RSP

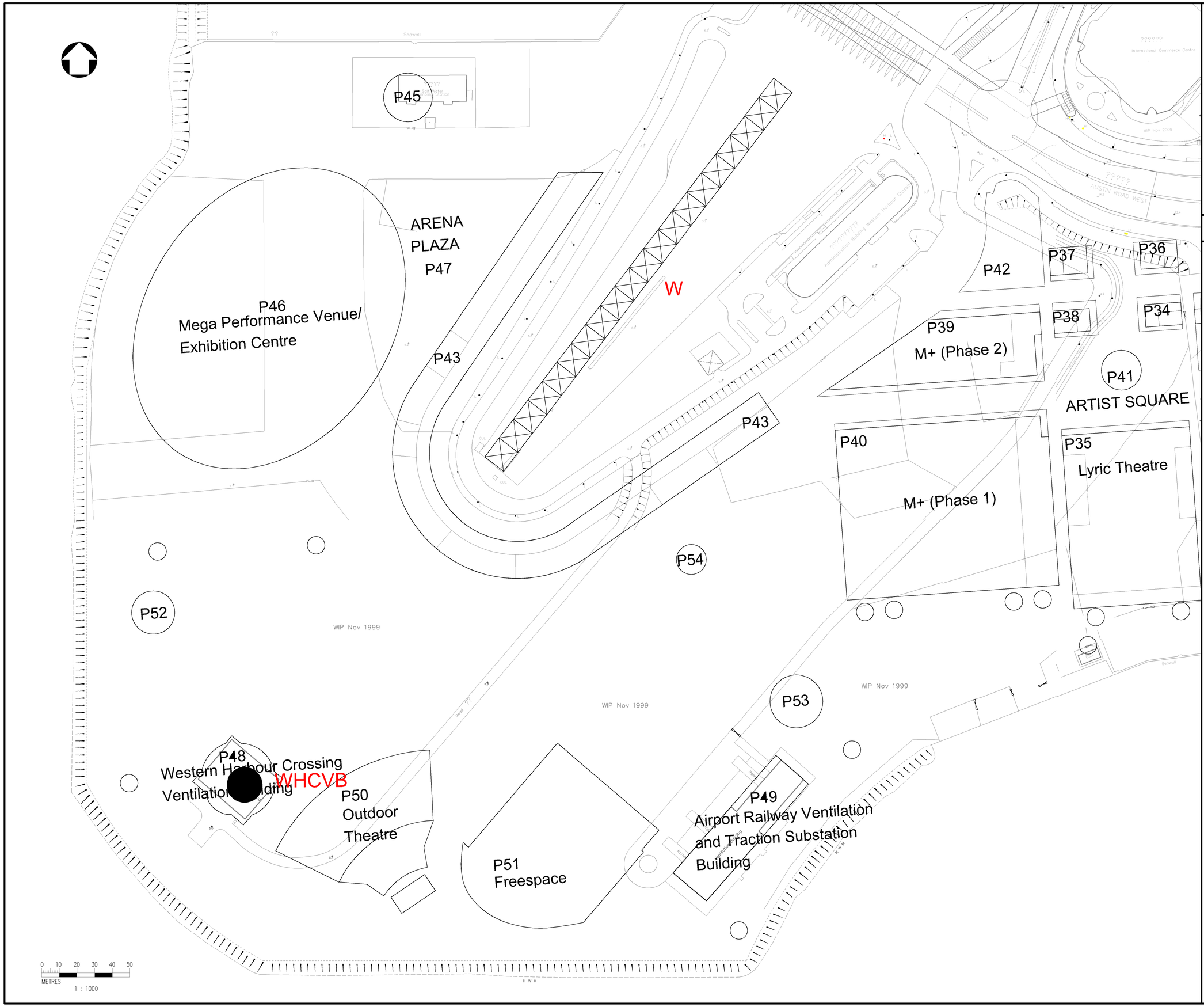
Scenario 1

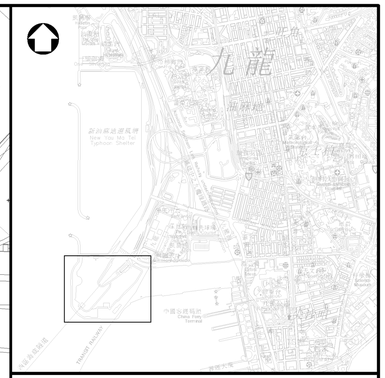
Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	2.03E-07	2.03E-07	3.06E-06	9.01E-08	9.01E-08	9.01E-08	1.91E-07	2.82E-07	5.98E-07	5.97E-07	4.92E-07	3.15E-07	3.15E-07	4.10E-07	3.06E-07	4.19E-07	4.31E-07	4.52E-07	4.54E-07	4.23E-07	4.08E-07	3.16E-07	2.94E-07	2.95E-07
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	7.84E-07	7.85E-07	2.70E-06	3.48E-07	3.48E-07	3.48E-07	7.40E-07	1.09E-06	2.31E-06	2.31E-06	1.90E-06	1.22E-06	1.22E-06	1.59E-06	1.18E-06	1.62E-06	1.67E-06	1.75E-06	1.75E-06	1.63E-06	1.58E-06	1.22E-06	1.14E-06	1.14E-06
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	6.46E-07	4.96E-07	1.15E-06	2.98E-07	2.98E-07	2.98E-07	6.15E-07	1.19E-06	2.51E-06	2.22E-06	1.71E-06	1.35E-06	1.20E-06	1.40E-06	1.15E-06	1.38E-06	1.40E-06	1.41E-06	1.50E-06	1.42E-06	1.18E-06	1.06E-06	8.95E-07	9.11E-07
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	6.00E-05	6.00E-05	1.53E-04	2.66E-05	2.66E-05	2.66E-05	5.65E-05	8.34E-05	1.77E-04	1.76E-04	1.45E-04	9.50E-05	9.48E-05	1.23E-04	9.23E-05	1.26E-04	1.29E-04	1.37E-04	1.38E-04	1.28E-04	1.22E-04	9.50E-05	8.85E-05	8.86E-05
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	6.00E-05	6.00E-05	1.53E-04	2.66E-05	2.66E-05	2.66E-05	5.65E-05	8.34E-05	1.77E-04	1.76E-04	1.45E-04	9.50E-05	9.48E-05	1.23E-04	9.23E-05	1.26E-04	1.29E-04	1.37E-04	1.38E-04	1.28E-04	1.22E-04	9.50E-05	8.85E-05	8.86E-05
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	6.00E-05	6.00E-05	1.53E-04	2.66E-05	2.66E-05	2.66E-05	5.65E-05	8.34E-05	1.77E-04	1.76E-04	1.45E-04	9.50E-05	9.48E-05	1.23E-04	9.23E-05	1.26E-04	1.29E-04	1.37E-04	1.38E-04	1.28E-04	1.22E-04	9.50E-05	8.85E-05	8.86E-05
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	6.00E-05	6.00E-05	1.53E-04	2.66E-05	2.66E-05	2.66E-05	5.65E-05	8.34E-05	1.77E-04	1.76E-04	1.45E-04	9.50E-05	9.48E-05	1.23E-04	9.23E-05	1.26E-04	1.29E-04	1.37E-04	1.38E-04	1.28E-04	1.22E-04	9.50E-05	8.85E-05	8.86E-05
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	6.00E-05	6.00E-05	1.53E-04	2.66E-05	2.66E-05	2.66E-05	5.65E-05	8.34E-05	1.77E-04	1.76E-04	1.45E-04	9.50E-05	9.48E-05	1.23E-04	9.23E-05	1.26E-04	1.29E-04	1.37E-04	1.38E-04	1.28E-04	1.22E-04	9.50E-05	8.85E-05	8.86E-05
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	6.00E-05	6.00E-05	1.53E-04	2.66E-05	2.66E-05	2.66E-05	5.65E-05	8.34E-05	1.77E-04	1.76E-04	1.45E-04	9.50E-05	9.48E-05	1.23E-04	9.23E-05	1.26E-04	1.29E-04	1.37E-04	1.38E-04	1.28E-04	1.22E-04	9.50E-05	8.85E-05	8.86E-05
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	6.00E-05	6.00E-05	1.53E-04	2.66E-05	2.66E-05	2.66E-05	5.65E-05	8.34E-05	1.77E-04	1.76E-04	1.45E-04	9.50E-05	9.48E-05	1.23E-04	9.23E-05	1.26E-04	1.29E-04	1.37E-04	1.38E-04	1.28E-04	1.22E-04	9.50E-05	8.85E-05	8.86E-05
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	3.00E-05	3.00E-05	7.66E-05	1.33E-05	1.33E-05	1.33E-05	2.83E-05	4.17E-05	8.84E-05	8.82E-05	7.27E-05	4.75E-05	4.74E-05	6.15E-05	4.61E-05	6.28E-05	6.46E-05	6.85E-05	6.88E-05	6.42E-05	6.11E-05	4.75E-05	4.42E-05	4.43E-05
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	3.00E-05	3.00E-05	7.66E-05	1.33E-05	1.33E-05	1.33E-05	2.83E-05	4.17E-05	8.84E-05	8.82E-05	7.27E-05	4.75E-05	4.74E-05	6.15E-05	4.61E-05	6.28E-05	6.46E-05	6.85E-05	6.88E-05	6.42E-05	6.11E-05	4.75E-05	4.42E-05	4.43E-05
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	3.00E-05	3.00E-05	7.66E-05	1.33E-05	1.33E-05	1.33E-05	2.83E-05	4.17E-05	8.84E-05	8.82E-05	7.27E-05	4.75E-05	4.74E-05	6.15E-05	4.61E-05	6.28E-05	6.46E-05	6.85E-05	6.88E-05	6.42E-05	6.11E-05	4.75E-05	4.42E-05	4.43E-05
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	3.00E-05	3.00E-05	7.66E-05	1.33E-05	1.33E-05	1.33E-05	2.83E-05	4.17E-05	8.84E-05	8.82E-05	7.27E-05	4.75E-05	4.74E-05	6.15E-05	4.61E-05	6.28E-05	6.46E-05	6.85E-05	6.88E-05	6.42E-05	6.11E-05	4.75E-05	4.42E-05	4.43E-05
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	3.00E-05	3.00E-05	7.66E-05	1.33E-05	1.33E-05	1.33E-05	2.83E-05	4.17E-05	8.84E-05	8.82E-05	7.27E-05	4.75E-05	4.74E-05	6.15E-05	4.61E-05	6.28E-05	6.46E-05	6.85E-05	6.88E-05	6.42E-05	6.11E-05	4.75E-05	4.42E-05	4.43E-05
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	3.00E-05	3.00E-05	7.66E-05	1.33E-05	1.33E-05	1.33E-05	2.83E-05	4.17E-05	8.84E-05	8.82E-05	7.27E-05	4.75E-05	4.74E-05	6.15E-05	4.61E-05	6.28E-05	6.46E-05	6.85E-05	6.88E-05	6.42E-05	6.11E-05	4.75E-05	4.42E-05	4.43E-05
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	3.00E-05	3.00E-05	7.66E-05	1.33E-05	1.33E-05	1.33E-05	2.83E-05	4.17E-05	8.84E-05	8.82E-05	7.27E-05	4.75E-05	4.74E-05	6.15E-05	4.61E-05	6.28E-05	6.46E-05	6.85E-05	6.88E-05	6.42E-05	6.11E-05	4.75E-05	4.42E-05	4.43E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	9.81E-07	3.32E-07	3.32E-07	4.83E-07	4.83E-07	4.83E-07	9.52E-07	2.61E-06	5.54E-06	4.29E-06	2.99E-06	3.02E-06	2.38E-06	2.41E-06	2.25E-06	2.21E-06	2.21E-06	2.07E-06	2.42E-06	2.37E-06	1.47E-06	1.76E-06	1.25E-06	1.31E-06
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	2.09E-04	1.23E-04	1.23E-04	7.90E-05	7.89E-05	8.13E-05	1.44E-04	4.55E-04	9.22E-04	7.68E-04	5.97E-04	6.12E-04	5.14E-04	5.19E-04	4.95E-04	5.10E-04	5.21E-04	5.06E-04	5.53E-04	5.43E-04	3.80E-04	4.15E-04	2.94E-04	2.82E-04
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	2.09E-04	1.23E-04	1.23E-04	7.90E-05	7.89E-05	8.13E-05	1.44E-04	4.55E-04	9.22E-04	7.68E-04	5.97E-04	6.12E-04	5.14E-04	5.19E-04	4.95E-04	5.10E-04	5.21E-04	5.06E-04	5.53E-04	5.43E-04	3.80E-04	4.15E-04	2.94E-04	2.82E-04
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	2.09E-04	1.23E-04	1.23E-04	7.90E-05	7.89E-05	8.13E-05	1.44E-04	4.55E-04	9.22E-04	7.68E-04	5.97E-04	6.12E-04	5.14E-04	5.19E-04	4.95E-04	5.10E-04	5.21E-04	5.06E-04	5.53E-04	5.43E-04	3.80E-04	4.15E-04	2.94E-04	2.82E-04
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	2.09E-04	1.23E-04	1.23E-04	7.90E-05	7.89E-05	8.13E-05	1.44E-04	4.55E-04	9.22E-04	7.68E-04	5.97E-04	6.12E-04	5.14E-04	5.19E-04	4.95E-04	5.10E-04	5.21E-04	5.06E-04	5.53E-04	5.43E-04	3.80E-04	4.15E-04	2.94E-04	2.82E-04
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	1.04E-04	6.17E-05	6.17E-05	3.95E-05	3.95E-05	4.07E-05	7.21E-05	2.28E-04	4.61E-04	3.84E-04	2.98E-04	3.06E-04	2.57E-04	2.59E-04	2.47E-04	2.55E-04	2.60E-04	2.53E-04	2.77E-04	2.71E-04	1.90E-04	2.08E-04	1.47E-04	1.41E-04
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	1.04E-04	6.17E-05	6.17E-05	3.95E-05	3.95E-05	4.07E-05	7.21E-05	2.28E-04	4.61E-04	3.84E-04	2.98E-04	3.06E-04	2.57E-04	2.59E-04	2.47E-04	2.55E-04	2.60E-04	2.53E-04	2.77E-04	2.71E-04	1.90E-04	2.08E-04	1.47E-04	1.41E-04
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	1.04E-04	6.17E-05	6.17E-05	3.95E-05	3.95E-05	4.07E-05	7.21E-05	2.28E-04	4.61E-04	3.84E-04	2.98E-04	3.06E-04	2.57E-04	2.59E-04	2.47E-04	2.55E-04	2.60E-04	2.53E-04	2.77E-04	2.71E-04	1.90E-04	2.08E-04	1.47E-04	1.41E-04
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	1.04E-04	6.17E-05	6.17E-05	3.95E-05	3.95E-05	4.07E-05	7.21E-05	2.28E-04	4.61E-04	3.84E-04	2.98E-04	3.06E-04	2.57E-04	2.59E-04	2.47E-04	2.55E-04	2.60E-04	2.53E-04	2.77E-04	2.71E-04	1.90E-04	2.08E-04	1.47E-04	1.41E-04
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	3.07E-07	1.81E-07	1.81E-07	1.10E-07	1.10E-07	1.14E-07	1.84E-07	5.85E-07	1.14E-06	9.98E-07	7.90E-07	8.80E-07	7.61E-07	7.74E-07	7.56E-07	8.05E-07	9.18E-07	9.03E-07	1.00E-06	9.76E-07	6.48E-07	6.75E-07	5.21E-07	4.72E-07
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	6.99E

Emission Inventory for Tennel Potal and Underpass Top Opening of RWWK of Year 2016 (Scenario 4) - RSP

Scenario 1

Sources	Source ID	Type	Location X (m)	Location Y (m)	Release Height (m)	Area Source X-dim (m)	Area Source Y-dim (m)	Angle (o)	Volume Source Lateral Dim. (Sy) (m)	Volume Source Vertical Dim. (Sz) (m)	Hourly NOX Emission Rate (g/s) or (g/m2/s) Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	A	AREA	835022.8	818174.7	0	7	45	81	-	-	4.06E-07	4.07E-07	6.12E-06	1.80E-07	1.80E-07	1.80E-07	3.83E-07	5.64E-07	1.20E-06	1.19E-06	9.84E-07	6.31E-07	6.30E-07	8.21E-07	6.13E-07	8.39E-07	8.63E-07	9.05E-07	9.08E-07	8.46E-07	8.16E-07	6.32E-07	5.88E-07	5.89E-07
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	B	AREA	834907.5	818322.3	0	4	80	0	-	-	2.33E-06	2.34E-06	5.77E-06	1.04E-06	1.04E-06	1.04E-06	2.20E-06	3.24E-06	6.87E-06	6.86E-06	5.66E-06	3.63E-06	3.62E-06	4.72E-06	3.52E-06	4.82E-06	4.96E-06	5.20E-06	5.22E-06	4.86E-06	4.69E-06	3.63E-06	3.38E-06	3.39E-06
Proposed one way underpass for Austin Road/Lin Cheung Road (NB)	CE	AREA	834918.2	818513.4	0	19.5	33	0	-	-	5.47E-07	3.33E-07	3.39E-07	2.58E-07	2.58E-07	2.58E-07	5.25E-07	1.17E-06	2.48E-06	2.07E-06	1.53E-06	1.34E-06	1.13E-06	1.25E-06	1.08E-06	1.19E-06	1.20E-06	1.18E-06	1.30E-06	1.25E-06	9.35E-07	9.27E-07	7.35E-07	7.57E-07
Proposed One-way Underpass for Austin Road/Lin Cheung Road (North Bound)	D1	VOLUME	834920.6	818726.7	2.85	-	-	-	3.26	2.65	1.83E-05	1.83E-05	1.86E-05	8.15E-06	8.15E-06	8.15E-06	1.73E-05	2.56E-05	5.43E-05	5.41E-05	4.45E-05	3.03E-05	3.02E-05	3.88E-05	2.95E-05	3.96E-05	4.07E-05	4.42E-05	4.45E-05	4.17E-05	3.85E-05	3.02E-05	2.81E-05	2.82E-05
	D2	VOLUME	834920.3	818733.7	2.85	-	-	-	3.26	2.65	1.83E-05	1.83E-05	1.86E-05	8.15E-06	8.15E-06	8.15E-06	1.73E-05	2.56E-05	5.43E-05	5.41E-05	4.45E-05	3.03E-05	3.02E-05	3.88E-05	2.95E-05	3.96E-05	4.07E-05	4.42E-05	4.45E-05	4.17E-05	3.85E-05	3.02E-05	2.81E-05	2.82E-05
	D3	VOLUME	834920.1	818740.7	2.85	-	-	-	3.26	2.65	1.83E-05	1.83E-05	1.86E-05	8.15E-06	8.15E-06	8.15E-06	1.73E-05	2.56E-05	5.43E-05	5.41E-05	4.45E-05	3.03E-05	3.02E-05	3.88E-05	2.95E-05	3.96E-05	4.07E-05	4.42E-05	4.45E-05	4.17E-05	3.85E-05	3.02E-05	2.81E-05	2.82E-05
	D4	VOLUME	834919.8	818747.7	2.85	-	-	-	3.26	2.65	1.83E-05	1.83E-05	1.86E-05	8.15E-06	8.15E-06	8.15E-06	1.73E-05	2.56E-05	5.43E-05	5.41E-05	4.45E-05	3.03E-05	3.02E-05	3.88E-05	2.95E-05	3.96E-05	4.07E-05	4.42E-05	4.45E-05	4.17E-05	3.85E-05	3.02E-05	2.81E-05	2.82E-05
	D5	VOLUME	834919.6	818754.7	2.85	-	-	-	3.26	2.65	1.83E-05	1.83E-05	1.86E-05	8.15E-06	8.15E-06	8.15E-06	1.73E-05	2.56E-05	5.43E-05	5.41E-05	4.45E-05	3.03E-05	3.02E-05	3.88E-05	2.95E-05	3.96E-05	4.07E-05	4.42E-05	4.45E-05	4.17E-05	3.85E-05	3.02E-05	2.81E-05	2.82E-05
	D6	VOLUME	834919.3	818761.7	2.85	-	-	-	3.26	2.65	1.83E-05	1.83E-05	1.86E-05	8.15E-06	8.15E-06	8.15E-06	1.73E-05	2.56E-05	5.43E-05	5.41E-05	4.45E-05	3.03E-05	3.02E-05	3.88E-05	2.95E-05	3.96E-05	4.07E-05	4.42E-05	4.45E-05	4.17E-05	3.85E-05	3.02E-05	2.81E-05	2.82E-05
	D7	VOLUME	834919.1	818768.7	2.85	-	-	-	3.26	2.65	1.83E-05	1.83E-05	1.86E-05	8.15E-06	8.15E-06	8.15E-06	1.73E-05	2.56E-05	5.43E-05	5.41E-05	4.45E-05	3.03E-05	3.02E-05	3.88E-05	2.95E-05	3.96E-05	4.07E-05	4.42E-05	4.45E-05	4.17E-05	3.85E-05	3.02E-05	2.81E-05	2.82E-05
	D8	VOLUME	834918.8	818775.7	2.85	-	-	-	3.26	2.65	9.17E-06	9.14E-06	9.29E-06	4.08E-06	4.08E-06	4.08E-06	8.64E-06	1.28E-05	2.71E-05	2.70E-05	2.23E-05	1.52E-05	1.51E-05	1.94E-05	1.47E-05	1.98E-05	2.04E-05	2.21E-05	2.23E-05	2.08E-05	1.92E-05	1.51E-05	1.41E-05	1.41E-05
	D9	VOLUME	834918.5	818782.7	2.85	-	-	-	3.26	2.65	9.17E-06	9.14E-06	9.29E-06	4.08E-06	4.08E-06	4.08E-06	8.64E-06	1.28E-05	2.71E-05	2.70E-05	2.23E-05	1.52E-05	1.51E-05	1.94E-05	1.47E-05	1.98E-05	2.04E-05	2.21E-05	2.23E-05	2.08E-05	1.92E-05	1.51E-05	1.41E-05	1.41E-05
	D10	VOLUME	834918.3	818789.7	2.85	-	-	-	3.26	2.65	9.17E-06	9.14E-06	9.29E-06	4.08E-06	4.08E-06	4.08E-06	8.64E-06	1.28E-05	2.71E-05	2.70E-05	2.23E-05	1.52E-05	1.51E-05	1.94E-05	1.47E-05	1.98E-05	2.04E-05	2.21E-05	2.23E-05	2.08E-05	1.92E-05	1.51E-05	1.41E-05	1.41E-05
	D11	VOLUME	834918.0	818796.7	2.85	-	-	-	3.26	2.65	9.17E-06	9.14E-06	9.29E-06	4.08E-06	4.08E-06	4.08E-06	8.64E-06	1.28E-05	2.71E-05	2.70E-05	2.23E-05	1.52E-05	1.51E-05	1.94E-05	1.47E-05	1.98E-05	2.04E-05	2.21E-05	2.23E-05	2.08E-05	1.92E-05	1.51E-05	1.41E-05	1.41E-05
	D12	VOLUME	834917.8	818803.7	2.85	-	-	-	3.26	2.65	9.17E-06	9.14E-06	9.29E-06	4.08E-06	4.08E-06	4.08E-06	8.64E-06	1.28E-05	2.71E-05	2.70E-05	2.23E-05	1.52E-05	1.51E-05	1.94E-05	1.47E-05	1.98E-05	2.04E-05	2.21E-05	2.23E-05	2.08E-05	1.92E-05	1.51E-05	1.41E-05	1.41E-05
	D13	VOLUME	834917.5	818810.7	2.85	-	-	-	3.26	2.65	9.17E-06	9.14E-06	9.29E-06	4.08E-06	4.08E-06	4.08E-06	8.64E-06	1.28E-05	2.71E-05	2.70E-05	2.23E-05	1.52E-05	1.51E-05	1.94E-05	1.47E-05	1.98E-05	2.04E-05	2.21E-05	2.23E-05	2.08E-05	1.92E-05	1.51E-05	1.41E-05	1.41E-05
	D14	VOLUME	834917.3	818817.6	2.85	-	-	-	3.26	2.65	9.17E-06	9.14E-06	9.29E-06	4.08E-06	4.08E-06	4.08E-06	8.64E-06	1.28E-05	2.71E-05	2.70E-05	2.23E-05	1.52E-05	1.51E-05	1.94E-05	1.47E-05	1.98E-05	2.04E-05	2.21E-05	2.23E-05	2.08E-05	1.92E-05	1.51E-05	1.41E-05	1.41E-05
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	F	AREA	834930.8	818309.3	0	9	30	0	-	-	1.22E-06	4.11E-07	4.11E-07	5.98E-07	5.98E-07	5.98E-07	1.18E-06	3.24E-06	6.87E-06	5.32E-06	3.71E-06	3.75E-06	2.95E-06	2.99E-06	2.78E-06	2.74E-06	2.74E-06	2.56E-06	3.00E-06	2.94E-06	1.83E-06	2.18E-06	1.54E-06	1.63E-06
Proposed one way underpass for Austin Road/Lin Cheung Road (SB)	HI1	VOLUME	835149.0	818216.2	2.85	-	-	-	6.51	2.65	1.94E-04	1.18E-04	1.18E-04	7.18E-05	7.17E-05	7.41E-05	1.30E-04	4.16E-04	8.39E-04	7.04E-04	5.52E-04	5.67E-04	4.78E-04	4.83E-04	4.61E-04	4.77E-04	4.87E-04	4.75E-04	5.17E-04	5.07E-04	3.58E-04	3.89E-04	2.76E-04	2.62E-04
	HI2	VOLUME	835163.0	818217.2	2.85	-	-	-	6.51	2.65	1.94E-04	1.18E-04	1.18E-04	7.18E-05	7.17E-05	7.41E-05	1.30E-04	4.16E-04	8.39E-04	7.04E-04	5.52E-04	5.67E-04	4.78E-04	4.83E-04	4.61E-04	4.77E-04	4.87E-04	4.75E-04	5.17E-04	5.07E-04	3.58E-04	3.89E-04	2.76E-04	2.62E-04
	HI3	VOLUME	835176.9	818218.3	2.85	-	-	-	6.51	2.65	1.94E-04	1.18E-04	1.18E-04	7.18E-05	7.17E-05	7.41E-05	1.30E-04	4.16E-04	8.39E-04	7.04E-04	5.52E-04	5.67E-04	4.78E-04	4.83E-04	4.61E-04	4.77E-04	4.87E-04	4.75E-04	5.17E-04	5.07E-04	3.58E-04	3.89E-04	2.76E-04	2.62E-04
	HI4	VOLUME	835190.9	818219.3	2.85	-	-	-	6.51	2.65	1.94E-04	1.18E-04	1.18E-04	7.18E-05	7.17E-05	7.41E-05	1.30E-04	4.16E-04	8.39E-04	7.04E-04	5.52E-04	5.67E-04	4.78E-04	4.83E-04	4.61E-04	4.77E-04	4.87E-04	4.75E-04	5.17E-04	5.07E-04	3.58E-04	3.89E-04	2.76E-04	2.62E-04
	HI5	VOLUME	835204.9	818220.3	2.85	-	-	-	6.51	2.65	9.70E-05	5.92E-05	5.92E-05	3.59E-05	3.58E-05	3.70E-05	6.50E-05	2.08E-04	4.20E-04	3.52E-04	2.76E-04	2.83E-04	2.39E-04	2.41E-04	2.31E-04	2.39E-04	2.44E-04	2.38E-04	2.58E-04	2.53E-04	1.79E-04	1.95E-04	1.38E-04	1.31E-04
	HI6	VOLUME	835218.8	818221.4	2.85	-	-	-	6.51	2.65	9.70E-05	5.92E-05	5.92E-05	3.59E-05	3.58E-05	3.70E-05	6.50E-05	2.08E-04	4.20E-04	3.52E-04	2.76E-04	2.83E-04	2.39E-04	2.41E-04	2.31E-04	2.39E-04	2.44E-04	2.38E-04	2.58E-04	2.53E-04	1.79E-04	1.95E-04	1.38E-04	1.31E-04
	HI7	VOLUME	835232.8	818222.4	2.85	-	-	-	6.51	2.65	9.70E-05	5.92E-05	5.92E-05	3.59E-05	3.58E-05	3.70E-05	6.50E-05	2.08E-04	4.20E-04	3.52E-04	2.76E-04	2.83E-04	2.39E-04	2.41E-04	2.31E-04	2.39E-04	2.44E-04	2.38E-04	2.58E-04	2.53E-04	1.79E-04	1.95E-04	1.38E-04	1.31E-04
	HI8	VOLUME	835246.7	818223.4	2.85	-	-	-	6.51	2.65	9.70E-05	5.92E-05	5.92E-05	3.59E-05	3.58E-05	3.70E-05	6.50E-05	2.08E-04	4.20E-04	3.52E-04	2.76E-04	2.83E-04	2.39E-04	2.41E-04	2.31E-04	2.39E-04	2.44E-04	2.38E-04	2.58E-04	2.53E-04	1.79E-04	1.95E-04	1.38E-04	1.31E-04
Proposed underpass at Austin Road (WB) + Proposed underpass at Lin Cheung Road (SB) + Austin Road West (EB)	JKO	AREA	834905.6	818171.2	0	40	40	0	-	-	2.94E-07	1.77E-07	1.76E-07	1.04E-07	1.03E-07	1.08E-07	1.71E-07	5.51E-07	1.07E-06	9.43E-07	7.52E-07	8.41E-07	7.30E-07	7.42E-07	7.27E-07	7.77E-07	8.89E-07	8.77E-07	9.69E-07	9.46E-07	6.29E-07	6.53E-07	5.05E-07	4.55E-07
Proposed Underpass at Lin Cheung Road (North Bound)	L1	VOLUME	834915.8	818313.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L2	VOLUME	834915.8	818320.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L3	VOLUME	834915.8	818327.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L4	VOLUME	834915.8	818334.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L5	VOLUME	834915.8	818341.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L6	VOLUME	834915.8	818348.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L7	VOLUME	834915.8	818355.1	2.85	-	-	-	3.26	2.65	3.32E-05	3.42E-05	2.69E-05	9.79E-06	9.79E-06	9.82E-06	2.72E-05	4.44E-05	9.17E-05	9.16E-05	7.57E-05	5.15E-05	5.10E-05	6.67E-05	4.91E-05	6.40E-05	6.35E-05	7.04E-05	6.65E-05	6.24E-05	5.93E-05	4.84E-05	4.01E-05	3.89E-05
	L8	VOLUME	834915.8	818362.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L9	VOLUME	834915.8	818369.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L10	VOLUME	834915.8	818376.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L11	VOLUME	834915.8	818383.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L12	VOLUME	834915.8	818390.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L13	VOLUME	834915.8	818397.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
	L14	VOLUME	834915.8	818404.1	2.85	-	-	-	3.26	2.65	1.66E-05	1.71E-05	1.34E-05	4.89E-06	4.89E-06	4.91E-06	1.36E-05	2.22E-05	4.58E-05	4.58E-05	3.78E-05	2.57E-05	2.55E-05	3.34E-05	2.46E-05	3.20E-05	3.18E-05	3.52E-05	3.32E-05	3.12E-05	2.97E-05	2.42E-05	2.00E-05	1.94E-05
Proposed Landscape Deck at Lin Cheung Road (South Bound)	M1	VOLUME	834963.5	818538.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M2	VOLUME	834963.5	818524.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M3	VOLUME	834963.5	818510.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M4	VOLUME	834963.5	818496.4	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	M5	VOLUME	834963.5	818482.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M6	VOLUME	834963.5	818468.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M7	VOLUME	834963.5	818454.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	M8	VOLUME	834949.5	818440.4	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Proposed Landscape Deck at Lin Cheung Road (North Bound)	N1	VOLUME	834913.6	818611.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N2	VOLUME	834913.6	818625.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N3	VOLUME	834913.6	818639.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N4	VOLUME	834913.7	818653.8	2.75	-	-	-	6.51	2.56	5.72E-05	4.51E-05	3.71E-05	2.84E-05	2.84E-05	2.84E-05	5.19E-05	1.13E-04	2.40E-04	2.03E-04	1.49E-04	1.34E-04	1.18E-04	1.26E-04	1.12E-04	1.20E-04	1.27E-04	1.34E-04	1.45E-04	1.32E-04	1.10E-04	9.95E-05	7.82E-05	8.18E-05
	N5	VOLUME	834913.7	818667.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N6	VOLUME	834913.7	818681.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N7	VOLUME	834913.7	818695.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
	N8	VOLUME	834913.8	818709.8	2.75	-	-	-	6.51	2.56	2.86E-05	2.26E-05	1.85E-05	1.42E-05	1.42E-05	1.42E-05	2.59E-05	5.66E-05	1.20E-04	1.02E-04	7.45E-05	6.70E-05	5.88E-05	6.29E-05	5.59E-05	6.00E-05	6.34E-05	6.72E-05	7.24E-05	6.60E-05	5.51E-05	4.98E-05	3.91E-05	4.09E-05
Austin Road West (WB)	P1	VOLUME	834846.8	818177.1	2.85	-	-	-	5.12	2.65	6.76E





LOCATION PLAN

LEGEND:

- POINT SOURCES
- AREA SOURCES
- VOLUME SOURCES

Rev	Description	By	Date

Consultant

PARSONS BRINCKERHOFF

漢臻 CINOTECH

Project title

AGREEMENT NO. CE 44/2011 (HY)
PROPOSED ROAD IMPROVEMENT WORKS IN WEST KOWLOON RECLAMATION DEVELOPMENT – PHASE 1 INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing title

LOCATION OF ISCST3 EMISSIONS (PAGE 1 OF 6)

Drawing no.			Rev.
A3.5–1			2
Drawn MC	Date JUL13	Checked KS	Approved LC
Scale A3 1:2000		Status PRELIMINARY	

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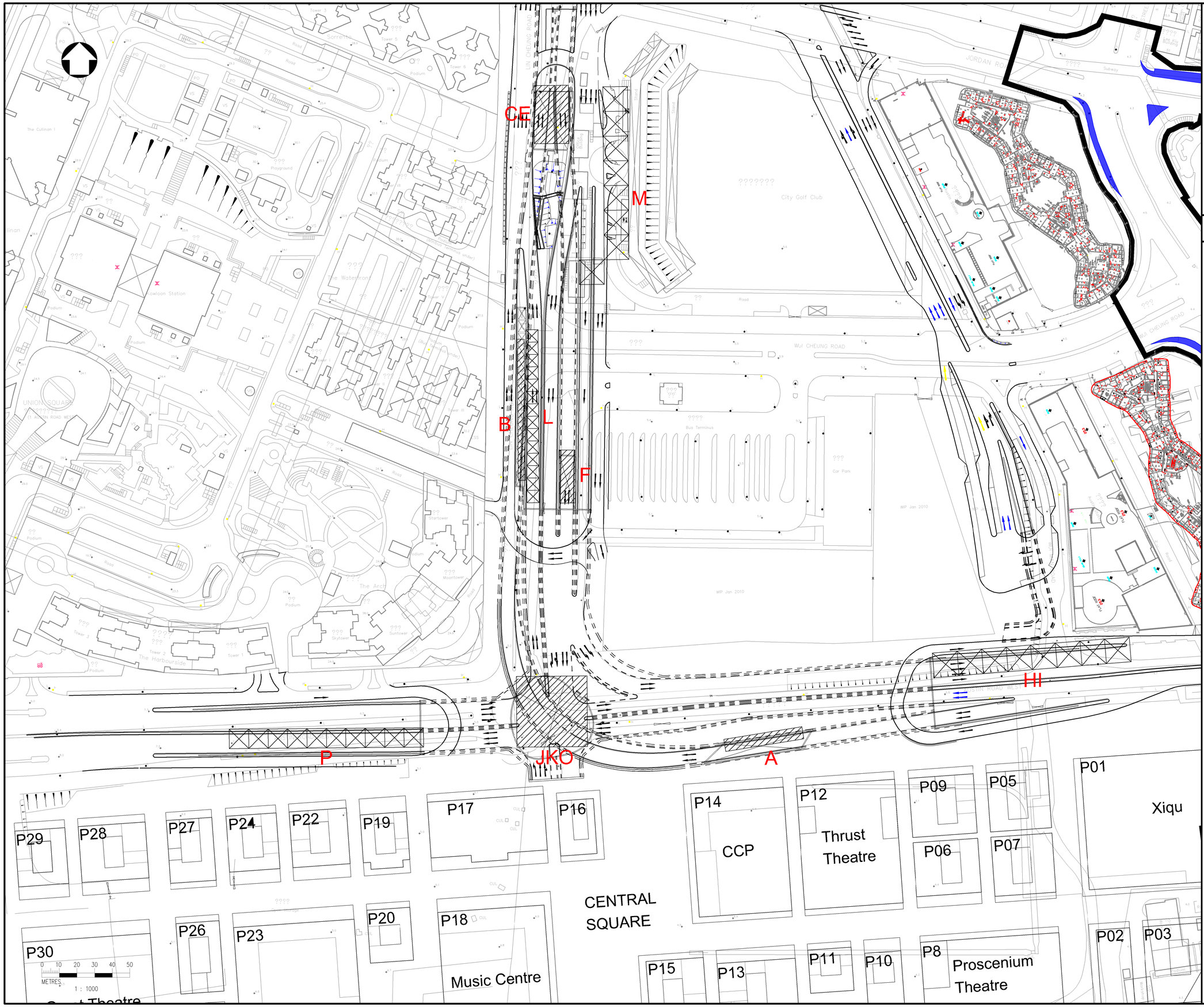

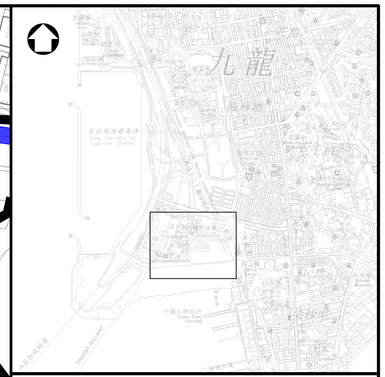

LOCATION PLAN

LEGEND:

- POINT SOURCES
- AREA SOURCES
- VOLUME SOURCES

Rev	Description	By	Date

Consultant

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Project title

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PROPOSED ROAD IMPROVEMENT WORKS IN WEST KOWLOON RECLAMATION DEVELOPMENT – PHASE 1 INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing title

LOCATION OF ISCST3 EMISSIONS (PAGE 2 OF 6)

Drawing no.			Rev.
A3.5–2			3
Drawn MC	Date JUL13	Checked KS	Approved LC
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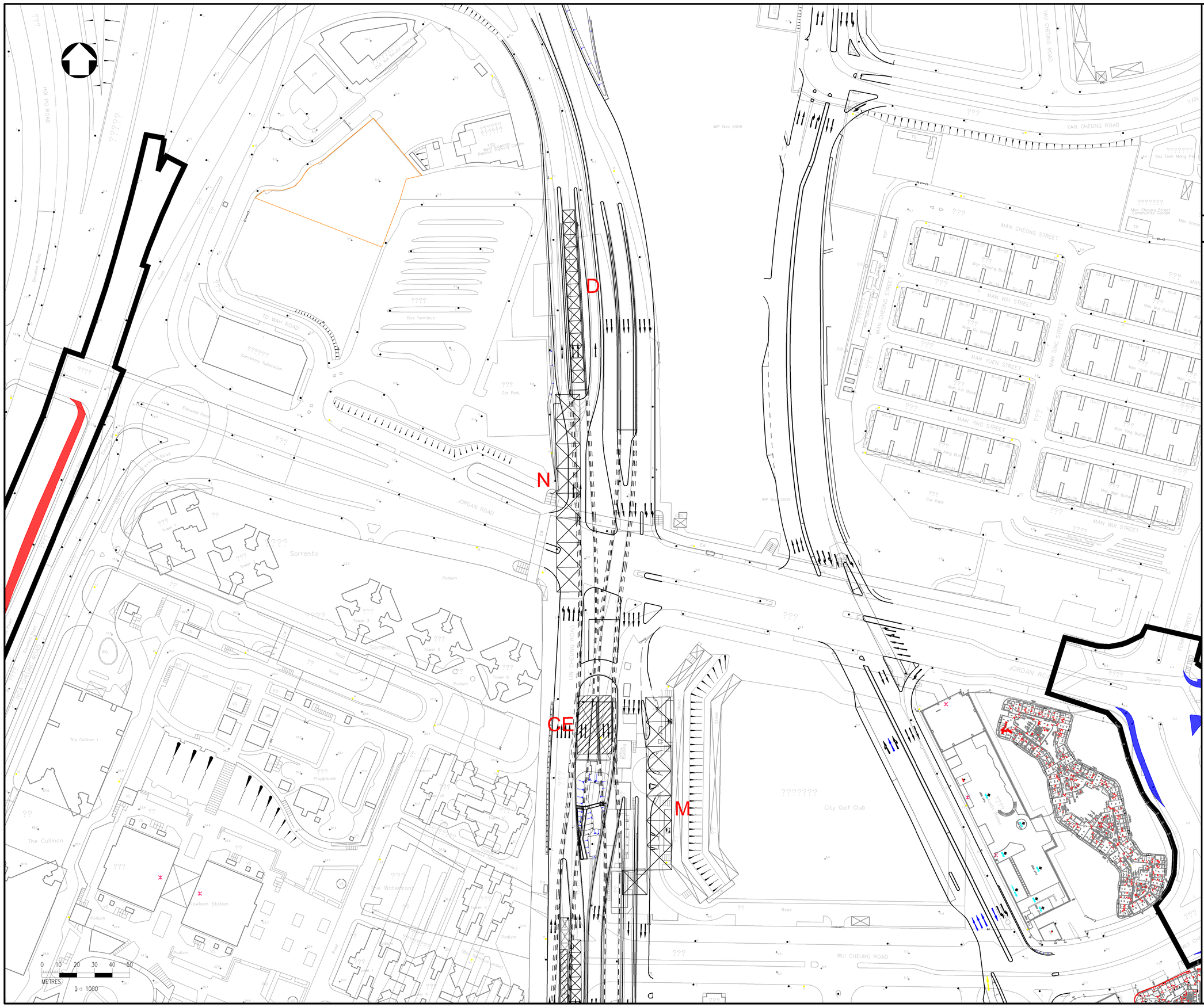

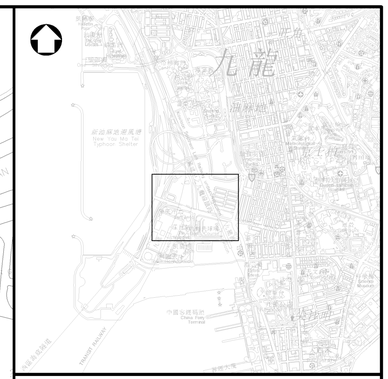

LOCATION PLAN

LEGEND:

- POINT SOURCES
- AREA SOURCES
- VOLUME SOURCES

Rev	Description	By	Date

Consultant

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Project title

AGREEMENT NO. CE 44/2011 (HY)
PROPOSED ROAD IMPROVEMENT WORKS IN WEST KOWLOON RECLAMATION DEVELOPMENT – PHASE 1 INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing title

LOCATION OF ISCST3 EMISSIONS (PAGE 3 OF 6)

Drawing no.			Rev.
A3.5–3			3
Drawn MC	Date JUL13	Checked KS	Approved LC
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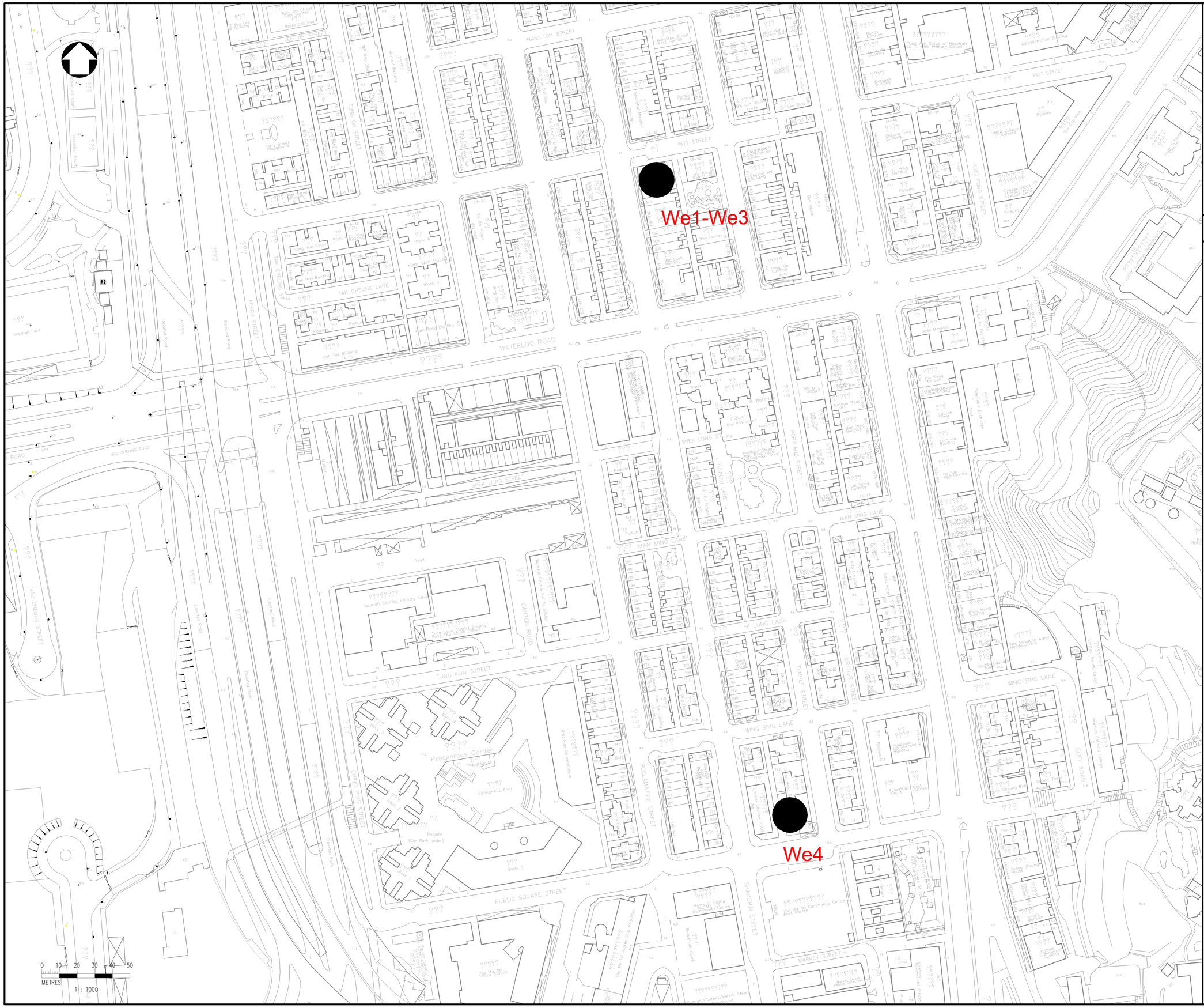

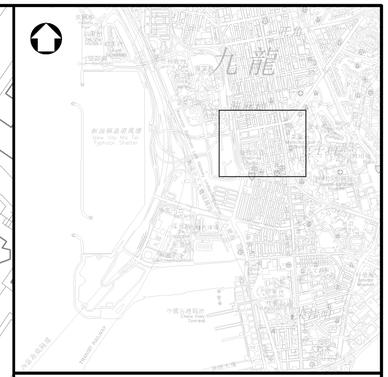

LOCATION PLAN

LEGEND:

- POINT SOURCES
- AREA SOURCES
- VOLUME SOURCES

Rev	Description	By	Date

Consultant

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Project title

AGREEMENT NO. CE 44/2011 (HY)
PROPOSED ROAD IMPROVEMENT WORKS IN WEST KOWLOON RECLAMATION DEVELOPMENT – PHASE 1 INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing title

LOCATION OF ISCST3 EMISSIONS (PAGE 4 OF 6)

Drawing no.			Rev.
A3.5-4			3
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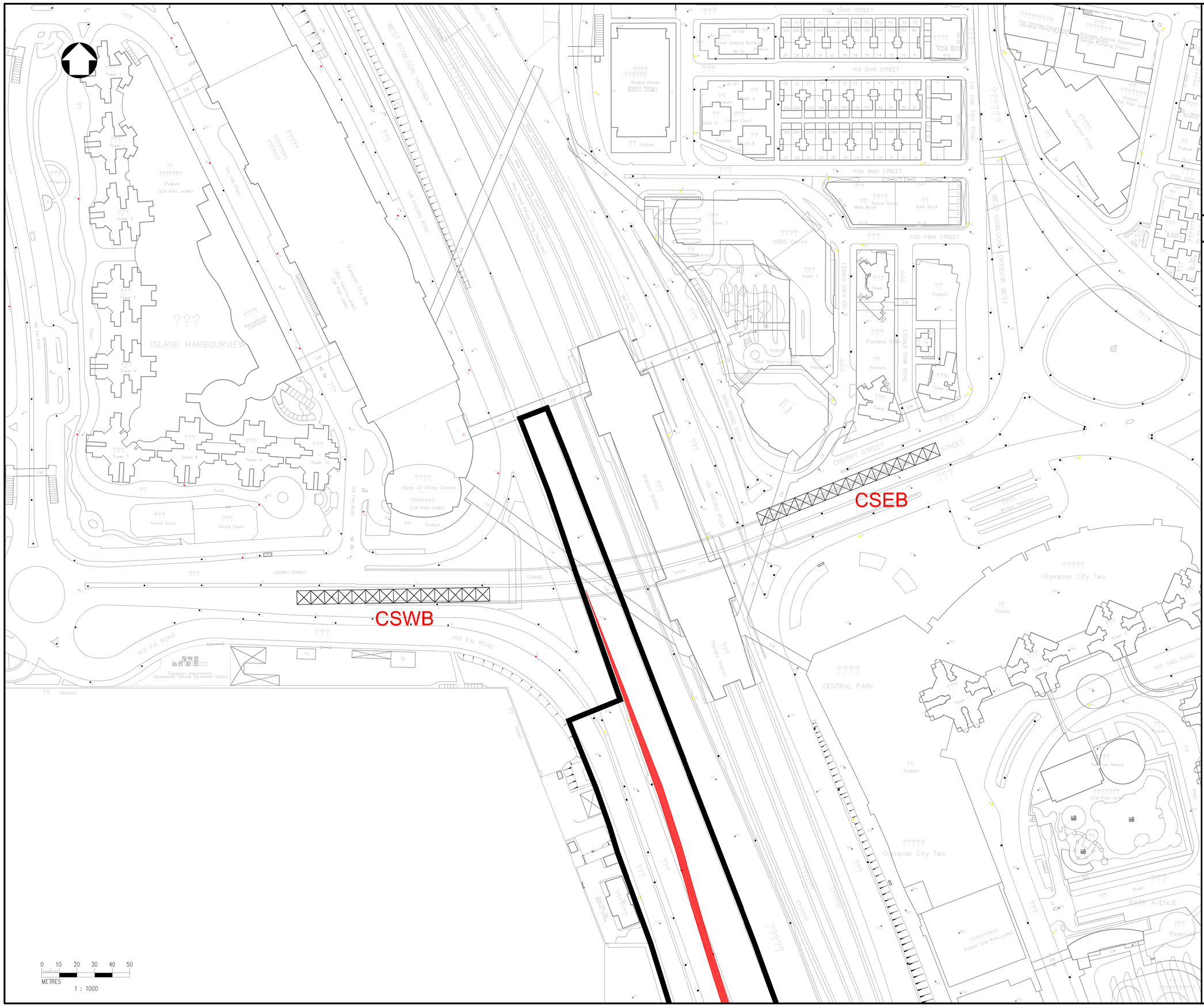
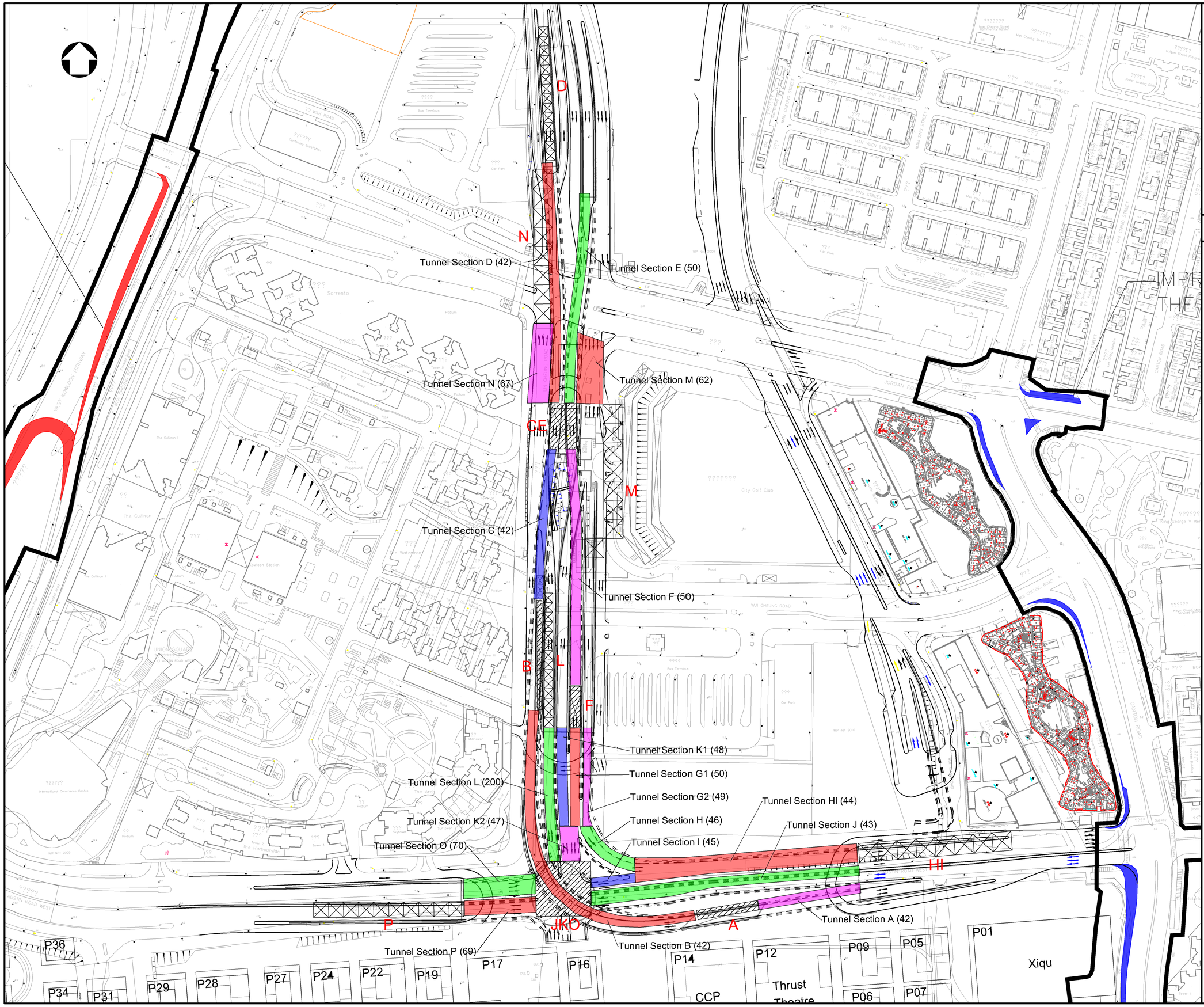

CSEB
CSWB
WEST KOWLOON HIGHWAY
HOI FAI ROAD
CHERRY STREET
ISLAND HARBOURVIEW
Olympian City One
Olympian City Two
CENTRAL PARK
HSBC Centre
Bank of China Centre
Tennis Court
Tennis Court
Transport Department Abandoned Vehicle Surrender Centre
Seawall
Tunnel
Podium
Tower 1
Tower 2
Tower 3
Tower 5
Tower 6
Tower 7
Tower 8
Tower 9
Tower 10
Podium (Car Park under)
Podium (Bus Terminus under)
Podium (Car Park under)
Podium (Car Park under)
Podium (Car Park


D
N
Tunnel Section D (42)
Tunnel Section E (50)
Tunnel Section N (67)
Tunnel Section M (62)
CE
M
Tunnel Section C (42)
Tunnel Section F (50)
B
L
F
Tunnel Section K1 (48)
Tunnel Section G1 (50)
Tunnel Section L (200)
Tunnel Section G2 (49)
Tunnel Section HI (44)
Tunnel Section K2 (47)
Tunnel Section H (46)
Tunnel Section J (43)
Tunnel Section O (70)
Tunnel Section I (45)
P
JKO
A
Tunnel Section A (42)
Tunnel Section B (42)
Tunnel Section P (69)
P36
P34
P31
P29
P28
P27
P24
P22
P19
P17
P16
P14
P12
P09
P05
P01
P06
P07
CCP
Thrust Theatre
Xiqu
WEST KOWLOON HIGHWAY
MAN CHEONG STREET
MAN WAI STREET
MAN YUEN STREET
MAN SHIU STREET
MAN YING STREET
JORDAN ROAD
WUI CHEUNG ROAD
CANTON ROAD
AUSTIN ROAD WEST
City Golf Club
Sorrento
The Cullinan
Kowloon Station
International Commerce Centre
The Harbourside
Tower 1
Tower 2
Tower 3
Podium
Playground
Car Park
Bus Terminus
Sewage Pumping Station
Sewerage Pumping Station
Sewerage Pumping Station
Sewer

Traffic Flow through Tunnel Sections and Top Openings

Flow 1: Tunnel A -------> Opening A -------> Tunnel B -------> Opening B -------> Tunnel C -------> Opening CE -------> Tunnel D -------> Portal D

Flow 2: Tunnel E -------> Opening CE -------> Tunnel F -------> Opening F -------> Tunnel G1 → Tunnel H (70%) -------> Tunnel HI -------> Portal HI
Tunnel G1 → Tunnel K2 (30%) -------> Opening JKO -------> Tunnel P -------> Portal P

Flow 3: Tunnel K1 -------> Tunnel K2 -------> Opening JKO -------> Tunnel P -------> Portal P

Flow 4: Tunnel G2 -------> Tunnel H -------> Tunnel HI -------> Portal HI

Flow 5: Tunnel J -------> Opening JKO → Tunnel P (95%) -------> Portal P
Opening JKO → Tunnel L (5%) -------> Portal L

Flow 6: Tunnel O -------> Opening JKO → Tunnel I (33%) -------> Tunnel HI -------> Portal HI
Opening JKO → Tunnel L (67%) -------> Portal L

Example: Top Opening JKO

		After Opening CE	After Opening F	Traffic to Tunnel K2		In the Opening JKO
Flow 2:	Tunnel E	x0.9	x0.9	x0.3	= Tunnel E x0.9 x0.9 x0.3	x2/3 x 40/50
	Tunnel F		x0.9	x0.3	= Tunnel F x0.9 x0.3	x2/3 x 40/50
	Tunnel G1			x0.3	= Tunnel G x0.3	x2/3 x 40/50
Flow 3:					Tunnel K1	x2/3 x 40/50
					Tunnel K2	x2/3 x 40/50
Flow 5:					Tunnel J	x2/3 x 40/50
Flow 6:					Tunnel O	x2/3 x 40/50

JKO = (2/3x40/50) x Tunnel Section J + (2/3x40/50) x Tunnel Section O + (2/3x40/50) x (Tunnel Section K2 + Tunnel Section K1 + (0.9 x 0.9 x Tunnel Section E + 0.9 x Tunnel Section F + Tunnel Section G1) x 0.3)

Remark:
The dimension of Top Opening JKO is about 40m x 40m so 2/3 x 40/50 of the emission will be emitted in the Top Opening JKO
It is Scenario 1 for RWWK so there is 10% emission from the top opening and 90% to next tunnel section.
Please refer to Figure A3.5.7 for the Tunnel Section Locations.

Rev	Description	By	Date

Consultant
PARSONS BRINCKERHOFF
CINOTECH

Project title
AGREEMENT NO. CE 44/2011 (HY)
PROPOSED ROAD IMPROVEMENT WORKS IN WEST KOWLOON RECLAMATION DEVELOPMENT – PHASE 1 INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing title
SAMPLE CALCULATION OF PORTALS AND TOP OPENINGS EMISSION FOR RWWK

Drawing no. A3.5-7 Rev. –
Drawn MC Date MAY13 Checked KS Approved LC
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