

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Calculation of Idling Emission Factor

##### FBDD

NO/NO<sub>2</sub> Ratio <sup>[1]</sup> = 5.24 From EMFAC

	Population	Idling Emission Factor				Mass Factor <sup>[8]</sup>	AC Factor <sup>[4]</sup>	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		%	NOx (g/s) <sup>[2]</sup>	RSP (g/hr) <sup>[3]</sup>	NOx (g/hr) <sup>[6]</sup>			RSP (g/hr) <sup>[7]</sup>	Nox	NO	NO <sub>2</sub>	RSP & FSP <sup>[5]</sup>	Nox	NO	NO <sub>2</sub>
Euro VI	79%	0.0225	0.01	1.75	0.01	1.2	1.3	3.001E+00	2.519E+00	4.812E-01	7.514E-04	9.988E-02	8.387E-02	1.602E-02	7.514E-04
Euro V	21%	0.1535	0.10	11.71	0.10										
Euro IV	0%	0.1535	0.20	7.51	0.20										

##### Remarks

- [1] NO/NO<sub>2</sub> ratio, at the respective running speed, was calculated based on emission factors extracted from EMFAC-HK.
- [2] NOx cold idling emission factors was referenced to *Calculation of Start Emissions in Air Quality Impact Assessment* published by EPD.
- [3] Due to the lack of information, RSP cold idling emission factor was referenced to the corresponding hot idling emission factor.
- [4] Reference made to the approved *Liantang / Heung Yuen Wai Boundary Control Point and Associated Works EIA Report*.
- [5] All RSP emissions were assumed for FSP as a conservative approach.
- [6] Reference made to Table 45 of *VEADV*.
- [7] Reference made to Table 46 of *VEADV*.
- [8] Reference made to Table 27 of *VEADV*.
- [9] The population of vehicle was extracted from EMFAC-HK.



















### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Hin Keng Bus Terminus

##### Starting Emission from Terminating Buses

	Starting Emission Factor of Double-Deck Franchised Bus (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NO	3.786E-01	6.814E-01	9.086E-01	1.287E+00	1.590E+00	2.120E+00	3.105E+00	3.862E+00	5.679E+00	7.420E+00	8.329E+00	9.843E+00	1.083E+01	1.136E+01	1.166E+01	1.196E+01	1.212E+01	1.212E+01
NO <sub>2</sub>	8.140E-02	1.465E-01	1.953E-01	2.767E-01	3.418E-01	4.557E-01	6.673E-01	8.300E-01	1.221E+00	1.595E+00	1.790E+00	2.116E+00	2.327E+00	2.441E+00	2.506E+00	2.572E+00	2.604E+00	2.604E+00
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
0600 - 0700	0	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0700 - 0800	0	27	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0800 - 0900	0	25	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	16	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	15	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	15	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	15	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	15	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	15	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	15	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	15	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)			
NO	NO <sub>2</sub>	RSP	FSP
3.63E+00	7.81E-01	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.33E+02	2.86E+01	0.00E+00	0.00E+00
4.17E+01	8.97E+00	0.00E+00	0.00E+00
6.20E+01	1.33E+01	0.00E+00	0.00E+00
2.52E+01	5.42E+00	0.00E+00	0.00E+00
1.82E+01	3.91E+00	0.00E+00	0.00E+00
1.75E+01	3.76E+00	0.00E+00	0.00E+00
1.75E+01	3.76E+00	0.00E+00	0.00E+00
1.84E+01	3.96E+00	0.00E+00	0.00E+00
1.84E+01	3.96E+00	0.00E+00	0.00E+00
1.84E+01	3.96E+00	0.00E+00	0.00E+00
1.93E+01	4.15E+00	0.00E+00	0.00E+00
1.93E+01	4.15E+00	0.00E+00	0.00E+00
1.93E+01	4.15E+00	0.00E+00	0.00E+00
1.84E+01	3.96E+00	0.00E+00	0.00E+00
1.75E+01	3.76E+00	0.00E+00	0.00E+00
1.18E+01	2.54E+00	0.00E+00	0.00E+00
1.18E+01	2.54E+00	0.00E+00	0.00E+00
1.09E+01	2.34E+00	0.00E+00	0.00E+00
9.09E+00	1.95E+00	0.00E+00	0.00E+00



### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Hin Keng Bus Terminus

##### Running Emission from Terminating and Non-terminating Buses

Average Travelling Distance within PTI =	145.00	m
Average Travelling Speed =	10.00	km/h

Hour	Double-Deck Franchised Bus								
	Frequency	Running Emission Factor (g/km-vehicle)				Running Emission Within PTI (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	7	5.056E+00	9.657E-01	1.525E-01	1.403E-01	5.13	9.802E-01	1.548E-01	1.424E-01
0100 - 0200	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	12	5.056E+00	9.657E-01	1.525E-01	1.403E-01	8.80	1.680E+00	2.654E-01	2.441E-01
0600 - 0700	30	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.99	4.201E+00	6.634E-01	6.103E-01
0700 - 0800	42	5.056E+00	9.657E-01	1.525E-01	1.403E-01	30.79	5.881E+00	9.287E-01	8.544E-01
0800 - 0900	39	5.056E+00	9.657E-01	1.525E-01	1.403E-01	28.59	5.461E+00	8.624E-01	7.934E-01
0900 - 1000	29	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.26	4.061E+00	6.413E-01	5.900E-01
1000 - 1100	28	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.53	3.921E+00	6.192E-01	5.696E-01
1100 - 1200	28	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.53	3.921E+00	6.192E-01	5.696E-01
1200 - 1300	28	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.53	3.921E+00	6.192E-01	5.696E-01
1300 - 1400	29	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.26	4.061E+00	6.413E-01	5.900E-01
1400 - 1500	29	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.26	4.061E+00	6.413E-01	5.900E-01
1500 - 1600	30	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.99	4.201E+00	6.634E-01	6.103E-01
1600 - 1700	30	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.99	4.201E+00	6.634E-01	6.103E-01
1700 - 1800	29	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.26	4.061E+00	6.413E-01	5.900E-01
1800 - 1900	29	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.26	4.061E+00	6.413E-01	5.900E-01
1900 - 2000	28	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.53	3.921E+00	6.192E-01	5.696E-01
2000 - 2100	18	5.056E+00	9.657E-01	1.525E-01	1.403E-01	13.20	2.520E+00	3.980E-01	3.662E-01
2100 - 2200	18	5.056E+00	9.657E-01	1.525E-01	1.403E-01	13.20	2.520E+00	3.980E-01	3.662E-01
2200 - 2300	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	11.73	2.240E+00	3.538E-01	3.255E-01
2300 - 2400	15	5.056E+00	9.657E-01	1.525E-01	1.403E-01	11.00	2.100E+00	3.317E-01	3.052E-01

##### Idling Emission from Non-terminating Buses

Idling Time for Non-terminating Buses =	1.5	min
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Hour	Double-Deck Franchised Bus								
	Frequency	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	3	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.38	7.208E-02	3.381E-03	3.381E-03
0100 - 0200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.13	2.403E-02	1.127E-03	1.127E-03
0600 - 0700	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
0700 - 0800	4	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.50	9.611E-02	4.509E-03	4.509E-03
0800 - 0900	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
0900 - 1000	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1000 - 1100	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1100 - 1200	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1200 - 1300	4	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.50	9.611E-02	4.509E-03	4.509E-03
1300 - 1400	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1400 - 1500	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1500 - 1600	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1600 - 1700	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1700 - 1800	4	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.50	9.611E-02	4.509E-03	4.509E-03
1800 - 1900	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
1900 - 2000	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
2000 - 2100	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
2100 - 2200	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03
2200 - 2300	4	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.50	9.611E-02	4.509E-03	4.509E-03
2300 - 2400	5	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.63	1.201E-01	5.636E-03	5.636E-03

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Hin Keng Bus Terminus

Total Hourly Emission from Terminating and Non-terminating Buses

Hour	Emission Within PTI							
	Total Emission (g) (Idling + Starting)				Total Emission Rate (g/s)			
	NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	6.846E+00	1.316E+00	1.672E-01	1.548E-01	1.902E-03	0.00	4.644E-05	4.300E-05
0100 - 0200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.000E+00	0.000E+00
0200 - 0300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.000E+00	0.000E+00
0300 - 0400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.000E+00	0.000E+00
0400 - 0500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	0.000E+00	0.000E+00
0500 - 0600	1.026E+02	1.992E+01	2.913E-01	2.700E-01	2.851E-02	0.01	8.091E-05	7.501E-05
0600 - 0700	4.700E+01	9.077E+00	7.254E-01	6.723E-01	1.306E-02	0.00	2.015E-04	1.867E-04
0700 - 0800	6.793E+01	1.312E+01	1.019E+00	9.446E-01	1.887E-02	0.00	2.830E-04	2.624E-04
0800 - 0900	4.001E+01	7.703E+00	9.447E-01	8.757E-01	1.111E-02	0.00	2.624E-04	2.432E-04
0900 - 1000	2.954E+01	5.686E+00	7.010E-01	6.497E-01	8.207E-03	0.00	1.947E-04	1.805E-04
1000 - 1100	2.850E+01	5.485E+00	6.766E-01	6.271E-01	7.916E-03	0.00	1.880E-04	1.742E-04
1100 - 1200	2.850E+01	5.485E+00	6.766E-01	6.271E-01	7.916E-03	0.00	1.880E-04	1.742E-04
1200 - 1300	2.871E+01	5.527E+00	6.778E-01	6.282E-01	7.974E-03	0.00	1.883E-04	1.745E-04
1300 - 1400	2.957E+01	5.691E+00	7.010E-01	6.497E-01	8.213E-03	0.00	1.947E-04	1.805E-04
1400 - 1500	2.957E+01	5.691E+00	7.010E-01	6.497E-01	8.213E-03	0.00	1.947E-04	1.805E-04
1500 - 1600	3.063E+01	5.897E+00	7.254E-01	6.723E-01	8.509E-03	0.00	2.015E-04	1.867E-04
1600 - 1700	3.063E+01	5.897E+00	7.254E-01	6.723E-01	8.509E-03	0.00	2.015E-04	1.867E-04
1700 - 1800	2.977E+01	5.733E+00	7.021E-01	6.508E-01	8.271E-03	0.00	1.950E-04	1.808E-04
1800 - 1900	2.957E+01	5.691E+00	7.010E-01	6.497E-01	8.213E-03	0.00	1.947E-04	1.805E-04
1900 - 2000	2.850E+01	5.485E+00	6.766E-01	6.271E-01	7.916E-03	0.00	1.880E-04	1.742E-04
2000 - 2100	1.817E+01	3.498E+00	4.330E-01	4.011E-01	5.047E-03	0.00	1.203E-04	1.114E-04
2100 - 2200	1.817E+01	3.498E+00	4.330E-01	4.011E-01	5.047E-03	0.00	1.203E-04	1.114E-04
2200 - 2300	1.624E+01	3.128E+00	3.854E-01	3.571E-01	4.512E-03	0.00	1.070E-04	9.918E-05
2300 - 2400	1.497E+01	2.880E+00	3.599E-01	3.333E-01	4.157E-03	0.00	9.996E-05	9.259E-05

Hourly Profile for Emission within PTI			
NO	NO <sub>2</sub>	RSP	FSP
0.0667	0.0661	0.1641	0.1639
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
1.0000	1.0000	0.2859	0.2859
0.4580	0.4557	0.7119	0.7117
0.6619	0.6588	1.0000	1.0000
0.3899	0.3867	0.9271	0.9270
0.2879	0.2855	0.6880	0.6878
0.2777	0.2754	0.6641	0.6639
0.2777	0.2754	0.6641	0.6639
0.2797	0.2775	0.6652	0.6651
0.2881	0.2857	0.6880	0.6878
0.2881	0.2857	0.6880	0.6878
0.2985	0.2961	0.7119	0.7117
0.2985	0.2961	0.7119	0.7117
0.2901	0.2878	0.6891	0.6890
0.2881	0.2857	0.6880	0.6878
0.2777	0.2754	0.6641	0.6639
0.1770	0.1756	0.4249	0.4247
0.1770	0.1756	0.4249	0.4247
0.1583	0.1570	0.3782	0.3780
0.1458	0.1446	0.3532	0.3529

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Sun Chui Bus Terminus

##### Starting Emission from Terminating Buses

	Starting Emission Factor of Double-Deck Franchised Bus (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NO	3.786E-01	6.814E-01	9.086E-01	1.287E+00	1.590E+00	2.120E+00	3.105E+00	3.862E+00	5.679E+00	7.420E+00	8.329E+00	9.843E+00	1.083E+01	1.136E+01	1.166E+01	1.196E+01	1.212E+01	1.212E+01
NO <sub>2</sub>	8.140E-02	1.465E-01	1.953E-01	2.767E-01	3.418E-01	4.557E-01	6.673E-01	8.300E-01	1.221E+00	1.595E+00	1.790E+00	2.116E+00	2.327E+00	2.441E+00	2.506E+00	2.572E+00	2.604E+00	2.604E+00
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0600 - 0700	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)			
NO	NO <sub>2</sub>	RSP	FSP
2.73E+00	5.86E-01	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
3.63E+01	7.81E+00	0.00E+00	0.00E+00
5.45E+00	1.17E+00	0.00E+00	0.00E+00
4.54E+00	9.77E-01	0.00E+00	0.00E+00
5.45E+00	1.17E+00	0.00E+00	0.00E+00
4.54E+00	9.77E-01	0.00E+00	0.00E+00
4.54E+00	9.77E-01	0.00E+00	0.00E+00
5.45E+00	1.17E+00	0.00E+00	0.00E+00
4.54E+00	9.77E-01	0.00E+00	0.00E+00
5.45E+00	1.17E+00	0.00E+00	0.00E+00
4.54E+00	9.77E-01	0.00E+00	0.00E+00
5.45E+00	1.17E+00	0.00E+00	0.00E+00
4.54E+00	9.77E-01	0.00E+00	0.00E+00
5.45E+00	1.17E+00	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00



### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Sun Chui Bus Terminus

##### Running Emission from Terminating and Non-terminating Buses

Average Travelling Distance within PTI =	40.00	m
Average Travelling Speed =	10.00	km/h

Hour	Double-Deck Franchised Bus								
	Frequency	Running Emission Factor (g/km-vehicle)				Running Emission Within PTI (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
0100 - 0200	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
0600 - 0700	6	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.21	2.318E-01	3.660E-02	3.367E-02
0700 - 0800	5	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.01	1.931E-01	3.050E-02	2.806E-02
0800 - 0900	6	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.21	2.318E-01	3.660E-02	3.367E-02
0900 - 1000	5	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.01	1.931E-01	3.050E-02	2.806E-02
1000 - 1100	5	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.01	1.931E-01	3.050E-02	2.806E-02
1100 - 1200	6	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.21	2.318E-01	3.660E-02	3.367E-02
1200 - 1300	5	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.01	1.931E-01	3.050E-02	2.806E-02
1300 - 1400	6	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.21	2.318E-01	3.660E-02	3.367E-02
1400 - 1500	5	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.01	1.931E-01	3.050E-02	2.806E-02
1500 - 1600	6	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.21	2.318E-01	3.660E-02	3.367E-02
1600 - 1700	5	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.01	1.931E-01	3.050E-02	2.806E-02
1700 - 1800	6	5.056E+00	9.657E-01	1.525E-01	1.403E-01	1.21	2.318E-01	3.660E-02	3.367E-02
1800 - 1900	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
1900 - 2000	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
2000 - 2100	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
2100 - 2200	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
2200 - 2300	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
2300 - 2400	3	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02

##### Idling Emission from Non-terminating Buses

Idling Time for Non-terminating Buses =	1.5	min
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Hour	Double-Deck Franchised Bus								
	Frequency	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00



**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**Sun Chui Bus Terminus**

**Total Hourly Emission from Terminating and Non-terminating Buses**

Hour	Emission Within PTI							
	Total Emission (g) (Idling + Starting)				Total Emission Rate (g/s)			
	NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	1.503E+00	2.908E-01	2.506E-02	2.360E-02	4.175E-04	8.077E-05	6.962E-06	6.555E-06
0100 - 0200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	2.493E+01	4.811E+00	2.506E-02	2.360E-02	6.924E-03	1.336E-03	6.962E-06	6.555E-06
0600 - 0700	3.006E+00	5.816E-01	5.013E-02	4.720E-02	8.349E-04	1.615E-04	1.392E-05	1.311E-05
0700 - 0800	2.505E+00	4.846E-01	4.177E-02	3.933E-02	6.958E-04	1.346E-04	1.160E-05	1.093E-05
0800 - 0900	3.006E+00	5.816E-01	5.013E-02	4.720E-02	8.349E-04	1.615E-04	1.392E-05	1.311E-05
0900 - 1000	2.505E+00	4.846E-01	4.177E-02	3.933E-02	6.958E-04	1.346E-04	1.160E-05	1.093E-05
1000 - 1100	2.505E+00	4.846E-01	4.177E-02	3.933E-02	6.958E-04	1.346E-04	1.160E-05	1.093E-05
1100 - 1200	3.006E+00	5.816E-01	5.013E-02	4.720E-02	8.349E-04	1.615E-04	1.392E-05	1.311E-05
1200 - 1300	2.505E+00	4.846E-01	4.177E-02	3.933E-02	6.958E-04	1.346E-04	1.160E-05	1.093E-05
1300 - 1400	3.006E+00	5.816E-01	5.013E-02	4.720E-02	8.349E-04	1.615E-04	1.392E-05	1.311E-05
1400 - 1500	2.505E+00	4.846E-01	4.177E-02	3.933E-02	6.958E-04	1.346E-04	1.160E-05	1.093E-05
1500 - 1600	3.006E+00	5.816E-01	5.013E-02	4.720E-02	8.349E-04	1.615E-04	1.392E-05	1.311E-05
1600 - 1700	2.505E+00	4.846E-01	4.177E-02	3.933E-02	6.958E-04	1.346E-04	1.160E-05	1.093E-05
1700 - 1800	3.006E+00	5.816E-01	5.013E-02	4.720E-02	8.349E-04	1.615E-04	1.392E-05	1.311E-05
1800 - 1900	1.503E+00	2.908E-01	2.506E-02	2.360E-02	4.175E-04	8.077E-05	6.962E-06	6.555E-06
1900 - 2000	1.503E+00	2.908E-01	2.506E-02	2.360E-02	4.175E-04	8.077E-05	6.962E-06	6.555E-06
2000 - 2100	1.503E+00	2.908E-01	2.506E-02	2.360E-02	4.175E-04	8.077E-05	6.962E-06	6.555E-06
2100 - 2200	1.503E+00	2.908E-01	2.506E-02	2.360E-02	4.175E-04	8.077E-05	6.962E-06	6.555E-06
2200 - 2300	1.503E+00	2.908E-01	2.506E-02	2.360E-02	4.175E-04	8.077E-05	6.962E-06	6.555E-06
2300 - 2400	1.503E+00	2.908E-01	2.506E-02	2.360E-02	4.175E-04	8.077E-05	6.962E-06	6.555E-06

Hourly Profile for Emission within PTI			
NO	NO <sub>2</sub>	RSP	FSP
0.0603	0.0604	0.5000	0.5000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
1.0000	1.0000	0.5000	0.5000
0.1206	0.1209	1.0000	1.0000
0.1005	0.1007	0.8333	0.8333
0.1206	0.1209	1.0000	1.0000
0.1005	0.1007	0.8333	0.8333
0.1005	0.1007	0.8333	0.8333
0.1206	0.1209	1.0000	1.0000
0.1005	0.1007	0.8333	0.8333
0.1206	0.1209	1.0000	1.0000
0.1005	0.1007	0.8333	0.8333
0.1206	0.1209	1.0000	1.0000
0.1005	0.1007	0.8333	0.8333
0.0603	0.0604	0.5000	0.5000
0.0603	0.0604	0.5000	0.5000
0.0603	0.0604	0.5000	0.5000
0.0603	0.0604	0.5000	0.5000
0.0603	0.0604	0.5000	0.5000

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Sun Tin Wai Bus Terminus

##### Starting Emission from Terminating Buses

	Starting Emission Factor of Double-Deck Franchised Bus (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NO	3.786E-01	6.814E-01	9.086E-01	1.287E+00	1.590E+00	2.120E+00	3.105E+00	3.862E+00	5.679E+00	7.420E+00	8.329E+00	9.843E+00	1.083E+01	1.136E+01	1.166E+01	1.196E+01	1.212E+01	1.212E+01
NO <sub>2</sub>	8.140E-02	1.465E-01	1.953E-01	2.767E-01	3.418E-01	4.557E-01	6.673E-01	8.300E-01	1.221E+00	1.595E+00	1.790E+00	2.116E+00	2.327E+00	2.441E+00	2.506E+00	2.572E+00	2.604E+00	2.604E+00
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
0600 - 0700	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0800 - 0900	0	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)			
NO	NO <sub>2</sub>	RSP	FSP
5.45E+00	1.17E+00	0.00E+00	0.00E+00
1.82E+00	3.91E-01	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
9.69E+01	2.08E+01	0.00E+00	0.00E+00
1.45E+01	3.12E+00	0.00E+00	0.00E+00
6.10E+01	1.31E+01	0.00E+00	0.00E+00
1.18E+01	2.54E+00	0.00E+00	0.00E+00
1.11E+01	2.39E+00	0.00E+00	0.00E+00
1.09E+01	2.34E+00	0.00E+00	0.00E+00
1.09E+01	2.34E+00	0.00E+00	0.00E+00
1.18E+01	2.54E+00	0.00E+00	0.00E+00
1.18E+01	2.54E+00	0.00E+00	0.00E+00
1.18E+01	2.54E+00	0.00E+00	0.00E+00
1.36E+01	2.93E+00	0.00E+00	0.00E+00
1.11E+01	2.39E+00	0.00E+00	0.00E+00
1.04E+01	2.25E+00	0.00E+00	0.00E+00
1.11E+01	2.39E+00	0.00E+00	0.00E+00
1.09E+01	2.34E+00	0.00E+00	0.00E+00
1.09E+01	2.34E+00	0.00E+00	0.00E+00
1.09E+01	2.34E+00	0.00E+00	0.00E+00
9.99E+00	2.15E+00	0.00E+00	0.00E+00



### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Sun Tin Wai Bus Terminus

##### Running Emission from Terminating and Non-terminating Buses

Average Travelling Distance within PTI =	60.00	m
Average Travelling Speed =	10.00	km/h

Hour	Double-Deck Franchised Bus								
	Frequency	Running Emission Factor (g/km-vehicle)				Running Emission Within PTI (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	7	5.056E+00	9.657E-01	1.525E-01	1.403E-01	2.12	4.056E-01	6.405E-02	5.893E-02
0100 - 0200	2	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.61	1.159E-01	1.830E-02	1.684E-02
0200 - 0300	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	8	5.056E+00	9.657E-01	1.525E-01	1.403E-01	2.43	4.635E-01	7.320E-02	6.734E-02
0600 - 0700	29	5.056E+00	9.657E-01	1.525E-01	1.403E-01	8.80	1.680E+00	2.654E-01	2.441E-01
0700 - 0800	31	5.056E+00	9.657E-01	1.525E-01	1.403E-01	9.40	1.796E+00	2.837E-01	2.610E-01
0800 - 0900	28	5.056E+00	9.657E-01	1.525E-01	1.403E-01	8.49	1.622E+00	2.562E-01	2.357E-01
0900 - 1000	24	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.28	1.391E+00	2.196E-01	2.020E-01
1000 - 1100	25	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.58	1.449E+00	2.288E-01	2.105E-01
1100 - 1200	24	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.28	1.391E+00	2.196E-01	2.020E-01
1200 - 1300	24	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.28	1.391E+00	2.196E-01	2.020E-01
1300 - 1400	25	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.58	1.449E+00	2.288E-01	2.105E-01
1400 - 1500	25	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.58	1.449E+00	2.288E-01	2.105E-01
1500 - 1600	27	5.056E+00	9.657E-01	1.525E-01	1.403E-01	8.19	1.564E+00	2.471E-01	2.273E-01
1600 - 1700	25	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.58	1.449E+00	2.288E-01	2.105E-01
1700 - 1800	25	5.056E+00	9.657E-01	1.525E-01	1.403E-01	7.58	1.449E+00	2.288E-01	2.105E-01
1800 - 1900	27	5.056E+00	9.657E-01	1.525E-01	1.403E-01	8.19	1.564E+00	2.471E-01	2.273E-01
1900 - 2000	22	5.056E+00	9.657E-01	1.525E-01	1.403E-01	6.67	1.275E+00	2.013E-01	1.852E-01
2000 - 2100	22	5.056E+00	9.657E-01	1.525E-01	1.403E-01	6.67	1.275E+00	2.013E-01	1.852E-01
2100 - 2200	21	5.056E+00	9.657E-01	1.525E-01	1.403E-01	6.37	1.217E+00	1.922E-01	1.768E-01
2200 - 2300	21	5.056E+00	9.657E-01	1.525E-01	1.403E-01	6.37	1.217E+00	1.922E-01	1.768E-01
2300 - 2400	18	5.056E+00	9.657E-01	1.525E-01	1.403E-01	5.46	1.043E+00	1.647E-01	1.515E-01

##### Idling Emission from Non-terminating Buses

Idling Time for Non-terminating Buses =	1.5	min
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Hour	Double-Deck Franchised Bus								
	Frequency	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	1	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.13	2.403E-02	1.127E-03	1.127E-03
0100 - 0200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0600 - 0700	13	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.64	3.124E-01	1.465E-02	1.465E-02
0700 - 0800	11	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.38	2.643E-01	1.240E-02	1.240E-02
0800 - 0900	13	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.64	3.124E-01	1.465E-02	1.465E-02
0900 - 1000	10	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.26	2.403E-01	1.127E-02	1.127E-02
1000 - 1100	13	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.64	3.124E-01	1.465E-02	1.465E-02
1100 - 1200	12	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.51	2.883E-01	1.353E-02	1.353E-02
1200 - 1300	11	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.38	2.643E-01	1.240E-02	1.240E-02
1300 - 1400	12	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.51	2.883E-01	1.353E-02	1.353E-02
1400 - 1500	12	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.51	2.883E-01	1.353E-02	1.353E-02
1500 - 1600	12	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.51	2.883E-01	1.353E-02	1.353E-02
1600 - 1700	11	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.38	2.643E-01	1.240E-02	1.240E-02
1700 - 1800	12	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.51	2.883E-01	1.353E-02	1.353E-02
1800 - 1900	13	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.64	3.124E-01	1.465E-02	1.465E-02
1900 - 2000	10	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.26	2.403E-01	1.127E-02	1.127E-02
2000 - 2100	10	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.26	2.403E-01	1.127E-02	1.127E-02
2100 - 2200	9	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.13	2.162E-01	1.014E-02	1.014E-02
2200 - 2300	9	8.387E-02	1.602E-02	7.514E-04	7.514E-04	1.13	2.162E-01	1.014E-02	1.014E-02
2300 - 2400	7	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.88	1.682E-01	7.890E-03	7.890E-03

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**Sun Tin Wai Bus Terminus**

**Total Hourly Emission from Terminating and Non-terminating Buses**

Hour	Emission Within PTI							
	Total Emission (g) (Idling + Starting)				Total Emission Rate (g/s)			
	NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	4.183E+00	8.102E-01	7.870E-02	7.358E-02	1.162E-03	2.250E-04	2.186E-05	2.044E-05
0100 - 0200	1.251E+00	2.427E-01	2.281E-02	2.134E-02	3.476E-04	6.742E-05	6.336E-06	5.929E-06
0200 - 0300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	6.947E+01	1.347E+01	9.123E-02	8.538E-02	1.930E-02	3.741E-03	2.534E-05	2.372E-05
0600 - 0700	1.559E+01	3.007E+00	3.161E-01	2.948E-01	4.330E-03	8.354E-04	8.780E-05	8.190E-05
0700 - 0800	4.929E+01	9.540E+00	3.411E-01	3.184E-01	1.369E-02	2.650E-03	9.476E-05	8.846E-05
0800 - 0900	1.481E+01	2.853E+00	3.047E-01	2.842E-01	4.113E-03	7.924E-04	8.463E-05	7.894E-05
0900 - 1000	1.291E+01	2.490E+00	2.624E-01	2.449E-01	3.587E-03	6.915E-04	7.290E-05	6.802E-05
1000 - 1100	1.309E+01	2.522E+00	2.705E-01	2.522E-01	3.635E-03	7.005E-04	7.513E-05	7.004E-05
1100 - 1200	1.266E+01	2.440E+00	2.602E-01	2.426E-01	3.516E-03	6.778E-04	7.227E-05	6.739E-05
1200 - 1300	1.285E+01	2.479E+00	2.613E-01	2.437E-01	3.571E-03	6.887E-04	7.258E-05	6.770E-05
1300 - 1400	1.328E+01	2.561E+00	2.716E-01	2.533E-01	3.690E-03	7.115E-04	7.544E-05	7.036E-05
1400 - 1500	1.328E+01	2.561E+00	2.716E-01	2.533E-01	3.690E-03	7.115E-04	7.544E-05	7.036E-05
1500 - 1600	1.453E+01	2.804E+00	2.944E-01	2.746E-01	4.037E-03	7.789E-04	8.178E-05	7.629E-05
1600 - 1700	1.334E+01	2.571E+00	2.727E-01	2.544E-01	3.707E-03	7.143E-04	7.575E-05	7.067E-05
1700 - 1800	1.317E+01	2.536E+00	2.716E-01	2.533E-01	3.657E-03	7.045E-04	7.544E-05	7.036E-05
1800 - 1900	1.420E+01	2.735E+00	2.933E-01	2.735E-01	3.945E-03	7.598E-04	8.146E-05	7.597E-05
1900 - 2000	1.180E+01	2.276E+00	2.396E-01	2.235E-01	3.278E-03	6.322E-04	6.656E-05	6.209E-05
2000 - 2100	1.180E+01	2.276E+00	2.396E-01	2.235E-01	3.278E-03	6.322E-04	6.656E-05	6.209E-05
2100 - 2200	1.137E+01	2.194E+00	2.293E-01	2.140E-01	3.158E-03	6.095E-04	6.371E-05	5.944E-05
2200 - 2300	1.137E+01	2.194E+00	2.293E-01	2.140E-01	3.158E-03	6.095E-04	6.371E-05	5.944E-05
2300 - 2400	9.886E+00	1.909E+00	1.974E-01	1.842E-01	2.746E-03	5.302E-04	5.483E-05	5.117E-05

Hourly Profile for Emission within PTI			
NO	NO <sub>2</sub>	RSP	FSP
0.0602	0.0602	0.2307	0.2311
0.0180	0.0180	0.0669	0.0670
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
1.0000	1.0000	0.2674	0.2681
0.2244	0.2233	0.9265	0.9259
0.7095	0.7083	1.0000	1.0000
0.2131	0.2118	0.8931	0.8924
0.1859	0.1848	0.7693	0.7689
0.1884	0.1873	0.7928	0.7918
0.1822	0.1812	0.7627	0.7619
0.1850	0.1841	0.7660	0.7654
0.1912	0.1902	0.7961	0.7954
0.1912	0.1902	0.7961	0.7954
0.2092	0.2082	0.8630	0.8624
0.1921	0.1909	0.7994	0.7989
0.1895	0.1883	0.7961	0.7954
0.2044	0.2031	0.8597	0.8589
0.1698	0.1690	0.7024	0.7019
0.1698	0.1690	0.7024	0.7019
0.1637	0.1629	0.6723	0.6719
0.1637	0.1629	0.6723	0.6719
0.1423	0.1417	0.5786	0.5785

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Chun Shek Bus Terminus

##### Starting Emission from Terminating Buses

	Starting Emission Factor of Double-Deck Franchised Bus (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NO	3.786E-01	6.814E-01	9.086E-01	1.287E+00	1.590E+00	2.120E+00	3.105E+00	3.862E+00	5.679E+00	7.420E+00	8.329E+00	9.843E+00	1.083E+01	1.136E+01	1.166E+01	1.196E+01	1.212E+01	1.212E+01
NO <sub>2</sub>	8.140E-02	1.465E-01	1.953E-01	2.767E-01	3.418E-01	4.557E-01	6.673E-01	8.300E-01	1.221E+00	1.595E+00	1.790E+00	2.116E+00	2.327E+00	2.441E+00	2.506E+00	2.572E+00	2.604E+00	2.604E+00
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
0600 - 0700	0	8	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	10	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	10	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	10	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	10	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	10	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	10	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)			
NO	NO <sub>2</sub>	RSP	FSP
2.20E+00	4.72E-01	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
9.69E+01	2.08E+01	0.00E+00	0.00E+00
1.17E+01	2.51E+00	0.00E+00	0.00E+00
1.17E+01	2.51E+00	0.00E+00	0.00E+00
1.30E+01	2.80E+00	0.00E+00	0.00E+00
1.30E+01	2.80E+00	0.00E+00	0.00E+00
1.70E+01	3.66E+00	0.00E+00	0.00E+00
1.68E+01	3.61E+00	0.00E+00	0.00E+00
1.68E+01	3.61E+00	0.00E+00	0.00E+00
1.67E+01	3.58E+00	0.00E+00	0.00E+00
1.30E+01	2.80E+00	0.00E+00	0.00E+00
1.30E+01	2.80E+00	0.00E+00	0.00E+00
1.30E+01	2.80E+00	0.00E+00	0.00E+00
1.32E+01	2.83E+00	0.00E+00	0.00E+00
1.23E+01	2.64E+00	0.00E+00	0.00E+00
1.57E+01	3.39E+00	0.00E+00	0.00E+00
1.17E+01	2.51E+00	0.00E+00	0.00E+00
1.08E+01	2.31E+00	0.00E+00	0.00E+00
1.08E+01	2.31E+00	0.00E+00	0.00E+00
7.87E+00	1.69E+00	0.00E+00	0.00E+00



### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Chun Shek Bus Terminus

##### Running Emission from Terminating and Non-terminating Buses

Average Travelling Distance within PTI =	250.00	m
Average Travelling Speed =	10.00	km/h

Hour	Double-Deck Franchised Bus								
	Frequency	Running Emission Factor (g/km-vehicle)				Running Emission Within PTI (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	2	5.056E+00	9.657E-01	1.525E-01	1.403E-01	2.53	4.829E-01	7.625E-02	7.015E-02
0100 - 0200	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	5.056E+00	9.657E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	8	5.056E+00	9.657E-01	1.525E-01	1.403E-01	10.11	1.931E+00	3.050E-01	2.806E-01
0600 - 0700	14	5.056E+00	9.657E-01	1.525E-01	1.403E-01	17.70	3.380E+00	5.338E-01	4.911E-01
0700 - 0800	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.22	3.863E+00	6.100E-01	5.612E-01
0800 - 0900	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.22	3.863E+00	6.100E-01	5.612E-01
0900 - 1000	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.22	3.863E+00	6.100E-01	5.612E-01
1000 - 1100	20	5.056E+00	9.657E-01	1.525E-01	1.403E-01	25.28	4.829E+00	7.625E-01	7.015E-01
1100 - 1200	21	5.056E+00	9.657E-01	1.525E-01	1.403E-01	26.54	5.070E+00	8.006E-01	7.366E-01
1200 - 1300	21	5.056E+00	9.657E-01	1.525E-01	1.403E-01	26.54	5.070E+00	8.006E-01	7.366E-01
1300 - 1400	20	5.056E+00	9.657E-01	1.525E-01	1.403E-01	25.28	4.829E+00	7.625E-01	7.015E-01
1400 - 1500	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.22	3.863E+00	6.100E-01	5.612E-01
1500 - 1600	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.22	3.863E+00	6.100E-01	5.612E-01
1600 - 1700	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.22	3.863E+00	6.100E-01	5.612E-01
1700 - 1800	17	5.056E+00	9.657E-01	1.525E-01	1.403E-01	21.49	4.104E+00	6.481E-01	5.963E-01
1800 - 1900	16	5.056E+00	9.657E-01	1.525E-01	1.403E-01	20.22	3.863E+00	6.100E-01	5.612E-01
1900 - 2000	19	5.056E+00	9.657E-01	1.525E-01	1.403E-01	24.02	4.587E+00	7.244E-01	6.664E-01
2000 - 2100	12	5.056E+00	9.657E-01	1.525E-01	1.403E-01	15.17	2.897E+00	4.575E-01	4.209E-01
2100 - 2200	11	5.056E+00	9.657E-01	1.525E-01	1.403E-01	13.90	2.656E+00	4.194E-01	3.858E-01
2200 - 2300	11	5.056E+00	9.657E-01	1.525E-01	1.403E-01	13.90	2.656E+00	4.194E-01	3.858E-01
2300 - 2400	7	5.056E+00	9.657E-01	1.525E-01	1.403E-01	8.85	1.690E+00	2.669E-01	2.455E-01

##### Idling Emission from Non-terminating Buses

Idling Time for Non-terminating Buses =	1.5	min
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Hour	Double-Deck Franchised Bus								
	Frequency	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0700 - 0800	4	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.50	9.611E-02	4.509E-03	4.509E-03
0800 - 0900	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00



**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**Chun Shek Bus Terminus**

**Total Hourly Emission from Terminating and Non-terminating Buses**

Hour	Emission Within PTI							
	Total Emission (g) (Idling + Starting)				Total Emission Rate (g/s)			
	NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	3.379E+00	6.544E-01	8.076E-02	7.466E-02	9.386E-04	1.818E-04	2.243E-05	2.074E-05
0100 - 0200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	8.374E+01	1.639E+01	3.230E-01	2.986E-01	2.326E-02	4.553E-03	8.973E-05	8.295E-05
0600 - 0700	2.302E+01	4.444E+00	5.653E-01	5.226E-01	6.393E-03	1.234E-03	1.570E-04	1.452E-04
0700 - 0800	2.557E+01	4.932E+00	6.416E-01	5.928E-01	7.104E-03	1.370E-03	1.782E-04	1.647E-04
0800 - 0900	2.625E+01	5.068E+00	6.461E-01	5.973E-01	7.292E-03	1.408E-03	1.795E-04	1.659E-04
0900 - 1000	2.625E+01	5.068E+00	6.461E-01	5.973E-01	7.292E-03	1.408E-03	1.795E-04	1.659E-04
1000 - 1100	3.294E+01	6.363E+00	8.076E-01	7.466E-01	9.151E-03	1.767E-03	2.243E-04	2.074E-04
1100 - 1200	3.441E+01	6.641E+00	8.480E-01	7.839E-01	9.558E-03	1.845E-03	2.355E-04	2.178E-04
1200 - 1300	3.441E+01	6.641E+00	8.480E-01	7.839E-01	9.558E-03	1.845E-03	2.355E-04	2.178E-04
1300 - 1400	3.288E+01	6.349E+00	8.076E-01	7.466E-01	9.133E-03	1.763E-03	2.243E-04	2.074E-04
1400 - 1500	2.625E+01	5.068E+00	6.461E-01	5.973E-01	7.292E-03	1.408E-03	1.795E-04	1.659E-04
1500 - 1600	2.625E+01	5.068E+00	6.461E-01	5.973E-01	7.292E-03	1.408E-03	1.795E-04	1.659E-04
1600 - 1700	2.625E+01	5.068E+00	6.461E-01	5.973E-01	7.292E-03	1.408E-03	1.795E-04	1.659E-04
1700 - 1800	2.778E+01	5.360E+00	6.864E-01	6.346E-01	7.716E-03	1.489E-03	1.907E-04	1.763E-04
1800 - 1900	2.612E+01	5.040E+00	6.461E-01	5.973E-01	7.256E-03	1.400E-03	1.795E-04	1.659E-04
1900 - 2000	3.122E+01	6.028E+00	7.672E-01	7.093E-01	8.673E-03	1.675E-03	2.131E-04	1.970E-04
2000 - 2100	2.001E+01	3.870E+00	4.846E-01	4.480E-01	5.559E-03	1.075E-03	1.346E-04	1.244E-04
2100 - 2200	1.836E+01	3.550E+00	4.442E-01	4.106E-01	5.099E-03	9.862E-04	1.234E-04	1.141E-04
2200 - 2300	1.836E+01	3.550E+00	4.442E-01	4.106E-01	5.099E-03	9.862E-04	1.234E-04	1.141E-04
2300 - 2400	1.186E+01	2.297E+00	2.827E-01	2.613E-01	3.294E-03	6.381E-04	7.852E-05	7.258E-05

Hourly Profile for Emission within PTI			
NO	NO <sub>2</sub>	RSP	FSP
0.0404	0.0399	0.0952	0.0952
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
1.0000	1.0000	0.3810	0.3810
0.2749	0.2711	0.6667	0.6667
0.3054	0.3009	0.7566	0.7562
0.3135	0.3092	0.7619	0.7619
0.3135	0.3092	0.7619	0.7619
0.3934	0.3881	0.9524	0.9524
0.4109	0.4051	1.0000	1.0000
0.4109	0.4051	1.0000	1.0000
0.3927	0.3873	0.9524	0.9524
0.3135	0.3092	0.7619	0.7619
0.3135	0.3092	0.7619	0.7619
0.3135	0.3092	0.7619	0.7619
0.3135	0.3092	0.7619	0.7619
0.3317	0.3270	0.8095	0.8095
0.3119	0.3075	0.7619	0.7619
0.3729	0.3678	0.9048	0.9048
0.2390	0.2361	0.5714	0.5714
0.2192	0.2166	0.5238	0.5238
0.2192	0.2166	0.5238	0.5238
0.1416	0.1402	0.3333	0.3333

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Broadcast Drive Bus Terminus

##### Starting Emission from Terminating Buses

	Starting Emission Factor of Double-Deck Franchised Bus (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
<b>NO</b>	3.786E-01	6.814E-01	9.086E-01	1.287E+00	1.590E+00	2.120E+00	3.105E+00	3.862E+00	5.679E+00	7.420E+00	8.329E+00	9.843E+00	1.083E+01	1.136E+01	1.166E+01	1.196E+01	1.212E+01	1.212E+01
<b>NO<sub>2</sub></b>	8.140E-02	1.465E-01	1.953E-01	2.767E-01	3.418E-01	4.557E-01	6.673E-01	8.300E-01	1.221E+00	1.595E+00	1.790E+00	2.116E+00	2.327E+00	2.441E+00	2.506E+00	2.572E+00	2.604E+00	2.604E+00
<b>RSP</b>	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
<b>FSP</b>	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0600 - 0700	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)			
NO	NO <sub>2</sub>	RSP	FSP
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.21E+01	2.60E+00	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.73E+00	5.86E-01	0.00E+00	0.00E+00
2.57E+00	5.53E-01	0.00E+00	0.00E+00
2.57E+00	5.53E-01	0.00E+00	0.00E+00
2.57E+00	5.53E-01	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00



### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Broadcast Drive Bus Terminus

##### Running Emission from Terminating and Non-terminating Buses

Average Travelling Distance within PTI =	40.00	m
Average Travelling Speed =	10.00	km/h

Hour	Double-Deck Franchised Bus								
	Frequency	Running Emission Factor (g/km-vehicle)				Running Emission Within PTI (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	0	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.20	3.877E-02	6.100E-03	5.612E-03
0600 - 0700	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
0700 - 0800	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
0800 - 0900	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
0900 - 1000	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1000 - 1100	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1100 - 1200	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1200 - 1300	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1300 - 1400	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1400 - 1500	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1500 - 1600	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1600 - 1700	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1700 - 1800	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1800 - 1900	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
1900 - 2000	3	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.61	1.163E-01	1.830E-02	1.684E-02
2000 - 2100	2	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.41	7.754E-02	1.220E-02	1.122E-02
2100 - 2200	2	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.41	7.754E-02	1.220E-02	1.122E-02
2200 - 2300	2	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.41	7.754E-02	1.220E-02	1.122E-02
2300 - 2400	0	5.075E+00	9.693E-01	1.525E-01	1.403E-01	0.00	0.000E+00	0.000E+00	0.000E+00

##### Idling Emission from Non-terminating Buses

Idling Time for Non-terminating Buses =	1.5	min
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Hour	Double-Deck Franchised Bus								
	Frequency	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)			
		NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0	8.387E-02	1.602E-02	7.514E-04	7.514E-04	0.00	0.000E+00	0.000E+00	0.000E+00

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**Broadcast Drive Bus Terminus**

**Total Hourly Emission from Terminating and Non-terminating Buses**

Hour	Emission Within PTI							
	Total Emission (g) (Idling + Starting)				Total Emission Rate (g/s)			
	NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
0000 - 0100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0500 - 0600	8.310E+00	1.604E+00	8.354E-03	7.866E-03	2.308E-03	4.455E-04	2.321E-06	2.185E-06
0600 - 0700	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
0700 - 0800	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
0800 - 0900	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
0900 - 1000	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1000 - 1100	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1100 - 1200	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1200 - 1300	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1300 - 1400	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1400 - 1500	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1500 - 1600	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1600 - 1700	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1700 - 1800	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1800 - 1900	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
1900 - 2000	1.505E+00	2.912E-01	2.506E-02	2.360E-02	4.181E-04	8.089E-05	6.962E-06	6.555E-06
2000 - 2100	1.047E+00	2.034E-01	1.671E-02	1.573E-02	2.908E-04	5.651E-05	4.641E-06	4.370E-06
2100 - 2200	1.047E+00	2.034E-01	1.671E-02	1.573E-02	2.908E-04	5.651E-05	4.641E-06	4.370E-06
2200 - 2300	1.047E+00	2.034E-01	1.671E-02	1.573E-02	2.908E-04	5.651E-05	4.641E-06	4.370E-06
2300 - 2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hourly Profile for Emission within PTI			
NO	NO <sub>2</sub>	RSP	FSP
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
1.0000	1.0000	0.3333	0.3333
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1811	0.1816	1.0000	1.0000
0.1260	0.1269	0.6667	0.6667
0.1260	0.1269	0.6667	0.6667
0.1260	0.1269	0.6667	0.6667
0.0000	0.0000	0.0000	0.0000

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

Routing of Starting Emission on Open Road

Terminus	Source ID	Travel Distance outside Bus Terminus (m)	Area (m <sup>2</sup> )	% of Flow	Max. Hourly Emission Rate (g/s)				Max. Hourly Emission Rate (g/m <sup>2</sup> /s)			
					NO	NO <sub>2</sub>	RSP	FSP	NO	NO <sub>2</sub>	RSP	FSP
Hin Keng Bus Terminus	Total	630	-	100%	2.639E-02	5.838E-03			-	-		
	HK1	21	267	100%	8.796E-04	1.946E-04			3.289E-06	7.277E-07		
	HK2	88	1318	100%	3.686E-03	8.154E-04			2.797E-06	6.187E-07		
	HK3	521	7816	19%	4.117E-03	9.109E-04			5.268E-07	1.165E-07		
	HK4	266	3424	81%	9.039E-03	2.000E-03			2.640E-06	5.841E-07		
	HK5	255	3312	81%	8.666E-03	1.917E-03			2.616E-06	5.788E-07		
Sun Chui Bus Terminus	Total	660	-	100%	7.539E-03	1.668E-03			-	-		
	SC1	356	3916	100%	4.067E-03	8.997E-04			1.038E-06	2.297E-07		
	SC2	304	3346	100%	3.473E-03	7.682E-04			1.038E-06	2.296E-07		
Sun Tin Wai Bus Terminus	Total	640	-	100%	1.950E-02	4.313E-03			-	-		
	STW1	314	3456	100%	9.565E-03	2.116E-03			2.768E-06	6.124E-07		
	STW2	326	3587	100%	9.931E-03	2.197E-03			2.769E-06	6.125E-07		
Chun Shek Bus Terminus	Total	580	-	100%	1.767E-02	3.909E-03			-	-		
	CS1	214.5	2360	100%	6.534E-03	1.446E-03			2.768E-06	6.124E-07		
	CS2	248	3717	100%	7.555E-03	1.671E-03			2.033E-06	4.497E-07		
	CS3	117.5	2357	14%	5.043E-04	1.116E-04			2.140E-07	4.734E-08		
	CS4	117.5	2355	86%	3.075E-03	6.803E-04			1.306E-06	2.888E-07		
Broadcast Drive Bus Terminus	Total	660	-	100%	2.513E-03	5.560E-04			-	-		
	BD1	269	2960	100%	1.024E-03	2.266E-04			3.460E-07	7.655E-08		
	BD2	391	4300	100%	1.489E-03	3.294E-04			3.462E-07	7.660E-08		

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

Emission Source Listing in AERMOD

Bus Terminus	Source	Type	X	Y	Base Elevation	Release Height	Operation Hours	Area for PTI	No. of Vertices	Max. Hourly Emission Rate			
	ID		(m)	(m)	(m)	(mAG)		(for AREAPOLY)	(for AREAPOLY)	NO	NO <sub>2</sub>	RSP	FSP
										(g/m <sup>2</sup> /s)			
Emission inside Terminus													
Hin Keng Bus Terminus	HKT1	AREAPOLY	835657.4	824875.6	14.0	0.0	00:00 - 24:00	2946.98	6	9.673E-06	1.878E-06	9.604E-08	8.904E-08
Sun Chui Bus Terminus	SCT1	AREAPOLY	836651.3	825374.6	7.0	0.0	00:00 - 24:00	399.86	4	1.732E-05	3.342E-06	3.482E-08	3.279E-08
Sun Tin Wai Bus Terminus	STWT1	AREAPOLY	837189.6	825729.2	24.5	0.0	00:00 - 24:00	1685.98	6	1.145E-05	2.219E-06	5.620E-08	5.247E-08
Chun Shek Bus Terminus	CST1	AREAPOLY	837256.9	825959.7	5.5	0.0	00:00 - 24:00	3263.67	5	7.127E-06	1.395E-06	7.217E-08	6.672E-08
Broadcast Drive Bus Terminus	BDT1	AREAPOLY	836636.0	822538.7	77.0	0.0	00:00 - 24:00	387.41	4	5.958E-06	1.150E-06	1.797E-08	1.692E-08
Start Emission outside Terminus													
Hin Keng Bus Terminus	HK1	AREAPOLY	835639.4	824847.5	14.0	3.9	00:00 - 24:00	-	6	3.289E-06	7.277E-07	0.000E+00	0.000E+00
	HK2	AREAPOLY	835641.1	824863.1	13.0	3.9	00:00 - 24:00	-	6	2.797E-06	6.187E-07	0.000E+00	0.000E+00
	HK3	AREAPOLY	835685.6	824941.3	12.0	3.9	00:00 - 24:00	-	12	5.268E-07	1.165E-07	0.000E+00	0.000E+00
	HK4	AREAPOLY	835696.4	824930.8	12.0	3.9	00:00 - 24:00	-	14	2.640E-06	5.841E-07	0.000E+00	0.000E+00
	HK5	AREAPOLY	835911.1	824939.4	12.0	3.9	00:00 - 24:00	-	12	2.616E-06	5.788E-07	0.000E+00	0.000E+00
Sun Chui Bus Terminus	SC1	AREAPOLY	836648.7	825413.9	7.5	3.9	00:00 - 24:00	-	14	1.038E-06	2.297E-07	0.000E+00	0.000E+00
	SC2	AREAPOLY	836957.1	825538.5	6.0	3.9	00:00 - 24:00	-	12	1.038E-06	2.296E-07	0.000E+00	0.000E+00
Sun Tin Wai Bus Terminus	STW1	AREAPOLY	837242.3	825769.4	31.0	3.9	00:00 - 24:00	-	14	2.768E-06	6.124E-07	0.000E+00	0.000E+00
	STW2	AREAPOLY	837349.1	825603.9	31.0	3.9	00:00 - 24:00	-	16	2.769E-06	6.125E-07	0.000E+00	0.000E+00
Chun Shek Bus Terminus	CS1	AREAPOLY	837362.8	826013.5	6.0	3.9	00:00 - 24:00	-	10	2.768E-06	6.124E-07	0.000E+00	0.000E+00
	CS2	AREAPOLY	837235.1	825902.0	6.5	3.9	00:00 - 24:00	-	10	2.033E-06	4.497E-07	0.000E+00	0.000E+00
	CS3	AREAPOLY	837033.6	826141.7	7.0	3.9	00:00 - 24:00	-	4	2.140E-07	4.734E-08	0.000E+00	0.000E+00
	CS4	AREAPOLY	837150.5	826122.3	8.0	3.9	00:00 - 24:00	-	6	1.306E-06	2.888E-07	0.000E+00	0.000E+00
Broadcast Drive Bus Terminus	BD1	AREAPOLY	836642.7	822586.6	74.5	3.9	00:00 - 24:00	-	20	3.460E-07	7.655E-08	0.000E+00	0.000E+00
	BD2	AREAPOLY	836875.4	822684.4	65.0	3.9	00:00 - 24:00	-	18	3.462E-07	7.660E-08	0.000E+00	0.000E+00





**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**19th Highest Hourly NO2 Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A04	1.5	125.23	0.00	125.23
A04	5.0	126.61	0.00	126.61
A04	10.0	116.15	0.00	116.15
A04	20.0	110.52	0.00	110.52
A04	30.0	101.41	0.00	101.41
A05	1.5	124.91	0.60	125.50
A05	5.0	125.09	0.00	125.09
A05	10.0	116.01	0.02	116.03
A05	20.0	105.93	0.01	105.94
A05	30.0	100.33	0.00	100.33
A06	1.5	125.14	0.00	125.14
A06	5.0	125.51	0.00	125.51
A06	10.0	114.53	0.03	114.55
A06	20.0	106.33	0.01	106.34
A06	30.0	102.36	0.00	102.36
A07	1.5	125.20	0.00	125.20
A07	5.0	122.62	0.00	122.62
A07	10.0	114.43	0.02	114.46
A07	20.0	104.55	0.00	104.55
A07	30.0	100.46	0.00	100.46
A08	1.5	115.06	0.00	115.06
A08	5.0	114.98	0.00	114.98
A08	10.0	110.39	0.12	110.51
A08	20.0	103.15	0.01	103.16
A08	30.0	100.62	0.00	100.62
A26	1.5	109.09	4.84	113.93
A26	5.0	108.22	0.00	108.22
A26	10.0	105.76	0.00	105.76
A26	20.0	103.72	0.01	103.73
A26	30.0	100.76	0.00	100.76
A61	1.5	65.95	52.02	117.97
A61	5.0	92.92	21.45	114.36
A61	10.0	101.23	0.00	101.23
A61	20.0	97.22	0.00	97.22
A61	30.0	97.20	0.00	97.20
A61	40.0	97.19	0.00	97.19
A61	50.0	97.18	0.00	97.18
A61	60.0	97.17	0.00	97.17
A61	70.0	97.12	0.00	97.12
A61	80.0	97.12	0.00	97.12
A61	90.0	96.84	0.00	96.84
A61	100.0	96.21	0.00	96.21
A62	1.5	118.46	17.11	135.57
A62	5.0	110.71	1.07	111.78
A62	10.0	100.69	0.02	100.71
A62	20.0	97.31	0.00	97.31
A63	1.5	120.04	0.78	120.82
A63	5.0	116.29	0.00	116.29
A63	10.0	102.13	0.00	102.13
A77	1.5	99.21	0.00	99.21
A77	5.0	98.44	0.51	98.95
A77	10.0	99.10	0.00	99.10
A77	20.0	97.58	0.00	97.58
A77	30.0	95.80	0.35	96.15

**Annual NO2 Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A04	1.5	25.32	0.05	25.36
A04	5.0	25.46	0.04	25.50
A04	10.0	23.66	0.02	23.68
A04	20.0	20.47	0.01	20.47
A04	30.0	18.75	0.00	18.75
A05	1.5	25.73	0.06	25.79
A05	5.0	25.88	0.04	25.93
A05	10.0	23.88	0.02	23.91
A05	20.0	20.52	0.01	20.52
A05	30.0	18.81	0.00	18.81
A06	1.5	26.71	0.06	26.77
A06	5.0	26.66	0.05	26.71
A06	10.0	24.10	0.02	24.13
A06	20.0	20.71	0.01	20.71
A06	30.0	18.91	0.00	18.91
A07	1.5	27.49	0.06	27.55
A07	5.0	27.36	0.05	27.41
A07	10.0	24.33	0.02	24.36
A07	20.0	20.85	0.01	20.86
A07	30.0	18.97	0.00	18.98
A08	1.5	26.21	0.07	26.27
A08	5.0	25.32	0.06	25.38
A08	10.0	23.43	0.04	23.47
A08	20.0	20.70	0.01	20.71
A08	30.0	18.99	0.00	19.00
A26	1.5	24.67	1.53	26.20
A26	5.0	22.72	0.46	23.17
A26	10.0	21.48	0.02	21.49
A26	20.0	19.96	0.00	19.96
A26	30.0	18.70	0.00	18.70
A61	1.5	22.92	3.40	26.32
A61	5.0	22.06	2.79	24.85
A61	10.0	20.84	1.16	21.99
A61	20.0	19.40	0.19	19.59
A61	30.0	18.73	0.07	18.79
A61	40.0	18.38	0.03	18.41
A61	50.0	18.16	0.02	18.18
A61	60.0	18.02	0.01	18.03
A61	70.0	17.91	0.01	17.92
A61	80.0	17.80	0.00	17.80
A61	90.0	17.66	0.00	17.67
A61	100.0	17.53	0.00	17.54
A62	1.5	26.82	6.86	33.69
A62	5.0	24.65	2.31	26.96
A62	10.0	21.46	0.46	21.92
A62	20.0	19.33	0.08	19.41
A63	1.5	24.13	0.57	24.70
A63	5.0	23.19	0.42	23.62
A63	10.0	21.38	0.21	21.60
A77	1.5	19.45	0.76	20.20
A77	5.0	19.64	0.24	19.88
A77	10.0	19.39	0.10	19.48
A77	20.0	17.77	0.06	17.82
A77	30.0	17.22	0.03	17.25

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**19th Highest Hourly NO2 Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A77	40.0	95.81	0.00	95.81
A77	50.0	95.71	0.00	95.71
A77	60.0	93.53	0.00	93.53
A77	70.0	93.31	0.00	93.31
A77	80.0	93.10	0.00	93.10
A77	90.0	92.93	0.00	92.93
A78	10.0	97.54	0.00	97.54
A78	20.0	96.35	0.00	96.35
A78	30.0	95.10	0.28	95.38
A78	40.0	94.24	0.00	94.24
A78	50.0	93.97	0.00	93.97
A78	60.0	93.74	0.00	93.74
A78	70.0	93.49	0.00	93.49
A78	80.0	93.26	0.00	93.26
A78	90.0	93.05	0.00	93.05
A85	1.5	56.30	80.37	136.67
A85	5.0	72.36	42.29	114.66
A85	10.0	102.78	0.13	102.91
A85	20.0	99.36	0.15	99.51
A85	30.0	97.53	0.02	97.55
A85	40.0	95.76	0.00	95.76
A85	50.0	94.61	0.00	94.61
A85	60.0	93.98	0.00	93.98
A86	1.5	105.63	1.22	106.85
A86	5.0	104.27	1.00	105.27
A86	10.0	102.35	0.05	102.39
A86	20.0	98.48	0.01	98.48
A86	30.0	96.02	0.00	96.02
A86	40.0	94.93	0.00	94.93
A86	50.0	94.40	0.00	94.40
A86	60.0	94.08	0.00	94.08
A86	70.0	93.49	0.00	93.49
A87	1.5	111.72	17.54	129.25
A87	5.0	98.48	14.69	113.17
A87	10.0	102.66	0.53	103.19
A87	20.0	99.00	0.16	99.16
A87	30.0	96.93	0.00	96.93
A88	1.5	105.04	0.09	105.13
A88	5.0	104.18	0.07	104.25
A88	10.0	102.00	0.04	102.04
A88	20.0	98.08	0.00	98.09
A88	30.0	96.21	0.00	96.21
A88	40.0	95.08	0.00	95.08
A88	50.0	94.24	0.00	94.24
A88	60.0	93.96	0.00	93.96
A93	1.5	120.79	1.92	122.70
A93	5.0	116.28	1.78	118.06
A93	10.0	105.01	0.72	105.72
A93	20.0	98.99	0.54	99.52
A93	30.0	96.47	0.30	96.77
A93	40.0	95.45	0.00	95.45
A93	50.0	94.89	0.00	94.89
A93	60.0	94.18	0.00	94.19
A93	70.0	93.59	0.00	93.59

**Annual NO2 Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A77	40.0	16.93	0.01	16.95
A77	50.0	16.67	0.01	16.68
A77	60.0	16.41	0.01	16.42
A77	70.0	16.18	0.01	16.19
A77	80.0	16.00	0.01	16.00
A77	90.0	15.85	0.00	15.86
A78	10.0	19.16	0.11	19.27
A78	20.0	17.68	0.06	17.74
A78	30.0	17.17	0.03	17.21
A78	40.0	16.89	0.02	16.90
A78	50.0	16.63	0.01	16.64
A78	60.0	16.39	0.01	16.40
A78	70.0	16.17	0.01	16.18
A78	80.0	15.99	0.01	15.99
A78	90.0	15.85	0.01	15.85
A85	1.5	27.53	6.65	34.17
A85	5.0	23.98	2.85	26.83
A85	10.0	21.99	0.62	22.61
A85	20.0	20.30	0.11	20.42
A85	30.0	19.38	0.04	19.42
A85	40.0	18.77	0.03	18.79
A85	50.0	18.33	0.02	18.35
A85	60.0	18.02	0.02	18.04
A86	1.5	23.88	1.12	25.00
A86	5.0	23.41	0.94	24.35
A86	10.0	22.29	0.47	22.76
A86	20.0	20.39	0.11	20.50
A86	30.0	19.35	0.05	19.40
A86	40.0	18.73	0.04	18.76
A86	50.0	18.30	0.03	18.33
A86	60.0	18.00	0.02	18.02
A86	70.0	17.79	0.02	17.80
A87	1.5	24.16	3.38	27.54
A87	5.0	23.08	2.11	25.19
A87	10.0	21.68	0.62	22.30
A87	20.0	20.18	0.09	20.27
A87	30.0	19.28	0.04	19.32
A88	1.5	23.06	0.37	23.43
A88	5.0	22.44	0.28	22.72
A88	10.0	21.35	0.13	21.48
A88	20.0	19.94	0.04	19.98
A88	30.0	19.06	0.02	19.08
A88	40.0	18.48	0.01	18.49
A88	50.0	18.09	0.01	18.10
A88	60.0	17.82	0.01	17.83
A93	1.5	27.16	3.05	30.21
A93	5.0	25.32	1.63	26.95
A93	10.0	22.45	0.59	23.04
A93	20.0	20.11	0.22	20.32
A93	30.0	19.17	0.09	19.26
A93	40.0	18.59	0.04	18.63
A93	50.0	18.19	0.02	18.21
A93	60.0	17.92	0.01	17.93
A93	70.0	17.72	0.01	17.73

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**19th Highest Hourly NO2 Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A93	80.0	93.23	0.00	93.23
A94	1.5	112.00	1.33	113.34
A94	5.0	109.83	0.43	110.26
A94	10.0	102.87	0.40	103.27
A94	20.0	99.89	0.01	99.90
A95	1.5	114.89	10.71	125.60
A95	5.0	109.24	6.12	115.36
A95	10.0	108.07	1.10	109.16
A95	20.0	98.32	0.18	98.49
A96	1.5	114.96	1.77	116.74
A96	5.0	114.10	0.31	114.41
A96	10.0	106.96	3.34	110.30

**Annual NO2 Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A93	80.0	17.58	0.01	17.59
A94	1.5	25.31	0.81	26.12
A94	5.0	23.10	0.55	23.65
A94	10.0	21.47	0.28	21.75
A94	20.0	20.12	0.18	20.30
A95	1.5	24.46	4.13	28.59
A95	5.0	23.79	1.79	25.58
A95	10.0	22.35	0.50	22.85
A95	20.0	20.22	0.16	20.39
A96	1.5	23.45	1.23	24.68
A96	5.0	22.98	0.98	23.96
A96	10.0	21.97	0.50	22.46

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**10th Highest Daily RSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A04	1.5	62.88	0.00	62.88
A04	5.0	62.93	0.00	62.93
A04	10.0	62.75	0.00	62.75
A04	20.0	62.44	0.00	62.44
A04	30.0	62.29	0.00	62.29
A05	1.5	62.96	0.00	62.96
A05	5.0	63.00	0.00	63.00
A05	10.0	62.78	0.00	62.78
A05	20.0	62.44	0.00	62.44
A05	30.0	62.30	0.00	62.30
A06	1.5	63.00	0.00	63.00
A06	5.0	62.98	0.00	62.98
A06	10.0	62.69	0.00	62.69
A06	20.0	62.44	0.00	62.44
A06	30.0	62.32	0.00	62.32
A07	1.5	63.03	0.00	63.03
A07	5.0	63.00	0.00	63.00
A07	10.0	62.68	0.00	62.68
A07	20.0	62.45	0.00	62.45
A07	30.0	62.34	0.00	62.34
A08	1.5	62.89	0.00	62.89
A08	5.0	62.79	0.00	62.79
A08	10.0	62.62	0.00	62.62
A08	20.0	62.45	0.00	62.45
A08	30.0	62.35	0.00	62.35
A26	1.5	62.65	0.01	62.67
A26	5.0	62.59	0.00	62.59
A26	10.0	62.53	0.00	62.53
A26	20.0	62.43	0.00	62.43
A26	30.0	62.34	0.00	62.34
A61	1.5	62.33	0.12	62.45
A61	5.0	62.31	0.11	62.42
A61	10.0	62.27	0.04	62.32
A61	20.0	62.21	0.01	62.22
A61	30.0	62.19	0.00	62.19
A61	40.0	62.17	0.00	62.17
A61	50.0	62.16	0.00	62.16
A61	60.0	62.16	0.00	62.16
A61	70.0	62.15	0.00	62.15
A61	80.0	62.15	0.00	62.15
A61	90.0	62.14	0.00	62.14
A61	100.0	62.14	0.00	62.14
A62	1.5	62.40	0.05	62.45
A62	5.0	62.33	0.02	62.35
A62	10.0	62.24	0.00	62.25
A62	20.0	62.20	0.00	62.20
A63	1.5	62.41	0.00	62.42
A63	5.0	62.37	0.00	62.37
A63	10.0	62.30	0.00	62.30
A77	1.5	63.17	0.01	63.18
A77	5.0	63.19	0.00	63.19
A77	10.0	63.19	0.00	63.19

**Annual RSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A04	1.5	26.68	0.00	26.68
A04	5.0	26.69	0.00	26.69
A04	10.0	26.62	0.00	26.62
A04	20.0	26.51	0.00	26.51
A04	30.0	26.45	0.00	26.45
A05	1.5	26.69	0.00	26.69
A05	5.0	26.70	0.00	26.70
A05	10.0	26.63	0.00	26.63
A05	20.0	26.51	0.00	26.51
A05	30.0	26.45	0.00	26.45
A06	1.5	26.73	0.00	26.73
A06	5.0	26.73	0.00	26.73
A06	10.0	26.64	0.00	26.64
A06	20.0	26.52	0.00	26.52
A06	30.0	26.46	0.00	26.46
A07	1.5	26.75	0.00	26.75
A07	5.0	26.75	0.00	26.75
A07	10.0	26.65	0.00	26.65
A07	20.0	26.52	0.00	26.52
A07	30.0	26.46	0.00	26.46
A08	1.5	26.71	0.00	26.71
A08	5.0	26.68	0.00	26.68
A08	10.0	26.61	0.00	26.61
A08	20.0	26.52	0.00	26.52
A08	30.0	26.46	0.00	26.46
A26	1.5	26.64	0.01	26.65
A26	5.0	26.58	0.00	26.59
A26	10.0	26.54	0.00	26.54
A26	20.0	26.49	0.00	26.49
A26	30.0	26.45	0.00	26.45
A61	1.5	26.57	0.04	26.61
A61	5.0	26.56	0.03	26.59
A61	10.0	26.53	0.02	26.55
A61	20.0	26.51	0.00	26.51
A61	30.0	26.49	0.00	26.49
A61	40.0	26.49	0.00	26.49
A61	50.0	26.48	0.00	26.48
A61	60.0	26.48	0.00	26.48
A61	70.0	26.47	0.00	26.47
A61	80.0	26.47	0.00	26.47
A61	90.0	26.47	0.00	26.47
A61	100.0	26.46	0.00	26.46
A62	1.5	26.64	0.11	26.75
A62	5.0	26.60	0.03	26.63
A62	10.0	26.54	0.01	26.55
A62	20.0	26.50	0.00	26.51
A63	1.5	26.59	0.00	26.60
A63	5.0	26.58	0.00	26.58
A63	10.0	26.54	0.00	26.55
A77	1.5	26.67	0.01	26.68
A77	5.0	26.68	0.00	26.68
A77	10.0	26.68	0.00	26.68

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**10th Highest Daily RSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A77	20.0	63.09	0.00	63.09
A77	30.0	63.07	0.00	63.07
A77	40.0	63.06	0.00	63.06
A77	50.0	63.06	0.00	63.06
A77	60.0	63.05	0.00	63.05
A77	70.0	63.04	0.00	63.04
A77	80.0	63.03	0.00	63.03
A77	90.0	63.03	0.00	63.03
A78	10.0	63.11	0.00	63.12
A78	20.0	63.09	0.00	63.09
A78	30.0	63.07	0.00	63.07
A78	40.0	63.06	0.00	63.06
A78	50.0	63.06	0.00	63.06
A78	60.0	63.05	0.00	63.05
A78	70.0	63.04	0.00	63.04
A78	80.0	63.03	0.00	63.03
A78	90.0	63.02	0.00	63.02
A85	1.5	61.84	0.15	61.98
A85	5.0	61.78	0.06	61.84
A85	10.0	61.74	0.01	61.75
A85	20.0	61.70	0.00	61.71
A85	30.0	61.68	0.00	61.68
A85	40.0	61.66	0.00	61.66
A85	50.0	61.65	0.00	61.65
A85	60.0	61.64	0.00	61.64
A86	1.5	61.77	0.01	61.78
A86	5.0	61.76	0.01	61.77
A86	10.0	61.75	0.00	61.75
A86	20.0	61.71	0.00	61.71
A86	30.0	61.68	0.00	61.68
A86	40.0	61.66	0.00	61.66
A86	50.0	61.64	0.00	61.64
A86	60.0	61.63	0.00	61.63
A86	70.0	61.63	0.00	61.63
A87	1.5	61.75	0.01	61.76
A87	5.0	61.74	0.01	61.75
A87	10.0	61.73	0.00	61.73
A87	20.0	61.70	0.00	61.70
A87	30.0	61.68	0.00	61.68
A88	1.5	61.79	0.00	61.79
A88	5.0	61.77	0.00	61.77
A88	10.0	61.74	0.00	61.74
A88	20.0	61.71	0.00	61.71
A88	30.0	61.68	0.00	61.68
A88	40.0	61.66	0.00	61.66
A88	50.0	61.65	0.00	61.65
A88	60.0	61.64	0.00	61.64
A93	1.5	61.79	0.04	61.83
A93	5.0	61.78	0.02	61.80
A93	10.0	61.76	0.01	61.76
A93	20.0	61.71	0.00	61.71
A93	30.0	61.67	0.00	61.67

**Annual RSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A77	20.0	26.62	0.00	26.62
A77	30.0	26.60	0.00	26.60
A77	40.0	26.60	0.00	26.60
A77	50.0	26.59	0.00	26.59
A77	60.0	26.58	0.00	26.58
A77	70.0	26.57	0.00	26.57
A77	80.0	26.56	0.00	26.56
A77	90.0	26.56	0.00	26.56
A78	10.0	26.66	0.00	26.66
A78	20.0	26.61	0.00	26.62
A78	30.0	26.60	0.00	26.60
A78	40.0	26.59	0.00	26.59
A78	50.0	26.59	0.00	26.59
A78	60.0	26.58	0.00	26.58
A78	70.0	26.57	0.00	26.57
A78	80.0	26.56	0.00	26.56
A78	90.0	26.56	0.00	26.56
A85	1.5	26.70	0.07	26.77
A85	5.0	26.64	0.03	26.67
A85	10.0	26.60	0.01	26.61
A85	20.0	26.57	0.00	26.57
A85	30.0	26.55	0.00	26.55
A85	40.0	26.53	0.00	26.53
A85	50.0	26.52	0.00	26.52
A85	60.0	26.51	0.00	26.51
A86	1.5	26.64	0.01	26.65
A86	5.0	26.63	0.01	26.64
A86	10.0	26.61	0.00	26.61
A86	20.0	26.57	0.00	26.57
A86	30.0	26.55	0.00	26.55
A86	40.0	26.53	0.00	26.53
A86	50.0	26.51	0.00	26.51
A86	60.0	26.50	0.00	26.50
A86	70.0	26.50	0.00	26.50
A87	1.5	26.64	0.04	26.68
A87	5.0	26.63	0.02	26.65
A87	10.0	26.60	0.01	26.61
A87	20.0	26.57	0.00	26.57
A87	30.0	26.55	0.00	26.55
A88	1.5	26.63	0.00	26.63
A88	5.0	26.62	0.00	26.62
A88	10.0	26.60	0.00	26.60
A88	20.0	26.56	0.00	26.57
A88	30.0	26.54	0.00	26.54
A88	40.0	26.52	0.00	26.52
A88	50.0	26.51	0.00	26.51
A88	60.0	26.50	0.00	26.50
A93	1.5	26.70	0.05	26.74
A93	5.0	26.67	0.02	26.69
A93	10.0	26.62	0.01	26.62
A93	20.0	26.57	0.00	26.57
A93	30.0	26.54	0.00	26.54

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**10th Highest Daily RSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A93	40.0	61.65	0.00	61.65
A93	50.0	61.63	0.00	61.63
A93	60.0	61.63	0.00	61.63
A93	70.0	61.62	0.00	61.62
A93	80.0	61.62	0.00	61.62
A94	1.5	61.86	0.01	61.87
A94	5.0	61.79	0.01	61.80
A94	10.0	61.74	0.00	61.75
A94	20.0	61.70	0.00	61.70
A95	1.5	61.78	0.02	61.80
A95	5.0	61.77	0.01	61.78
A95	10.0	61.76	0.00	61.76
A95	20.0	61.71	0.00	61.71
A96	1.5	61.78	0.01	61.79
A96	5.0	61.77	0.01	61.78
A96	10.0	61.76	0.01	61.76

**Annual RSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A93	40.0	26.52	0.00	26.52
A93	50.0	26.51	0.00	26.51
A93	60.0	26.50	0.00	26.50
A93	70.0	26.49	0.00	26.49
A93	80.0	26.49	0.00	26.49
A94	1.5	26.67	0.01	26.68
A94	5.0	26.63	0.00	26.64
A94	10.0	26.60	0.00	26.61
A94	20.0	26.57	0.00	26.57
A95	1.5	26.66	0.07	26.72
A95	5.0	26.65	0.03	26.67
A95	10.0	26.62	0.01	26.62
A95	20.0	26.57	0.00	26.57
A96	1.5	26.65	0.01	26.66
A96	5.0	26.64	0.01	26.65
A96	10.0	26.62	0.01	26.62

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**19th Highest Daily FSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A04	1.5	30.57	0.00	30.57
A04	5.0	30.59	0.00	30.59
A04	10.0	30.52	0.00	30.52
A04	20.0	30.39	0.00	30.39
A04	30.0	30.32	0.00	30.32
A05	1.5	30.62	0.00	30.62
A05	5.0	30.65	0.00	30.65
A05	10.0	30.56	0.00	30.56
A05	20.0	30.40	0.00	30.40
A05	30.0	30.33	0.00	30.33
A06	1.5	30.70	0.00	30.70
A06	5.0	30.71	0.00	30.71
A06	10.0	30.57	0.00	30.57
A06	20.0	30.41	0.00	30.41
A06	30.0	30.34	0.00	30.34
A07	1.5	30.78	0.00	30.78
A07	5.0	30.78	0.00	30.78
A07	10.0	30.59	0.00	30.59
A07	20.0	30.42	0.00	30.42
A07	30.0	30.34	0.00	30.34
A08	1.5	30.67	0.00	30.67
A08	5.0	30.63	0.00	30.63
A08	10.0	30.54	0.00	30.54
A08	20.0	30.42	0.00	30.42
A08	30.0	30.34	0.00	30.34
A26	1.5	30.52	0.02	30.55
A26	5.0	30.45	0.01	30.46
A26	10.0	30.41	0.00	30.41
A26	20.0	30.36	0.00	30.36
A26	30.0	30.32	0.00	30.32
A61	1.5	32.88	0.06	32.94
A61	5.0	32.86	0.05	32.91
A61	10.0	32.82	0.02	32.85
A61	20.0	32.78	0.00	32.78
A61	30.0	32.76	0.00	32.76
A61	40.0	32.75	0.00	32.75
A61	50.0	32.74	0.00	32.74
A61	60.0	32.73	0.00	32.73
A61	70.0	32.73	0.00	32.73
A61	80.0	32.73	0.00	32.73
A61	90.0	32.72	0.00	32.72
A61	100.0	32.72	0.00	32.72
A62	1.5	32.98	0.15	33.13
A62	5.0	32.93	0.05	32.98
A62	10.0	32.84	0.01	32.85
A62	20.0	32.78	0.00	32.78
A63	1.5	32.93	0.00	32.93
A63	5.0	32.90	0.00	32.90
A63	10.0	32.85	0.00	32.85
A77	1.5	32.84	0.01	32.85
A77	5.0	32.86	0.00	32.86
A77	10.0	32.85	0.00	32.85
A77	20.0	32.77	0.00	32.77
A77	30.0	32.74	0.00	32.74

**Annual FSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A04	1.5	14.71	0.00	14.71
A04	5.0	14.72	0.00	14.72
A04	10.0	14.66	0.00	14.66
A04	20.0	14.55	0.00	14.55
A04	30.0	14.50	0.00	14.50
A05	1.5	14.72	0.00	14.72
A05	5.0	14.73	0.00	14.73
A05	10.0	14.66	0.00	14.66
A05	20.0	14.55	0.00	14.55
A05	30.0	14.50	0.00	14.50
A06	1.5	14.75	0.00	14.75
A06	5.0	14.75	0.00	14.75
A06	10.0	14.67	0.00	14.67
A06	20.0	14.56	0.00	14.56
A06	30.0	14.50	0.00	14.50
A07	1.5	14.78	0.00	14.78
A07	5.0	14.77	0.00	14.77
A07	10.0	14.68	0.00	14.68
A07	20.0	14.56	0.00	14.56
A07	30.0	14.50	0.00	14.50
A08	1.5	14.74	0.00	14.74
A08	5.0	14.71	0.00	14.71
A08	10.0	14.65	0.00	14.65
A08	20.0	14.56	0.00	14.56
A08	30.0	14.51	0.00	14.51
A26	1.5	14.67	0.01	14.69
A26	5.0	14.62	0.00	14.62
A26	10.0	14.58	0.00	14.58
A26	20.0	14.53	0.00	14.53
A26	30.0	14.49	0.00	14.49
A61	1.5	14.61	0.04	14.65
A61	5.0	14.59	0.03	14.63
A61	10.0	14.57	0.01	14.59
A61	20.0	14.55	0.00	14.55
A61	30.0	14.54	0.00	14.54
A61	40.0	14.53	0.00	14.53
A61	50.0	14.53	0.00	14.53
A61	60.0	14.52	0.00	14.52
A61	70.0	14.52	0.00	14.52
A61	80.0	14.52	0.00	14.52
A61	90.0	14.51	0.00	14.51
A61	100.0	14.51	0.00	14.51
A62	1.5	14.67	0.10	14.77
A62	5.0	14.64	0.03	14.67
A62	10.0	14.59	0.00	14.59
A62	20.0	14.55	0.00	14.55
A63	1.5	14.63	0.00	14.64
A63	5.0	14.62	0.00	14.62
A63	10.0	14.59	0.00	14.59
A77	1.5	14.63	0.01	14.63
A77	5.0	14.63	0.00	14.64
A77	10.0	14.63	0.00	14.63
A77	20.0	14.58	0.00	14.58
A77	30.0	14.56	0.00	14.56

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**19th Highest Daily FSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A77	40.0	32.73	0.00	32.73
A77	50.0	32.72	0.00	32.72
A77	60.0	32.71	0.00	32.71
A77	70.0	32.70	0.00	32.70
A77	80.0	32.69	0.00	32.69
A77	90.0	32.68	0.00	32.68
A78	10.0	32.79	0.00	32.79
A78	20.0	32.75	0.00	32.75
A78	30.0	32.74	0.00	32.74
A78	40.0	32.73	0.00	32.73
A78	50.0	32.72	0.00	32.72
A78	60.0	32.71	0.00	32.71
A78	70.0	32.70	0.00	32.70
A78	80.0	32.69	0.00	32.69
A78	90.0	32.68	0.00	32.68
A85	1.5	32.48	0.07	32.55
A85	5.0	32.40	0.04	32.43
A85	10.0	32.36	0.01	32.37
A85	20.0	32.32	0.00	32.32
A85	30.0	32.29	0.00	32.29
A85	40.0	32.27	0.00	32.27
A85	50.0	32.25	0.00	32.25
A85	60.0	32.23	0.00	32.23
A86	1.5	32.39	0.01	32.40
A86	5.0	32.38	0.01	32.39
A86	10.0	32.35	0.00	32.36
A86	20.0	32.31	0.00	32.32
A86	30.0	32.29	0.00	32.29
A86	40.0	32.26	0.00	32.26
A86	50.0	32.25	0.00	32.25
A86	60.0	32.23	0.00	32.23
A86	70.0	32.22	0.00	32.22
A87	1.5	32.41	0.07	32.49
A87	5.0	32.38	0.04	32.42
A87	10.0	32.35	0.01	32.35
A87	20.0	32.32	0.00	32.32
A87	30.0	32.29	0.00	32.29
A88	1.5	32.39	0.00	32.39
A88	5.0	32.37	0.00	32.37
A88	10.0	32.35	0.00	32.35
A88	20.0	32.30	0.00	32.30
A88	30.0	32.27	0.00	32.27
A88	40.0	32.25	0.00	32.25
A88	50.0	32.23	0.00	32.23
A88	60.0	32.22	0.00	32.22
A93	1.5	32.44	0.04	32.49
A93	5.0	32.41	0.03	32.44
A93	10.0	32.36	0.01	32.37
A93	20.0	32.31	0.00	32.31
A93	30.0	32.28	0.00	32.28
A93	40.0	32.26	0.00	32.26
A93	50.0	32.24	0.00	32.24
A93	60.0	32.23	0.00	32.23
A93	70.0	32.22	0.00	32.22

**Annual FSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A77	40.0	14.55	0.00	14.55
A77	50.0	14.55	0.00	14.55
A77	60.0	14.54	0.00	14.54
A77	70.0	14.53	0.00	14.53
A77	80.0	14.52	0.00	14.52
A77	90.0	14.52	0.00	14.52
A78	10.0	14.61	0.00	14.62
A78	20.0	14.57	0.00	14.57
A78	30.0	14.56	0.00	14.56
A78	40.0	14.55	0.00	14.55
A78	50.0	14.54	0.00	14.54
A78	60.0	14.54	0.00	14.54
A78	70.0	14.53	0.00	14.53
A78	80.0	14.52	0.00	14.52
A78	90.0	14.52	0.00	14.52
A85	1.5	14.63	0.07	14.69
A85	5.0	14.57	0.03	14.60
A85	10.0	14.54	0.01	14.55
A85	20.0	14.51	0.00	14.51
A85	30.0	14.49	0.00	14.49
A85	40.0	14.47	0.00	14.47
A85	50.0	14.46	0.00	14.46
A85	60.0	14.45	0.00	14.45
A86	1.5	14.57	0.01	14.58
A86	5.0	14.56	0.01	14.57
A86	10.0	14.54	0.00	14.55
A86	20.0	14.51	0.00	14.51
A86	30.0	14.49	0.00	14.49
A86	40.0	14.47	0.00	14.47
A86	50.0	14.46	0.00	14.46
A86	60.0	14.45	0.00	14.45
A86	70.0	14.44	0.00	14.44
A87	1.5	14.58	0.04	14.61
A87	5.0	14.56	0.02	14.58
A87	10.0	14.54	0.00	14.54
A87	20.0	14.51	0.00	14.51
A87	30.0	14.49	0.00	14.49
A88	1.5	14.56	0.00	14.56
A88	5.0	14.55	0.00	14.55
A88	10.0	14.53	0.00	14.53
A88	20.0	14.50	0.00	14.50
A88	30.0	14.48	0.00	14.48
A88	40.0	14.46	0.00	14.46
A88	50.0	14.45	0.00	14.45
A88	60.0	14.44	0.00	14.44
A93	1.5	14.63	0.04	14.67
A93	5.0	14.60	0.02	14.62
A93	10.0	14.55	0.01	14.56
A93	20.0	14.51	0.00	14.51
A93	30.0	14.48	0.00	14.48
A93	40.0	14.46	0.00	14.46
A93	50.0	14.45	0.00	14.45
A93	60.0	14.44	0.00	14.44
A93	70.0	14.44	0.00	14.44



**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**19th Highest Daily FSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A93	80.0	32.21	0.00	32.21
A94	1.5	32.39	0.00	32.39
A94	5.0	32.36	0.00	32.36
A94	10.0	32.34	0.00	32.34
A94	20.0	32.31	0.00	32.31
A95	1.5	32.41	0.10	32.51
A95	5.0	32.39	0.03	32.43
A95	10.0	32.36	0.01	32.36
A95	20.0	32.31	0.00	32.31
A96	1.5	32.39	0.01	32.40
A96	5.0	32.38	0.01	32.39
A96	10.0	32.36	0.00	32.36

**Annual FSP Concentration with Bus Terminus (µg/m3)**

Receptor ID	Height (mAG)	All Sources and Background	Bus Terminus	Total
A93	80.0	14.43	0.00	14.43
A94	1.5	14.60	0.01	14.61
A94	5.0	14.57	0.00	14.57
A94	10.0	14.54	0.00	14.54
A94	20.0	14.51	0.00	14.51
A95	1.5	14.59	0.06	14.65
A95	5.0	14.58	0.03	14.60
A95	10.0	14.55	0.01	14.56
A95	20.0	14.51	0.00	14.51
A96	1.5	14.58	0.01	14.59
A96	5.0	14.57	0.01	14.58
A96	10.0	14.55	0.01	14.56

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

**Hin Keng Bus Terminus Contribution**

Receptor ID	Height (mAG)	Highest Hourly NO2 Concentration (µg/m3)	Annual NO2 Concentration (µg/m3)	Highest Daily RSP Concentration (µg/m3)	Annual RSP Concentration (µg/m3)	Highest Daily FSP Concentration (µg/m3)	Annual FSP Concentration (µg/m3)
A61	1.5	91.9	3.40	0.15	0.04	0.14	0.04
A61	5	85.3	2.79	0.13	0.03	0.12	0.03
A61	10	38.8	1.16	0.05	0.02	0.05	0.01
A61	20	7.0	0.19	0.01	0.00	0.01	0.00
A61	30	3.2	0.07	0.01	0.00	0.01	0.00
A61	40	1.9	0.03	0.00	0.00	0.00	0.00
A61	50	1.2	0.02	0.00	0.00	0.00	0.00
A61	60	0.6	0.01	0.00	0.00	0.00	0.00
A61	70	0.3	0.01	0.00	0.00	0.00	0.00
A61	80	0.2	0.00	0.00	0.00	0.00	0.00
A61	90	0.2	0.00	0.00	0.00	0.00	0.00
A61	100	0.2	0.00	0.00	0.00	0.00	0.00
A62	1.5	133.5	6.86	0.30	0.11	0.27	0.10
A62	5	79.4	2.31	0.11	0.03	0.10	0.03
A62	10	12.3	0.46	0.03	0.01	0.03	0.00
A62	20	4.0	0.08	0.01	0.00	0.01	0.00
A63	1.5	105.2	0.57	0.06	0.00	0.05	0.00
A63	5	88.5	0.42	0.04	0.00	0.04	0.00
A63	10	30.4	0.21	0.02	0.00	0.01	0.00

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Determination of Contribution for Minibus Terminus

The NO<sub>2</sub>, RSP & FSP contribution from Hin Keng Bus Terminus to nearby concerned ASRs (A61, A62 and A63) are adopted for prediction at other concerned ASRs close to a minibus terminus, as Hin Keng Bus Terminus serves 5 routes and has the highest traffic. Referring to the assessment results of these three ASRs, the highest hourly NO<sub>2</sub> concentration contributed from Hin Keng Bus Terminus would be 133.5 ug/m<sup>3</sup> which occurs at 05:00-06:00 hour, dominantly due to the startup emission with longest soak time for the buses.

An adjustment factor taking into account the frequency of minibuses of the terminus is applied in the calculation for short-term averages. For long-term averages, the annual contribution in NO<sub>2</sub>/ RSP /FSP from Hin Keng Bus Terminus is added directly to the respective results of those ASRs

For hourly NO<sub>2</sub>, the adjustment factor is the ratio of minibus frequency at 05:00-06:00 hour at respective terminus to the bus frequency at the same hour at Hin Keng Bus Terminus. For daily RSP and FSP, the adjustment factor is the ratio of daily minibus frequency at respective terminus to daily bus frequency at Hin Keng Bus Terminus.

Detailed calculation of the adjustment factor and its application to the other bus terminus are presented in the tables below.

#### For NO<sub>2</sub>

PLB/FBDD Nox Emission Ratio	1.00
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1. NOx emission of FBDD is adopted for PLB as a conservative approach.

Bus Terminus	Concerned ASRs	Bus/ Minibus Frequency at 05:00-06:00 <sup>1</sup>	Adjustment Factor	Maximum Hourly NO <sub>2</sub> Contribution (µg/m <sup>3</sup> ) <sup>3</sup>	Annual NO <sub>2</sub> Contribution (µg/m <sup>3</sup> ) <sup>3</sup>
Hin Keng Bus Terminus <sup>2</sup>	A61, A62, A63	11	--	133.51	6.86
Hin Tin Village Minibus Terminus	A65	5	0.45	60.69	6.86
Julimount Garden Minibus Terminus	A70, A71	2	0.18	24.27	6.86
Worldwide Gardens Minibus Terminus	A74, A75	3	0.27	36.41	6.86
Boardcast Drive Minibus Terminus	A01, A02, A03, A27	2	0.18	24.27	6.86

Remarks:

1. The maximum contribution (highest hourly NO<sub>2</sub> Concentration of A62 at 1.5m) occurs at 05:00 - 06:00.

The soak time of the buses at this hour is 720min based on on-site observations.

Since no minibuses are scheduled at 05:00-06:00 at 4 minibuses, no. of parking capacity of the terminus with 720min soak time is adopted for the worst case assumption.

2. The components are taken from A62 at 1.5m, which is the highest among A61-A63 at all heights.

3. For long-term cumulative air quality impact, the maximum annual contribution by Hin Keung Bus Terminus is directly adopted for annual prediction

#### For RSP, FSP

Bus terminus	Daily Bus/ Minibus Frequency <sup>1,2</sup>	Adjustment Factor <sup>4</sup>	Maximum Daily RSP Contribution (µg/m <sup>3</sup> ) <sup>5</sup>	Annual RSP Contribution (µg/m <sup>3</sup> ) <sup>6</sup>	Maximum Daily FSP Contribution (µg/m <sup>3</sup> ) <sup>5</sup>	Annual FSP Contribution (µg/m <sup>3</sup> ) <sup>6</sup>
Hin Keng Bus Terminus <sup>3</sup>	424	--	0.30	0.11	0.27	0.10
Hin Tin Village Minibus Terminus	602	1.42	0.42	0.11	0.39	0.10
Julimount Garden Minibus Terminus	249	0.59	0.17	0.11	0.16	0.10
Worldwide Gardens Minibus Terminus	105	0.25	0.07	0.11	0.07	0.10
Boardcast Drive Minibus Terminus	156	0.37	0.11	0.11	0.10	0.10

Remarks:

1. Daily bus frequency is adopted for daily averages of RSP and FSP.

2. The daily frequency is calculated by taking the highest daily frequency across Monday to Sunday of each route serving the corresponding bus terminus and summed together.

3. The components are taken from A62 at 1.5m, which is the highest among A61-A63 at all heights.

4. The factor is calculated by the ratio of daily bus frequency at respective bus terminus to daily bus frequency at Hin Hin Keng Bus Terminus.

5. The contribution by other bus terminus is estimated by applying the adjustment factor to the highest contribution of Hin Keng Bus Terminus.

6. For long-term cumulative air quality impact, the maximum annual contribution by Hin Keung Bus Terminus is directly adopted for annual prediction

**Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus**

Hin Tin Village Minibus Terminus

NO2 Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Hourly NO <sub>2</sub> Concentration			Annual NO <sub>2</sub> Concentration		
		19th Highest Hourly NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A65	1.5	101.93	60.69	162.61	21.83	6.86	28.69
A65	5.0	100.97	60.69	161.66	20.76	6.86	27.62
A65	10.0	99.51	60.69	160.20	19.88	6.86	26.74

RSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily RSP Concentration			Annual RSP Concentration		
		10th Highest Daily RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A65	1.5	62.34	0.42	62.76	26.60	0.11	26.70
A65	5.0	62.29	0.42	62.71	26.56	0.11	26.67
A65	10.0	62.25	0.42	62.67	26.54	0.11	26.64

FSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily FSP Concentration			Annual FSP Concentration		
		19th Highest Daily FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A65	1.5	32.90	0.39	33.29	14.63	0.10	14.73
A65	5.0	32.87	0.39	33.26	14.60	0.10	14.70
A65	10.0	32.84	0.39	33.23	14.58	0.10	14.68

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

Julimount Garden Minibus Terminus

NO2 Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Hourly NO <sub>2</sub> Concentration			Annual NO <sub>2</sub> Concentration		
		19th Highest Hourly NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A70	1.5	102.00	24.27	126.27	22.88	6.86	29.74
A70	5.0	101.37	24.27	125.65	21.51	6.86	28.37
A70	10.0	100.61	24.27	124.88	20.67	6.86	27.53
A70	20.0	100.56	24.27	124.84	20.16	6.86	27.02
A70	30.0	100.22	24.27	124.50	19.80	6.86	26.66
A70	40.0	98.86	24.27	123.13	19.30	6.86	26.16
A70	50.0	98.07	24.27	122.34	18.76	6.86	25.62
A70	60.0	96.99	24.27	121.26	18.27	6.86	25.12
A70	70.0	96.35	24.27	120.63	17.90	6.86	24.76
A70	80.0	96.24	24.27	120.52	17.63	6.86	24.49
A71	1.5	102.54	24.27	126.82	22.21	6.86	29.06
A71	5.0	102.54	24.27	126.82	22.13	6.86	28.99
A71	10.0	102.54	24.27	126.82	21.94	6.86	28.80
A71	20.0	101.96	24.27	126.23	21.58	6.86	28.44
A71	30.0	101.28	24.27	125.55	21.07	6.86	27.93
A71	40.0	99.94	24.27	124.22	20.02	6.86	26.88
A71	50.0	98.19	24.27	122.46	19.05	6.86	25.91
A71	60.0	97.85	24.27	122.12	18.36	6.86	25.22
A71	70.0	96.38	24.27	120.65	17.94	6.86	24.80
A71	80.0	96.26	24.27	120.53	17.65	6.86	24.51

RSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily RSP Concentration			Annual RSP Concentration		
		10th Highest Daily RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A70	1.5	62.32	0.17	62.50	26.63	0.11	26.74
A70	5.0	62.30	0.17	62.48	26.59	0.11	26.70
A70	10.0	62.28	0.17	62.45	26.57	0.11	26.68
A70	20.0	62.25	0.17	62.43	26.56	0.11	26.66
A70	30.0	62.23	0.17	62.41	26.55	0.11	26.65
A70	40.0	62.21	0.17	62.39	26.53	0.11	26.64
A70	50.0	62.20	0.17	62.37	26.51	0.11	26.61
A70	60.0	62.18	0.17	62.36	26.49	0.11	26.60
A70	70.0	62.17	0.17	62.35	26.48	0.11	26.58
A70	80.0	62.16	0.17	62.34	26.46	0.11	26.57
A71	1.5	62.35	0.17	62.52	26.64	0.11	26.75
A71	5.0	62.34	0.17	62.51	26.64	0.11	26.74
A71	10.0	62.33	0.17	62.50	26.63	0.11	26.74
A71	20.0	62.30	0.17	62.47	26.62	0.11	26.73
A71	30.0	62.28	0.17	62.45	26.61	0.11	26.71
A71	40.0	62.26	0.17	62.43	26.56	0.11	26.67
A71	50.0	62.23	0.17	62.41	26.52	0.11	26.63
A71	60.0	62.21	0.17	62.39	26.49	0.11	26.60
A71	70.0	62.20	0.17	62.37	26.48	0.11	26.58
A71	80.0	62.18	0.17	62.35	26.47	0.11	26.57

FSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily FSP Concentration			Annual FSP Concentration		
		19th Highest Daily FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A70	1.5	32.96	0.16	33.12	14.66	0.10	14.76
A70	5.0	32.91	0.16	33.07	14.63	0.10	14.73
A70	10.0	32.88	0.16	33.04	14.61	0.10	14.71
A70	20.0	32.85	0.16	33.02	14.60	0.10	14.70
A70	30.0	32.84	0.16	33.00	14.59	0.10	14.69
A70	40.0	32.81	0.16	32.98	14.57	0.10	14.67
A70	50.0	32.78	0.16	32.95	14.55	0.10	14.65
A70	60.0	32.76	0.16	32.92	14.54	0.10	14.63
A70	70.0	32.74	0.16	32.90	14.52	0.10	14.62
A70	80.0	32.73	0.16	32.89	14.51	0.10	14.61
A71	1.5	32.94	0.16	33.10	14.67	0.10	14.77
A71	5.0	32.94	0.16	33.10	14.67	0.10	14.77
A71	10.0	32.93	0.16	33.09	14.67	0.10	14.77
A71	20.0	32.91	0.16	33.07	14.66	0.10	14.76
A71	30.0	32.89	0.16	33.06	14.64	0.10	14.74
A71	40.0	32.85	0.16	33.01	14.60	0.10	14.70
A71	50.0	32.80	0.16	32.96	14.57	0.10	14.66
A71	60.0	32.76	0.16	32.93	14.54	0.10	14.64
A71	70.0	32.74	0.16	32.90	14.52	0.10	14.62
A71	80.0	32.73	0.16	32.89	14.51	0.10	14.61

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

Worldwide Gardens Minibus Terminus

NO2 Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Hourly NO <sub>2</sub> Concentration			Annual NO <sub>2</sub> Concentration		
		19th Highest Hourly NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A74	1.5	100.75	36.41	137.16	22.20	6.86	29.06
A74	5.0	98.52	36.41	134.93	20.03	6.86	26.89
A74	10.0	96.87	36.41	133.28	19.07	6.86	25.92
A74	20.0	96.32	36.41	132.73	18.61	6.86	25.47
A74	30.0	95.97	36.41	132.38	17.92	6.86	24.78
A74	40.0	94.82	36.41	131.23	17.17	6.86	24.03
A74	50.0	93.73	36.41	130.14	16.61	6.86	23.47
A74	60.0	93.30	36.41	129.72	16.23	6.86	23.09
A74	70.0	93.20	36.41	129.61	15.98	6.86	22.84
A74	80.0	92.28	36.41	128.70	15.82	6.86	22.68
A75	10.0	99.76	36.41	136.17	20.76	6.86	27.62
A75	20.0	97.79	36.41	134.20	19.92	6.86	26.78
A75	30.0	95.50	36.41	131.91	18.07	6.86	24.93
A75	40.0	93.52	36.41	129.93	17.01	6.86	23.87
A75	50.0	93.36	36.41	129.77	16.47	6.86	23.33
A75	60.0	92.06	36.41	128.48	16.14	6.86	23.00
A75	70.0	91.26	36.41	127.67	15.94	6.86	22.79

RSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily RSP Concentration			Annual RSP Concentration		
		10th Highest Daily RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A74	1.5	63.29	0.07	63.36	26.76	0.11	26.86
A74	5.0	63.21	0.07	63.29	26.71	0.11	26.81
A74	10.0	63.18	0.07	63.26	26.68	0.11	26.79
A74	20.0	63.17	0.07	63.24	26.67	0.11	26.77
A74	30.0	63.14	0.07	63.21	26.64	0.11	26.75
A74	40.0	63.10	0.07	63.17	26.61	0.11	26.72
A74	50.0	63.07	0.07	63.14	26.59	0.11	26.69
A74	60.0	63.05	0.07	63.12	26.57	0.11	26.68
A74	70.0	63.03	0.07	63.11	26.56	0.11	26.67
A74	80.0	63.03	0.07	63.10	26.56	0.11	26.66
A75	10.0	63.31	0.07	63.38	26.76	0.11	26.87
A75	20.0	63.26	0.07	63.34	26.73	0.11	26.83
A75	30.0	63.15	0.07	63.23	26.65	0.11	26.76
A75	40.0	63.09	0.07	63.16	26.61	0.11	26.71
A75	50.0	63.06	0.07	63.13	26.58	0.11	26.69
A75	60.0	63.04	0.07	63.11	26.57	0.11	26.68
A75	70.0	63.03	0.07	63.10	26.56	0.11	26.67

FSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily FSP Concentration			Annual FSP Concentration		
		19th Highest Daily FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A74	1.5	32.96	0.07	33.03	14.70	0.10	14.80
A74	5.0	32.89	0.07	32.96	14.65	0.10	14.75
A74	10.0	32.86	0.07	32.93	14.63	0.10	14.73
A74	20.0	32.84	0.07	32.91	14.62	0.10	14.72
A74	30.0	32.81	0.07	32.87	14.60	0.10	14.69
A74	40.0	32.76	0.07	32.83	14.57	0.10	14.67
A74	50.0	32.73	0.07	32.80	14.55	0.10	14.65
A74	60.0	32.71	0.07	32.78	14.53	0.10	14.63
A74	70.0	32.70	0.07	32.76	14.52	0.10	14.62
A74	80.0	32.69	0.07	32.76	14.52	0.10	14.62
A75	10.0	32.97	0.07	33.03	14.71	0.10	14.80
A75	20.0	32.93	0.07	33.00	14.68	0.10	14.77
A75	30.0	32.82	0.07	32.89	14.60	0.10	14.70
A75	40.0	32.76	0.07	32.82	14.56	0.10	14.66
A75	50.0	32.73	0.07	32.79	14.54	0.10	14.64
A75	60.0	32.71	0.07	32.78	14.53	0.10	14.63
A75	70.0	32.70	0.07	32.77	14.52	0.10	14.62

### Appendix 3.23 Sensitivity Test on Start Emission at Bus Terminus

#### Broadcast Drive Minibus Terminus

##### NO2 Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Hourly NO <sub>2</sub> Concentration			Annual NO <sub>2</sub> Concentration		
		19th Highest Hourly NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual NO <sub>2</sub> Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A01	1.5	122.51	24.27	146.79	25.98	6.86	32.84
A01	5.0	119.82	24.27	144.09	25.42	6.86	32.28
A01	10.0	115.40	24.27	139.68	23.73	6.86	30.59
A01	20.0	108.59	24.27	132.86	20.59	6.86	27.44
A01	30.0	103.65	24.27	127.93	18.73	6.86	25.59
A02	1.5	120.28	24.27	144.55	24.29	6.86	31.15
A02	5.0	120.08	24.27	144.36	23.76	6.86	30.62
A02	10.0	115.24	24.27	139.52	22.53	6.86	29.39
A02	20.0	109.69	24.27	133.96	20.30	6.86	27.16
A02	30.0	102.90	24.27	127.18	18.69	6.86	25.55
A03	1.5	121.71	24.27	145.99	24.19	6.86	31.04
A03	5.0	121.18	24.27	145.45	23.65	6.86	30.51
A03	10.0	115.81	24.27	140.09	22.38	6.86	29.24
A03	20.0	108.51	24.27	132.79	20.19	6.86	27.04
A03	30.0	101.59	24.27	125.86	18.68	6.86	25.54
A27	1.5	114.88	24.27	139.15	24.09	6.86	30.95
A27	5.0	113.07	24.27	137.35	22.73	6.86	29.59
A27	10.0	111.67	24.27	135.94	21.56	6.86	28.42
A27	20.0	109.88	24.27	134.15	19.92	6.86	26.77
A27	30.0	102.29	24.27	126.57	18.59	6.86	25.44

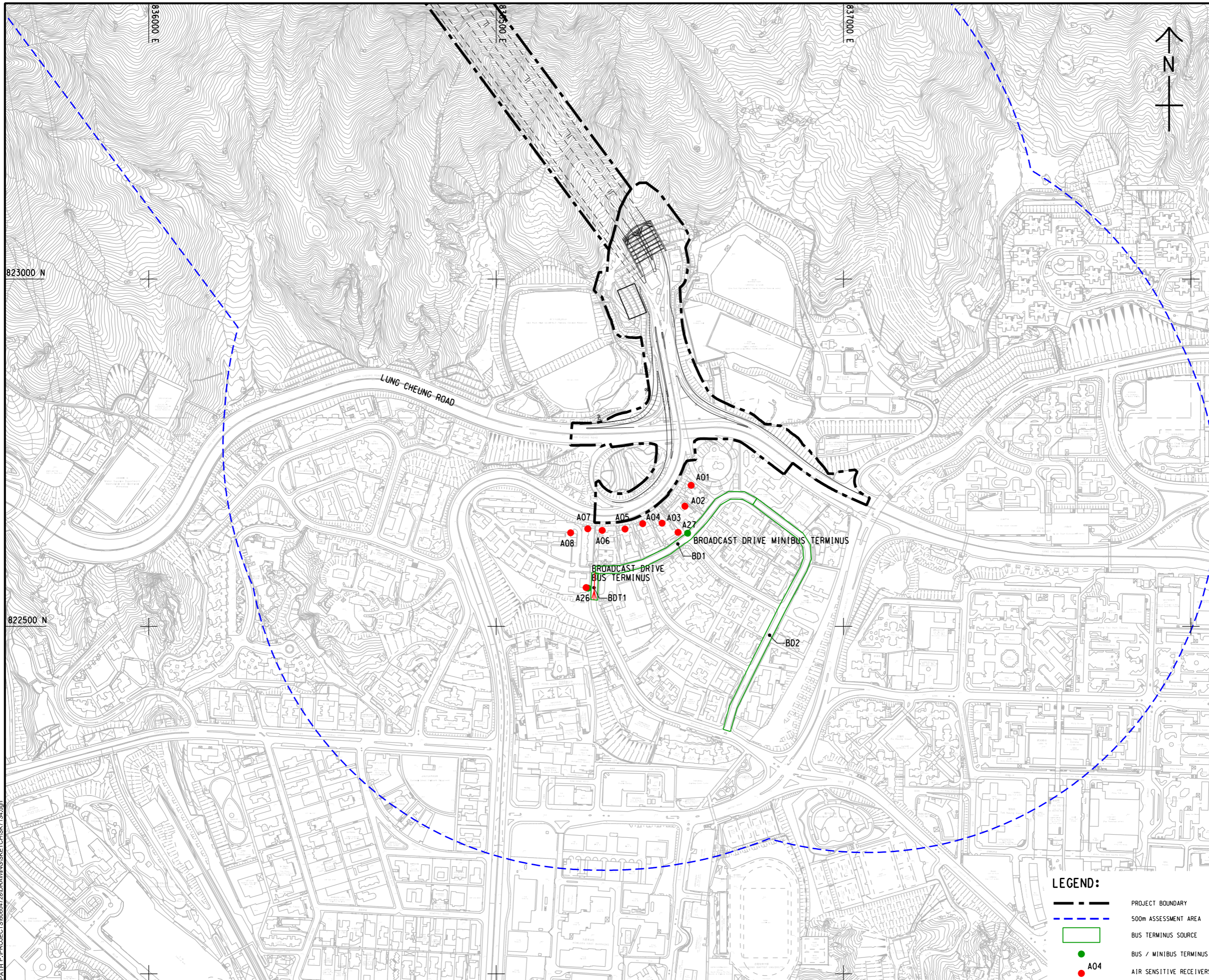
##### RSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily RSP Concentration			Annual RSP Concentration		
		10th Highest Daily RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual RSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A01	1.5	62.57	0.11	62.68	26.72	0.11	26.82
A01	5.0	62.54	0.11	62.65	26.70	0.11	26.80
A01	10.0	62.46	0.11	62.57	26.63	0.11	26.74
A01	20.0	62.30	0.11	62.41	26.52	0.11	26.62
A01	30.0	62.23	0.11	62.34	26.45	0.11	26.56
A02	1.5	62.53	0.11	62.64	26.65	0.11	26.75
A02	5.0	62.51	0.11	62.62	26.63	0.11	26.74
A02	10.0	62.45	0.11	62.56	26.59	0.11	26.69
A02	20.0	62.33	0.11	62.44	26.51	0.11	26.61
A02	30.0	62.25	0.11	62.36	26.45	0.11	26.55
A03	1.5	62.65	0.11	62.75	26.64	0.11	26.75
A03	5.0	62.62	0.11	62.73	26.62	0.11	26.73
A03	10.0	62.54	0.11	62.65	26.58	0.11	26.68
A03	20.0	62.38	0.11	62.49	26.50	0.11	26.61
A03	30.0	62.27	0.11	62.38	26.45	0.11	26.55
A27	1.5	62.51	0.11	62.61	26.63	0.11	26.74
A27	5.0	62.48	0.11	62.59	26.59	0.11	26.69
A27	10.0	62.44	0.11	62.55	26.55	0.11	26.65
A27	20.0	62.34	0.11	62.45	26.49	0.11	26.60
A27	30.0	62.27	0.11	62.37	26.44	0.11	26.55

##### FSP Concentration with Adjusted Terminus Contribution

Receptor ID	Height (mAG)	Daily FSP Concentration			Annual FSP Concentration		
		19th Highest Daily FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )	Annual FSP Concentration (All Other Sources and Background) (µg/m <sup>3</sup> )	Adjusted Terminus Contribution (µg/m <sup>3</sup> )	Total (µg/m <sup>3</sup> )
A01	1.5	30.54	0.10	30.64	14.74	0.10	14.84
A01	5.0	30.53	0.10	30.63	14.72	0.10	14.82
A01	10.0	30.48	0.10	30.58	14.67	0.10	14.76
A01	20.0	30.38	0.10	30.48	14.56	0.10	14.66
A01	30.0	30.31	0.10	30.41	14.50	0.10	14.60
A02	1.5	30.51	0.10	30.61	14.68	0.10	14.78
A02	5.0	30.49	0.10	30.59	14.66	0.10	14.76
A02	10.0	30.45	0.10	30.55	14.62	0.10	14.72
A02	20.0	30.37	0.10	30.47	14.55	0.10	14.65
A02	30.0	30.31	0.10	30.42	14.50	0.10	14.59
A03	1.5	30.51	0.10	30.61	14.67	0.10	14.77
A03	5.0	30.49	0.10	30.59	14.66	0.10	14.75
A03	10.0	30.45	0.10	30.55	14.62	0.10	14.71
A03	20.0	30.37	0.10	30.48	14.54	0.10	14.64
A03	30.0	30.32	0.10	30.42	14.50	0.10	14.59
A27	1.5	30.49	0.10	30.59	14.66	0.10	14.76
A27	5.0	30.45	0.10	30.55	14.62	0.10	14.72
A27	10.0	30.42	0.10	30.52	14.59	0.10	14.69
A27	20.0	30.36	0.10	30.46	14.53	0.10	14.63
A27	30.0	30.31	0.10	30.41	14.49	0.10	14.59

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 2022/2/11  
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 Plot File by: ZHLZ



**PROJECT**  
 項目  
**IMPROVEMENT OF  
 LION ROCK TUNNEL -  
 INVESTIGATION**

**CLIENT**  
 業主  
 **路政署  
 HIGHWAYS  
 DEPARTMENT**

**CONSULTANT**  
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**ISSUE/REVISION**  
 修訂

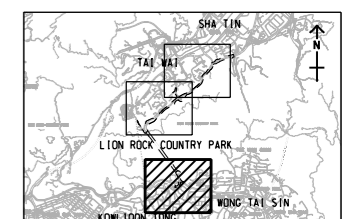
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**STATUS**  
 狀態

**SCALE**                      **DIMENSION UNIT**  
 比例尺                              單位

A3 1:5000                      METRES

**KEY PLAN**    A3 1:200000



**PROJECT NO.**                      **AGREEMENT NO.**  
 項目編號                              協議編號






60604728                              CE 48/2018(HY)

**SHEET TITLE**  
 圖則名稱

LOCATION OF BUS OR  
 MINIBUS TERMINUS ON  
 KOWLOON SIDE

**SHEET NUMBER**  
 圖則編號

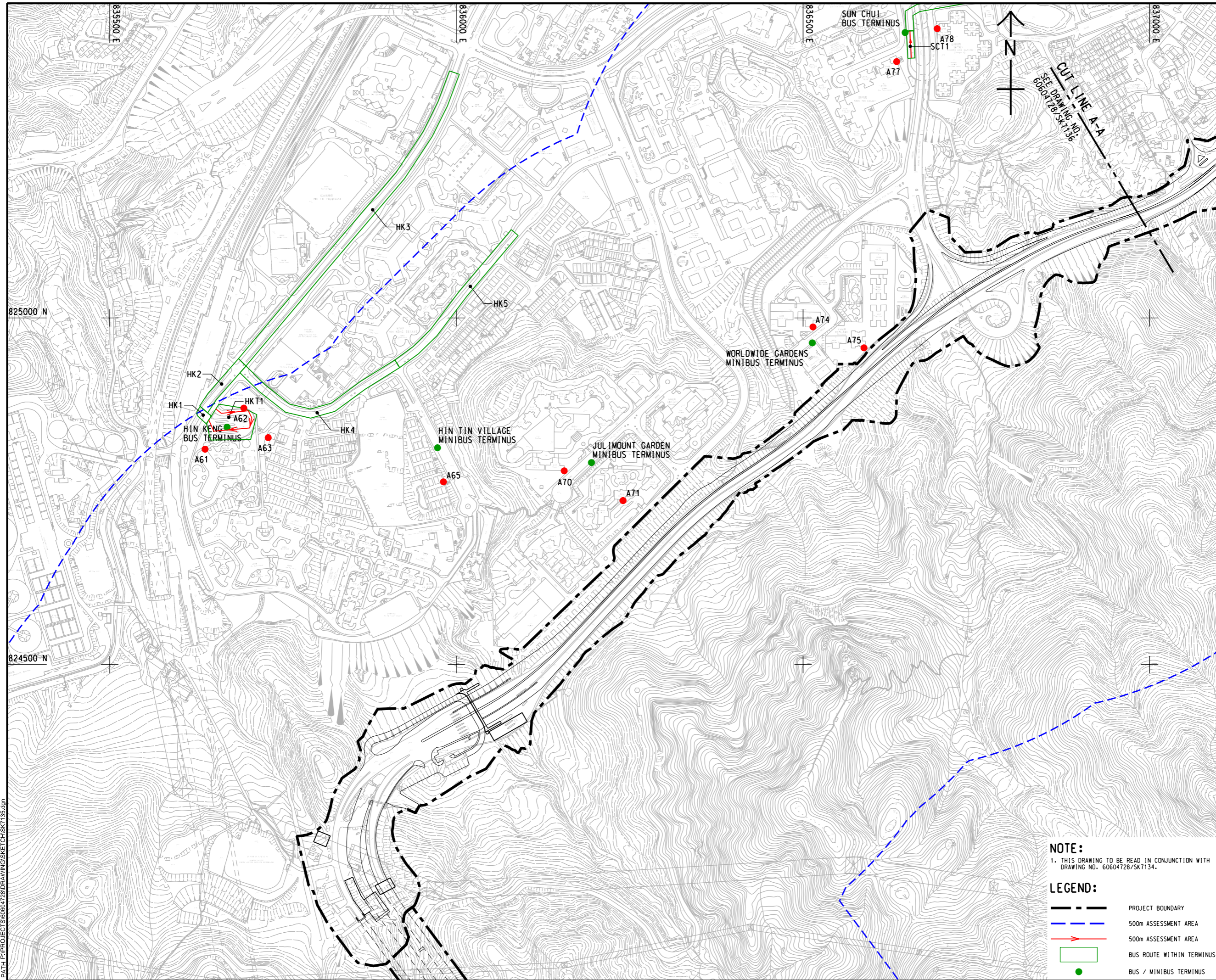
60604728/SK7134

- LEGEND:**
-  PROJECT BOUNDARY
  -  500m ASSESSMENT AREA
  -  BUS TERMINUS SOURCE
  -  BUS / MINIBUS TERMINUS
  -  AIR SENSITIVE RECEIVERS

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**PROJECT**  
 IMPROVEMENT OF  
 LION ROCK TUNNEL -  
 INVESTIGATION

**CLIENT**  
 路政署  
**HIGHWAYS  
 DEPARTMENT**

**CONSULTANT**  
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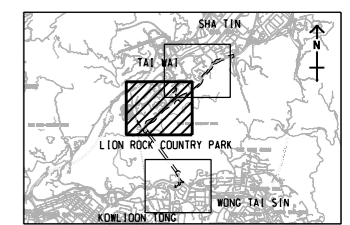
**ISSUE/REVISION**

IR	DATE	DESCRIPTION	CHK.

**STATUS**  
 1/1/18

**SCALE**      **DIMENSION UNIT**  
 A3 1 : 5000      METRES

**KEY PLAN**      A3 1 : 200000



**NOTE:**  
 1. THIS DRAWING TO BE READ IN CONJUNCTION WITH  
 DRAWING NO. 60604728/SK7134.

**LEGEND:**

	PROJECT BOUNDARY
	500m ASSESSMENT AREA
	500m ASSESSMENT AREA
	BUS ROUTE WITHIN TERMINUS
	BUS / MINIBUS TERMINUS

**PROJECT NO.**      **AGREEMENT NO.**  
 60604728      CE 48/2018(HY)

**SHEET TITLE**  
 LOCATION OF BUS OR  
 MINIBUS TERMINUS ON  
 SHATIN SIDE

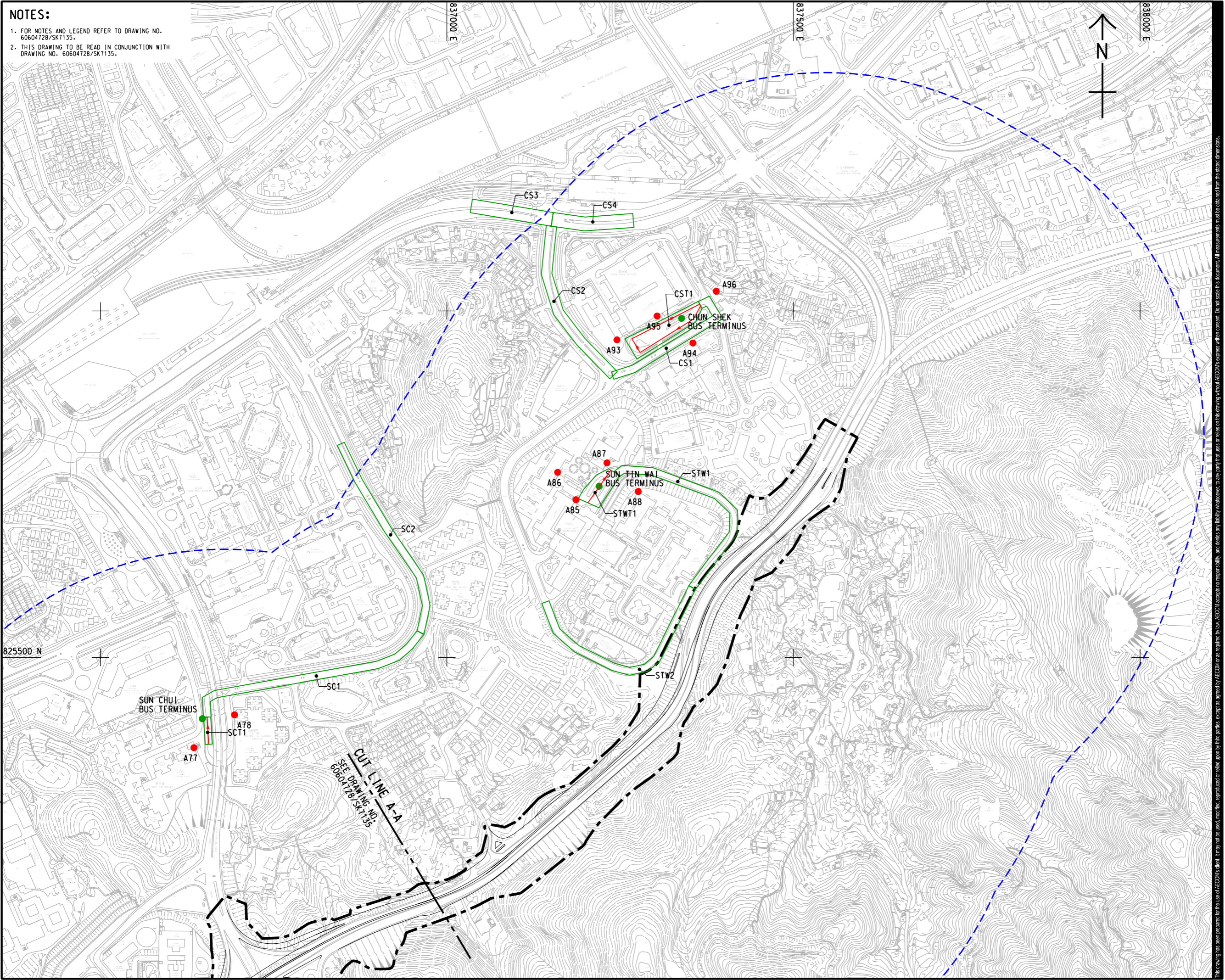
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 60604728/SK7135

2022/6/24  
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 Project Management Initials:  
 2022/6/24  
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 Plot File by: ZHLZ

**NOTES:**

- FOR NOTES AND LEGEND REFER TO DRAWING NO. 60604728/SK7135.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NO. 60604728/SK7135.



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 60604728/SK7135

**AECOM**

PROJECT  
 項目

**IMPROVEMENT OF LION ROCK TUNNEL - INVESTIGATION**

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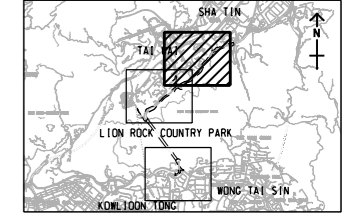
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STATUS

SCALE  
 比例尺

A3 1:5000 METRES

KEY PLAN A3 1:20000  
 索引圖



PROJECT NO.  
 項目編號

60604728

AGREEMENT NO.  
 協議編號

CE 48/2018(HY)

SHEET TITLE  
 圖名

LOCATION OF BUS OR MINIBUS TERMINUS ON SHATIN SIDE

SHEET NUMBER  
 圖號

60604728/SK7136

SHEET 2 OF 2

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